

ABB LTD  
Form 20-F  
May 27, 2005

[QuickLinks](#) -- Click here to rapidly navigate through this document

As filed with the Securities and Exchange Commission on May 27, 2005

---

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

---

**FORM 20-F**

o **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

OR

ý **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2004

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

Commission file number: 001-16429

---

**ABB Ltd**

*(Exact name of registrant as specified in its charter)*

**Switzerland**

*(Jurisdiction of incorporation or organization)*

**Affolternstrasse 44  
CH-8050 Zurich  
Switzerland**

*(Address of principal executive offices)*

Securities registered or to be registered pursuant to Section 12(b) of the Act:

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
<b>American Depositary Shares, each representing one Registered Share</b>	<b>New York Stock Exchange</b>
<b>Registered Shares, par value CHF 2.50</b>	<b>New York Stock Exchange*</b>

Edgar Filing: ABB LTD - Form 20-F

---

\*

Listed on the New York Stock Exchange not for trading or quotation purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None.**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None.**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 2,070,314,947 Registered Shares

---

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

---

---

---

## TABLE OF CONTENTS

	<u>Page</u>
PART I	4
Item 1. Identity of Directors, Senior Management and Advisers	4
Item 2. Officer Statistics and Expected Timetable	4
Item 3. Key Information	4
Item 4. Information on the Company	20
Item 5. Operating and Financial Review and Prospects	43
Item 6. Directors, Senior Management and Employees	114
Item 7. Major Shareholders and Related Party Transactions	126
Item 8. Financial Information	130
Item 9. The Offer and Listing	133
Item 10. Additional Information	139
Item 11. Quantitative and Qualitative Disclosures About Market Risk	155
Item 12. Description of Securities Other than Equity Securities	156
PART II	157
Item 13. Defaults, Dividend Arrearages and Delinquencies	157
Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds	157
Item 15. Controls and Procedures	157
Item 16A. Audit Committee Financial Expert	158
Item 16B. Code of Ethics	158
Item 16C. Principal Accountant Fees and Services	158
Item 16D. Exemptions from the Listing Standards for Audit Committees.	159
Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.	160
PART III	161
Item 17. Financial Statements	161
Item 18. Financial Statements	161
Item 19. Exhibits	162

## INTRODUCTION

ABB Ltd is a corporation organized under the laws of Switzerland. In this report, "the ABB Group," "ABB," "we," "our" and "us" refer to ABB Ltd and its consolidated subsidiaries (unless the context otherwise requires). We also use these terms to refer to ABB Asea Brown Boveri Ltd and its subsidiaries prior to the establishment of ABB Ltd as the holding company for the entire ABB Group in 1999, as described in this report under "Item 4. Information on the Company Introduction History of the ABB Group." Our American Depositary Shares (each representing one of our registered shares) are referred to as "ADSs." The registered shares of ABB Ltd are referred to as "shares."

Our principal corporate offices are located at Affolternstrasse 44, CH-8050 Zurich, Switzerland, telephone number +41-43-317-7111.

## FINANCIAL AND OTHER INFORMATION

ABB Ltd has prepared its statutory unconsolidated financial statements in accordance with the Swiss Federal Code of Obligations. The consolidated financial statements of ABB Ltd, including the notes thereto, as of December 31, 2004, 2003 and 2002 and for the years then ended (our "Consolidated Financial Statements") have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP").

In this report: (i) "\$," "U.S. dollars" and "USD" refer to the lawful currency of the United States of America; (ii) "CHF" and "Swiss francs" refer to the lawful currency of Switzerland; (iii) "€," "EUR" and "euro" refer to the lawful currency of the participating member states of the European Union (the "EU"); (iv) "SEK" and "Swedish krona" refer to the lawful currency of Sweden; (v) "£," "sterling," "pounds sterling" and "GBP" refer to the lawful currency of the United Kingdom; (vi) "Norwegian krone" refers to the lawful currency of Norway; and (vii) "Chinese renminbi" refers to the lawful currency of the People's Republic of China.

Except as otherwise stated, all monetary amounts in this report are presented in U.S. dollars. Where specifically indicated, amounts in Swiss francs have been translated into U.S. dollars. These translations are provided for convenience only, and they are not representations that the Swiss franc could be converted into U.S. dollars at the rate indicated. These translations have been made using the noon buying rate in the City of New York for cable transfers as certified for customs purposes by the Federal Reserve Bank of New York as of December 31, 2004, unless otherwise indicated. The noon buying rate for Swiss francs on December 31, 2004 was \$1.00 = CHF 1.1412. The noon buying rate for Swiss francs on May 25, 2005 was \$1.00 = CHF 1.2264.

## FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "intends," "may," "will," or "should" or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this report and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, dispositions, strategies and the countries and industry in which we operate.

These forward-looking statements include, but are not limited to the following:

statements in "Item 3. Key Information Dividends and Dividend Policy" regarding our policy on future dividend payments;

## Edgar Filing: ABB LTD - Form 20-F

statements in "Item 5. Operating and Financial Review and Prospects" and "Item 8. Financial Information Legal Proceedings" regarding the expected outcome of our proposed pre-packaged plans of reorganization under Chapter 11 of the U.S. Bankruptcy Code for our subsidiaries Combustion Engineering and Lummus and the outcome of certain compliance matters under investigation;

statements in "Item 3. Key Information Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" regarding our management objectives and the timing of intended disposals; and

statements in "Item 5. Operating and Financial Review and Prospects" regarding our management objectives, as well as trends in results, prices, volumes, operations, margins and overall market trends.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. We caution you that forward-looking statements are not guarantees of future performance and that the actual results of our operations, financial condition and liquidity, and the development of the countries and the industries in which we operate may differ materially from those described in or suggested by the forward-looking statements contained in this report. In addition, even if our results of operations, financial condition and liquidity, and the development of the countries and the industries in which we operate, are consistent with the forward-looking statements contained in this report, those results or developments may not be indicative of results or developments in subsequent periods. Important factors that could cause actual results to differ materially from our expectations are contained in cautionary statements in this report and include, without limitation, the following:

We are subject to ongoing litigation and potentially substantial liabilities arising out of asbestos claims.

If we are not able to comply with the covenants contained in our \$1 billion credit facility, our financial position may be adversely affected.

Our ability to bid for large contracts depends on our ability to obtain performance guarantees from financial institutions.

We have retained performance guarantees related to our divested power generation business.

Undertaking long-term fixed price projects exposes our businesses to risk of loss.

Our international operations expose us to the risk of fluctuations in currency exchange rates.

Our hedging activities may not protect us against the consequences of significant fluctuations in exchange rates on our earnings and cash flows.

We operate in very competitive markets and could be adversely affected if we fail to keep pace with technological changes.

Industry consolidation could result in more powerful competitors and fewer customers.

Our business is affected by the global economic and political climate.

We have retained liability for environmental remediation costs relating to businesses that we sold in 2000, and we could be required to make payments in respect of these retained liabilities in excess of established reserves.

We are subject to environmental laws and regulations in the countries in which we operate. We incur costs to comply with such regulations, and our ongoing operations may expose us to environmental liabilities.



We may be the subject of product liability claims.

Our operations in emerging markets expose us to risks associated with conditions in those markets.

We may encounter difficulty in managing our business due to the global nature of our operations.

Our reputation and our ability to do business may be impaired by corrupt behavior by any of our employees or agents or those of our subsidiaries.

Our Oil, Gas and Petrochemicals business may experience losses if the oil and gas industry generally experiences a downturn.

Increase in the costs of our raw materials may adversely affect our financial performance.

If we are unable to successfully address the material weaknesses in our internal control over financial reporting, our ability to report our financial results on a timely and accurate basis may be adversely affected. As a result, investors could lose confidence in our financial reporting, which may harm our business and the trading price of our stock.

We urge you to read the sections of this report entitled "Item 3. Key Information Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects" for a more complete discussion of the factors that could affect our future performance and the countries and industries in which we operate. In light of these risks, uncertainties and assumptions, the forward-looking circumstances described in this report and the assumptions underlying them may not occur.

Except as required by law or applicable stock exchange rules or regulations, we undertake no obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this report.

**PART I**

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable

**Item 2. Officer Statistics and Expected Timetable**

Not applicable

**Item 3. Key Information**

**SELECTED FINANCIAL DATA**

The following table presents our selected financial and operating information at the dates and for each of the periods indicated. You should read the following information together with the information contained in "Item 5. Operating and Financial Review and Prospects," as well as our Consolidated Financial Statements and the notes thereto, included elsewhere in this report.

Our selected financial data are presented in the following tables in accordance with U.S. GAAP and have been derived from our published consolidated financial statements.

The consolidated financial statements and other financial data included in this report reflect restatements we made in September 2004, when we restated certain financial statements contained in our annual report for the year ended December 31, 2003, as published in our Form 20-F filed with the U.S. Securities and Exchange Commission in April 2004. The amendments reflected restatements of our consolidated financial statements at December 31, 2003 and 2002 and for each of the years in the three-year period ended December 31, 2003, and of certain financial data at December 31, 2001 and 2000, and for the year ended December 31, 2000. These changes were intended to correct the effect of earnings overstatements by the medium-voltage business unit of our Power Technologies division in Italy on its previously reported financial statement results.

The cumulative effect of these overstatements on our earnings before interest and taxes and net income was approximately \$73 million and \$89 million, respectively, from the first quarter of 1998 through the end of March 2004. The negative impact on income tax expense results from the inability to claim tax benefits under Italian tax law for adjustments made to improperly filed tax returns for the years 1998 through 2002, as well as a reassessment of the probability of realization of our deferred tax assets due to a cumulative loss position after the restatement. As compared with financial data originally published, the corrections increased net loss by \$12 million (\$0.01 per share basic and diluted), \$36 million (\$0.04 and \$0.03 per share basic and diluted, respectively) and \$14 million (\$0.02 per share basic and diluted) in 2003, 2002 and 2001, respectively, decreased net income by \$17 million (\$0.01 and \$0.02 per share basic and diluted, respectively) and \$6 million (\$0.01 per share basic and diluted) in 2000 and 1999, respectively, and decreased stockholders' equity by \$109 million at December 31, 2003.

Our consolidated financial statements at and for each of the years ended December 31, 2004, 2003, 2002 and 2001 were audited by Ernst & Young AG, except for the 2001 consolidated financial statements of ABB Holdings Inc., a wholly owned subsidiary, the 2004, 2003, 2002 and 2001 financial statements of Jorf Lasfar Energy Company, a corporation in which we have a 50 percent interest, the 2002 and 2001 consolidated financial statements of Swedish Export Credit Corporation, in which we had a 35 percent interest at December 31, 2002, and the 2001 financial statements of Scandinavian Reinsurance Company Limited, a then wholly owned subsidiary, which were audited by other independent auditors.



Edgar Filing: ABB LTD - Form 20-F

Our consolidated financial statements at and for the year ended December 31, 2000, before the restatement described above with respect to the earnings overstatement at one of our Italian subsidiaries and before reclassifications for operations discontinued, were audited jointly by Ernst & Young AG and KPMG Klynveld Peat Marwick Goerdeler SA. The Consolidated Financial Statements at December 31, 2002, 2001 and 2000 and for each of the years ended December 31, 2001 and 2000, have not been audited after the reclassifications of certain businesses between continuing operations and discontinued operations. The Consolidated Financial Statements at December 31, 2001 and 2000, and for the year ended December 31, 2000, have not been audited after the restatements described above.

**INCOME STATEMENT DATA:**

	Year ended December 31,				
	2004	2003	2002	2001	2000
	(audited)	(audited)	(audited)	(unaudited)	(unaudited)
	(U.S. dollars in millions, except per share data)				
Revenues	\$ 20,721	\$ 20,427	\$ 19,472	\$ 20,058	\$ 20,052
Cost of sales	(15,757)	(15,928)	(15,098)	(15,211)	(14,920)
<b>Gross profit</b>	<b>4,964</b>	<b>4,499</b>	<b>4,374</b>	<b>4,847</b>	<b>5,132</b>
Selling, general and administrative expenses	(3,786)	(3,917)	(4,050)	(4,030)	(4,082)
Amortization expense <sup>(1)</sup>	(45)	(31)	(45)	(203)	(196)
Other income (expense), net <sup>(2)</sup>	(49)	(194)	(80)	(158)	273
<b>Earnings before interest and taxes</b>	<b>1,084</b>	<b>357</b>	<b>199</b>	<b>456</b>	<b>1,127</b>
Interest and dividend income	164	152	194	353	381
Interest and other finance expense	(387)	(569)	(327)	(580)	(452)
<b>Income (loss) from continuing operations before taxes and minority interest</b>	<b>861</b>	<b>(60)</b>	<b>66</b>	<b>229</b>	<b>1,056</b>
Provision for taxes	(311)	(245)	(81)	(85)	(309)
Minority interest	(102)	(66)	(111)	(69)	(47)
<b>Income (loss) from continuing operations</b>	<b>448</b>	<b>(371)</b>	<b>(126)</b>	<b>75</b>	<b>700</b>
Income (loss) from discontinued operations, net of tax <sup>(3)</sup>	(483)	(408)	(693)	(755)	726
Cumulative effect of change in accounting principles (SFAS 133), net of tax <sup>(4)</sup>				(63)	
<b>Net income (loss)</b>	<b>\$ (35)</b>	<b>\$ (779)</b>	<b>\$ (819)</b>	<b>\$ (743)</b>	<b>\$ 1,426</b>
Basic earnings (loss) per share <sup>(5)</sup> :					
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.11)	\$ 0.07	\$ 0.59
Net Income (loss)	\$ (0.02)	\$ (0.64)	\$ (0.74)	\$ (0.66)	\$ 1.21
Diluted earnings (loss) per share <sup>(5)</sup> :					
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.27)	\$ 0.07	\$ 0.59
Net Income (loss)	\$ (0.02)	\$ (0.64)	\$ (0.86)	\$ (0.66)	\$ 1.20

**BALANCE SHEET DATA:**

	December 31,				
	2004	2003	2002	2001	2000
	(audited)	(audited)	(unaudited)	(unaudited)	(unaudited)
	(U.S. dollars in millions)				
Cash and equivalents	\$ 3,676	\$ 4,783	\$ 2,529	\$ 2,470	\$ 1,234
Marketable securities and short-term investments	524	473	589	1,236	2,349
Total assets	24,677	30,401	29,522	32,313	30,967
Long-term borrowings	4,901	6,290	5,358	5,010	3,760
Total debt <sup>(6)</sup>	5,534	7,934	7,935	9,739	7,262
Capital stock and additional paid-in capital	3,083	3,067	2,027	2,028	2,082
Total stockholders' equity	2,824	2,917	931 <sup>(8)</sup>	1,938 <sup>(8)</sup>	5,147 <sup>(8)</sup>
Net operating assets <sup>(7)</sup>	\$ 9,622	\$ 9,857	\$ 9,870	\$ 9,396	\$ 10,922

**CASH FLOW DATA:**

	Year ended December 31,				
	2004	2003	2002	2001	2000
	(audited)	(audited)	(audited)	(audited)	(unaudited)
	(U.S. dollars in millions)				
Net cash provided by (used in) operating activities	\$ 962	\$ (173)	\$ 1,983	\$ 747	\$ 747
Net cash provided by (used in) investing activities	354	754	2,651	(1,218)	(489)
Net cash provided by (used in) financing activities	\$ (2,805)	\$ 1,603	\$ (2,793)	\$ 677	\$ (392)

**OTHER FINANCIAL AND OPERATING DATA:**

	Year ended December 31,				
	2004	2003	2002	2001	2000
	(audited)	(audited)	(audited)	(unaudited)	(unaudited)
	(U.S. dollars in millions)				
Purchases of property, plant and equipment	\$ 543	\$ 547	\$ 602	\$ 761 <sup>(8)</sup>	\$ 553
Depreciation and amortization <sup>(1)</sup>	633	585	611	787 <sup>(8)</sup>	836
Research and development	690	635	572	602	661
Order-related development <sup>(9)</sup>	\$ 727	\$ 886	\$ 719	\$ 824	\$ 973

(1) Includes goodwill amortization of \$161 million and \$155 million in 2001 and 2000, respectively. In accordance with the adoption of Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, after January 1, 2002, goodwill is no longer amortized but is charged to operations when specified tests indicate that the goodwill is impaired.

(2) During 2004, 2003, 2002, 2001, and 2000, we incurred restructuring charges and related asset write-downs of \$165 million, \$340 million, \$255 million, \$226 million, and \$187 million, respectively, relating to a number of restructuring initiatives throughout the world. The restructuring costs incurred in 2002, 2001 and 2000 were accrued in the respective periods pursuant to the requirements

of EITF 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*. The restructuring costs incurred in 2004 and 2003 were accrued pursuant to the requirements of Statement of Financial Accounting Standards No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*.

- (3) In 2004 and 2003, we recorded net losses of \$70 million and \$44 million, respectively, and in 2002 we recorded net income of \$14 million relating to the upstream part of our Oil, Gas and Petrochemicals businesses. The sale of this business was completed in July 2004. In 2004, 2003, 2002 and 2001, we recorded charges of \$262 million, \$142 million, \$395 million and \$470 million, respectively, related to the retained asbestos liability of our disposed power generation segment. During 2000, we recorded gains on the disposal of our power generation segment of approximately \$730 million, which included our investment in ABB ALSTOM POWER NV and our nuclear business, which were partly offset by a \$70 million provision related to our retained asbestos liability, a \$300 million provision for estimated environmental remediation costs, \$136 million of accumulated foreign currency translation losses and operating losses associated with these businesses. For additional information, see "Item 5. Operating and Financial Review and Prospects" and Note 18 to the Consolidated Financial Statements. Prior to 2001, we estimated certain reserves for unpaid claims and expenses in our Reinsurance business, which we sold in April 2004, by calculating the present value of funds required to pay losses at future dates. As of 2001, the timing and amount of future claims payments had become more uncertain. Therefore, the discounted value could no longer be reliably estimated. Consequently, we showed the expected future claims at full face value, resulting in a net charge of \$295 million in income (loss) from discontinued operations, net of tax in the 2001 Consolidated Income Statement.
- (4) We accounted for the adoption of Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133), as a change in accounting principle. Based on our outstanding derivatives at January 1, 2001, we recognized the cumulative effect of the accounting change as a loss in the Consolidated Income Statement.
- (5) The number of shares and earnings per share data in the Consolidated Financial Statements have been presented as if ABB Ltd shares had been issued for all periods presented and as if the four-for-one split of ABB Ltd shares in May 2001 had occurred as of the earliest period presented. Basic earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year. Diluted earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise: outstanding written call options, if dilutive; the securities issued under the Company's employee incentive plans, if dilutive; and shares issuable in relation to outstanding convertible bonds, if dilutive; and outstanding written put options, for which net share settlement at average market price of our stock was assumed, if dilutive (see Notes 2, 15, 22 and 24 to the Consolidated Financial Statements).
- (6) Total debt, also referred to as total borrowings, is equal to the sum of short-term borrowings and long-term borrowings.
- (7) Net operating assets is calculated based upon total assets (excluding cash and equivalents, marketable securities and short-term investments, current loans receivable, tax assets, assets held for sale and in discontinued operations, prepaid pension and other employee benefits and other assets) less total liabilities (excluding borrowings, tax liabilities, provisions, pension and employee related liabilities, liabilities held for sale and in discontinued operations and certain other liabilities).
- (8) Audited.
- (9) Order-related development activities are customer- and project-specific development efforts that we undertake to develop or adapt equipment and systems to the unique needs of our customers in connection with specific orders or projects. Order-related development amounts are initially recorded in inventories as part of the work in progress of a contract and then are reflected in cost of sales at the time revenue is recognized in accordance with our accounting policies. These amounts are unaudited.

**DIVIDENDS AND DIVIDEND POLICY**

Payment of dividends is subject to general business conditions, the ABB Group's current and expected financial condition and performance and other relevant factors including growth opportunities.

Dividends may be paid only if ABB Ltd has sufficient distributable profits from previous fiscal years or sufficient free reserves to allow the distribution of a dividend. In addition, at least 5 percent of ABB Ltd's annual net profits must be retained and booked as legal reserves, unless these reserves already amount to 20 percent of ABB Ltd's share capital. As a holding company, ABB Ltd's main sources of income are dividend, interest and debt payments from its subsidiaries. At December 31, 2004, of the CHF 8,911 million of stockholders' equity recorded in the unconsolidated statutory financial statements of ABB Ltd prepared in accordance with Swiss law, CHF 5,176 million was attributable to the share capital, CHF 1,780 million was attributable to legal reserves, CHF 412 million was attributable to reserves for treasury, CHF 1,533 million was attributable to other reserves and CHF 11 million was available for distribution.

ABB Ltd may only pay out a dividend if it has been proposed by a shareholder or the board of directors of ABB Ltd, approved at a general meeting of shareholders and the statutory auditors confirm that the dividend conforms to statutory law and the articles of incorporation of ABB Ltd. In practice, the shareholders' meeting usually approves dividends as proposed by the board of directors, if the board of directors' proposal is confirmed by the statutory auditors.

Dividends are usually due and payable no earlier than three trading days after the shareholders' resolution. Dividends not collected within five years after the due date accrue to ABB Ltd and are allocated to its other reserves. For information about the deduction of withholding taxes from dividend payments, see "Item 10. Additional Information Taxation."

We have established a dividend access facility for shareholders who are resident in Sweden under which these shareholders may register with VPC AB (Sweden) ("VPC"), as holder of up to 600,004,716 shares, and receive dividends in Swedish kronor equivalent to the dividend paid in Swiss francs without deduction of Swiss withholding tax. For further information, see "Item 10. Additional Information Taxation."

Because ABB Ltd pays cash dividends, if any, in Swiss francs (subject to the exception for certain shareholders in Sweden described above), exchange rate fluctuations will affect the U.S. dollar amounts received by holders of ADSs upon conversion of those cash dividends by Citibank, N.A., the depositary, in accordance with the Amended and Restated Deposit Agreement dated May 7, 2001.

The following table sets forth in Swiss francs and in U.S. dollars the dividend paid per share with respect to the years ended December 31, 2004, 2003, 2002, 2001 and 2000. On May 12, 2005, at the annual general meeting of shareholders, the shareholders decided that no dividend would be paid with respect to the year ended December 31, 2004.

Year ended December 31,	Dividend per share	
	(CHF)	(\$)
2004		
2003		
2002		
2001		
2000	0.75	0.43 <sup>(1)</sup>

(1) The dividend was approved at the annual general meeting held in March 2001 and is converted in dollars at the rate of \$1 = CHF1.7258.

## RISK FACTORS

*You should carefully consider all of the information set forth in this report and the following description of risks and uncertainties that we currently believe may exist. Our business, financial condition or results of operations could be adversely affected by any of these risks. Additional risks of which we are unaware or that we currently deem immaterial may also impair our business operations. This annual report also contains forward-looking statements that involve risks and uncertainties. Our results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those described below and elsewhere in this annual report. See "Forward-Looking Statements."*

### ***We are subject to ongoing litigation and potentially substantial liabilities arising out of asbestos claims.***

Companies in the ABB group are subject to thousands of lawsuits brought by plaintiffs seeking compensation for personal injuries allegedly resulting from exposure to asbestos. In the United States, our Combustion Engineering subsidiary has been a co-defendant in a large number of these lawsuits, and a smaller number of claims have been brought against two other subsidiaries, ABB Lummus Global Inc. ("Lummus") (which is part of our Oil, Gas and Petrochemicals business and was formerly a subsidiary of Combustion Engineering) and Basic Incorporated ("Basic") (which was a subsidiary of Combustion Engineering and of Asea Brown Boveri Inc. ("Asea Brown Boveri") and is now a subsidiary of ABB Holdings Inc. ("Holdings") following the merger in December 2004 of Asea Brown Boveri into Holdings).

Since early 2003, we and our subsidiaries have been seeking to resolve our asbestos-related liabilities principally through a proposed plan of reorganization under Chapter 11 of the U.S. Bankruptcy Code for our subsidiary Combustion Engineering. In March 2005, following the ruling of the U.S. Court of Appeals for the Third Circuit in December 2004 (the "Third Circuit Decision") that reversed the lower courts' approval of the original plan, we reached agreement with various parties on basic terms for a modified plan of reorganization for Combustion Engineering (the "Modified CE Plan") and a separate plan of reorganization under Chapter 11 of the U.S. Bankruptcy Code for Lummus (the "Lummus Plan"). The proposed plans do not address Basic, and we expect that Basic's asbestos-related liabilities will have to be resolved through its own bankruptcy or similar U.S. state court liquidation proceeding, or through the tort system.

We and various other interested parties are now working to reach agreement on open issues, details relating to the Modified CE Plan and the Lummus Plan and the form and substance of the operative documents and related Bankruptcy Court motions and other pleadings. We cannot be certain when those negotiations will be concluded or whether or on what terms the parties will resolve outstanding issues. The Modified CE Plan and the Lummus Plan will become effective only if different classes of their respective creditors vote in favor of the respective plans. The Modified CE Plan and the Lummus Plan will be subject to the approval of the Bankruptcy and District Courts, as well as to further judicial review if appeals are made. While we believe that the Modified CE Plan and the Lummus Plan are consistent with the Third Circuit Decision and other applicable laws and precedents, we cannot be certain whether the courts will approve the plans, nor can we predict whether the plans will receive the needed creditor votes.

We cannot be certain of the duration of the asbestos-related litigation process, its outcome or its eventual cost to us. We do not know whether any plan of reorganization for Combustion Engineering or Lummus will ultimately be confirmed or whether asbestos-related liabilities of any other ABB group entities would be resolved by any such plan. If for any reason a Chapter 11 plan relating to Combustion Engineering is not eventually confirmed, Combustion Engineering could be required to enter a Chapter 7 proceeding. If for any reason a Chapter 11 plan relating to Lummus is not eventually confirmed, we expect that Lummus' asbestos-related liabilities will have to be resolved through the tort system.

If any ABB group entities are not included in the protection offered by the channeling injunction entered pursuant to any Combustion Engineering plan that is confirmed, such entities could be required to resolve in the tort system, or otherwise, current and future asbestos-related claims that are asserted against such entities. Such events would be subject to numerous uncertainties, risk and expense.

All of these factors make the ultimate outcome of our efforts to resolve the asbestos-related claims against Combustion Engineering and our other subsidiaries uncertain, and, moreover, could cause our obligations to make payments in respect of asbestos-related claims, indemnity payments and related defense costs to significantly exceed our estimates. From time to time we update our forecasts to take into consideration developments regarding any plan of reorganization, recent claims experience and other developments and such updates may affect our estimates of future asbestos-related liabilities and costs. Any expenses incurred or increases to our asbestos reserves as a result of a delay or abandonment of any plan of reorganization for Lummus or Combustion Engineering, revised forecasts, adverse jury verdicts or court decisions or other negative developments involving resolution of our asbestos-related liabilities, whether through the bankruptcy courts, liquidation proceedings or the tort system, may cause the value or trading prices of our securities to decrease significantly. These negative developments could also cause our credit ratings to be downgraded, restrict our access to the capital markets or otherwise have a material adverse effect on our financial condition, results of operations, cash flows and liquidity.

***If we are not able to comply with the covenants contained in our new \$1 billion credit facility, our financial position may be adversely affected.***

We are party to a three-year \$1 billion credit facility that became available in December 2003. It contains certain financial covenants in respect of minimum interest coverage, maximum net leverage and a minimum level of consolidated net worth, as well as specific negative pledges. If we are unable to comply with the covenants in the credit facility, we may be required to renegotiate the facility with our lenders or to replace it in order not to default under it. We can offer no assurance that we would be able to renegotiate or replace the facility on terms that are acceptable to us, if at all. We have never drawn any funds under the facility and we currently do not intend to draw on it. See "Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Credit Facilities."

***Our ability to bid for large contracts depends on our ability to obtain performance guarantees from financial institutions.***

In the normal course of our business and in accordance with industry practice, we provide performance guarantees on large projects, including long-term operation and maintenance contracts, which guarantee our own performance. These guarantees may include guarantees that a project will be completed or that a project or particular equipment will achieve defined performance criteria. If we fail to attain the defined criteria, we must make payments in cash or in kind. Performance guarantees frequently are requested in relation to bids for large projects, both in our core power and automation businesses and in our Oil, Gas and Petrochemicals business.

Some customers require that performance guarantees be issued by a financial institution in the form of a letter of credit, surety bond or other financial guarantee. In considering whether to issue a guarantee on our behalf, financial institutions consider our credit ratings. Our current credit rating and financial position have not prevented us from obtaining such guarantees from financial institutions, but they can make and have made the process more difficult and expensive. If, in the future, we cannot obtain such a guarantee from a financial institution on reasonable terms, we could be prevented from bidding on or obtaining the contract or our costs would be higher, which would reduce the profitability of the contract. If we cannot obtain sufficient guarantees from financial institutions in the future, there could be a material impact on our business, financial condition, results of operations or liquidity.

***We have retained performance guarantees related to our divested power generation business.***

We have retained performance guarantees related to the power generation business that we contributed to the former ABB ALSTOM POWER joint venture. The guarantees primarily consist of performance guarantees, advance payment guarantees, product warranty guarantees and other miscellaneous guarantees under certain contracts such as indemnification for personal injuries and property damages, taxes and compliance with labor laws, environmental laws and patents. The guarantees are related to projects that are expected to be completed by 2015 but in some cases the guarantees have no definite expiration. ALSTOM and its subsidiaries have primary responsibility for performing the obligations that are the subject of the guarantees. In connection with the sale to ALSTOM of our interest in the joint venture in May 2000, ALSTOM, (the parent company), and ALSTOM POWER (the former joint venture entity) have undertaken jointly and severally to fully indemnify us and hold us harmless against any claims arising under these guarantees. Due to the nature of product warranty guarantees and certain other guarantees, we are unable to develop an estimate of the maximum potential amount of future payments for these guarantees. Our best estimate of the total maximum potential exposure under all quantifiable guarantees we issued on behalf of our former power generation business was approximately \$875 million as of December 31, 2004. This maximum potential exposure, as required by Financial Accounting Standards Board Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, is based on the original guarantee or contract amount and does not reflect our assessment of actual exposure under the guarantees.

As of December 31, 2004, no losses have been recognized in connection with the guarantees relating to the divested power generation business. We have not concluded that a loss is probable under these guarantees and, therefore, we have not recorded a provision as of December 31, 2004. However, if we are required to fund payments under these guarantees following a failure of the divested power generation business to perform its obligations, and if ALSTOM does not to fulfill its undertaking to indemnify us, we could incur material losses. See "Item 5. Operating and Financial Review and Prospects Off Balance Sheet Arrangements Guarantees."

***Undertaking long-term fixed price projects exposes our businesses to risk of loss.***

We derive a portion of our revenues from long-term, fixed price or turnkey projects that are awarded on a competitive basis and can take many months, or even years, to complete. Such contracts involve substantial risks, including the possibility that we may underbid and the fact that we typically assume substantially all of the risks associated with completing the project and the post-completion warranty obligations. We also assume the project's technical risk, meaning that we must tailor our products and systems to satisfy the technical requirements of a project even though, at the time we are awarded the project, we may not have previously produced such a product or system. The revenue, cost and gross profit realized on such contracts can vary, sometimes substantially, from our original projections because of changes in conditions, including but not limited to:

unanticipated technical problems with the equipment being supplied or developed by us which may require that we spend our own money to remedy the problem;

changes in the cost of components, materials or labor;

difficulties in obtaining required governmental permits or approvals;

project modifications creating unanticipated costs;

delays caused by local weather conditions; and

suppliers' or subcontractors' failure to perform.



These risks are exacerbated if the duration of the project is long-term because there is an increased risk that the circumstances upon which we originally bid and developed a price will change in a manner that increases our costs. In addition, we sometimes bear the risk of delays caused by unexpected conditions or events. The contracts for our long-term, fixed-price projects often make us subject to penalties if we cannot complete portions of the project in accordance with agreed-upon time limits.

Historically, we have incurred significant losses as a result of performing long-term projects on a fixed-price or turnkey basis. For example, in 2003 the operating income of the downstream part of our Oil, Gas and Petrochemicals business was adversely affected by cost overruns amounting to \$399 million, primarily relating to four large, long-term, fixed-price projects which had been contracted prior to 2002. In 2004 no significant losses were reported from such long-term projects. In view of the potential for losses from such contracts, we have been seeking to reduce our involvement with new long-term, fixed-price contracts and have instead been pursuing contracts with a cost-reimbursement element. However, because we still do enter into new contracts on a fixed price basis and continue to have substantial obligations under long-term, fixed-price contracts, we still face the risk of significant losses on these types of contracts.

In connection with long-term projects, we routinely undertake substantial customer- and project-specific development efforts to develop or adapt equipment and systems to the unique needs of our customers in connection with specific orders or projects. We had expenditures of \$727 million, \$886 million, and \$719 million, or approximately 3.5 percent, 4.3 percent and 3.7 percent of annual consolidated revenues, in 2004, 2003 and 2002, respectively, on such order-related development activities. Order-related development amounts are initially recorded in inventories as part of the work in progress of a contract and then are reflected in cost of sales at the time revenue is recognized in accordance with our accounting policies. If our revenues on these projects are insufficient, we must write off the associated order-related development expenditures. Additionally, to the extent that order-related development expenditures in a specific project exceed expectations, the profit margin on that project will be adversely affected.

We may expend significant resources, both in management time as well as money, on bidding for projects that we are not awarded.

***Our international operations expose us to the risk of fluctuations in currency exchange rates.***

Exchange rate fluctuations have had, and could continue to have, a material impact on our operating results, the comparability of our results between periods, the value of assets or liabilities as recorded on our consolidated balance sheet and the price of our securities. Foreign exchange rate changes resulted in an increase in our reported revenues and earnings before interest and taxes of 6 percent and 18 percent in 2004 and 12 percent and 42 percent in 2003, respectively. Changes in exchange rates can unpredictably and adversely affect our consolidated operating results, and could result in exchange losses.

**Currency Translation Risk.** The results of operations and financial position of most of our non-U.S. companies are initially recorded in the currency, which we call "local currency," of the country in which the respective company resides. That financial information is then translated into U.S. dollars at the applicable exchange rates for inclusion in our Consolidated Financial Statements. The exchange rates between local currencies and the U.S. dollar fluctuate substantially, which has a significant translation effect on our reported consolidated results of operations and financial position. In 2004 as in 2003, the U.S. dollar continued to depreciate against most of the currencies in which our companies reported results of operations. In particular, the exchange rates between the U.S. dollar and the EUR and the U.S. dollar and the CHF at December 31, 2004, 2003, and 2002, were as follows.

**Exchange rates into U.S. dollars**

	At December 31,		
	2004	2003	2002
EUR 1.00	\$ 1.37	\$ 1.26	\$ 1.05
CHF 1.00	\$ 0.88	\$ 0.81	\$ 0.72

The average exchange rates between the U.S. dollar and the EUR and the U.S. dollar and the CHF for the years ended December 31, 2004, 2003 and 2002, were as follows.

**Exchange rates into U.S. dollars**

	For the year ended December 31,		
	2004	2003	2002
EUR 1.00	\$ 1.25	\$ 1.13	\$ 0.94
CHF 1.00	\$ 0.81	\$ 0.75	\$ 0.64

Increases and decreases in the value of the U.S. dollar versus local currencies will affect the reported value of our local currency assets, liabilities, revenues and costs in our Consolidated Financial Statements, even if the value of these items has not changed in local currency terms. These translations could significantly and adversely affect our results of operations and financial position from period to period.

**Currency Transaction Risk.** Currency risk exposure also affects our operations when our sales are denominated in currencies that are different from those in which our manufacturing costs are incurred. In this case, if after the parties agree on a price, the value of the currency in which the purchase price is to be paid weakens relative to the currency in which we incur manufacturing costs, there would be a negative impact on the profit margin for any such transaction. This transaction risk may exist regardless of whether or not there is also a translation risk as described above.

In 2004, approximately 84 percent of our consolidated revenues were generated in local currencies and translated into U.S. dollars. Of that amount, the following percentages were reported in the following local currencies:

Euro, approximately 37 percent;

Chinese renminbi, approximately 6 percent;

Swedish krona, approximately 6 percent;

Swiss franc, approximately 5 percent; and

Pound sterling, approximately 3 percent.

In 2004, approximately 83 percent of our consolidated cost of sales and selling, general and administration expenses were reported in currencies other than U.S. dollars. Of that amount, the following percentages were reported in the following currencies:

Euro, approximately 37 percent,

Chinese renminbi, approximately 5 percent,

Swedish krona, approximately 6 percent,

Swiss franc, approximately 5 percent and

Pound sterling, approximately 4 percent.

Currency exchange rate fluctuations in those currencies in which we incur our principal manufacturing expenses may adversely affect our ability to compete with companies whose costs are incurred in other currencies. If our principal expense currencies appreciate in value against such other currencies, our competitiveness may be weakened.

***Our hedging activities may not protect us against the consequences of significant fluctuations in exchange rates on our earnings and cash flows.***

Our policy is to hedge material net currency exposures by entering into offsetting transactions with third party financial institutions. Given that, and the effective horizons of our risk management activities and the anticipatory nature of the exposures intended to be hedged, there can be no assurance that our currency hedging activities will fully offset the adverse financial impact resulting from unfavorable movements in foreign exchange rates. In addition, the timing of the accounting for recognition of gains and losses related to a hedging instrument may not coincide with the timing of gains and losses related to the underlying economic exposures.

***We operate in very competitive markets and could be adversely affected if we fail to keep pace with technological changes.***

We operate in very competitive environments in several specific respects, including product performance, developing integrated systems and applications that address the business challenges faced by our customers, pricing, new product introduction time and customer service. The relative importance of these factors differs across the geographic markets and product areas that we serve. The markets for our products and services are characterized by evolving industry standards (particularly for our automation technology products and systems), rapidly changing technology (in both our power and automation businesses) and increased competition as a result of deregulation (particularly for our power technology products and systems). For example, for a number of years power transmission and distribution providers throughout the world have been undergoing substantial deregulation and privatization. This has increased their need for timely product and service innovations that increase efficiency and allow them to compete in a deregulated environment. Additionally, the continual development of advanced technologies for new products and product enhancements is an important way in which we maintain acceptable pricing levels. If we fail to keep pace with technological changes in the industrial sectors that we serve, we may experience price erosion and lower margins.

The principal competitors for our automation technology products and services include Emerson Electric Co., Honeywell International, Inc., Invensys plc, Schneider Electric S.A. and Siemens AG. We primarily compete with Areva S.A., Schneider Electric SA and Siemens AG in sales of our power technology products and systems to our utilities customers. The principal competitors with our Oil, Gas and Petrochemicals business include Bechtel Group, Inc., UOP LLC, Fluor Corporation, Halliburton Company and Technip-Coflexip S.A. All of our competitors are sophisticated companies with significant resources that may develop products and services that are superior to our products and services or may adapt more quickly than we do to new technologies, industry changes or evolving customer requirements. Our failure to anticipate or respond quickly to technological developments or customer requirements could adversely affect our business, results of operations, financial condition and liquidity.

***Industry consolidation could result in more powerful competitors and fewer customers.***

Competitors of all of our business divisions are consolidating. In particular, the automation industry is undergoing consolidation that is reducing the number but increasing the size of companies that compete with us. As our competitors consolidate, they likely will increase their market share, gain economies of scale that enhance their ability to compete with us and/or acquire additional products and technologies that could displace our product offerings.

Our customer base also is undergoing consolidation. Consolidation among our customers' industries (such as the marine and cruise industry, the automotive, aluminum, steel, pulp and paper, pharmaceutical industries and the oil and gas industry) could affect our customers and their relationships with us. If one of our competitors' customers acquires any of our customers, we may lose its business. Additionally, as our customers become larger and more concentrated, they could exert pricing pressure on all suppliers, including ABB. For example, in an industry such as power transmission, which historically has consisted of large and concentrated customers such as utilities, price competition can be a factor in determining which products and services will be selected by a customer.

***Our business is affected by the global economic and political climate.***

Adverse changes in economic conditions or the political climate could have a material adverse effect on our business, financial condition, results of operations and liquidity. The business environment is influenced by numerous political uncertainties, which will continue to affect the global economy and the international capital markets. In periods of slow economic growth or decline, our customers are more likely to decrease expenditures on the types of products and systems we supply and we are more likely to experience decreased revenues as a result. Our Power Technologies division is affected by the level of investments by utilities, and our Automation Technologies division is affected by conditions in a broad range of industries, including the automotive, pharmaceutical, pulp and paper, metals and minerals and manufacturing and consumer industries. Our Oil, Gas and Petrochemicals business is affected by conditions in the oil, gas and petrochemicals industry, including the level of market growth in low hydrocarbon cost regions and high economic growth regions.

***We have retained liability for environmental remediation costs relating to businesses that we sold in 2000, and we could be required to make payments in respect of these retained liabilities in excess of established reserves.***

We have retained liability for environmental remediation costs at two sites in the United States that were operated by our nuclear technology business, which we sold in April 2000 to British Nuclear Fuels plc ("BNFL"). We have retained all environmental liabilities associated with our Combustion Engineering subsidiary's Windsor, Connecticut facility and a portion of the liabilities associated with our ABB C-E Nuclear Power, Inc. subsidiary's Hematite, Missouri facility. The primary environmental liabilities associated with these sites relate to the costs of remediating radiological and chemical contamination upon decommissioning the facilities. Based on information that BNFL has made publicly available, we believe remediation may take until 2013 at the Hematite site and until 2008 at the Windsor site. At the Windsor site, we believe that a significant portion of such remediation costs will be the responsibility of the U.S. government pursuant to federal law, although the exact amount of such responsibility cannot reasonably be estimated. In connection with the sale of the nuclear business in April 2000, we established a reserve of \$300 million in respect of estimated remediation costs related to these facilities. Expenditures charged to the remediation reserve were \$10 million, \$6 million and \$12 million during 2004, 2003 and 2002, respectively. It is possible that we could be required to make expenditures in excess of the reserve, in a range of amounts that cannot reasonably be estimated. See "Item 5. Operating and Financial Review and Prospects Environmental Liabilities

***We are subject to environmental laws and regulations in the countries in which we operate. We incur costs to comply with such regulations, and our ongoing operations may expose us to environmental liabilities.***

Our operations are subject to U.S., European and other laws and regulations governing the discharge of materials into the environment or otherwise relating to environmental protection. Our manufacturing facilities use and produce paint residues, solvents, metals, oils and related residues. We use petroleum-based insulation in transformers, PVC resin to manufacture PVC cable and chloroparaffine as a flame retardant. We use inorganic lead as a counterweight in robots that we

produce. These are considered to be hazardous substances in many jurisdictions in which we operate. We may be subject to substantial liabilities for environmental contamination arising from the use of such substances. All of our manufacturing operations are subject to ongoing compliance costs in respect of environmental matters and the associated capital expenditure requirements.

In addition, we may be subject to significant fines and penalties if we do not comply with environmental laws and regulations including those referred to above. Some environmental laws provide for joint and several strict liability for remediation of releases of hazardous substances, which could result in our liability for environmental damage without regard to our negligence or fault. Such laws and regulations could expose us to liability arising out of the conduct of operations or conditions caused by others, or for our acts which were in compliance with all applicable laws at the time the acts were performed. Additionally, we may be subject to claims alleging personal injury or property damage as a result of alleged exposure to hazardous substances. Changes in the environmental laws and regulations, or claims for damages to persons, property, natural resources or the environment, could result in substantial costs and liabilities to us.

***We may be the subject of product liability claims.***

We may be required to pay for losses or injuries purportedly caused by the design, manufacture or operation of our products and systems. Additionally, we may be subject to product liability claims for the improper installation of products and systems designed and manufactured by others.

Product liability claims brought against us may be based in tort or in contract, and typically involve claims seeking compensation for personal injury or property damage. If the claimant runs a commercial business, claims are often made also for financial losses arising from interruption of operations consequential to property damage. Because of our broad offering of products, these claims arise in different contexts, including the following:

If our power technology products and systems are defective, there is a substantial risk of fires, explosions and power surges and significant damage to electricity generating, transmission and distribution facilities.

If our automation technology products and systems are defective, our customers could suffer significant damage to facilities that rely on these products and systems to properly monitor and control their manufacturing processes.

If we were to incur a very large product liability claim, our insurance protection might not be adequate or sufficient to cover such a claim in terms of paying any awards or settlements, and/or paying for our defense costs. Further, some claims may be outside the scope of our insurance coverage. If a litigant were successful against us, a lack or insufficiency of insurance coverage could result in an adverse effect on our business, financial condition, results of operations and liquidity. Additionally, a well-publicized actual or perceived problem could adversely affect our market reputation which could result in a decline in demand for our products.

***Our operations in emerging markets expose us to risks associated with conditions in those markets.***

An increasing amount of our operations are conducted in the emerging markets of Latin America, Asia, the Middle East and Africa. In 2004, approximately 35 percent of our consolidated revenues were generated from these emerging markets. Operations in emerging markets can present risks that are not encountered in countries with well-established economic and political systems, including:

economic instability, which could make it difficult for us to anticipate future business conditions in these markets, cause delays in the placement of orders for projects that we have been awarded and subject us to volatile markets;

political or social instability, which makes our customers less willing to make investments in such regions and complicates our dealings with governments regarding permits or other regulatory matters, local businesses and workforces;

boycotts and embargoes that may be imposed by the international community on countries in which we operate, which could adversely affect the ability of our operations in those countries to obtain the materials necessary to fulfill contracts and our ability to pursue business or establish operations in those countries;

significant fluctuations in interest rates and currency exchange rates;

the imposition of unexpected taxes or other payments on our revenues in these markets; and

the introduction of exchange controls and other restrictions by foreign governments.

In addition, the legal and regulatory systems of the emerging markets identified above are less developed and less well-enforced than in industrialized countries. Therefore, our ability to protect our contractual and other legal rights in those regions could be limited. We cannot offer any assurance that our exposure to conditions in emerging markets will not adversely affect our business, financial condition, results of operations and liquidity.

***We may encounter difficulty in managing our business due to the global nature of our operations.***

We operate in approximately 100 countries around the world and, as of December 31, 2004, employed approximately 102,500 people. As of December 31, 2004, approximately 59 percent of our employees were located in Europe, approximately 16 percent in the Americas, approximately 16 percent in Asia and approximately 9 percent in the Middle East and Africa. In order to manage our day-to-day operations, we must overcome cultural and language barriers and assimilate different business practices. In addition, we are required to create compensation programs, employment policies and other administrative programs that comply with the laws of multiple countries. We also must communicate and monitor group-wide standards and directives across our global network. Our failure to successfully manage our geographically diverse operations could impair our ability to react quickly to changing business and market conditions and to enforce compliance with group-wide standards and procedures.

***Our reputation and our ability to do business may be impaired by corrupt behavior by any of our employees or agents or those of our subsidiaries.***

There is a risk that our employees or agents may take actions that violate either the U.S. Foreign Corrupt Practices Act (FCPA) or legislation promulgated pursuant to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions or other applicable anti-corruption regulations. Such actions have resulted, and could in the future result, in monetary penalties against us or our subsidiaries and could damage our reputation and ability to do business. Further, detecting, investigating and resolving such actions could be expensive and could consume significant time and attention of our senior management. While we and our subsidiaries are committed to conducting business in a legal and ethical manner, our internal control systems have not been, and in the future may not be, completely effective to prevent and detect such improper activities by our employees and agents.

In 2004, we agreed to a civil settlement and paid civil penalties in connection with FCPA violations in Nigeria, we discovered earnings overstatements and related improper payments by one of our units in Italy (and as a result in 2004 we restated our consolidated financial statements as of December 31, 2003 and 2002 and for each of the years in the three year period ended December 31, 2003) and we discovered and reported to European authorities anticompetitive practices by employees in our gas insulated switchgear business.

On April 19, 2005, we voluntarily disclosed to the U.S. Department of Justice and the U.S. Securities Exchange Commission certain suspect payments made by employees of ABB network management, a specialized U.S.-based business unit. The suspect payments became apparent during an internal investigation following the dismissal of two managers from the company in mid-2004. The payments were made to intermediaries in Latin America and in the Middle East in connection with the company's business, which is control software for utility customers. We are continuing our investigation and compliance review of this business.

If these payments are found to have been illegal, we could be subject to civil and criminal penalties. There can be no assurance that any governmental investigation or our investigation of these matters will not conclude that violations of applicable laws have occurred or that the results of these investigations will not have a material adverse effect on our business and results of operations.

For more information, see "Item 8. Financial Information Legal Proceedings."

***Our Oil, Gas and Petrochemicals business may experience losses if the oil and gas industry generally experiences a downturn.***

Our Oil, Gas and Petrochemicals business, which is part of our Non-core activities, depends on the condition of the oil and gas and chemical industry and particularly on capital expenditure budgets of the companies engaged in the downstream refining and petrochemicals segments. The prices of oil and gas and their uncertainty in the future, along with forecasted growth in world oil and gas demand, strongly influence the extent of investment in downstream production activities. Demand for our Oil, Gas and Petrochemicals services will also be affected by refinery margins and prices for petrochemical products such as ethylene and polypropylene.

Refining budgets may be impacted by slower growth in transport fuel demands in China and other growing economies, reduction in fuel usage due to high gasoline prices in the Western economies and slowdown in implementing clean fuels regulations.

Petrochemicals investments, which are normally cyclical and which have been on a high growth pattern in the Middle East and China, may flatten or decline if there is a slowdown in consumption of plastics or if there are political or social events which disrupt business in the Middle East.

***Increases in the costs of our raw materials may adversely affect our financial performance.***

We purchase large amounts of commodity-based raw materials, including steel, copper, aluminum, and oil. Prevailing prices for such commodities are subject to fluctuations in response to changes in supply and demand and a variety of additional factors beyond our control, such as global political and economic conditions. Historically, prices received for some of these raw materials has been volatile and unpredictable, and such volatility is expected to continue. Therefore, commodity price changes may result in unexpected increases in raw material costs, and we may be unable to increase our prices to offset these increased costs without suffering reduced volume, revenue and operating income. We do not fully hedge against changes in commodity prices and our hedging procedures may not work as planned.

We depend on third parties to supply raw materials and other components and may not be able to obtain sufficient quantities of these materials, which could limit our ability to manufacture products on a timely basis and could harm our profitability. Any supply interruption in a limited or sole-sourced component or raw material could materially harm our ability to manufacture our products until a new source of supply, if any, could be found. We may be unable to find a sufficient alternative supply channel in a reasonable time period or on commercially reasonable terms, if at all. If our suppliers are unable to deliver sufficient quantities of these materials on a timely basis, the manufacture and sale of our products may be disrupted and our sales and profitability could be materially adversely affected.



***If we are unable to successfully address the material weaknesses in our internal control over financial reporting, our ability to report our financial results on a timely and accurate basis may be adversely affected. As a result, investors could lose confidence in our financial reporting, which may harm our business and the trading price of our stock.***

Effective internal control is necessary for us to provide reliable financial reports, and effective disclosure controls are important in enabling us to meet our reporting obligations under the U.S. federal securities laws and other relevant rules and regulations. The Sarbanes-Oxley Act of 2002 requires, among other things, that we maintain adequate internal control structure and procedures for financial reporting. If we can not provide reliable reports, our business and operating results could be harmed. In connection with their evaluation of our disclosure controls and procedures as of December 31, 2004, our Chief Executive Officer and Chief Financial Officer determined that several areas of our internal control over financial reporting need improvement, including a material weakness arising from our September 2004 restatement of our consolidated financial statements as of December 31, 2003 and 2002 and for each of the years in the three year period ended December 31, 2003 and data for 2004 and prior years, and a material weakness resulting from a series of significant deficiencies in our financial reporting process (including, significant deficiencies that were identified in prior years but had not yet been remediated). Based on their evaluation of our disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer were not able to conclude that as of December 31, 2004 our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and such information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. We have begun executing a remediation plan to address these weaknesses in our internal controls over financial reporting, as discussed in Item 15 "Controls and Procedures."

In April 2005, in accordance with our 2004 civil settlement with the U.S. Securities and Exchange Commission, we appointed an independent consultant to review our policies and procedures as they relate to compliance with the books and records, internal accounting controls and anti-bribery provisions of the FCPA. The consultant is expected submit a report in August 2005 documenting findings and making recommendations (the "Report") to our Board of Directors. Within ninety days after receiving the Report, we are required to adopt the recommendations contained in the Report, except in certain limited circumstances. We cannot predict what conclusions the independent consultant will reach, or what changes we will make to our controls and procedures following recommendations by the independent consultant. See "Item 8. Financial Information Legal Proceedings."

Unless and until we successfully address the material weaknesses and significant deficiencies, and any other inadequacies in our internal controls and disclosure controls and procedures, our ability to manage our business and to report on a timely and accurate basis may be adversely affected. Any failure to improve our internal control to address these identified material weaknesses and significant deficiencies could also cause investors to lose confidence in our reported financial information, which could have a negative impact on the trading price of our securities.

**Item 4. Information on the Company**

**INTRODUCTION**

We are a global provider of power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. We serve electric, gas and water utilities, as well as industrial and commercial customers, with a broad range of products, systems and services for power transmission, distribution and power plant automation. We also deliver automation systems for measurement, control, motion, protection and plant optimization across a full range of industries. We apply our expertise to develop creative ways of integrating our products and systems with our customers' business processes to enhance their productivity and efficiency.

**History of the ABB Group**

The ABB Group was formed in 1988 through a merger between Asea AB and BBC Brown Boveri AG. Initially founded in 1883, Asea AB was a major participant in the introduction of electricity into Swedish homes and businesses and in the development of Sweden's railway network. In the 1940s and 1950s, Asea AB expanded into the power, mining and steel industries. Brown Boveri & Cie. (later renamed BBC Brown Boveri AG) was formed in Switzerland in 1891 and initially specialized in power generation and turbines. In the early to mid-1900s, it expanded its operations throughout Europe and broadened its business operations to include a wide range of electrical engineering activities.

In January 1988, Asea AB and BBC Brown Boveri AG each contributed almost all of their businesses to newly formed ABB Asea Brown Boveri Ltd, of which they each owned 50 percent. In 1996, Asea AB was renamed ABB AB and BBC Brown Boveri AG was renamed ABB AG. In February 1999, the ABB Group announced a group reconfiguration designed to establish a single parent holding company and a single class of shares. ABB Ltd was incorporated on March 5, 1999, under the laws of Switzerland. In June 1999, ABB Ltd became the holding company for the entire ABB Group. This was accomplished by having ABB Ltd issue shares to the shareholders of ABB AG and ABB AB, the two publicly traded companies that formerly owned the ABB Group. The ABB Ltd shares were exchanged for the shares of those two companies, which, as a result of the share exchange and certain related transactions, became wholly owned subsidiaries of ABB Ltd, and are no longer publicly traded. ABB Ltd shares are currently traded on the SWX Swiss Exchange (virt-x), the Stockholm Exchange, the New York Stock Exchange (in the form of American Depositary Shares), the Frankfurt Exchange and the London Stock Exchange.

**Organizational Structure**

We manage our business based on a divisional structure. Each of our divisions manages several business areas, which in turn are subdivided into business units.

Our core business consists of two divisions, Power Technologies and Automation Technologies, and our management intends to continue to focus its attention on, and future investments in, these divisions. In addition, certain of our operations are classified in Non-core activities and Corporate/Other.

Non-core activities comprise businesses and activities that are not integral to our focus on power and automation technologies and that we are considering for sale, winding down or otherwise exiting.

Effective January 1, 2003, some business areas within our business divisions were reorganized or combined. Consequently, the results of operations in 2002 for certain of the affected business areas are not directly comparable to our results in 2003. When our results of operations in 2003 on a business area basis are not directly comparable to our results of operations in 2002, we combine the results of

the affected business areas to create an aggregated basis on which we can compare and discuss our results of operations.

Effective January 1, 2005, some business areas within our business divisions were combined. These changes are further discussed within the "Our business divisions" section below.

The following table sets forth the amount and percentage of ABB Ltd. revenues derived from each of our business divisions for the fiscal years ended December 31, 2004, 2003 and 2002, based on our current organizational structure:

	Revenues Year ended December 31,			Percentage of Revenues Year ended December 31,		
	2004	2003	2002	2004	2003	2002
	(U.S dollars in millions)			(%)		
Power Technologies	\$ 8,755	\$ 7,598	\$ 6,814	41	35	33
Automation Technologies	11,030	9,628	8,201	51	45	40
Non-Core Activities	1,693	4,322	5,614	8	20	27
<b>Subtotal</b>	<b>21,478</b>	<b>21,548</b>	<b>20,629</b>	<b>100</b>	<b>100</b>	<b>100</b>
Corporate/Other and Eliminations	(757)	(1,121)	(1,157)			
<b>Consolidated Revenues</b>	<b>\$ 20,721</b>	<b>\$ 20,427</b>	<b>\$ 19,472</b>			

For a breakdown of our consolidated revenues derived from each geographic region in which we operate, see "Item 5. Operating and Financial Review and Prospects Analysis of Results of Operations Revenues."

Our principal corporate offices are located at Affolternstrasse 44, CH-8050 Zurich, Switzerland, telephone number +41-43-317-7111. Our agent for U.S. federal securities law purposes is ABB Holdings Inc., located at 501 Merritt 7, Norwalk, Connecticut 06851.

## BUSINESS DIVISIONS

### Power Technologies Division

#### *Overview*

The Power Technologies division serves electric, gas and water utilities as well as industrial and commercial customers, with a broad range of products, systems and services for power transmission, distribution and power plant automation. Key technologies include high- and medium-voltage switchgear, high-voltage power converters, advanced cables for underground and undersea power transmission, electrical transformers, and products and systems to automate and control power plants, electrical and other utility networks. The division had 149 manufacturing plants and 40,500 employees as of January 1, 2005.

#### *Power Industry Background*

The portions of an electricity grid that operate at highest voltages are "transmission" systems, while those at lower voltages are "distribution" systems. Transmission systems link power generation sources to distribution systems. Distribution networks then branch out over shorter distances to carry electricity from the transmission system to end users. These electricity networks incorporate sophisticated devices to control and monitor operations and to prevent damage from failures or stresses.

Electricity is transformed at different stages in the delivery process between the source and the ultimate end user. For example, electrical power is often generated in large power plants at 10 to 20



kilovolts. Because this voltage is too low to be transmitted efficiently, transformers are used to increase the voltage of electricity (up to 1,100 kilovolts) for long-distance transmission. This reduces losses and increases the amount of power that can be carried per line.

Transformers are also used to decrease the voltage at the local end for distribution to end users, such as residential, commercial or industrial consumers. An electric utility distribution system comprises distribution substations and networks, both overhead and underground. Some large industrial and commercial facilities receive electricity at higher voltage levels from the transmission or distribution network, while most industrial, commercial and residential users receive electricity from distribution network feeders at lower voltages.

There is a global trend toward deregulation and privatization of the power industry, which is creating a more competitive environment for our customers. This trend is evident in the United States, parts of Latin America and Western Europe, particularly in the United Kingdom and the Nordic countries. It is accelerating elsewhere in Europe and is developing in other regions. The creation of a free market for electricity requires our customers to become more cost-efficient and reliable to compete as a lowest-cost provider among power suppliers. Grid operators must be able to deliver power to customers that are hundreds or thousands of miles away within a few minutes. As more disturbance-sensitive loads (such as computers and telecommunications systems) have been added to networks, demand for reliable, high-quality electricity is increasing. Power suppliers can achieve this efficiency and reliability in a number of ways, including the following:

Replacing and modernizing assets and investing in information technology-based control and monitoring equipment and communications networks to control and supervise power networks based on instantaneous access to information.

Upgrading current technologies and introducing new technologies to improve network reliability, increase network power rating and enhance the control of power flow through existing transmission and distribution assets.

**Business Areas**

The following table sets forth the approximate proportion of the Power Technologies division's revenue generated in 2004 by each of the business areas in the division:

Business Area	Proportion of Division Revenues
Transformers	26%
Power Systems	22%
Medium-Voltage Products	19%
High-Voltage Products	17%
Utility Automation Systems	16%

Through 2003 and 2004, two of the division's business areas Power Systems and Utility Automation Systems primarily provided engineering services drawing on the ABB Group's complete range of products and services. The other three business areas High-Voltage Products, Medium-Voltage Products, and Transformers mainly consisted of product manufacturing businesses. As of January 1, 2005, the Power Technologies division simplified its structure from five into two business areas, organized around products and systems, in order to further improve efficiency and cost competitiveness. The Power Technology Systems business area offers systems for power transmission, distribution grids and power plants. The Power Technology Products business area incorporates ABB's manufacturing network for power technologies, such as switchgear, breakers, transformers and cables.

### *Transformers*

Effective January 1, 2004, the Power Technologies division merged its Power Transformers business area with its Distribution Transformers business area to form a single Transformers business area. The merger was intended to reduce product overlaps, eliminate redundant research and development efforts and improve supply chain management. The two former business areas already shared many production locations prior to their merger.

The Transformers business area designs and manufactures power transformers (72.5 to 800 kilovolts) for utility, transportation and industrial customers, as well as transformer components such as bushings and tap changers. The business area also produces insulation material. Transformers are typically used for power transmission and distribution systems, such as in large substations. Generator transformers are used in power generation when it is necessary to increase power voltage from a power plant for long-distance transmission. Industrial transformers are mainly delivered to the steel and aluminum industry, which need their own high-voltage transformers and substations on-site to service their heavy electricity requirements. Finally, the business area produces traction transformers used in electric locomotives. Customers in the components business come both from the transformer and electrical motor industry. The business area also provides a wide range of transformer service and retrofit solutions for utilities and industry customers.

The business area also manufactures distribution transformers for use in industrial facilities, commercial buildings and utility distribution networks to step down electrical voltage to the levels needed by end users. The business area manufactures and sells a full range of power distribution transformers (up to 72.5 kilovolts), including oil-type, dry-type and special application distribution transformers. Although oil-type transformers are more commonly used, demand for dry-type transformers is growing because they minimize fire hazards and have applications in high-density office buildings, windmills, offshore drilling platforms, naval vessels and high-volume industrial plants.

### *Power Systems*

Our Power Systems business area undertakes turnkey contracts to install and upgrade transmission and distribution systems incorporating components manufactured by this division and the Automation Technologies division, as well as those manufactured by third parties.

We are a leader in high-voltage direct current ("HVDC") technology. HVDC transmission is an advanced technology for transporting electricity over long distances. It reduces power losses, increases system stability and provides a more controllable flow than high-voltage alternating current. An HVDC transmission system typically includes converters, which change alternating current to direct current and then back to alternating current when it reaches the terminal point, and transmission lines, either above or below ground. Advances in converter and cable technology have enabled us to introduce a system called HVDC Light . Converter stations for HVDC Light are approximately one-fifth the size of conventional HVDC technology for the same rated power. HVDC Light extends the range of applications for high-voltage direct current. Typical applications include interconnection of separate networks that operate on different frequencies or provide variational power quality, such as wind parks. The system can also be used as a substitute for local power generation in remote areas, islands or oil platforms.

We also provide flexible alternating current (AC) transmission systems ("FACTS") to enhance power grid stability, improve power quality and thus increase transmission capability. FACTS devices include series compensators, static VAR compensators ("SVCs") and SVC Light (based on the same unique technology as HVDC Light ).

HVDC, HVDC Light , FACTS, and SVC Light systems rely on advanced power semiconductor components. Our in-house power semiconductor unit enables us to develop and manufacture

tailor-made components to maximize the performance of these systems. This business area supplies power semiconductor devices to other ABB businesses and to external customers in the power transmission and distribution, drives, and transportation markets.

The Power Systems business area also supplies substations to interconnect electricity grids operating on different voltage levels, to sectionalize portions of the grid and to protect the electrical system against damage from outside sources such as lightning and overload. By sectionalizing the grid, power can be rerouted from portions of the transmission system that are experiencing problems to sections that are functioning properly, thereby enhancing the overall reliability of the power supply. This business area delivers complete air and gas insulated substations for power transmission. Substations are also necessary in a power distribution network to sectionalize and reduce the voltage of the main power lines and cables to the lower voltages required for efficient distribution and consumption. For power distribution, this business area sells traditional custom-engineered substations as well as compact, modular substations, which require less space than a conventional substation and thus are particularly well suited for urban settings. It also offers prefabricated secondary substations that can be installed more quickly than traditional substations, and which transform electricity to consumer-level voltages.

Power Systems also delivers the engineering, procurement and construction ("EPC") of overhead transmission lines, one of the main subsystems in a transmission network. ABB in-house engineering and manufacturing of steel transmission towers and composite insulators also add value in the delivery of a transmission line project. Power Systems also provides studies on the design of new transmission lines and system optimization that take into account technical, economic and environmental considerations.

This business area offers service contracts and support for management of existing power transmission and distribution assets, including both ABB products and those manufactured by third parties. In addition, it offers asset management services including technical consulting (system diagnostics, network analysis, planning and optimization), commercial consulting (cost reduction programs, investment strategies, reengineering of business processes) and execution (maintenance strategies, logistics).

#### *Medium-Voltage Products*

The Medium-Voltage Products business area develops products and systems that reduce outage times and improve power quality and control, which are key to improving operational efficiency of both utility and industrial customers. It supplies switching equipment both directly to end users and through distributors and original equipment manufacturers ("OEMs"). Most of its products provide connections between higher voltage substations and lower voltage uses. It produces a comprehensive line of medium-voltage equipment (1 to 50 kilovolts), including products such as indoor and outdoor switch disconnectors, breakers, reclosers, fuses, contactors, instrument transformers and sensors as well as air- and gas-insulated switchgear, motor control centers, and ring main units for primary and secondary distribution. It also produces indoor and outdoor modular systems, compact substations and power distribution centers. As with the High-Voltage Products business area, many of its components form part of the offering of the Power Systems business area. In addition, a significant portion of its products are sold through external channel partners such as OEMs.

#### *High-Voltage Products*

The High-Voltage Products business area provides power utilities with electricity transmission equipment that allows them to operate more efficiently and with lower environmental impact, both of which are significant business concerns in the market in which our customers operate. The business area manufactures the principal components of power transmission systems (50 to 800 kilovolts),

including air- and gas-insulated switchgear, cables, capacitors, high-voltage circuit breakers, grounding switches and instrument transformers. This business area is also responsible for the entire ABB portfolio of low, medium and high voltage capacitors and surge arresters. Its products and components also include circuit breaker drives and cable accessories. Some of the business area's products are integrated into the offering of the Power Systems business area or are sold through external channel partners such as engineering, procurement and construction firms.

#### *Utility Automation Systems*

Our Utility Automation Systems business area applies its power industry and automation expertise to integrate products manufactured by both the Power Technologies and the Automation Technologies divisions, as well as those of third parties, to provide utility customers with automation systems tailored for their generating plants or transmission and distribution networks.

In the area of power plant automation, the Utility Automation Systems business area offers complete system integration of instrumentation, control and electrical ("ICE") equipment for the power generation market. The services offered by the business area include combustion management, plant performance optimization, condition monitoring and asset management.

For water plants, the business area offers system integration for all ICE applications in water systems, including automation services for water treatment plants, distribution systems, waste water collection systems and wastewater treatment. The business area offers turnkey pumping stations and control systems for water leakage management, lift-station monitoring and optimization of plant performance.

The Utility Automation Systems business area offers high-end supervisory control and data acquisition ("SCADA") systems to power and gas customers. SCADA systems are used to monitor and control energy transmission, distribution and power generation management systems. They are also used to operate market systems for power networks by tracking energy costs, end-user consumption and retail and wholesale prices, among other things. In addition, this business area offers customer care systems and asset management systems for electrical networks, district heating networks and gas networks. These allow utilities to optimize their business by improving the performance of their installed network equipment to meet changing customer requirements and new market conditions.

This business area also provides system integration for substations used in power generation, transmission and distribution. Its offering includes small electrical SCADA systems, wide area protection systems, feeder automation systems and power system monitoring, which provides real-time information that enables utilities to make informed system-related decisions.

The business area provides wireless and fixed communication systems for power, water and gas utilities, including both operational and corporate communication networks. It offers fiber optics, microwave radio and power line applications for data networking and broadband network management, as well as teleprotection and substation communication networks and voice switching management systems.

The Utility Automation Systems business area offers a range of service capabilities aimed at reducing the in-house operational and maintenance requirements of utility customers. It offers service contracts for spare parts management, support agreements, software and hardware upgrades and retrofits, service consulting, asset management and training.

#### *Customers*

The Power Technologies division's principal customers are electric, gas and water utilities, owners and operators of power transmission systems, utilities that own or operate networks and owners and operators of power generating plants. Other customers include gas transmission companies, local



distribution companies and multi-utilities, which are involved in the transmission or distribution of more than one commodity. The division also serves industrial and commercial customers, such as operators of large commercial buildings and heavy industrial plants. In 2004, the division's ten largest customers accounted for approximately 14 percent of the division's orders received.

***Geographic Markets***

The following table sets forth the proportion of Power Technologies division's revenues derived from each geographic region (based on the location of the customer, which may be different from the ultimate destination of the products' end use) in which the ABB Group operates:

	Year ended December 31,	
	2004	2003
	(percent)	
Europe	39	38
The Americas	22	25
Asia	25	24
Middle East and Africa	14	13
<b>Total</b>	<b>100</b>	<b>100</b>

***Sales and Marketing***

The Power Technologies division sells its products individually through its three product business areas and as parts of larger systems through its two systems business areas. Most product sales are made through the division's own direct sales force, which is enhanced by industrial representatives and agents where appropriate. In 2004, direct sales accounted for a majority of the division's total product sales, and sales through external channel partners, such as wholesalers, distributors and OEMs, accounted for the remainder. Sales in the systems business areas are handled primarily by the division's specialized sales engineering teams, although these divisions use system integrators and other third-party sellers from time to time.

***Competition***

On a global basis, the Power Technologies division's principal competitors are Areva, Schneider and Siemens. In the distribution transformers market, the division also competes with companies such as Cooper Cameron and Howard Industries. In the utility automation area, the division's principal competitors are ALSTOM, Emerson, GE Harris, Honeywell, Invensys and Siemens.

***Research and Development***

Research and development expenses that were not order-related for the Power Technologies division amounted to approximately \$210 million for 2004. The division's research and development activities in 2004 primarily related to streamlining product portfolios in all business areas. The aim is to increase product standardization and thus improve the efficiency of our design, supply, manufacturing, sales and distribution functions. Related research has focused on technologies that enable faster production cycles, mainly in the areas of new materials and design. In the Utility Automation Systems business area, research continued to focus on the standardization of controls and protection systems, with the goal of reducing costs in the production of substation automation systems, power plant controls and SCADA systems. In addition, order-related research and development expenses for the Power Technologies division amounted to \$179 million during 2004. A significant part of this amount was spent in the Systems business area.

### *Capital Expenditures*

The Power Technologies division's capital expenditures for property, plant and equipment were \$137 million in 2004, compared to \$120 million and \$116 million in 2003 and 2002, respectively. Principal investments in 2004 included investments to replace existing equipment, particularly in Sweden, the United States, China and Germany, mainly in the Power Transformers business area. Geographically, in 2004, Europe accounted for about 63 percent of the capital expenditure, with about 12 percent in the Americas, about 20 percent in Asia and about 5 percent in Middle East and Africa. Asia and Middle East experienced increases in the total amount of capital expenditure, particularly in China, India and Saudi Arabia.

### **Automation Technologies Division**

#### *Overview*

The Automation Technologies division provides products, systems, software and services for the automation and optimization of industrial and commercial processes. Key technologies include measurement and control, instrumentation, process analysis, drives and motors, power electronics, robots and low-voltage products. This division had approximately 150 manufacturing, software and application centers and 55,000 employees as of January 1, 2005.

We are a recognized market leader in our core automation products and systems, with particular strength in process automation systems (including supervisory control and data acquisition, or SCADA, systems), quality control systems, advanced robotics, process instrumentation (including analytical measurement devices), electrical machines and alternating current, or AC, drives.

The Automation Technologies division offers its products, both as separately sold devices and as part of a total automation system, through one product-based business area and two primarily system and service-based business areas, as discussed below. The division focuses on developing synergies and efficiencies among its business areas, such as common marketing, software re-use and streamlined geographic sales and service networks.

#### *Automation Industry Background*

Our customers use automation technologies primarily to improve product quality, productivity and consistency in industrial and manufacturing applications. The automation market can be divided into three sectors:

*Process automation* refers to control systems applied in processes where the main objective is continuous production, such as oil and gas, electricity, chemicals and pulp and paper. Product lines for this market include instrumentation, analytical measurement and control products and systems, as well as motors and drives. This division offers complete process automation systems that incorporate medium and low-voltage switchgear, synchronized drive systems, instrument and control and advanced diagnostic packages. Its products also include software to optimize the manufacturing and business processes.

*Factory automation* refers to discrete operations which manufacture individual items used mainly within the automotive, packaging and consumer goods industries. Product lines for this market include robots and robot cells, which include standardized and tailored systems for discrete applications such as painting, picking, packing, palletizing, welding and assembly. This division provides a comprehensive set of systems using these technologies, including application-specific software and configuration tools.

*Building automation* comprises product lines and applications particularly targeted at the building industry. Product lines for this market include a wide range of low-voltage products for control

of climate, lighting and security, as well as software for optimal management of the energy cost of buildings.

The Automation Technologies division manufactures products and systems relating to all three sectors, primarily focusing on process automation products and systems, as well as robotics technologies for factory automation. The division provides to its customers the full range of ABB's products on a stand-alone basis, or as part of systems involving conceptual design, detailed engineering, project management, installation and commissioning, as well as after-sales services and system optimization during the full life span of the system.

In mid-2001, this division entered into a ten-year strategic alliance with The Dow Chemical Company ("Dow") in which Dow agreed to use our Industrial IT automation systems in nearly all of its new automation projects, as well as in retrofits of existing systems. Another significant strategic cooperation was forged in 2001 through a framework agreement with the original equipment manufacturer York International (U.S.), a long-time customer, for simplified account service, pricing and joint development spanning multiple product lines. In late 2002, the division was awarded two contracts for long-term asset management services totaling more than \$130 million at papermaker Carter Holt Harvey Limited (New Zealand) and petrochemical leader ENI Group (Italy). The division has similar strategic relationships with nearly 100 customers, and has been successful in expanding the scope of such agreements over time to cover additional ABB products and services. Significant agreements during 2003 included a frame agreement with transportation leader Bombardier for up to \$500 million in power and automation technologies, signed in cooperation with our Power Technologies division, and a \$34 million contract extension to provide site service, spare parts and modifications to oil producer Statoil.

In December 2003, this division commercially released the latest version of its Industrial IT process automation platform, called System 800xA. This system extends the capability of traditional process control systems, introducing advanced functions such as batch management, asset optimization and field device integration which "plug in" to a common user environment. The same user interface may also be used to manage components of existing multiple ABB control systems that have been installed in the market over the past approximately 20 years. In this way, System 800xA gives customers a way to migrate to new functions one step at a time, rather than having to make a large-scale capital investment to replace their entire control system. By creating a common user interface that can be used to manage multiple systems, the System 800xA also reduces the research and development investment needed to achieve a "one size fits all" solution across our large installed systems base.

Our customers are increasingly under pressure to deliver their products more quickly to their customers and to respond rapidly to changing customer preferences. At the same time, constant price pressure requires them to find ways to decrease production costs. Furthermore, as the quality of products becomes more equalized among our customers' competitors, our customers increasingly focus on design and branding to distinguish their products from those of their competitors. This change in focus means that much of the manufacturing and production activities are outsourced to sub-suppliers, which may manufacture products for a number of different companies in a given industry. The consolidation in the manufacturing role enables the sub-suppliers to provide products at a lower cost and presents further opportunities for ABB to provide flexible solutions for automation. Another growing practice among our customers is the outsourcing of non-core tasks such as maintenance and facilities management services. The division has sought to capitalize on this trend by providing an increasing number of service arrangements covering overall plant maintenance and asset optimization.

**Business Areas**

Effective January 1, 2004, the Automation Technologies division merged its six business areas into three business areas as part of its drive to further simplify and focus the business and to improve efficiency. The three business areas are:

*Automation Products*, comprising the former business areas Low-Voltage Products and Instrumentation and Drives, Motors and Power Electronics.

*Process Automation*, comprising the former Control Platform and Enterprise Products, Petroleum, Chemical and Consumer Industries, and Paper, Minerals, Marine and Turbocharging business areas.

*Manufacturing Automation*, previously called Robotics, Automotive and Manufacturing.

The following table sets forth the approximate amount of the Automation Technologies division's revenue generated in 2004 by each of the business areas in the division:

Business Area	Proportion of Division Revenues
Automation Products	47%
Process Automation	40%
Manufacturing Automation	13%

*Automation Products*

The Automation Products business area manufactures low-voltage circuit breakers, switches and control products to protect people, installations and electronic equipment from electrical overloads. It also manufactures instrumentation products to measure and control the flow of fluids.

This business area makes line protection products, wiring accessories and enclosures and cable systems that are primarily used for control and protection in building installations. It also produces European Installation Bus/Powernet systems, which integrate and automate a building's electrical installations, ventilation, security and data communication networks. Although it provides low-voltage products and systems for building automation, this business area is not involved in the execution of building system projects and installations (which is the business of the non-core Building Systems business area).

The process instrumentation products manufactured by this business area interact with the division's Open Control System products and include products for the measurement of process variables such as pressure, temperature, volume and flow. The increasing sophistication of many process automation systems often requires thousands of measurement points for such variables. These instrumentation products are sold separately or in combination with control systems. The various analytical measurement devices produced by this business area form an important part of instrumentation and control systems. These devices measure chemical characteristics while process instrumentation products measure physical characteristics.

This business area also develops low-voltage and medium-voltage AC drive products and systems for industrial, commercial and residential applications. Drives provide motion and torque while adding control and efficiency to equipment such as fans, pumps, compressors, conveyors, kilns, centrifuges, mixers, hoists, cranes, extruders, printing machinery and textile machines. Our drives are used in the building automation, marine, power, transportation and manufacturing industries, among others.

The Automation Products business area also produces a range of power electronics products. It produces static excitation and synchronizing systems that provide stability for power stations, as well as high power rectifiers that convert AC power to DC power for very high-amperage applications such as furnaces in zinc plants and aluminum and magnesium smelters. The business area also manufactures

frequency converters that use state-of-the-art semiconductor technology to convert electrical power into the type and frequency required by individual customers.

In addition, this business area supplies a comprehensive range of electrical motors and generators, including high-efficiency motors that conform to leading environmental and efficiency standards. Efficiency is an important criterion for selection by customers, because electric motors account for nearly two-thirds of the electricity consumed by industrial plants. This business area manufactures synchronous motors for the most demanding applications and a full range of low and high-voltage induction motors.

#### *Process Automation*

The Process Automation business area offers integrated process control and information management systems for a variety of industries, primarily pulp and paper, minerals and mining, chemicals and pharmaceuticals, oil and gas, and the marine industry.

Our control systems are used in such applications as batch management, asset optimization, energy management and safety control. They are the hubs that link instrumentation, devices and systems for control and supervision of an industrial process and enable customers to integrate their production systems with their enterprise, resource and planning systems, thereby providing a link to their ordering, billing and shipping processes. This link allows customers to manage their entire manufacturing and business process based on real-time access to plant information. Additionally, it allows customers to employ information received from instrumentation and measurement products to increase production efficiency, optimize their assets and reduce environmental waste.

The business area emphasizes Open Control Systems, including batch control systems, supervisory control and data acquisition systems, and, to a lesser but increasing extent, programmable logic controls ("PLCs") and remote terminal units ("RTUs").

Batch control systems control the production of a variety of products in shorter runs, such as certain pharmaceuticals and food and beverage products. Supervisory control and data acquisition systems are used to collect and manage data over wide areas or long distances such as those involved in operating electric power networks.

The business area's product offerings for the pulp and paper industries include quality control systems for pulp and paper mills, control systems, drive systems, on-line sensors, actuators and field instruments. On-line sensors measure product properties, such as weight, thickness, color, brightness, moisture content and additive content. Actuators allow the customer to make automatic adjustments during the production process to improve the quality and consistency of the product. Field instruments measure properties of the process, such as flow rate, chemical content and temperature.

We offer our customers in the metals and minerals industries specialized products and services, as well as total production systems. We design, plan, engineer, supply, erect and commission electric equipment, drives, motors and equipment for automation and supervisory control within a variety of areas including mining, mineral handling, aluminum smelting, hot and cold steel applications and cement production.

In the oil and gas sector, we provide onshore, offshore and subsea production technology, gas gathering and processing, refining, transportation and distribution applications. In the pharmaceuticals and fine chemicals areas, the business area provides software and solutions for applications including manufacturing, packaging, quality control and compliance with regulatory agencies.

## Edgar Filing: ABB LTD - Form 20-F

In the marine field, we provide global shipbuilders with power and automation technologies for luxury cruise liners, ferries, tankers, offshore oil rigs and special purpose vessels. We design, engineer, build, supply and commission electrical systems and software for marine power generation, power distribution and diesel electric propulsion, as well as turbochargers to improve efficiency for diesel and gasoline engines.

We also offer full-service contracts across all of our customer segments, in which we take over in-house maintenance activities for customers and apply strategies to reduce overall maintenance costs and helps optimize these investments.

### *Manufacturing Automation*

The Manufacturing Automation business area develops and manufactures industrial robots and related equipment for the automotive industry and other manufacturing industries. This business area designs, installs and commissions automation systems for customers in the automotive industry and their sub-suppliers, incorporating software developed by its engineers into its range of products, as well as those manufactured by the Power Technologies division. The products and systems are used in such areas as press shop, body shop, paint shop, power train assembly, trim and final assembly.

In addition to serving the automotive industry, this business area provides complete production automation systems for industry segments ranging from metal and glass fabrication to telecommunications. Manufacturers use our flexible automation and advanced robotics products for applications involving multiple tasks such as welding, material handling, painting, picking, packing and palletizing. For example, we provide painting systems for mobile phones, as well as robot cells to produce base stations for telecom companies. This business area incorporates software developed by its engineers into its automation products and the power products manufactured by the Power Technologies division to maximize energy efficiency and provide a secure power supply for manufacturing lines. Our services include design and project management, engineering, installation, training and life-cycle care of the complete production line.

### *Customers*

The Automation Technologies division's end customers are primarily companies in the chemical, life sciences (pharmaceuticals), automotive, marine, turbocharging, metals, minerals, mining, cement, paper, petroleum, food and beverage, printing and building industries. In each of these industries, we sell both through direct sales forces as well as through third-party channels, such as distributors, wholesalers, installers, system integrators and OEMs.

### *Geographic Markets*

The following table sets forth the proportion of Automation Technologies division's revenues derived from each geographic region (based on the location of the customer which may be different from the ultimate destination of the products' end use) in which the ABB Group operates:

	Year Ended December 31,	
	2004	2003
	(percent)	
Europe	60	61
The Americas	15	17
Asia	19	16
Middle East and Africa	6	6
Total	100	100

The ultimate destination of our products' end use is relevant for the Automation Technologies division as some global distributors and wholesalers in Europe sell our products in Asia, the Americas and Middle East and Africa. We estimate this volume to be approximately 10 percent of the division revenues, divided between the ultimate destinations of Asia, the Americas and Middle East and Africa.

### ***Sales and Marketing***

In each of the Automation Technologies division's business areas, sales are made both through direct sales forces as well as through third-party channel partners, such as distributors, wholesalers, installers and OEMs. The proportion of direct sales compared to channel partner sales varies among the different industries, product technologies and geographic markets. For the division as a whole, the majority of the products are sold through channel partners, with the remainder being sold through the division's own direct sales channels.

### ***Competition***

The Automation Technologies division's principal competitors vary by product line but include Alstom, Emerson, Fanuc, General Electric, Honeywell, Invensys, Metso Automation, Rockwell Automation, Schneider, Siemens, Voith AG, Aspen Technologies, and Yokogawa Electric Corporation.

### ***Research and Development***

Research and development expenses that were not order-related for the Automation Technologies division amounted to approximately \$370 million for 2004. In addition, order related research and development expenses for the Automation Technologies division amounted approximately to \$146 million during 2004 with around 40 percent share coming from the Process Automation business area and approximately equal share of the remaining amount coming from the other two business areas.

An important focus of the division's research programs is the group-wide commitment to Industrial IT. The Automation Technologies division is responsible for the development of the Industrial IT platform architecture and the base Industrial IT control products and systems. As a result, the division's research is heavily focused on intelligent, "information enabled" products and devices that may be integrated easily to provide better access to real-time information across the business enterprise. Increasing "productization" of automation technologies is intended to yield a growing portfolio of reusable building blocks that may be easily deployed and bundled by customers, channel partners and the division itself.

### ***Capital Expenditures***

The Automation Technologies division's capital expenditures for property, plant and equipment were \$186 million in 2004, compared to \$154 million and \$130 million in 2003 and in 2002, respectively. Principal investments in 2004 were primarily related to ordinary course purchases of machinery and equipment mainly in Germany, Italy, France, Sweden, Finland and Switzerland. Geographically, in 2004, Europe accounted for about 82 percent of the capital expenditure, with about 6 percent in the Americas, about 11 percent in Asia and 1 percent in the Middle East and Africa.

### ***Non-Core Activities***

These activities at December 31, 2004 constituted primarily the Oil, Gas and Petrochemicals, Building Systems, New Ventures, Equity Ventures and Structured Finance business areas and a number of other activities, including Customer Service Workshops and the Logistic Systems business areas. Non-core activities generated revenues in 2004 of approximately \$1.7 billion, and had approximately 5,000 employees at December 31, 2004.

The following is a description of our principal businesses in the Non-Core Activities division.

***Oil, Gas and Petrochemicals***

Our Oil, Gas and Petrochemical business is a full service engineering business that principally serves the downstream oil, gas and petrochemicals markets. The downstream markets typically relate to the processing and transportation of hydrocarbon raw materials in and through refineries, petrochemical and chemical plants and pipelines. In addition to offering engineering, procurement and construction (or EPC) project expertise to engineering and project management services, this business area also licenses process technologies to the refining, petrochemical and polymer industries. This business area has particular expertise in ethylene process technologies through ABB Lummus Global, which is a part of the Oil, Gas and Petrochemical business. Ethylene is used as a raw material in a wide variety of plastics. This business area also provides modernization and maintenance services for refining and petrochemicals facilities in the downstream market. In 2002, we initiated a more selective process to effect a strategic shift in the types of projects for which we bid, from large, long term projects with fixed-price contracts to narrower-scope projects with reimbursable contracts. We believe projects with reimbursable contracts are lower risk projects, as reimbursable contracts allow a more balanced sharing of risks and opportunities between customer and contractor. In July 2004, we divested substantially all of our oil, gas and petrochemicals business operating in the upstream oil, gas and petrochemicals markets. We refer to this divested portion as the Upstream Oil, Gas and Petrochemicals business. We are currently winding down our Floating Production Systems business, which is a part of this business area, and sold our related intellectual property in this business in 2005. In December 2004, we reclassified our remaining Oil, Gas and Petrochemicals business into continuing operations within non-core activities from discontinued operations as it did not meet the accounting criteria required to be classified in discontinued operations.

***Building Systems***

Our Building Systems business area designs, builds and maintains installations for industrial, infrastructure and commercial facilities. Following our decision in 2002 to divest our Building Systems business area, we substantially reduced the number of businesses held in the Building Systems business area during 2003 and 2004. However, we remain involved in a number of these divested businesses through a combination of technology licenses, supplier relationships and participation on such businesses' board of directors. In addition, in February 2004 we sold our Building Systems business located in Switzerland, but retained a 10 percent equity interest. During 2004, we took steps to close down the Building Systems businesses in the United States and Egypt and to sell the business in Hong Kong. In 2004, revenues for the Business Systems business area were generated principally in Germany.

***New Ventures***

Our New Ventures business area was established in 2001 as a business incubator that would find, develop and invest in new and mature business opportunities, both internally and externally. New Ventures had three investment portfolios, two of which focused on investment opportunities externally, and one of which focused on opportunities internally. This business area also directly managed several majority-owned companies. Since October 2002, we have been restructuring the New Ventures business area to transfer core activities to other business areas and to dispose of the remaining businesses. At December 31, 2004, this business area principally consisted of the Distributed Energy business and certain portfolio investments in emerging technology businesses.

***Equity Ventures***

Our Equity Ventures business area focused its activities on investments in and the operation of independent power projects that would provide business opportunities for our former power generation



division or that would develop opportunities to sell our equipment and systems. At December 31, 2004, this business area managed investments in power plants in Brazil, Colombia, India, Morocco and the Ivory Coast and an airport in South Africa. Our Equity Ventures business has not pursued further project development or significant additional investments since its classification to Non-core activities in 2002.

### ***Structured Finance***

Our Structured Finance business area provided financing, including export, trade and project financing, and asset-based leasing and lending. We sold a significant part of this business area in 2002 and we continued our divestments in 2003 and 2004, including the sale of certain lease and loan portfolios, ownership interests in infrastructure projects and other financial assets. At December 31, 2004, the Structured Finance business area consisted of a portfolio of loans, leases and unfunded commitments which were available for sale or run-off, with net operating assets of \$524 million.

Our Other Non-core activities principally consist of our Customer Service Workshop and Logistic Systems business areas. Our Customer Service Workshop business area overhauls, repairs, rewinds and lubricates rotating machine products manufactured by the Automation Technologies division as well as those from third-party suppliers. Most of our Customer Service Workshop businesses have been transferred to the core divisions, closed or divested. The Logistic Systems business area provides air traffic management, turnkey electromechanical and airfield lighting systems, and information technology packages and automation services for airport baggage and material handling.

### **Corporate/Other**

Our Corporate/Other division comprises headquarters and stewardship activities, research and development activities and other activities. The Corporate/Other division had approximately 1,500 employees at December 31, 2004.

Headquarters and stewardship activities include the operations of our corporate headquarters in Zurich, Switzerland, as well as corresponding local holding companies in certain countries. These activities cover staff functions with group-wide responsibilities, such as group accounting and consolidation, finance and controlling, audit, tax, financial advisory, legal affairs, risk management and insurance, communications, investor relations and human resources.

Group Research and Development consists of two Group R&D laboratories: Power Technologies and Automation Technologies. Each laboratory collaborates with universities and other external partners to support our divisions in developing cross-divisional technology platforms and focusing on core areas of power, automation and emerging technologies. The Global R&D laboratories have operations in nine countries: the United States, Sweden, Switzerland, Finland, Poland, China, Germany, Norway and India.

Other activities include our Real Estate and Group Treasury Operations. Our Real Estate business area principally manages the use of our real estate assets and facilities. Group Treasury Operations act as a cost center for internal treasury activities.

## **DISCONTINUED OPERATIONS**

### **Overview**

We have adopted, with effect from January 1, 2002, Statement of Financial Accounting Standards No. 144 ("SFAS 144"), *Accounting for the Impairment or Disposal of Long Lived Assets*. SFAS 144 broadened the presentation of discontinued operations to include disposal transactions involving less than an entire reporting segment, if certain criteria are met. The purpose of SFAS 144 was to allow for

historically comparable data to be available to investors without the distortions created by divestments or operation abandonments, thereby improving the predictive value of financial statements.

The following businesses and costs are included in our Consolidated Financial Statements as discontinued operations:

Our Upstream Oil, Gas and Petrochemicals business, whose sale was completed in July 2004. The upstream oil and gas business is a global producer of equipment and services for oil and gas exploration and production. The remaining portions of our Oil, Gas and Petrochemicals business primarily consists of a full service engineering company which, in addition to having expertise in engineering, procurement and construction projects, also licenses process technologies in the refining, chemical, petrochemical and polymer fields. This business does not meet the accounting criteria required to be classified in discontinued operations and is now reported in continuing operations within Non-core activities.

Provisions and other expenses recorded in connection with asbestos-related claims, including those against our U.S. subsidiary, Combustion Engineering, of approximately \$262 million, \$142 million and \$395 million in 2004, 2003 and 2002, respectively. The status of our potential asbestos obligation is described in "Item 5. Operating and Financial Review and Prospects Asbestos Liabilities," as well as in Note 18 to the Consolidated Financial Statements.

Our Reinsurance business, which we sold to White Mountains Insurance Group Limited, a Bermuda-based insurance holding company, in April 2004. See Note 3 to the Consolidated Financial Statements. Our Reinsurance business provided international reinsurance, insurance underwriting through Sirius International and specialized primary insurance in the United States through Sirius America. In reinsurance, the reinsurer, in return for a premium payment, provides coverage to a primary insurance company for all or a specific portion of the primary insurer's obligation to its customer. The business area's brokerage companies, Komposit in Germany and ABB Insurance Brokers in Switzerland, provided services to ABB companies and third-party clients. Our network of branches and local companies comprised locations in Sweden, Germany, Belgium, Switzerland, Singapore and the United States. An important part of our reinsurance portfolio was excess of loss coverage, mainly in the property, marine, aviation, oil and energy sectors.

Most of our Power Lines business, including operations in Brazil, which were abandoned in 2004, Nigeria, which were sold in January 2005, Italy, which were sold in February 2005, and Germany. This business designs and builds overhead alternating current power transmission lines.

Our Foundry business, which was part of our Automation Technologies division. This business provides mainly third-party products for the melting side of the metals foundry business and is not related to the foundry business within our Manufacturing Automation business area.

Our Wind Energy business in Greece and Germany, of which we sold a portion to GI Ventures of Munich, Germany in December 2003. This business focused on the development and engineering, procurement and construction of wind parks in Europe.

Most of our Structured Finance business that we sold to GE Commercial Finance in November 2002. This business provided debt capital for projects and equipment, and asset-based financing (such as leasing).

Our MDVC cable business in Germany, which we agreed to sell to Wilms Group of Menden, Germany in December 2003 (this sale was completed in January 2004). This business manufactures medium- and high-voltage cables, cable systems and accessories for power suppliers and network operators.

## Edgar Filing: ABB LTD - Form 20-F

ABB Export Bank, which we sold to a financial investor in December 2003. ABB Export Bank arranged international export, trade and project financing.

Our Metering business, which we sold to Ruhrgas Industries GmbH of Essen, Germany in December 2002. This business produced electricity, water, energy and gas meters, metering systems and load control systems.

Various businesses that were abandoned in 2004, 2003 and 2002 for which a buyer could not be found.

Legal and professional fees related to the above disposals.

### CAPITAL EXPENDITURES

Total capital expenditures for property, plant and equipment for the ABB Group (excluding discontinued operations) amounted to \$400 million, \$402 million and \$440 million in 2004, 2003 and 2002, respectively. The majority of the capital expenditures in 2004 related to replacement of existing equipment and improvements in existing production and testing sites, primarily in Germany, Italy, Sweden, Switzerland, China and Finland. Total divestitures of property, plant and equipment amounted to \$113 million, \$153 million and \$459 million in 2004, 2003 and 2002, respectively. Of the total divestitures of 2004, \$78 million related to the sale of our real estate properties, mainly from Switzerland, Italy and Germany. Construction in progress for property, plant and equipment as of December 31, 2004 was \$122 million, mainly from Germany, Sweden, United States, Italy, Spain and Switzerland. We intend to finance our expenditures for construction in progress internally.

### SUPPLIES AND RAW MATERIALS

We purchase a variety of raw materials for use in our production and project execution processes. The main materials used in our products, by weight, are steel, copper, aluminum, mineral oil and various plastics. We also purchase a variety of fabricated products and electronic components.

We operate a worldwide supply chain management network with employees dedicated to this function in business areas and key countries. The supply chain management network uses the scale of the ABB Group to maximize the efficiency of supply networks. We expanded our eBusiness activities in recent years, including e-procurement for materials and services, and further developed advanced supplier collaboration tools and a supplier information system.

For many commodities that we purchase, including steel, fabricated copper and aluminum products and products derived from crude oil, the recovery in global economic growth, rising demand from China and changes in foreign exchange rates (particularly the U.S. dollar and the euro) have led to increases in raw materials costs for these commodities. While some of these increases will be offset through use of multi-year contracts and, in the case of copper and aluminum, through hedging, we expect prices for many of these commodities to rise in 2005 compared to 2004, which, we anticipate, will primarily impact the results of our Power Technologies division.

In the field of electronic components, subassemblies or fabricated products, prices remained stable or decreased slightly in 2004 compared to 2003. Electronic component lead times remained relatively short in the first half of the year, but increased in the second half, although there were no shortages. We expect to experience shortages and significant price increases for certain components during 2005, which we expect will primarily affect our Automation Technologies division.

There can be no assurance that our ability to obtain sufficient raw materials will not be adversely affected by unforeseen developments. In addition, the price of raw materials may vary, perhaps substantially, from year to year.

We hedge our exposure to commodity risk arising from the changes in prices of raw materials. We manage copper and aluminum price risk using swap and forward contracts based on the London Metal Exchange price for these commodities. Our hedging policy is designed to minimize price volatility and create a stable cost base for the ABB Group. Hedging has the effect of minimizing the unfavorable impact of price increases in commodities, but it also limits the favorable impact of decreasing prices. In most cases, the gains and losses derived from our commodity hedging transactions are deferred and reflected in the cost of goods sold when the underlying physical transaction takes place. In addition to using hedging to reduce our exposure to fluctuations in raw materials prices, in some cases we can reduce this risk by incorporating changes in raw materials prices into the prices of our products.

## RESEARCH AND DEVELOPMENT

Each year, we invest significantly in research and development. Our research and development area focuses on developing and commercializing the core technologies of our businesses that are of strategic importance to our future growth. In 2004, 2003 and 2002, we invested \$690 million, \$635 million, and \$572 million, respectively, or approximately 3.3 percent, 3.1 percent, and 2.9 percent of annual consolidated revenues, respectively, on research and development activities. We also had expenditures of \$727 million, \$886 million, and \$719 million, respectively, or approximately 3.5 percent, 4.3 percent and 3.7 percent, respectively, of annual consolidated revenues in 2004, 2003 and 2002, on order-related development activities. These are customer- and project-specific development efforts that we undertake to develop or adapt equipment and systems to the unique needs of our customers in connection with specific orders or projects. Order-related development amounts are initially recorded in inventories as part of the work in progress of a contract and then are reflected in cost of sales at the time revenue is recognized in accordance with our accounting policies.

In addition to continuous product development, and order-related engineering work, we develop future technology platforms for technology applications in our automation and power businesses in our Group research and development labs, which operate on a global basis. Through active management of our investment in research and development, we seek to maintain a balance between short-term and long-term research and development programs and optimize our return on investment.

Our research and development strategy focuses on three objectives:

To monitor and develop emerging technologies and create a pioneering, sustainable technology base for the company;

To develop technology platforms that enable efficient product design for our power and automation customers;

To create the next generation of power and automation products and systems that we believe will be the engines of profitable growth.

Universities are the incubators of future technology, and a central task of our research and development team is to transform university research into industry-ready technology platforms. We collaborate with a number of universities and research institutions to build research networks and foster new technologies. We believe these collaborations shorten the amount of time required to turn basic ideas into viable products, and they additionally help us recruit and train new personnel. We have built more than 50 university partnerships in the U.S., Europe and Asia, including long-term, strategic relationships with institutions such as Stanford University, the Massachusetts Institute of Technology, Carnegie Mellon University, Cambridge University and Imperial College London. Our collaborative projects include research on materials, sensors, micro-engineered mechanical systems, robotics, controls, manufacturing, software, distributed power and communication.

Common platforms for power and automation technologies are developed around advanced materials, efficient manufacturing, information technology and data communication, as well as sensor

and actuator technology. Common applications of basic power and automation technologies can also be found in power electronics, electrical insulation, and control and optimization. Our power technologies, including our insulation technologies, current interruption and limitation devices, power electronics, flow control and power protection processes, apply as much to large, reliable, blackout-free transmission systems as they do to everyday household needs. Our automation technologies, including our control and optimization processes, software technologies, power electronics, sensors and microelectronics, mechatronics and wireless communication processes, are designed to improve efficiency in plants and factories around the world including our own.

Group research and development is carried out in two global laboratories for power and automation technologies, combining research units in the U.S., Europe and Asia. The cultural diversity and closeness to our customers and the world's best universities creates a breeding ground for success. We continue to expand our research and development activities in India, Singapore and China, reflecting its growth strategy in Asia. Our corporate research center in Bangalore, India was launched in early 2002. As a focal point for software research, it develops platforms for both automation and power technologies. In China our fastest-growing market research and development activity is focused on power transmission and distribution, manufacturing and robotics. It is centered in new facilities in Beijing and Shanghai, where our researchers are in close contact with Chinese universities and customers.

Our researchers have been recognized in recent years for contributions in areas like HCI (human-computer interface), safeguarding power transmission systems, faster and more efficient automation systems, improved electrical insulation and industrial applications of nanotechnology and wireless technology.

Our current research programs focus on:

Power device technology;

Power transmission and distribution applications;

Power electronics;

Mechatronics and robotics applications;

Control and optimization processes;

Automation networks and devices;

Software architecture and processes;

Advanced materials; and

Manufacturing technologies.

## PATENTS AND TRADEMARKS

We believe that intellectual property has become as important as tangible assets for a technology group such as ABB. Over the past ten years, we have almost doubled our total number of first patent filings, and we intend to continue our aggressive approach to seeking patent protection. Currently, we have nearly 14,000 patent applications and registrations, of which approximately 7,000 are pending applications. In 2004, we filed patent applications for more than 470 new inventions. Based on our existing intellectual property strategy, we believe that we have adequate control over our core technologies. The "ABB" trademarks and logo are protected in all of the countries in which we operate. We aggressively defend the reputation associated with the ABB brand.



## ENVIRONMENTAL ACTIVITIES

Environmental management is one of our highest business priorities. We address environmental issues in all our business operations. Our goal is to improve our social and environmental performance continuously, and improve the quality of life in the communities and countries where we operate.

Our social and environmental efforts include:

joining initiatives that foster economic, environmental, social and educational development;

making positive contributions in the communities where we operate so they will welcome us and consider ABB an attractive employer and a good investment;

offering our customers eco-efficient products that save energy and are safe to use, that optimize the use of natural resources, minimize waste and reduce environmental impact over their complete life cycles;

sharing our latest technologies with emerging markets;

ensuring that our operations and processes comply with applicable environmental standards and legislation. Specifically, every operating unit must implement an environmental management system that continuously improves its environmental performance;

ensuring that our social and environmental policies are communicated and implemented;

working towards achieving best practices in occupational health and safety, and ensuring the health and safety of our employees, contractors and others involved in or affected by our activities; and

favoring suppliers that have sustainability policies and systems similar to our own.

To continuously improve the environmental performance of our own operations, we are implementing environmental management systems according to the ISO 14001 standard on all our sites. We have implemented the ISO 14001 in 96 percent of our manufacturing facilities and service workshops (approximately 390 sites) and our environmental management program now includes operations in approximately 50 countries. We also require every operating unit within the ABB Group to implement an environmental management system that aims continuously to improve its environmental performance. We are now implementing an adapted environmental management system in our non-manufacturing organizations.

We have introduced the concept of Environmental Product Declarations to communicate the environmental performance of our core products. These describe the salient environmental aspects and impacts of a product line, viewed over its complete life cycle. Declarations are based on Life Cycle Assessment studies, created according to the international standard ISO/TR 14025. To date, approximately 50 declarations have been produced for major product lines, 10 of which have been externally certified by agencies such as Det Norske Veritas (DNV) of Norway and the RINA Management System Certification Society in Italy.

We have expanded the scope of our environmental reporting in recent years. In 2004, our formal reporting system covered approximately 88 percent of our employees. The parts of our business that are not yet covered by our reporting system have very limited environmental impacts. A total of 12 accidents were reported in 2004, none of which had a material environmental impact.

One of our corporate objectives is to phase out the use of the hazardous substances that are recorded on our list of "restricted" substances. Priorities for replacement are set by each business using criteria such as the environmental aspects of alternatives, the risk of the substance escaping into the environment, how hazardous the substance is, whether we can use the substance under strict control and whether there are any

technically acceptable alternatives.



## Edgar Filing: ABB LTD - Form 20-F

We have retained liability for environmental remediation costs at two sites in the United States that were operated by our former nuclear business, which we have sold to BNFL. The primary environmental liabilities associated with these sites relate to the costs of remediating radiological contamination upon decommissioning the facilities. For further information, see "Item 5. Operating and Financial Review and Prospects Environmental Liabilities."

### REGULATION

Our operations are subject to numerous other governmental laws and regulations including those governing currency conversions and repatriation, taxation of foreign earnings and earnings of expatriate personnel and use of local employees and suppliers.

As a reporting company under Section 12 of the U.S. Securities Exchange Act of 1934, we are subject to the U.S. Foreign Corrupt Practices Act's antibribery provisions with respect to our conduct around the world.

Our operations are also subject to the 1997 Organization of Economic Cooperation and Development Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, as implemented by the 34 signatory countries. The convention obliges signatories to adopt national legislation that makes it a crime to bribe foreign public officials. As of December 31, 2004, those countries which have adopted implementing legislation and have ratified the convention include the United States, Switzerland and several European nations in which we have significant operations.

We and our subsidiaries conduct business in certain countries known to experience governmental corruption. While we and our subsidiaries are committed to conducting business in a legal and ethical manner, there is a risk that our employees or agents may take actions that violate either the U.S. Foreign Corrupt Practices Act or legislation promulgated pursuant to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. These actions could result in monetary penalties against us or our subsidiaries and could damage our reputation and, therefore, our ability to do business.

### SIGNIFICANT SUBSIDIARIES

ABB Ltd, Zurich, Switzerland is the ultimate parent company of the ABB Group, which is comprised of around 500 subsidiaries (excluding dormant companies) worldwide. Besides ABB Ltd, the only other listed company in the ABB Group is ABB Ltd, India, which is listed on the exchanges in India at Mumbai (BSE and NSE), Ahmadabad, New Delhi and Kolkata.

The following table sets forth, as of March 31, 2005, the name, country of incorporation and ownership interest of ABB Ltd of its significant subsidiaries:

<b>Company Name / Location</b>	<b>Country</b>	<b>ABB Interest</b>
		<b>(percent)</b>
ABB S.A., Buenos Aires	Argentina	100.00
ABB Australia Pty Limited, Sydney	Australia	100.00
ABB AG, Vienna	Austria	100.00
ABB Ltda., Osasco	Brazil	100.00
ABB Bulgaria EOOD, Sofia	Bulgaria	100.00
ABB Inc., St. Laurent, Quebec	Canada	100.00
ABB (China) Ltd., Beijing	China	100.00
Asea Brown Boveri Ltda., Bogotá	Colombia	99.99
ABB Ltd., Zagreb	Croatia	100.00
ABB s.r.o., Prague	Czech Republic	100.00
ABB A/S, Skovlunde	Denmark	100.00
Asea Brown Boveri S.A., Quito	Ecuador	96.87

Edgar Filing: ABB LTD - Form 20-F

Asea Brown Boveri S.A.E., Cairo	Egypt	100.00
ABB AS, Tallinn	Estonia	100.00
ABB Oy, Helsinki	Finland	100.00
ABB S.A., Rueil-Malmaison	France	100.00
ABB AG, Mannheim	Germany	100.00
ABB Automation Products GmbH, Eschborn	Germany	100.00
ABB Beteiligungs-und Verwaltungsges GmbH, Mannheim	Germany	100.00
ABB Gebäudetechnik AG, Mannheim	Germany	100.00
Asea Brown Boveri S.A., Metamorphosis Attica	Greece	100.00
ABB (Hong Kong) Ltd., Hong Kong	Hong Kong	100.00
ABB Engineering Trading and Service Ltd., Budapest	Hungary	100.00
ABB Ltd., Bangalore	India	52.11
ABB Ltd, Dublin	Ireland	100.00
ABB Technologies Ltd., Tirat Carmel	Israel	99.99
ABB S.p.A., Milan	Italy	100.00
ABB SACE S.p.A., Sesto S. Giovanni (MI)	Italy	100.00
ABB Technology SA, Abidjan	Ivory Coast	99.00
ABB K.K., Tokyo	Japan	100.00
ABB Ltd., Seoul	Korea, Republic of	100.00
ABB Holdings Sdn. Bhd., Subang Jaya	Malaysia	100.00
Asea Brown Boveri S.A. de C.V., Tlalnepantla	Mexico	100.00
ABB BV, Rotterdam	Netherlands	100.00
ABB Holdings BV, Amsterdam	Netherlands	100.00
Luwoco Lummus Worldwide Contracting (Netherlands) B.V., The Hague	Netherlands	100.00
ABB Limited, Auckland	New Zealand	100.00
ABB Holding AS, Billingstad	Norway	100.00
Asea Brown Boveri S.A., Lima	Peru	99.99
Asea Brown Boveri Inc., Paranaque, Metro Manila	Philippines	100.00
ABB Sp. zo.o., Warsaw	Poland	96.01
ABB S.G.P.S, S.A., Amadora	Portugal	100.00
Asea Brown Boveri Ltd., Moscow	Russia	100.00
ABB Contracting Company Ltd., Riyadh	Saudi Arabia	65.00
ABB Holdings Pte. Ltd., Singapore	Singapore	100.00
ABB Holdings (Pty) Ltd., Sunninghill	South Africa	80.00
Asea Brown Boveri S.A., Madrid	Spain	100.00
ABB AB, Västeros	Sweden	100.00
ABB Norden Holding AB, Stockholm	Sweden	100.00
ABB Asea Brown Boveri Ltd, Zurich	Switzerland	100.00
ABB LIMITED, Bangkok	Thailand	100.00
ABB Holding A.S., Istanbul	Turkey	99.95
ABB Ltd., Kiev	Ukraine	100.00
ABB Industries (L.L.C), Dubai	United Arab Emirates	49.00
ABB Ltd., Warrington	United Kingdom	100.00
ABB Lummus Global Inc., Bloomfield, NJ	United States	100.00
ABB Holdings, Inc., Norwalk, CT	United States	100.00
ABB Inc., Norwalk, CT	United States	100.00
Asea Brown Boveri S.A., Caracas	Venezuela	100.00
ABB (Private) Ltd., Harare	Zimbabwe	100.00

**DESCRIPTION OF PROPERTY**

As of December 31, 2004, the ABB Group occupied manufacturing, production and development facilities in approximately 100 countries throughout the world with over 18 million square meters of land and over 7 million square meters of building space. The facilities consist mainly of manufacturing plants, office buildings, research centers and warehouses. A substantial portion of our production and development facilities are situated in Germany, Sweden, the United States, Switzerland, China, Finland, and Italy. We also own or lease other properties, including office buildings, warehouses, research and development facilities and sales offices in many countries. We own approximately 50 percent of the buildings and approximately 80 percent of the land on which our facilities are located and lease the remainder.

We own essentially all of the machinery and equipment used in our manufacturing operations. From time to time, we have a surplus of space arising from acquisitions, production efficiencies and/or restructuring of operations. Normally, we seek to sell such surplus space or, to a lesser extent, lease it to third parties.

It is our general policy to maintain facilities and equipment at quality levels assuring continuous production at good efficiency and safety standards. The net book value of our property, plant and equipment as of December 31, 2004 was \$2,981 million, of which machinery and equipment represented \$1,337 million and land and buildings represented \$1,523 million and construction in progress of \$121 million. We believe that our current facilities are in good condition and are adequate to meet the requirements of our present and foreseeable future industrial operations.

## Item 5. Operating and Financial Review and Prospects

*You should read the following discussion of our financial condition and results of operations in conjunction with our Consolidated Financial Statements and the related notes and other financial information contained elsewhere in this annual report. This discussion contains forward-looking statements that involve risks and uncertainties, including those discussed in "Item 3. Key Information Risk Factors." See "Forward-looking statements" at the beginning of this annual report. The financial statements and certain financial data set forth in our Consolidated Financial Statements as of December 31, 2003 and 2002 and for each of the years in the three year period ended December 31, 2003, reflect restatements made in September 2004 of our previously issued financial statements for those periods. This restatement was intended to correct the effect of earnings overstatements by the medium-voltage business unit of our Power Technologies division (or PT-MV BAU) in Italy on its previously reported financial statement results.*

### MANAGEMENT OVERVIEW

Our operating performance improved significantly during 2004 following three years of substantial losses. Improved performance in our core divisions contributed to a 204 percent increase in earnings before interest and taxes, which increased \$727 million to \$1,084 million.

During 2004, we continued to dispose of businesses that are outside our core activities, including the Upstream Oil, Gas and Petrochemicals and the Reinsurance businesses. The net cash proceeds from these dispositions, approximately \$1,182 million, helped us fund the reduction of our debt. Our total borrowings fell from approximately \$7.9 billion at the end of 2003 to \$5.5 billion at the end of 2004, while our cash and cash equivalents were \$4.8 billion at the end of 2003 and \$3.7 billion at the end of 2004.

Having made substantial progress in refocusing our business on our two core divisions, we are planning to address four key goals in 2005.

#### Improving Operational Performance

Our financial targets for 2005 include achieving earnings before interest and taxes (EBIT) margins of 7.7 percent for the group and 10.7 percent for the Automation Technologies division. As part of the announcement of our first quarter 2005 results, we advised that due to the ongoing volatility in the Power Technologies businesses the achievement of our previously announced 10 percent EBIT margin in 2005 for the Power Technologies division was unlikely and could no longer be reaffirmed. We have not yet announced a new EBIT margin target for that division. Margin targets exclude major acquisitions, divestitures and business closures.

We expect that the 2005 performance in our Power Technologies division will reflect higher revenues and improved capacity utilization. We further expect a positive impact from cost savings and improved efficiencies following the division's reorganization from five business areas to two effective as of January 1, 2005. In addition, we expect benefits from the implementation of a common front-end sales organization. The division performance in 2005 will reflect the reclassification of the majority of our Power Lines business unit to discontinued operations, as the exit strategy initiated in the fourth quarter 2004 is progressing as planned. A further increase in commodity prices could adversely affect the performance in the Power Technologies division in 2005.

We expect that the performance in 2005 of our Automation Technologies division will reflect the cost savings and operating efficiencies resulting from this division's reorganization from eleven business areas at the beginning of 2003 into three business areas by the end of 2004. We additionally expect that the Automation Technologies division will benefit from a risk evaluation procedure, implemented in 2003, that subjects the division's large projects to a review based on the size and complexity of each project to help mitigate the risk of booking projects that ultimately will not be profitable. Various

factors could also adversely affect the performance of the Automation Technologies division in 2005, including a decline in the value of the U.S. dollar against the euro or an increase in commodity prices.

The performance of our Non-core activities in 2005 will depend significantly upon the results of our Oil, Gas and Petrochemicals business. Several years ago, we decided to shift our focus in that business from long-term fixed price contracts to reimbursable contracts to reduce project execution risk. While this change in strategy has led to reduced revenues in this business, we believe that over time it will enable us to improve margins and reduce risks.

#### **Lowering Corporate Costs**

Reducing our cost base continues to be an important objective, and during 2005 we plan to focus particularly on reducing corporate costs. While cost reduction will have continuing benefits for us over the long term, it will also require us to incur additional restructuring and other related expenses in the near term.

#### **Aligning Behavior to Rules**

During the past few years, we have discovered several instances in which ABB employees have failed to comply with our policies and applicable laws. One of our highest priorities is improving the compliance culture and control mechanisms within our entire organization so similar situations can be avoided in the future.

#### **Resolving Asbestos**

In December 2004, the U.S. Court of Appeals for the Third Circuit effectively reversed the lower courts' order confirming the proposed plan of reorganization of Combustion Engineering. Resolving the asbestos-related liabilities of our subsidiaries remains a top priority. We intend to seek confirmation of a modified plan that continues to reflect the fundamental approach of the original plan to channeling claims against Combustion Engineering to a trust funded, in part, by us or other of our subsidiaries. To this end, in March 2005 we reached agreement with certain representatives of various parties on the basic terms of a modified plan, in connection with which we would increase by approximately \$232 million the contributions to be made by us for the benefit of the claimants. We are now working with those parties to reach agreement on other issues relating to, and details of, the proposed modified plan and related proceedings involving Lummus and to prepare the related documentation. As soon as possible, we will submit each of the proposed plans for the approval of creditors and review by the courts.

### **APPLICATION OF CRITICAL ACCOUNTING POLICIES**

#### **General**

We prepare our Consolidated Financial Statements in accordance with U.S. GAAP.

The preparation of our financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis, including, but not limited to, those related to: costs expected to be incurred to complete projects; costs of product guarantees and warranties; provisions for bad debts; recoverability of inventories, investments, goodwill and intangible assets; income tax related costs and accruals; provisions for restructuring; gross profit margins on long-term contracts; pensions and other post-retirement benefit assumptions; and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily

apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We deem an accounting policy to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or if changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact our Consolidated Financial Statements. We also deem an accounting policy to be critical when the application of such policy is essential to our ongoing operations. We believe the following critical accounting policies reflect the accounting policies relating to our more significant estimates and assumptions that we use in the preparation to our Consolidated Financial Statements. These policies should be considered in reviewing our Consolidated Financial Statements.

### **Revenues and cost of sales recognition**

We recognize revenues from the sale of manufactured products when persuasive evidence of an arrangement exists, the price is fixed and determinable, collectibility is reasonably assured and upon transfer of title, including the risks and rewards of ownership, to the customer. When multiple elements, such as products and services, are contained in a single arrangement or in a series of related arrangements with the same customer, we allocate revenue to each element based on its relative fair value, provided that such element meets the criteria for treatment as a separate unit of accounting. The allocation of the sales price between delivered elements and undelivered elements might affect the timing of revenue recognition, but would not change the total revenue recognized on the contract. Revenues from short-term or noncustomer specific contracts to deliver products or services are recognized upon completion of required services to the customer. Revenues from contracts that contain customer acceptance provisions are deferred until customer acceptance occurs, we have tested to the level required to ensure that acceptance will occur or the contractual acceptance period has lapsed. As a result, judgment in the selection of revenue recognition methods must be made.

These revenue recognition methods require the collectibility of the revenues recognized to be reasonably assured. When recording the respective accounts receivable, allowances are calculated to estimate those receivables that will not be collected. These reserves assume a level of default based on historical information, as well as knowledge about specific invoices and customers. The risk remains that a greater number of defaults will occur than originally estimated. As such, the amount of revenues recognized might exceed that which will be collected, resulting in a deterioration of earnings in the future. This risk is likely to increase during periods of significant negative industry or economic trends.

Revenues under long-term contracts are recognized using the percentage-of-completion method of accounting. We principally use the cost-to-cost or delivery events methods to measure progress towards completion on contracts. We determine the method to be used by type of contract based on our experience and judgment as to which method best measures actual progress towards completion.

The percentage-of-completion method of accounting involves the use of assumptions and projections, relating to future material, labor, construction and overhead costs. As a consequence, there is a risk that total contract costs will exceed those we originally estimated. This risk increases if the duration of a contract increases or if the project is a fixed price turnkey project, because there is a higher probability that the circumstances upon which we originally developed estimates will change, resulting in increased costs that we will not recover. Factors that could cause costs to increase include:

unanticipated technical problems with equipment supplied or developed by us which may require that we incur additional costs to remedy;

changes in the cost of components, materials or labor;

difficulties in obtaining required governmental permits or approvals;

project modifications creating unanticipated costs;

suppliers' or subcontractors' failure to perform;

penalties incurred as a result of not completing portions of the project in accordance with agreed upon time limits; and

delays caused by unexpected conditions or events.

Changes in our initial assumptions, which we review on a regular basis between balance sheet dates, may result in revisions to total estimated costs, current earnings and anticipated earnings. We recognize these changes in the period in which the changes in estimate are determined. By recognizing changes in estimates cumulatively, recorded revenue and costs to date reflect the current estimates of the stage of completion. Additionally, losses on long-term contracts are recognized in the period when they are identified and are based upon the anticipated excess of contract costs over the related contract revenues. Any such losses are recorded as a component of cost of sales.

We accrue anticipated costs for warranties when we recognize the revenue on the related contracts. Warranty costs include calculated costs arising from imperfections in design, material and workmanship, performance guarantees (technical risks) and delays in contract fulfillment. Although we generally make assessments on an overall, statistical basis, we make individual assessments on contracts with risks resulting from order-specific conditions or guarantees, such as plants or installations. There is a risk that actual warranty costs may exceed the amounts provided for, which would result in a deterioration of earnings in the future when these actual costs are determined.

Revenues under cost-reimbursement contracts are recognized as costs are incurred. Shipping and handling costs are recorded as a component of cost of sales.

#### **Accounting for discontinued operations**

Our strategy is to focus on power and automation technologies for utility and industry customers. In accordance with our strategy, we have sold and plan to sell certain businesses that are not part of our core power and automation technologies businesses. Statement of Financial Accounting Standards No. 144 (SFAS 144), *Accounting for the Impairment or Disposal of Long Lived Assets*, broadened the presentation of discontinued operations to include disposal transactions involving less than an entire reporting segment, if certain criteria are met. The purpose of SFAS 144 is to allow for historically comparable data to be available to investors without the distortions created by divestments or the closure or abandonment of businesses, thereby improving the predictive value of financial statements. SFAS 144 requires the revenues and associated costs, net of taxes, of certain divestments and abandonments, to be classified as discontinued operations, net of taxes, below income from continuing operations in our Consolidated Income Statement and requires the related assets and liabilities to be classified as assets or liabilities held for sale and in discontinued operations in our Consolidated Balance Sheet.

In order to classify a business as a discontinued operation, SFAS 144 requires that certain criteria be met. In certain cases, significant interpretation is required to determine the appropriate classification. Changes in plans regarding the sale of a business may change our interpretation as to whether a business should be classified as a discontinued operation. Any such reclassification may have a material impact on our income from continuing operations and the individual components thereof.

In the Consolidated Statement of Cash Flows, we have included the businesses classified as discontinued operations together with continuing operations in the individual line items within cash from operating, investing and financing activities, as permitted by U.S. GAAP.

For a description of our discontinued operations, see Note 3 to our Consolidated Financial Statements.

### **Goodwill and other intangible assets impairment**

We review goodwill for impairment annually on October 1 and additionally whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with Statement of Financial Accounting Standards No. 142 (SFAS 142), *Goodwill and Other Intangible Assets*. SFAS 142 requires that a two-step impairment test be performed on goodwill. In the first step, we compare the fair value of each reporting unit to its carrying value. Our reporting units are one level below the reportable segments identified in Note 26 to our Consolidated Financial Statements. We use a discounted cash flow model to determine the fair value of reporting units unless there is a readily determinable fair market value. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired and no further testing is performed. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step to determine the implied fair value of the reporting unit's goodwill and compare it to the carrying value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we must record an impairment loss equal to the difference.

The discounted cash flow model, which we use to estimate the fair value of our reporting units is dependent on a number of factors including estimates of future cash flows, appropriate discount rates and other variables. Estimating future cash flows requires us to make significant estimates and judgments involving variables such as sales volumes, sales prices, sales growth, production and operating costs, capital expenditures, market conditions and other economic factors. We base our fair value estimates on assumptions we believe to be reasonable, but which are unpredictable and inherently uncertain. Actual future results may differ from those estimates.

We review intangible assets in accordance with SFAS 144, and accordingly test for impairment upon the occurrence of certain triggering events, such as a decision to divest a business or projected losses of an entity.

We record any related impairment charge in other income (expense), net, in our Consolidated Income Statement, unless it is related to a discontinued operation, in which case the charge is recorded in loss from discontinued operations, net of tax.

### **Pension and post-retirement benefits**

As more fully described in Note 21 to our Consolidated Financial Statements, we operate pension plans that cover the majority of our employees. We use actuarial valuations to determine our pension and post-retirement benefit costs and credits. The amounts calculated depend on a variety of key assumptions, including discount rates and expected return on plan assets. We are required to consider current market conditions, including changes in interest rates, in selecting these assumptions. The discount rates are reviewed annually and considered for adjustment based on changes in long-term, highly rated corporate bond yields. Decreases in the discount rate result in an increase in the projected benefit obligation and to pension costs.

The expected return on plan assets is reviewed annually and considered for adjustment based on current and expected asset allocations and represents the long-term return expected to be achieved. Decreases in the expected return on plan assets result in an increase to pension costs. An increase or decrease of 0.5 percent in the expected long-term rate of asset return would have decreased or increased, respectively, the net periodic benefit cost in 2004 by approximately \$30 million.

Under U.S. GAAP, we accumulate and amortize over future periods actual results that differ from the assumptions used. Therefore, actual results generally affect our recognized expense and recorded liabilities for pension and other post-retirement benefit obligations in future periods.



The "unfunded" balance, which can increase or decrease based on the performance of the financial markets or changes in our assumptions regarding rates, does not represent a mandatory short-term cash obligation. Instead, the unfunded balance of a pension plan is the difference between the projected obligation to employees (PBO) and the fair value of the plan assets. While we comply with appropriate statutory funding requirements, at December 31, 2004, the unfunded balance of our pension plans was \$1,451 million. In accordance with Statement of Financial Accounting Standards No. 87 (SFAS 87), *Employers' Accounting for Pensions*, we have recorded on the Consolidated Balance Sheet a net liability of \$410 million in relation to this unfunded benefit balance. The difference is primarily due to an unrecognized actuarial loss of \$1,019 million, which is amortized using the "minimum corridor" approach as defined by SFAS 87.

In May 2003, the Emerging Issues Task Force of the Financial Accounting Standards Board reached a consensus on Emerging Issues Task Force No. 03-4 (EITF 03-4), *Determining the Classification and Benefit Attribution Method for a "Cash Balance" Pension Plan*, which requires the "traditional unit credit method" to be used for the calculation of the liability and attribution of the costs for pension plans with certain characteristics. We determined that certain of our pension plans covering the employees of Switzerland had the characteristics described in EITF 03-4 and therefore we changed the approach to calculating the PBO from the projected unit credit method to the traditional unit credit method. The change in cost attribution methods resulted in an actuarial gain of \$406 million in 2003 that is included in the unrecognized actuarial loss of \$1,019 million and as described above, will result in lower net pension costs in future years.

We have multiple non-pension post-retirement benefit plans. Our health care plans are generally contributory with participants' contributions adjusted annually. For purposes of estimating our health care costs, we have assumed health care cost increases per annum to be 11.76 percent for 2005, then gradually declining to 6.24 percent per annum in 2013, and to remain at that level thereafter.

## **Taxes**

In preparing our Consolidated Financial Statements, we are required to estimate income taxes in each of the jurisdictions in which we operate. We account for deferred taxes by using the asset and liability method. Under this method, we determine deferred tax assets and liabilities based on temporary differences between the financial reporting and the tax bases of assets and liabilities. The differences are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. We recognize a deferred tax asset when it is probable that the asset will be realized. We regularly review our deferred tax assets for recoverability and establish a valuation allowance based upon historical losses, projected future taxable income and the expected timing of the reversals of existing temporary differences. To the extent we increase or decrease this allowance in a period, we recognize the change in the allowance within provision for taxes in the Consolidated Income Statement unless the change relates to discontinued operations, in which case the change is recorded in loss from discontinued operations, net of tax. Unforeseen changes in tax rates and tax laws as well as differences in the projected taxable income compared to the actual taxable income may affect these estimates.

We operate in numerous tax jurisdictions and, as a result, are regularly subject to audit by tax authorities. Although we believe that our tax estimates are reasonable and that appropriate tax reserves have been made, the final determination of tax audits and any related litigation could be different than that which is reflected in income tax provisions and accruals.

Accounting for tax contingencies requires that an estimated loss from a contingency such as a tax claim should be accrued as a charge to income if it is probable that an asset has been impaired or a liability has been incurred, and the amount of the loss can be reasonably estimated. The required amount of provision for contingencies of any type may change in the future due to new developments.

## Consolidation

We evaluate our investments in joint ventures and other types of investments for purposes of determining whether consolidation or the cost or equity method of accounting is appropriate. This determination is based upon our ability to retain and exercise control through our decision-making powers and our ability to exercise significant influence over the entity, as well as our ownership interests in the entity.

Material changes in our ability to retain control and exercise significant influence over an entity could change the accounting method between consolidation or the cost or equity methods, which could have a material impact on our Consolidated Financial Statements.

In January 2003 and December 2003, the Financial Accounting Standards Board issued Interpretation No. 46 (FIN 46) *Consolidation of Variable Interest Entities - an Interpretation of ARB No. 5* and revised Interpretation No. 46 (FIN 46(R)), respectively, which require variable interest entities (VIEs) to be consolidated by their primary beneficiaries. Accordingly, effective January 31, 2003, we consolidate VIEs when we are considered the primary beneficiary. Also effective January 31, 2003, previously consolidated VIEs would be deconsolidated when a triggering event, as defined by FIN 46(R), indicates we are no longer the primary beneficiary. For those VIEs where we are not the primary beneficiary, we apply our existing consolidation policies in accordance with U.S. GAAP.

In determining the primary beneficiary of a VIE, we are required to make projections of expected losses and expected residual returns to be generated by that VIE. The projected expected losses and expected residual returns are critical to the identification of the primary beneficiary. These projections require us to use assumptions, including assumptions regarding the probability of cash flows. Expected losses and expected residual returns materially different from those projected could identify another entity as the primary beneficiary. A change in the contractual arrangements or ownership between the parties involved in the VIE could have an impact on our determination of the primary beneficiary, which in turn, could have a material impact on our Consolidated Financial Statements.

## Contingencies

As more fully described in Note 18 to our Consolidated Financial Statements, we are subject to proceedings, lawsuits and other claims related to asbestos, environmental, labor, product and other matters. We are required to assess the likelihood of any adverse judgments or outcomes to these matters, as well as potential ranges of probable losses. A determination of the amount of provision required, if any, for these contingencies is made after analysis of each individual issue, often with assistance from both internal and external legal counsel and technical experts. The required amount of provision for a contingency of any type may change in the future due to new developments in the particular matter, including changes in approach to its resolution.

## Restructuring

Certain restructuring provisions include estimates pertaining to employee termination costs and the settlements of contractual obligations resulting from our actions. Although we do not anticipate significant changes, the actual costs may differ from these estimates due to subsequent developments such as voluntary retirement of employees and other business developments. Restructuring costs are recorded in other income (expense), net, in the Consolidated Income Statements. However, restructuring costs relating to discontinued operations are recorded in loss from discontinued operations, net of tax.

## Insurance

In April 2004, we completed the sale of substantially all of our business operating in the reinsurance industry. We refer to the divested portion of this business as the Reinsurance business. Consequently, we have reflected the results of operations of the Reinsurance business in loss from discontinued operations, net of tax, and the assets and liabilities in assets and liabilities held for sale and in discontinued operations for all periods presented.

We generally recognized premiums in earnings on a pro rata basis over the period coverage was provided. Premiums earned included estimates of certain premiums not yet collected. These premium receivables included premiums relating to retrospectively rated contracts. For such contracts, a provisional premium was collected that will eventually be adjusted. We included an estimated value of the actual premium in receivables. Unearned premiums represented the portion of premiums written that was applicable to the unexpired terms of reinsurance contracts or certificates in force. These unearned premiums were calculated by the monthly pro rata method or were based on reports from ceding companies that we reinsure.

Insurance liabilities were reflected in liabilities held for sale and in discontinued operations, in our Consolidated Balance Sheet and represented unpaid claims, losses, and related loss expenses based upon estimates for losses reported, estimates received from ceding reinsurers, and estimates of incurred but not reported losses related to direct and assumed business, less amounts ceded to reinsurers. Reserves for unreported losses were determined by an estimate established using various statistical and actuarial techniques reflecting historical patterns of development of paid and reported losses adjusted for current trends. The inherent variability of the estimate was analyzed in order to ascertain whether it was reasonable before application. We did not discount loss and loss adjustment expense reserves.

We developed our estimate considering a range of reserve estimates bounded by a high and a low estimate. The high and low ends of the range did not correspond to an absolute best and worst case scenario of ultimate settlements because such estimates may have been the result of unlikely assumptions. Our best estimate therefore did not include the set of all possible outcomes but only those outcomes that were considered reasonable. Those estimates were subject to the effects of trends in loss severity and frequency. Although considerable variability was inherent in such estimates, we believed the reserves for losses and loss adjustment expenses were adequate. The estimates were continually reviewed and adjusted as necessary as experience developed or new information became known; such adjustments were included in discontinued operations. Adjustments to reserves were reflected in the loss from discontinued operations, net of tax, in the periods in which the estimates were changed.

We reflected our liability for losses net of anticipated salvage and subrogation recoveries. Salvage and subrogation received and changes in estimates of future recoveries were reflected in current year underwriting results. We believe the liabilities for losses and loss adjustment expenses were adequate to cover the ultimate liability; however, due to the underlying risks and high degree of uncertainty associated with the determination of the liability for losses, such estimates may have been more or less than the amounts ultimately paid when the claims were settled.

We sought to reduce the loss from our underwriting liabilities by reinsuring certain levels of risks with other insurance enterprises or reinsurers. We used recoverable amounts for both paid and unpaid losses. We estimated these recoverable amounts in a manner consistent with the claim liability associated with the reinsurance policy. The risk of collectibility of these reinsurance receivables arose from disputes relating to the policy terms and the ability of the reinsurer to pay.

## NEW ACCOUNTING PRONOUNCEMENTS

In December 2004, the Financial Accounting Standards Board issued Statement No.123(R) (SFAS 123R), *Share-Based Payment*, which replaces SFAS 123 and APB 25, *Accounting for Stock Issued to Employees*, and requires the Company to measure compensation cost for all share-based payments at fair value. On April 14, 2005, the U.S. Securities and Exchange Commission announced the adoption of a new rule that amends the compliance dates for SFAS 123R. As a result of this announcement, the Company plans to adopt SFAS 123R as of January 1, 2006. The Company will recognize share-based employee compensation cost from January 1, 2006, as if the fair-value based accounting method had been used to account for all employee awards granted, modified, or settled after the effective date and for any awards that were not fully vested as of the effective date. Based on currently existing share-based compensation plans, the Company does not expect the adoption of SFAS 123R to have a material impact on its financial position or results of operations.

In January 2003, the Financial Accounting Standards Board issued Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities an Interpretation of ARB No. 51*. FIN 46 requires variable interest entities (VIEs) to be consolidated by their primary beneficiaries. During 2003, we adopted the requirements of FIN 46 and applied the guidance to VIEs in which we have an interest. See Note 8 to the Consolidated Financial Statements for information relating to the impact of adopting FIN 46. FIN 46 was revised in December 2003. We adopted the December revision (FIN 46R) effective March 31, 2004. The adoption of FIN 46R did not have a material impact on our financial position or results of operations.

## RESTRUCTURING EXPENSES

We have implemented several major restructuring programs during the past three years (see Note 25 to the Consolidated Financial Statements).

### **2001 Program**

Our restructuring program announced in July 2001 (the 2001 Program) was substantially completed at September 30, 2002. Restructuring charges relating to workforce reductions, lease terminations and other exit costs associated with the 2001 Program, along with changes in estimates accrued for any of these charges, are included in other income (expense), net. Termination benefits were paid to approximately 100, 2,270 and 4,000 employees in 2004, 2003 and 2002, respectively. As a result of the 2001 Program, certain assets, inventories and property, plant and equipment were identified as being impaired or would no longer be used in continuing operations. We recorded in 2002 a charge of \$18 million to write down these assets to their fair values, and such costs are included in cost of sales and other income (expense), net.

### **Step change program**

In October 2002, we announced the Step change program. The goals of the Step change program were to increase competitiveness of our core businesses, reduce overhead costs and streamline operations. At June 30, 2004, the Step Change program was substantially complete.

Restructuring charges relating to workforce reductions, lease terminations and other exit costs associated with the Step change program are included in other income (expense), net. Termination benefits were paid to approximately 950, 1,500 and 200 employees in 2004, 2003 and 2002, respectively. Workforce reductions occurred principally from production, managerial and administrative employees. Changes in management's original estimate of the amounts accrued for workforce reductions, lease terminations and other exit costs were included in other income (expense), net.

As a result of the Step change program, certain assets, inventories and property, plant and equipment were identified as being impaired or would no longer be used in continuing operations. We recorded \$0 million, \$3 million and \$2 million in 2004, 2003 and 2002, respectively, to write down these assets to their fair value, and such costs were included in cost of sales and other income (expense), net.

## Other

Certain restructuring programs were initiated primarily during 2003 at specified locations not included in the Step change program. The goals of these programs are to increase efficiencies by reducing headcount and streamlining operations. These programs are expected to increase productivity of the non-core businesses. Anticipated savings will be recognized through the strategic divestment of these operations.

Restructuring charges related to workforce reductions, lease terminations and other exit costs associated with these other programs are included in other income (expense), net. Termination benefits were paid to approximately 1,290 and 1,300 employees in 2004 and 2003, respectively. Workforce reductions occurred principally from production, managerial and administrative employees. Changes in management's original estimate of the amounts accrued for workforce reductions, lease terminations and other exit costs have been included in other income (expense), net.

As a result of other restructuring programs, certain assets, inventories and property, plant and equipment have been identified as being impaired or would no longer be used in continuing operations. We recorded \$5 million and \$11 million in 2004 and 2003, respectively, to write down these assets to fair value and such costs are included in cost of sales and other income (expense), net.

## Restructuring liabilities

Restructuring liabilities consist of the following:

	2001 Program		Step change		Other		Total
	Workforce reductions	Lease terminations and other exit costs	Workforce reductions	Lease terminations and other exit costs	Workforce reductions	Lease terminations and other exit costs	
(U.S. dollars in millions)							
Balance at January 1, 2002	\$ 78	\$ 39	\$	\$	\$ 20	\$ 12	\$ 149
Restructuring expense	168	40	51	26			285
Cash paid	(156)	(29)	(13)	(1)			(199)
Exchange rate differences	20	5					25
Changes in estimate	(16)	(5)			(9)		(30)
Balance at December 31, 2002	94	50	38	25	11	12	230
Restructuring expense			181	56	110	25	372
Cash paid	(99)	(10)	(143)	(48)	(43)	(12)	(355)
Exchange rate differences	14	9	24	4	7	3	61
Changes in estimate		(22)	(4)		(6)		(32)
Balance at December 31, 2003	9	27	96	37	79	28	276
Restructuring expense			42	17	98	31	188
Cash paid	(9)	(9)	(137)	(18)	(103)	(16)	(292)
Exchange rate differences		2	6	3	5	4	20
Changes in estimate		(6)	(7)		(5)	(5)	(23)
Balance at December 31, 2004	\$	\$ 14	\$	\$ 39	\$ 74	\$ 42	\$ 169



## Edgar Filing: ABB LTD - Form 20-F

We expect that we will continue to expend cash and incur restructuring expenses. In particular, we expect that we will pay in 2005 a significant portion of our total restructuring liabilities at December 31, 2004. We also expect to incur restructuring expenses in an amount equal to approximately 0.5 to 0.7 percent of our revenues in each year as part of our routine assessment of our business practices and strategy. These expenses will be recorded in cost of sales, selling, general and distribution expenses and other income (expense), net, in the Consolidated Income Statements according to the nature of the expenses, except for restructuring expenses incurred by businesses classified in discontinued operations, which will be recorded in income (loss) from discontinued operations. We expect to fund our cash expenditures under our restructuring programs through cash generated from our continuing operations. The benefits of these restructuring programs are expected to be realized through reductions in selling, general and administrative expenses and cost of sales in the subsequent years. These benefits, however, may be offset by increases in cost of sales, selling, general and administrative expenses and other income (expense), net, due to various other factors, which cannot be predicted in advance.

### Cumulative

The cumulative amounts at December 31, 2004, for each plan are given below:

	2001 Program	Step change	Other	Total
(U.S. dollars in millions)				
Restructuring charge for workforce reduction	\$ 282	\$ 274	\$ 228	\$ 784
Restructuring charge for lease terminations and other	111	99	68	278
Changes in estimate	(49)	(11)	(25)	(85)
	\$ 344	\$ 362	\$ 271	\$ 977

### Division information

Restructuring charges by division and business activity consist of the following:

	Year ended December 31,		
	2004	2003	2002
(U.S. dollars in millions)			
Power Technologies	\$ 51	\$ 61	\$ 57
Automation Technologies	72	139	126
Non-core activities:			
Oil, Gas and Petrochemicals	20	20	
Equity Ventures			
Structured Finance			
Building Systems	11	43	22
New Ventures	1	1	2
Other Non-core activities		47	15
	32	111	39
Total Non-core activities	32	111	39
Corporate/Other	10	29	33
	\$ 165	\$ 340	\$ 255
Total restructuring charges	\$ 165	\$ 340	\$ 255

## ACQUISITIONS, INVESTMENTS AND DIVESTITURES

### Acquisitions and investments

In 2004, 2003 and 2002, we paid aggregate consideration of \$24 million, \$55 million and \$154 million, respectively, related to acquisitions and investments in new businesses, joint ventures and affiliated companies.

### Divestitures of businesses, joint ventures and affiliated companies

In 2004, 2003 and 2002, we received cash, net of cash disposed, from sales of businesses, joint ventures and affiliated companies of \$1,182 million, \$543 million and \$2,509 million, respectively. In relation to these dispositions we recognized net gains in 2004, 2003, and 2002 within other income (expense), net, of \$52 million, \$43 million and \$98 million, respectively. We also recognized net losses in 2004, 2003, and 2002 within loss from discontinued operations, net of tax, of \$63 million, \$38 million and \$194 million, respectively.

Our material and certain other dispositions are described below.

#### *Divestitures in 2004*

In December 2004, we sold our entire 15.7 percent equity interest in IXYS Corporation for approximately \$42 million and recorded a gain, before tax, of \$20 million in other income (expense), net.

In July 2004, we sold the Upstream Oil, Gas and Petrochemicals business to a consortium of private equity investors (collectively, the Purchasers). We received net cash proceeds of approximately \$800 million, which reflects an initial sales price of \$925 million adjusted for approximately \$85 million of unfunded pension liabilities and changes in net working capital. We recognized in 2004 a loss on disposal of \$26 million in loss from discontinued operations, net of tax. On February 9, 2005, we and the Purchasers entered into a Settlement Agreement and Amendment (the Settlement Agreement) finalizing the sales price. This Settlement Agreement contains provisions to indemnify the Purchasers with respect to certain incomplete projects. We believe the provisions we have accrued for such indemnified projects are adequate.

In June 2004, we sold a business in the Automation Technologies division operating in Sweden, for gross and net proceeds of approximately \$11 million, and recorded a gain on disposal of \$7 million, before tax, in other income (expense), net.

In April 2004, we completed the sale of our Reinsurance business to White Mountains Insurance Group Limited, a Bermuda based insurance holding company, receiving gross cash proceeds of \$415 million and net proceeds of approximately \$280 million. In anticipation of the sale of this business, we recorded in 2003 an impairment charge of \$154 million in loss from discontinued operations, net of tax. We recognized in 2004 a net loss of \$41 million in loss from discontinued operations, net of tax, that related primarily to currency translation effects from December 2003 through the date of sale in April 2004 (as explained in "Note 2 Significant accounting policies Translation of foreign currencies and foreign exchange transactions" to our Consolidated Financial Statements).

In February 2004, we sold our Swiss Building Systems business to a Swiss private equity company, for gross cash proceeds of approximately \$39 million, but retained a 10 percent ownership interest. We recognized in 2004 a net gain on disposal of \$12 million, before tax, in other income (expense), net.

In January 2004, we sold our MDCV (Mitsubishi-Dainichi Continuous Vulcanization) Cable Business. We recorded in 2003 asset write-downs of \$10 million in anticipation of the sale of this business in loss from discontinued operations, net of tax.



***Divestitures in 2003***

In December 2003, as part of the divestment of our Structured Finance business, we sold ABB Export Bank. We received cash proceeds of approximately \$50 million from the sale and recorded in 2003 a loss on disposal of \$12 million, in loss from discontinued operations, net of tax.

In December 2003, as part of the divestment of the Wind Energy business (which was held in the New Ventures business area prior to its classification to discontinued operations), we sold the majority of the business for total consideration of \$35 million, which included a vendor note of \$10 million. We recognized in 2003 a loss on disposal from this sale of approximately \$25 million in loss from discontinued operations, net of tax.

In August 2003, as part of the divestment of our Building Systems businesses, we sold to YIT Corporation of Finland our Building Systems businesses located in Sweden, Norway, Denmark, Finland, Russia and the Baltic states for consideration of \$213 million. We recorded a gain on disposal of approximately \$124 million, before tax, in other income (expense), net. Additionally, throughout 2003, we sold other Building Systems businesses in a number of countries, including Belgium, the Netherlands, Austria, Hungary and the United Kingdom, for aggregate proceeds of \$21 million. We recorded in 2003 a loss on disposal from the sale of these businesses of approximately \$41 million, before tax, in other income (expense), net.

In June 2003, we sold our entire 35 percent interest in the Swedish Export Credit Corporation to the government of Sweden for net proceeds of approximately \$149 million, and recorded a loss on disposal of approximately \$80 million, before tax, included in other income (expense), net.

Also in June 2003, we sold our interests in certain equity investments in Australia for cash proceeds of approximately \$90 million, and recorded in 2003, a gain on disposal of approximately \$28 million, before tax, in other income (expense), net.

In March 2003, we sold our aircraft leasing business for approximately \$90 million. This business consisted of a portfolio of loans and leases related to commuter aircraft and helicopters used primarily in Northern Europe. We provided significant financial support to the entity formed by the buyer for the acquisition. Following the introduction of FIN 46 in 2003, we determined that this entity should be treated as a variable interest entity and, as a result of the financial support we provided, that we are the primary beneficiary of this entity. Accordingly, we consolidated this entity in our Consolidated Financial Statements.

***Divestitures in 2002***

In December 2002, we completed the sale of our Metering business to Ruhrgas Industries GmbH for consideration of approximately \$223 million. We recorded in 2002 a loss on disposal of approximately \$48 million from this sale in loss from discontinued operations, net of tax. Cash held in escrow of \$15 million was released after resolution of certain disputed items in 2003.

In November 2002, we completed the sale of most of our Structured Finance business to General Electric Capital Corporation (GE) and received cash proceeds of approximately \$2.0 billion, including a contingent payment of \$20 million to be released to us should amounts ultimately collected by GE, from a portfolio transferred by us to GE, reach specified targets. Collection of the last portion of the contingent payment, which culminated our collection of substantially all of the contingent payment, took place on August 3, 2004. We recorded in 2002 a loss on disposal from this sale of approximately \$146 million in loss from discontinued operations, net of tax. Pursuant to the sale and purchase agreement for this transaction, we provided GE with cash collateralized letters of credit in the aggregate amount of \$202 million as security for certain performance-related obligations retained by us, of which approximately \$63 million were outstanding as of December 31, 2004. The remaining cash collateralized letters of credit will further be reduced as our performance related obligations expire.

The sale and purchase agreement also provided GE with the option to require us to repurchase designated financial assets transferred to GE. The fair value of GE's right to require us to repurchase the designated assets was \$11 million at December 31, 2003. On January 26, 2004, we repurchased the designated financial assets for approximately \$28 million. No further obligation exists for us to repurchase any assets under the sale and purchase agreement.

In January 2002, we sold our Air Handling business for cash proceeds of \$113 million, which was the sales price of \$147 million less a vendor note of 39 million euro principal value (approximately \$34 million at the date of issuance) issued by the purchaser, Global Air Movement (Luxembourg) Sarl. We recognized in 2002 a gain on disposal from this sale of \$74 million, before tax, in other income (expense), net.

#### *Other divestitures*

In May 2003, we sold our interest in China National Petrochemical Corporation (Sinopec Corp.) for approximately \$82 million and recorded in 2003 a loss on disposal of \$40 million, before tax, in interest and other finance expense, net.

During 2004, 2003 and 2002, we sold several operating units and investments not described above for total proceeds of \$39 million, \$31 million and \$209 million, respectively, and recognized net gains, before tax, on disposal of \$13 million, \$12 million and \$24 million, respectively, in other income (expense), net. Net income from these businesses and investments was not significant in 2004, 2003 and 2002.

In addition, throughout 2003, we engaged in a number of sales and terminations of lease portfolios and individual financing receivables resulting in cash proceeds of approximately \$400 million. These disposals continued in 2004, generating cash proceeds of approximately \$180 million. The gains (losses) on such disposals were not material.

#### **EXCHANGE RATES**

We report our financial results in U.S. dollars. A significant amount of our revenues, expenses, assets and liabilities are denominated in other currencies due to our global operations. As a consequence, movements in exchange rates between currencies may affect:

our profitability,

the comparability of our results between periods, and

the carrying value of our assets and liabilities.

We must translate non-U.S. dollar denominated results of operations, assets and liabilities to U.S. dollars in our Consolidated Financial Statements. Balance sheet items are translated to U.S. dollars using year-end currency exchange rates. Income statement and cash flow items are translated to U.S. dollars using the average currency exchange rate over the relevant period. As a consequence, increases and decreases in the value of the U.S. dollar against other currencies will affect our reported results of operations in our Consolidated Income Statement and the value of certain of our assets and liabilities in our Consolidated Balance Sheet, even if our results of operations or the value of those assets and liabilities have not changed in their original currency. Because of the impact foreign exchange rates have on our reported results of operations and the reported value of our assets and liabilities, changes in foreign exchange rates could significantly affect the comparability of our reported results of operations between periods and result in significant changes to the reported value of our assets, liabilities and shareholders' equity, as has been the case during the period from 2002 through 2004.

While we operate globally and report our financial results in U.S. dollars, because of the location of our significant operations and because our headquarters are in Switzerland, exchange rate movements between the U.S. dollar and both the euro (EUR) and the Swiss franc (CHF) are of

## Edgar Filing: ABB LTD - Form 20-F

particular importance to us. The decline in the value of the U.S. dollar against the euro and Swiss franc between 2002 and 2004 has had a material impact on our financial statements.

The exchange rates between the U.S. dollar and the EUR and the U.S. dollar and the CHF at December 31, 2004, 2003, and 2002, are as follows.

Exchange rates into U.S. dollars	At December 31,		
	2004	2003	2002
EUR 1.00	\$ 1.37	\$ 1.26	\$ 1.05
CHF 1.00	\$ 0.88	\$ 0.81	\$ 0.72

The average exchange rates between the U.S. dollar and the EUR and the U.S. dollar and the CHF for the years ended December 31, 2004, 2003 and 2002, are as follows.

Exchange rates into U.S. dollars	Year ended December 31,		
	2004	2003	2002
EUR 1.00	\$ 1.25	\$ 1.13	\$ 0.94
CHF 1.00	\$ 0.81	\$ 0.75	\$ 0.64

When we incur expenses that are not denominated in the same currency as the related revenues, foreign exchange rate fluctuations could adversely affect our profitability. To mitigate the impact of exchange rate movements on our profitability, it is our policy to enter into forward foreign exchange contracts to manage the foreign exchange risk of our operations.

In 2004, approximately 84 percent of our consolidated revenues were reported in currencies other than U.S. dollars. Of that amount, the following percentages were reported in the following currencies:

- Euro, approximately 37 percent,
- Chinese renminbi, approximately 6 percent,
- Swedish krona, approximately 6 percent,
- Swiss franc, approximately 5 percent and
- Pound sterling, approximately 3 percent.

In 2004, approximately 83 percent of our consolidated cost of sales and selling, general and administration expenses were reported in currencies other than U.S. dollars. Of that amount, the following percentages were reported in the following currencies:

- Euro, approximately 37 percent,
- Chinese renminbi, approximately 5 percent,
- Swedish krona, approximately 6 percent,

Swiss franc, approximately 5 percent and

Pound sterling, approximately 4 percent.

Foreign exchange rate changes resulted in an increase in our reported revenues and EBIT by 6 percent and 18 percent in 2004 and 12 percent and 42 percent in 2003, respectively.

We also incur expenses other than cost of sales and selling, general and administration expenses in various currencies.

The results of operations and financial position of most of our non-U.S. subsidiaries are reported in the currencies of the countries in which those subsidiaries reside. We call these "local currencies." That local currency financial information is then translated into U.S. dollars at applicable exchange rates for inclusion in our Consolidated Financial Statements.

The discussion of our results of operations below provides certain information with respect to orders, revenues, earnings before interest and taxes and other measures as reported in local currencies (as well as in U.S. dollars). We measure period-to-period variations in local currency results by using a constant foreign exchange rate for all periods under comparison. Differences in our results of operations as reported in local currencies as compared to our results of operations as reported in U.S. dollars are caused exclusively by changes in currency exchange rates.

While we consider our results of operations as measured in local currencies to be a significant indicator of business performance, local currency information should not be relied upon to the exclusion of U.S. GAAP financial measures. Instead, local currencies reflect an additional measure of comparability and provide a means of viewing aspects of our operations that, when viewed together with the U.S. GAAP results and our reconciliations, provide a more complete understanding of factors and trends affecting the business. Because local currency information is not standardized, it may not be possible to compare our local currency information with other companies' financial measures having the same or a similar name. Management strongly encourages investors to review our financial statements and publicly-filed reports in their entirety, and not to rely on any single financial measure.

## ORDERS

We book and report an order when a binding contractual agreement has been concluded with the customer covering, at a minimum, the price and scope of products or services to be supplied, the delivery schedule and payment terms. The reported value of an order corresponds to the undiscounted value of revenues that we expect to recognize following our delivery of the goods or services subject to the order, less any trade discounts and excluding any value added or sales tax. The value of orders received during a given period of time represents a sum of the value of all orders received during the period, adjusted to reflect the aggregate value of any changes to the value of orders received during the period and orders existing at the beginning of the period. These adjustments, which may in the aggregate increase or decrease the orders reported during the period, may include changes in the estimated order price up to the date of contractual performance, changes in the scope of products or services ordered, cancellations of orders, returns of delivered goods, and the recognition of operating or financial services income relating to the order (except that the cancellation of orders with an expected revenue value of over \$10 million that were received in a previous period are not deducted from the value of orders received during the present period, and instead, are balanced against order backlog only).

The undiscounted value of revenues we expect to generate from our orders at any point in time is represented by our order backlog. Approximately 12 percent of the value of the orders we booked in 2004 were "large orders," which we define as orders from third parties involving at least \$15 million worth of products or systems. Of the total value of orders in the Power Technologies and Automation Technologies divisions in 2004, approximately 11 percent and 7 percent, respectively, represented large orders. Within Non-core activities, large orders represented 49 percent of total orders in 2004, as large orders accounted for 68 percent of the value of orders received by the Oil, Gas and Petrochemicals business.

The level of orders fluctuates from year to year. Arrangements included in particular orders can be complex and unique to the order. Portions of our business involve orders for long-term projects that can take months or years to complete and many large orders result in revenues in periods after the order is booked. However, the level of large orders and backlog, and orders and backlog generally, cannot be used to accurately predict future revenues or operating performance. Orders that are placed can be cancelled, delayed or modified by the customer. These actions can reduce or delay any future revenues from the order, or may result in the elimination of the order.

### **PERFORMANCE MEASURES**

We evaluate the performance of our divisions based on orders received, revenues, earnings before interest and taxes (or EBIT), EBIT as a percentage of revenues (or EBIT margin) and net cash provided by (used in) operating activities. The orders, revenues and EBIT of our divisions include interdivisional transactions. In 2004, approximately 95 percent of our core divisions' orders and revenues were from third-party customers. EBIT, which is commonly referred to as operating profit, is the amount resulting from the subtraction of our cost of sales, selling, general and administrative expenses, amortization expense and other income (expense), net, from our revenues. EBIT margin is the percentage amount resulting from the division of EBIT by revenues. Net cash provided by (used in) operating activities represents the cash provided by or used in a business before cash inflows and outflows from investing and financing activities, and, as relates to our divisions, includes interdivisional transactions.

### **RESTATEMENT**

The financial statements and other financial data included in this report reflect restatements we made in September 2004, when we restated certain financial statements contained in our annual report for the year ended December 31, 2003 as published in our Form 20-F filed with the U.S. Securities and Exchange Commission in April 2004. The amendments reflected restatements of our consolidated financial statements at December 31, 2003 and 2002 and for each of the years in the three-year period ended December 31, 2003, and of certain financial data at December 31, 2001, 2000 and 1999 and for each of the years in the two-year period ended December 31, 2000. These changes were intended to correct the effect of earnings overstatements by the PT-MV BAU in Italy on its previously reported financial statement results.

The cumulative effect of these overstatements on our EBIT and net income was approximately \$73 million and \$89 million, respectively, from the first quarter of 1998 through the end of March 2004. The negative impact on income tax expense results from the inability to claim tax benefits under Italian tax law for adjustments made to improperly filed tax returns for the years 1998 through 2002, as well as a reassessment of the probability of realization of our deferred tax assets due to a cumulative loss position after the restatement. As compared with financial data originally published, the corrections increased net loss by \$12 million (\$0.01 per share basic and diluted), \$36 million (\$0.04 and \$0.03 per share basic and diluted, respectively) and \$14 million (\$0.02 per share basic and diluted) in 2003, 2002 and 2001, respectively, decreased net income by \$17 million (\$0.01 and \$0.02 per share basic and diluted, respectively) and \$6 million (\$0.01 per share basic and diluted) in 2000 and 1999, respectively, and decreased stockholders' equity by \$109 million at December 31, 2003.

### **DIFFERENCES FROM PRELIMINARY EARNINGS ANNOUNCEMENT**

On February 17, 2005, we announced, in an unaudited earnings release, net income for the year ended December 31, 2004 totaling \$201 million. Following extensive negotiations between various representatives of asbestos claimants and us, on March 21, 2005, we announced that we reached an agreement with those parties on the basic terms of an amended plan of reorganization for Combustion Engineering and ABB Lummus Global to resolve the asbestos claims against both companies.

This event, and the resulting change in estimate relating to our potential asbestos-related liabilities, is required under accounting rules to be recorded in our results for the year ended December 31, 2004. As a result of the changes required to reflect that change in estimate, our Consolidated Financial Statements included in this report differ in certain respects from the financial information stated in the February 17, 2005 earnings release.

Edgar Filing: ABB LTD - Form 20-F

In the Consolidated Financial Statements, we have adjusted the preliminary amounts announced in the earnings release as follows:

Selected Financial Data	Year Ended December 31, 2004		
	As reported on February 17, 2005	Adjustments*	As adjusted
(U.S. dollars in millions, except per share data)			
Loss from discontinued operations, net of tax	\$ (247)	\$ (236)	\$ (483)
Net income (loss)	201	(236)	(35)
Net income (loss) per share	\$ 0.10	\$ (0.12)	\$ (0.02)
Accrued liabilities and other	\$ 6,200	\$ 236	\$ 6,436
Total stockholders' equity	\$ 3,060	\$ (236)	\$ 2,824

\*

Adjustments due to changes in asbestos related cost provision.

**ANALYSIS OF RESULTS OF OPERATIONS**

**Consolidated**

Our results from operations were as follows:

	Year ended December 31,		
	2004	2003	2002
(U.S. dollars in millions, except per share data)			
Orders	\$ 21,689	\$ 19,701	\$ 19,153
Order backlog <sup>(1)</sup>	12,364	11,306	12,127
Revenues	20,721	20,427	19,472
Cost of sales	15,757	15,928	15,098
Selling, general and administrative expenses	3,786	3,917	4,050
EBIT	1,084	357	199
Interest and other finance expense, net	(223)	(417)	(133)
Loss from discontinued operations	(483)	(408)	(693)
Net loss	\$ (35)	\$ (779)	\$ (819)
Basic earnings (loss) per share:			
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.11)
Net loss	\$ (0.02)	\$ (0.64)	\$ (0.74)
Diluted earnings (loss) per share:			
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.27)
Net loss	\$ (0.02)	\$ (0.64)	\$ (0.86)

<sup>(1)</sup> at December 31

A more detailed discussion of the orders, revenues, cost of sales, selling, general and administrative expenses and EBIT for each of our individual divisions and segments follows in sections entitled "Power Technologies," "Automation Technologies," "Non-core activities" and "Discontinued operations" below.





## Orders

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Power Technologies	\$ 9,372	\$ 7,682	\$ 6,686
Automation Technologies	11,334	9,691	8,428
<b>Total Core Divisions</b>	<b>20,706</b>	<b>17,373</b>	<b>15,114</b>
Non-core activities			
Oil, Gas and Petrochemicals	1,216	1,156	2,123
Building Systems	388	1,616	2,351
New Ventures	41	45	70
Equity Ventures	7	26	19
Structured Finance	6	48	77
Other Non-core activities	36	469	960
<b>Total Non-core activities</b>	<b>1,694</b>	<b>3,360</b>	<b>5,600</b>
Corporate/Other and inter-division eliminations.	(711)	(1,032)	(1,561)
<b>Total</b>	<b>\$ 21,689</b>	<b>\$ 19,701</b>	<b>\$ 19,153</b>

In 2004, orders increased by \$1,988 million, or 10 percent (3 percent in local currencies), to \$21,689 million.

Orders received by the core divisions increased by 19 percent in 2004 (12 percent in local currencies), with orders received by the Power Technologies and Automation Technologies divisions increasing 22 percent and 17 percent (15 percent and 9 percent in local currencies), respectively. Orders received by Non-core activities decreased by 50 percent (53 percent in local currencies) in 2004 as compared to 2003. Orders valued at approximately \$92 million, or 0.4 percent of 2004 orders, were received prior to 2004 and were cancelled, but not deducted from the reported value of orders received, during 2004.

In 2003, orders increased by \$548 million, or 3 percent (decreased by 9 percent in local currencies), to \$19,701 million from \$19,153 million in 2002. This small increase in orders was due to a 40 percent (43 percent in local currencies) decline in orders received by Non-core activities that substantially offset increases in orders received by each of the Power Technologies and Automation Technologies divisions of 15 percent (5 percent and 1 percent, respectively, in local currencies). Orders valued at approximately \$136 million, or 0.7 percent of 2003 orders, were received prior to 2003 and were cancelled, but not deducted from the reported value of orders received, during 2003. Orders valued at approximately \$644 million, or 3.4 percent of 2002 orders, were received prior to 2002 and were cancelled, but not deducted from the reported value of orders received, during 2002.

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Europe	\$ 11,009	\$ 11,024	\$ 10,915
The Americas	3,797	3,227	3,862
Asia	5,013	3,460	2,822
MEA	1,870	1,990	1,554
<b>Total</b>	<b>\$ 21,689</b>	<b>\$ 19,701</b>	<b>\$ 19,153</b>

Orders from Europe remained flat in 2004 and 2003, but declined 8 percent and 12 percent in local currencies, respectively. Changes in our orders from Europe from 2002 to 2004 were primarily the



## Edgar Filing: ABB LTD - Form 20-F

result of divestments from the Building Systems business and a shift to reimbursable contracts in the Oil, Gas and Petrochemicals business. Orders from the Americas increased 18 percent (15 percent in local currencies) during 2004, driven largely by automotive industries after a decline of 16 percent (18 percent in local currencies) during 2003.

Asian orders increased 45 percent and 23 percent (38 percent and 15 percent in local currencies) in 2004 and 2003, respectively, principally resulting from an increase in orders from China in the same respective periods driven by economic growth and infrastructure development. South Asian orders were predominantly from India, where orders grew in 2004 and 2003, following the Indian government's economic liberalization and initiatives. In 2004, orders from Middle East and Africa (MEA) declined by 6 percent (14 percent in local currencies) in 2004 compared to 2003, which included several large orders received by the Power Technologies division's Power Systems business area thereby resulting in an increase of 28 percent (20 percent in local currencies) in 2003 as compared to 2002.

### Order backlog

	At December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Power Technologies	\$ 6,874	\$ 6,030	\$ 5,682
Automation Technologies	4,322	3,826	3,486
Non-core activities	1,533	1,865	3,579
Corporate/Other and inter-division eliminations	(365)	(415)	(620)
	\$ 12,364	\$ 11,306	\$ 12,127

Order backlog increased by \$1,058 million, or 9 percent (3 percent in local currencies), to \$12,364 million in 2004 as an increase in order backlog in the core divisions exceeded an 18 percent decline (24 percent in local currencies) in the order backlog in Non-core activities. In 2003, order backlog decreased by \$821 million, or 7 percent (17 percent in local currencies), to \$11,306 million from \$12,127 million in 2002, as an increase in order backlog in the core divisions was more than offset by a 48 percent (53 percent in local currencies) decline in order backlog in Non-core activities.

### Revenues

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Power Technologies	\$ 8,755	\$ 7,598	\$ 6,814
Automation Technologies	11,030	9,628	8,201
	19,785	17,226	15,015
Core Divisions			
Non-core activities			
Oil, Gas and Petrochemicals	1,079	1,895	2,321
Building Systems	508	1,829	2,375
New Ventures	49	53	50
Equity Ventures	7	26	19
Structured Finance	6	48	66
Other Non-core activities	44	471	783
	1,693	4,322	5,614
Corporate/Other and inter-division eliminations	(757)	(1,121)	(1,157)
	\$ 20,721	\$ 20,427	\$ 19,472

## Edgar Filing: ABB LTD - Form 20-F

Revenues increased in each of 2004, 2003 and 2002, driven by growth in our core divisions partially offset by declines in Non-core activities.

Revenues increased by \$294 million, or 1 percent (decreased by 5 percent in local currencies), to \$20,721 million in 2004 from \$20,427 million in 2003. The relatively flat revenue growth in 2004 was due to a 61 percent decrease (63 percent in local currencies) in revenues generated by Non-core activities that substantially offset revenue increases of 15 percent and 15 percent (9 percent and 7 percent in local currencies) in the Power Technologies and Automation Technologies divisions, respectively. In 2003, revenues increased by \$955 million, or 5 percent (decreased by 7 percent in local currencies), to \$20,427 million from \$19,472 million in 2002. The increase in revenues in 2003 was due to increases in revenue of 12 percent and 17 percent (2 percent and 3 percent in local currencies) in the Power Technologies and Automation Technologies divisions, respectively, partially offset by a 23 percent decrease (36 percent in local currencies) in revenues in Non-core activities.

	Year ended December 31,		
	2004	2003	2002
(U.S. dollars in millions)			
Europe	\$ 10,764	\$ 10,963	\$ 10,461
The Americas	3,624	3,900	4,177
Asia	4,296	3,519	2,860
MEA	2,037	2,045	1,974
	\$ 20,721	\$ 20,427	\$ 19,472
<b>Total</b>	<b>\$ 20,721</b>	<b>\$ 20,427</b>	<b>\$ 19,472</b>

European revenues decreased 2 percent (10 percent in local currencies) in 2004 after increasing 5 percent (declining 10 percent in local currencies) in 2003. These changes were primarily the result of revenue reductions associated with the Building Systems divestments in the Nordic countries, Switzerland and in the United Kingdom, substantially offset by exchange rate effects related to the declining value of the U.S. dollar over this period. Within Europe, Central and Eastern European revenues decreased in 2004 after increasing substantially in 2003. Improvement by the core divisions in this region was more than offset in 2004 by the shift to reimbursable contracts in our Oil, Gas and Petrochemicals business and the sale of businesses from the Building Systems business. Revenues from the Americas decreased 7 percent in both 2004 and 2003 (9 percent and 8 percent in local currencies respectively) across all divisions, primarily reflecting the relatively weak markets in the previous periods. North American revenues declined in 2003 reflecting a decline in sales of distribution transformers by the Power Technologies division. Revenues from Asia increased 22 percent and 23 percent (17 percent and 15 percent in local currencies) in 2004 and 2003, respectively, primarily reflecting growth in China. Revenues from India almost doubled in 2004, after a small decline in 2003. The increase in Indian revenue in 2004 was across all business areas, whereas the decline in 2003 reflects the revenues pertaining to an oil and petrochemical refinery project in India that stalled during 2003 due to complications encountered by the customer in obtaining necessary additional financing. Revenues in the MEA remained flat (decline of 6 percent in local currencies) in 2004 after a period of growth in 2003, principally due to higher revenues from an Angolan oil and gas project completed in 2003 that resulting in an increase of MEA revenues in 2003 of 4 percent (2 percent in local currencies) as compared to 2002.

### Cost of sales

Cost of sales decreased by \$171 million, or 1 percent (7 percent in local currencies), to \$15,757 million in 2004 after increasing by \$830 million, or 5 percent (decreased 7 percent in local currencies), to \$15,928 million from \$15,098 million in 2002.

## Edgar Filing: ABB LTD - Form 20-F

Cost of sales consists primarily of labor, raw materials and related components. Cost of sales also includes provisions for warranty claims, contract losses and project penalties, as well as order-related development expenses incurred in connection with projects for which we have recognized corresponding revenues. Order-related development is recorded in cost of sales, and amounted to \$727 million, \$886 million and \$719 million in 2004, 2003 and 2002, respectively. Order-related development amounts are initially recorded in inventories as works in progress, and reflected in cost of sales at the time revenue is recognized.

The gross profit margin on a consolidated basis and for each core division and Non-core activities, calculated as gross profit divided by revenues, were as follows.

	Year ended December 31,		
	2004	2003	2002
Power Technologies	20.3%	22.0%	22.1%
Automation Technologies	29.4%	29.0%	29.8%
Non-core activities*	6.7%	(0.5)%	5.0%
Consolidated	24.0%	22.0%	22.5%

\*

Excludes revenues of \$0 million, \$421 million and \$758 million and gross profit of \$0 million, \$378 million and \$707 million of the Group Processes business area in 2004, 2003 and 2002, respectively.

The gross profit margin improved in 2004 as compared to 2003, principally due an improvement in gross profit margin in the in the Oil, Gas and Petrochemicals business area from negative 9.5 percent in 2003 to 9.9 percent in 2004 following a \$1,103 million reduction in costs of sales related to the winding down or culmination of long-term fixed price contracts.

### Selling, general and administrative expenses

Selling, general and administrative expenses decreased by \$131 million, or 3 percent (10 percent in local currencies), to \$3,786 million in 2004 from \$3,917 million in 2003. In 2003, selling, general and administrative expenses decreased by \$133 million, or 3 percent (15 percent in local currencies), to \$3,917 million from \$4,050 million in 2002.

The components of selling, general and administrative expenses were as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Selling expenses	\$ 1,910	\$ 1,830	\$ 1,815
General and administrative expenses	1,876	2,087	2,235
<b>Total selling, general and administrative expenses</b>	<b>\$ 3,786</b>	<b>\$ 3,917</b>	<b>\$ 4,050</b>
Total selling, general and administrative expenses as a percentage of revenues	18.3%	19.2%	20.8%

Selling, general and administrative expenses as a percentage of revenues have decreased in Power Technologies, Automation Technologies and Non-core activities in each of the past two years as compared to the previous period.

Selling expenses increased 4 percent and 1 percent (decreased 3 percent and 11 percent in local currencies) in 2004 and 2003, respectively. The increase in 2004 was due to growth in selling expense in each of the Power Technologies and Automation Technologies divisions of 13 percent (6 percent and 5 percent in local currencies, respectively), partially offset by business divestments and closures in Non-core activities.

General and administrative expenses decreased by 10 percent and 7 percent (16 percent and 17 percent in local currencies) in 2004 and 2003, respectively. General and administrative expenses decreased in 2004 as a result of business sales and closures in Non-core activities, partially offset by increases of 2 percent and 15 percent (a decrease of 5 percent and an increase of 5 percent in local currencies) in the Power Technologies and Automation Technologies divisions, respectively. General and administrative expenses decreased in 2003 as a result of business sales and closures in Non-core activities, as well as a decrease of 3 percent (13 percent in local currencies) in the Power Technologies division and partially offset by an increase of 6 percent (a decrease of 10 percent in local currencies) in the Automation Technologies division.

General and administrative expenses include non-order related research and development not related to a specific order or project, which increased 9 percent and 11 percent (decreased 1 percent and 1 percent in local currencies) in 2004 and 2003, respectively. Research and development costs not related to a specific order or project were \$690 million, \$635 million and \$572 million in 2004, 2003 and 2002, respectively.

General and administrative expenses in 2002 additionally include the recovery of payments to two former chief executive officers.

#### Amortization expense

Amortization expense of other intangibles was \$45 million, \$31 million and \$45 million in 2004, 2003 and 2002, respectively. Amortization expense of other intangibles primarily reflects the amortization of intellectual property related to an acquisition made in 1999 and the amortization of patents and other intangible assets from acquisitions held by the Oil, Gas and Petrochemicals business. The increase in amortization expense in 2004 was primarily due to the reclassification of the Oil, Gas and Petrochemicals business in 2004, and the related recognition of amortization expense not recorded while this business was classified in discontinued operations. Amortization of assets ceases when the assets meet the criteria to be classified as held for sale. Amortization expenses for businesses classified in discontinued operations are not recorded as an amortization expense in our consolidated results of operations. When a business is reclassified from discontinued operations, we recognize in the period of reclassification all amortization expense that would have been recognized by the reclassified business during the period of time the business was classified in discontinued operations as long as this amount is less than the fair value of the assets on the date the business is reclassified into continuing operations.

#### Other income (expense), net

Other income (expense), net, typically consists of: restructuring expenses; gains or losses from the sale of businesses, gains or losses from the sale or disposal of property, plant and equipment; asset write-downs; our share of income or loss from equity accounted companies, principally from our Equity Ventures business; and license income.

	<b>Year ended December 31,</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	(U.S. dollars in millions)		
Restructuring expenses	\$ (165)	\$ (340)	\$ (255)
Capital gains, net	73	69	107
Asset write-downs	(71)	(35)	(94)
Income from licenses, equity accounted companies and other	114	112	162
<b>Total</b>	<b>\$ (49)</b>	<b>\$ (194)</b>	<b>\$ (80)</b>

Restructuring expenses are described above in " Restructuring expenses".

Capital gains, net in 2004 included gains of \$33 million on the sale of land and buildings, \$20 million on the sale of our shares of IXYS Corporation and lesser amounts from a number of smaller transactions. Capital gains, net in 2003 included gains of \$83 million from the sale of businesses from the Building System business area, \$28 million from the sale of equity investments in Australia, \$26 million from the sale of land and buildings and lesser amounts from a number of smaller transactions, partly offset by an \$80 million loss on the sale of our equity interest in the Swedish Export Credit Corporation. Capital gains in 2002 included a \$74 million gain on the sale of our Air Handling business, a \$22 million gain from the sale of machinery, land and buildings and a number of smaller gains.

Asset write-downs in 2004 included charges of \$21 million in respect of goodwill, \$14 million in respect of an e-business investment, \$8 million in respect of property impairments, \$2 million in respect of machinery and equipment, approximately \$20 million in a write-down of notes receivable in the Power Technologies division and a number of smaller write-downs. Asset write-downs in 2003 related to software, several equity investments, impairments of property and a number of smaller write-downs. Asset write-downs in 2002 included \$25 million in respect of software, \$30 million in respect of a number of equity investments, approximately \$30 million in respect of impairments of property and a number of smaller write-downs.

License income was \$24 million, \$25 million and \$14 million in 2004, 2003 and 2002, respectively, primarily reflecting income from liquid crystal display licenses.

Income from equity accounted companies was \$87 million, \$96 million and \$220 million in 2004, 2003 and 2002, respectively. Included in these values is income from our investment in Jorf Lasfar, which operates a power plant in Morocco, of \$68 million, \$62 million and \$73 million in 2004, 2003 and 2002, respectively. The decline in 2003 of income from equity accounted companies is primarily due to the sale of our investment in the Swedish Export Credit Corporation, which we divested in the second quarter of 2003.

#### Earnings before interest and taxes

Our EBIT for the years ended December 31, 2004, 2003 and 2002 was as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Power Technologies	\$ 610	\$ 595	\$ 451
Automation Technologies	1,027	738	495
<b>Core Divisions</b>	<b>1,637</b>	<b>1,333</b>	<b>946</b>
Non-core Activities			
Oil, Gas and Petrochemicals	(4)	(296)	(142)
Building Systems	(70)	(104)	(113)
New Ventures	(5)	(21)	(37)
Equity Ventures	69	76	43
Structured Finance	(14)	(65)	96
Other Non-core activities	(22)	(57)	(157)
<b>Total Non-core activities</b>	<b>(46)</b>	<b>(467)</b>	<b>(310)</b>
Corporate/Other and inter-division eliminations	(507)	(509)	(437)
<b>Total</b>	<b>\$ 1,084</b>	<b>\$ 357</b>	<b>\$ 199</b>

EBIT increased by \$727 million, or 204 percent (186 percent in local currencies), to \$1,084 million in 2004 and by \$158 million, or 79 percent (37 percent in local currencies), to \$357 million in 2003.

The EBIT margin for our core divisions and on a consolidated basis for the years ended December 31, 2004, 2003 and 2002, are as follows:

	Year ended December 31,		
	2004	2003	2002
Power Technologies	7.0%	7.8%	6.6%
Automation Technologies	9.3%	7.7%	6.0%
Core Divisions	8.3%	7.7%	6.3%
Total	5.2%	1.7%	1.0%

The 2004 EBIT margin decline in the Power Technologies division principally reflected a \$26 million (of which approximately \$20 million was included in other income (expense) net,) write-down of notes receivable, the increase in raw materials costs (especially for steel, copper, and aluminum and transformer oil) during the year, \$14 million in project-related hedging costs incurred following our decision to cease accounting for certain hedges under Statement of Accounting Financial Standards No. 133 (or SFAS 133), *Accounting for Derivative Instruments and Hedging Activity* and lower margin turnkey projects in the Utility Automation Systems business area including, in certain instances, cost overruns. Lower margin levels in the Power Systems business area due to continued low capacity utilization also contributed to the declining EBIT margin in 2004, caused principally by a lack of large orders received by the high voltage direct current business unit and a related declining order backlog relating to our performance in China and Brazil of orders with a combined value of approximately \$553 million received in 2001. These developments were partially offset by strong, productivity-driven margin improvements in the Medium Voltage Products business area. The EBIT margin increased in 2003 as compared to 2002, primarily due to the elimination of overlapping product lines and production sites, as well as productivity improvements.

The EBIT margin in the Automation Technologies division increased in 2004 due to increases in EBIT in all business areas resulting from productivity improvements and operational excellence initiatives along with a decrease in restructuring costs in 2004 from 2003. The EBIT margin increased in all Automation Technologies business areas in 2003 as compared to 2002, primarily due to productivity improvements and cost savings programs, partially offset by higher restructuring expenses in 2003 than 2002.

The EBIT margin in Non-core activities improved in 2004 as compared to 2003, primarily due to charges and losses realized in 2003 relating to certain large projects in the Oil, Gas and Petrochemicals business, the \$80 million loss on the sale of our investment in the Swedish Export Credit Corporation and the cessation or transfer of the Group Processes business. Non-core activities EBIT margin declined in 2003 due to the aforementioned items in the Oil, Gas and Petrochemicals business and the Structured Finance business.

#### Net interest and other finance expense

Net interest and other finance expense consists of interest and dividend income and interest and other finance expense. Interest and other finance expense includes expenses associated with the change in fair value of the embedded derivative that was in our \$968 million convertible bonds, the



amortization of costs associated with our credit facility, the issuance of our debt securities, gains (losses) on marketable securities and interest expense on our borrowings.

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Interest and dividend income	\$ 164	\$ 152	\$ 194
Interest and other finance expense	(387)	(569)	(327)
<b>Net interest and other finance expense</b>	<b>\$ (223)</b>	<b>\$ (417)</b>	<b>\$ (133)</b>

Net interest and other finance expense decreased by 47 percent in 2004 after rising 214 percent in 2003.

Interest and dividend income increased in 2004 due to higher average balances of cash and marketable securities in 2004 compared to 2003, as well as higher average market interest rates. Interest and dividend income decreased in 2003 because market interest rates were lower than those in 2002 and because our divestments reduced our previous sources of dividend income.

Interest and other finance expense decreased in 2004 due to lower average debt levels in the period, partially offset by higher average interest rates on our borrowings. The debt repaid in 2004 was largely debt that had been swapped into floating interest rates. Consequently, fixed rate debt, with higher average interest rates than our floating rate debt during 2004, represented an increased proportion of our total debt balance. Interest and other finance expense in 2004 also included a \$43 million non-cash gain on available for sale marketable securities contributed to our German pension funds in 2004 and a \$20 million expense relating to our securitization programs. In 2003, these expenses included a \$40 million loss on the sale of our shares in the China National Petrochemical Corporation (Sinopec), a \$36 million impairment charge for available-for-sale marketable securities in Germany and a \$21 million expense relating to our securitization programs. The change in fair value of the embedded derivative and the amortization of the related discount on issuance from our \$968 million convertible bonds resulted in an expense of \$52 million in 2004, as compared to an expense of \$84 million in 2003 and a decrease in expense of \$215 million in 2002.

#### Provision for taxes

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Income (loss) from continuing operations, before taxes and minority interest	\$ 861	\$ (60)	\$ 66
Provision for taxes	\$ (311)	\$ (245)	\$ (81)
Effective tax rate for the year	36.1%	(408.3)%	122.7%

The provision for taxes in 2004 was \$311 million, representing an effective tax rate for the year of 36.1 percent. The provision for taxes in 2004 includes an expense relating to a valuation allowance of \$107 million, predominantly relating to our operations in certain countries including Canada and France, and a benefit of approximately \$45 million from the losses of a post divestment reorganization and of \$39 million relating to the favorable resolution in 2004 of certain prior year tax matters.

In 2003, the loss from continuing operations before taxes and minority interest of \$60 million included an \$84 million expense comprising the change in fair value of the embedded derivative and the amortization of the related discount on issuance from our \$968 million convertible bonds combined with the continued amortization of the discount on issuance of these bonds. Furthermore, the provision for taxes includes the release of an approximately \$38 million tax provision related to a tax case ruled in our favor and an expense of approximately \$16 million related to a tax claim filed in Central

Europe. In addition, the provision for taxes includes a valuation allowance of approximately \$258 million on deferred tax assets as a result of the determination that it was more likely than not that such deferred tax assets would no longer be realized within our Oil, Gas and Petrochemicals business. The effective tax rate in 2003 applicable to income from continuing operations excluding the tax effect of these items would have been 37.5 percent.

The effective tax rate in 2002 was 122.7 percent, in part as a result of a valuation allowance of approximately \$33 million on deferred tax assets in the Oil, Gas and Petrochemicals business. Furthermore, the provision for taxes in 2002 includes a valuation allowance of \$17 million on deferred tax assets and an increased tax expense of \$7 million related to non-deductible expenses under Italian tax law as a result of the overstatement within the PT-MV BAU in Italy. The effective tax rate in 2002 applicable to income from continuing operations excluding the tax effect of these items would have been 36.4 percent.

### Income (loss) from continuing operations

Income (loss) from continuing operations increased by \$819 million to an income of \$448 million in 2004 compared to a loss of \$371 million in 2003. The increase reflects improved EBIT and reduced net interest and other finance expense in 2004.

Income (loss) from continuing operations deteriorated by \$245 million to a loss of \$371 million in 2003 compared to a loss of \$126 million in 2002. The deterioration reflects increased net interest and other finance expense and increased tax expense in 2003:

### Loss from discontinued operations, net of tax

The loss from discontinued operations, net of tax, are as set forth below:

Discontinued operations	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Combustion Engineering (Asbestos)	\$ (262)	\$ (142)	\$ (395)
Powerlines	(75)	(10)	(17)
Upstream Oil, Gas and Petrochemicals	(70)	(44)	14
Reinsurance	(41)	(97)	22
Wind Energy	(25)	(42)	(1)
Foundry	(17)		
MDCV Cables		(24)	(1)
Export Bank		(9)	10
Metering	12	(3)	(54)
Structured Finance	14	(29)	(183)
Other abandoned or sold businesses	(19)	(8)	(88)
Loss from discontinued operations, net of tax	\$ (483)	\$ (408)	\$ (693)

Tax expense, net, in discontinued operations was \$41 million, \$42 million and \$91 million in 2004, 2003 and 2002, respectively.

A detailed discussion of the results of the significant discontinued businesses follows in the section entitled "Discontinued operations."

**Net loss**

As a result of the factors discussed above, net loss improved by \$744 million to a loss of \$35 million in 2004 from a loss of \$779 million in 2003. The net loss in 2003 decreased by \$40 million to a net loss of \$779 million in 2003 from a net loss of \$819 million in 2002.

**Earnings (loss) per share**

Basic and Diluted earnings (loss) per share	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars)		
Income (loss) from continuing operations			
Basic	\$ 0.22	\$ (0.30)	\$ (0.11)
Diluted	\$ 0.22	\$ (0.30)	\$ (0.27)
Loss from discontinued operations			
Basic	\$ (0.24)	\$ (0.34)	\$ (0.63)
Diluted	\$ (0.24)	\$ (0.34)	\$ (0.59)
Net loss			
Basic	\$ (0.02)	\$ (0.64)	\$ (0.74)
Diluted	\$ (0.02)	\$ (0.64)	\$ (0.86)

Basic earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year. Diluted earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise: outstanding written call options, if dilutive; the securities issued under our employee incentive plans, if dilutive; and shares issuable in relation to our convertible bonds, if dilutive.

Basic loss per share was \$0.02 in 2004 compared to \$0.64 in 2003. Basic loss per share was \$0.64 in 2003 compared to \$0.74 in 2002.

The difference between the basic and diluted earnings per share in 2002 primarily reflects the effect of the gain of \$215 million recognized in 2002 under SFAS 133 with respect to changes in the fair value of the embedded derivative and the amortization of the related discount on issuance from our \$968 million convertible bond.

**POWER TECHNOLOGIES**

Effective January 1, 2005, the business areas within the Power Technologies division were reorganized into two businesses areas. The Transformers, Medium Voltage Products and High Voltage Products business areas were combined to form the Products business area, while the Power Systems and Utility Automation Systems business areas were combined to form the Systems business area. We expect to report future financial results for the Power Technologies business area based on the Products and Systems business areas.

The financial results of the Power Technologies division were as follows:

Power Technologies	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Orders	\$ 9,372	\$ 7,682	\$ 6,686
Order backlog	6,874	6,030	5,682
Revenues	8,755	7,598	6,814
Cost of sales	6,976	5,927	5,306
Selling, general and administrative expenses	1,097	1,020	989
EBIT	\$ 610	\$ 595	\$ 451

### Orders

Orders increased by \$1,690 million, or 22 percent (15 percent in local currencies), to \$9,372 million in 2004. Orders in 2004 grew at a rate between 18 percent and 27 percent (11 percent and 19 percent in local currencies) in all business areas except for Utility Automation Systems, where orders increased approximately 12 percent (6 percent in local currencies). Both base and large orders improved in 2004, with the large order growth driven by an order for the Three Gorges project in China of approximately \$390 million. Orders from other divisions were \$500 million in 2004 as compared to \$435 million in 2003, representing 5 percent and 6 percent of division orders, respectively.

The proportionate geographic distribution of orders of the Power Technologies division (based on the location of the customer, which may be different from the ultimate destination of the products' end use) were approximately as follows:

	Year ended December 31,	
	2004	2003
Europe	37%	40%
The Americas	22%	22%
Asia	29%	21%
MEA	12%	17%
Total	100%	100%

Order growth in 2004 was particularly strong in Asia, led by China where orders almost doubled, making Asia the Power Technologies division's second largest regional source of orders. Orders also grew in Europe in 2004, which continued to be the division's largest regional source of orders. Orders in North America increased significantly while orders from South America decreased slightly. Orders from MEA were down due mainly to a lower level of large orders in 2004 than in 2003.

In 2003, orders increased by \$996 million, or 15 percent (5 percent in local currencies), to \$7,682 million. Orders increased in all business areas, with increases of 30 percent (20 percent in local currencies) in our Medium Voltage Products business area following growth in our base orders, and 26 percent and 16 percent (13 percent and 8 percent in local currencies) in the Utility Automation Systems and Power Systems business areas, respectively. Orders grew by 13 percent (flat in local currencies) in our High Voltage Products business area as large orders from Eastern Europe and the MEA were partially offset by a decrease from the United States. Orders in our Transformers business area increased by 5 percent (decreased by 5 percent in local currencies).

Order growth in 2003 was driven by growth in the MEA, Asia and Europe, moderated by a decrease in the Americas. Orders from other divisions were \$435 million in 2003 compared to \$433 million in 2002, representing 6 percent of division orders in both the periods.

**Order backlog**

Order backlog increased by \$844 million, or 14 percent (7 percent in local currencies), to \$6,874 million as at December 31, 2004 from \$6,030 million as at December 31, 2003.

Order backlog increased by \$348 million, or 6 percent (decreased by 6 percent in local currencies), to \$6,030 million as at December 31, 2003 from \$5,682 million as at December 31, 2002.

**Revenues**

The distribution of revenues of the Power Technologies division by business area for the years ended December 31, 2004 and 2003, were approximately as follows:

Business area	Year ended December 31,	
	2004	2003
Transformers	26%	25%
Power Systems	22%	25%
Medium Voltage Products	19%	18%
High Voltage Products	17%	16%
Utility Automation Systems	16%	16%

Revenues increased by \$1,157 million, or 15 percent (9 percent in local currencies), to \$8,755 million in 2004 from \$7,598 million in 2003, principally reflecting a 22 percent (16 percent and 15 percent in local currencies, respectively) revenue growth in the Medium Voltage Products and High Voltage Products business areas, and a 19 percent (13 percent in local currencies) increase in the Transformers business area. Revenues in the Utility Automation Systems business area increased by 11 percent (5 percent in local currencies), whereas revenues in the Power Systems business area increased by 1 percent (down 5 percent in local currencies), reflecting a lower level of order backlog of large projects than in 2003.

Revenues increased by \$784 million, or 12 percent (2 percent in local currencies), to \$7,598 million in 2003 from \$6,814 million in 2002. Revenues from our Medium Voltage Products business area increased 30 percent (20 percent in local currencies) in 2003, based mainly on growth in China and Eastern Europe, while revenues from the High Voltage Products business area increased by 8 percent (4 percent decrease in local currency terms as a result of lower order backlog at the beginning of 2003). Revenues in our Power Systems and Utility Automation Systems business areas decreased by 8 percent and 10 percent (1 percent and 1 percent in local currencies), respectively, due to a reduced number of short-term orders received in the second half of 2002. Revenues for the Power Technologies division were also negatively affected by the loss of revenues from three businesses that were divested in each of the United States, Poland and Italy.

The proportionate geographic distribution of revenues of the Power Technologies division (based on the location of the customer, which may be different from the ultimate destination of the products' end use) were approximately as follows:

	Year ended December 31,	
	2004	2003
Europe	39%	38%
The Americas	22%	25%
Asia	25%	24%
MEA	14%	13%
Total	100%	100%

## Edgar Filing: ABB LTD - Form 20-F

Regionally, revenues were higher in Europe, MEA and Asia. Asian revenues in 2004 reflected relatively modest growth in China, where revenues from the Power Systems business area declined from a peak in 2003. Revenue growth in the Americas in 2004 was flat, principally resulting from a decline in revenues in the United States.

Regionally, in 2003 revenues from Asia and the MEA significantly increased primarily driven by increased revenues in China and Saudi Arabia. Revenues from Europe increased in U.S. dollar terms but decreased slightly in local currencies. These increases in revenues for 2003 were partly offset by decreases in the Americas, with the Americas revenues decline in 2003 reflecting a decline in sales of distribution transformers by the Power Technologies division.

Revenues from other divisions were \$499 million in 2004 (representing 6 percent of the Power Technologies division's revenues), \$476 million in 2003 (representing 6 percent of division revenues) compared to \$298 million in 2002 (representing 4 percent of division revenues).

### **Cost of sales**

Cost of sales increased by \$1,049 million, or 18 percent (11 percent in local currencies), to \$6,976 million in 2004 from \$5,927 million in 2003. The Power Technologies division's gross profit margin decreased from 22.0 percent in 2003 to 20.3 percent in 2004, reflecting higher input prices of raw materials, particularly steel, copper, aluminum and transformer oil, that principally impacted the Transformers business area, low capacity utilization of the Power Systems business area and project-related hedging costs incurred following our decision to cease accounting for certain hedges under SFAS 133, offset in part by savings in supply chain management and productivity improvements.

Cost of sales increased by \$621 million, or 12 percent (2 percent in local currencies), to \$5,927 million in 2003 from \$5,306 million in 2002. The Power Technologies division's gross profit margin decreased from 22.1 percent in 2002 to 22.0 percent in 2003. Despite difficult markets in 2003 characterized by a less favorable product mix and price level erosion, most noticeably in our High Voltage Products and Transformers business areas, gross profit margin remained relatively flat mainly due to ongoing productivity improvements and cost savings.

### **Selling, general and administrative expenses**

Selling, general and administration expenses increased by \$77 million, or 8 percent (flat in local currencies), to \$1,097 million in 2004 from \$1,020 million in 2003. Expressed as a percentage of revenues, selling, general and administration expenses decreased to 12.5 percent in 2004 from 13.4 percent in 2003, reflecting productivity gains from improved sales and administrative processes and our restructuring under the Step Change program.

Selling, general and administration expenses increased by \$31 million, or 3 percent (decreased by 8 percent in local currencies), to \$1,020 million in 2003 from \$989 million in 2002. Expressed as a percentage of revenues, selling, general and administration expenses decreased to 13.4 percent in 2003 compared to 14.5 percent in 2002, reflecting the benefits of restructuring and efficiency improvement programs.

### **Earnings before interest and taxes**

EBIT grew \$15 million, or 3 percent (2 percent decrease in local currencies) to \$610 million in 2004. EBIT reflected restructuring expenses of \$51 million and \$61 million in 2004 and 2003, respectively.

## Edgar Filing: ABB LTD - Form 20-F

EBIT margin for the Power Technologies division was 7.0 percent in 2004 compared to 7.8 percent for 2003. The decrease in EBIT margin in 2004 principally reflected the increase in raw materials costs (especially for steel, copper, aluminum and transformer oil) during the year, a \$26 million (of which approximately \$20 million was included in other income (expense), net) write-down of notes receivable, \$14 million in project-related hedging costs incurred following our decision to cease accounting for certain hedges under SFAS 133, lower margin levels in the Power Systems business area due to continued low capacity utilization and lower margin turnkey projects in the Utility Automation Systems business area including, in certain instances, cost overruns. These decreases were partially offset by strong, productivity-driven margin improvements in the Medium Voltage Products business area.

EBIT increased by \$144 million, or 32 percent (28 percent in local currencies), to \$595 million in 2003 from \$451 million in 2002. EBIT margin increased from 6.6 percent in 2002 to 7.8 percent in 2003, caused principally by comparatively significant improvements from the Medium Voltage Products, Utility Automation Systems and Power Systems business areas due to the elimination of overlapping product lines and production sites, as well as productivity improvements. EBIT margin in the Transformers business area remained flat.

### AUTOMATION TECHNOLOGIES

The financial results of the Automation Technologies division were as follows:

Automation Technologies	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Orders	\$ 11,334	\$ 9,691	\$ 8,428
Order backlog	4,322	3,826	3,486
Revenues	11,030	9,628	8,201
Cost of sales	7,785	6,835	5,760
Selling, general and administrative expenses	2,147	1,889	1,786
EBIT	\$ 1,027	\$ 738	\$ 495

Orders increased by \$1,643 million, or 17 percent (9 percent in local currencies), from \$9,691 million in 2003 to \$11,334 million in 2004. Orders received by the Automation Products business area increased by 21 percent (13 percent in local currencies) in 2004 led by an increase in orders from process industries and building installations customers. Orders received by the Process Automation business area grew at 11 percent (3 percent in local currencies) in 2004, as growth in orders from the mining, cement, metals, the cruise and ferry and oil and gas industries exceeded declining orders from businesses operating in the chemicals, pharmaceuticals and pulp and paper markets. Orders received by the Manufacturing Automation business area increased by 23 percent (16 percent in local currencies), primarily driven by orders for automotive systems from North America and China. Orders from other divisions were \$355 million in 2004, compared to \$344 million in 2003 representing 3 percent and 4 percent of the division orders, respectively.

The proportionate geographic distribution of orders of the Automation Technologies division (based on the location of the customer, which may be different from the ultimate destination of the products' end use) were approximately as follows:

	Year ended December 31,	
	2004	2003
Europe	59%	61%
The Americas	16%	15%
Asia	19%	18%
MEA	6%	6%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The ultimate destination of our products' end use is relevant for the Automation Technologies division as some global distributors and wholesalers in Europe sell our products in Asia, the Americas, and MEA. We estimate this volume to be approximately 10 percent of the division orders, divided between the ultimate destinations of Asia, the Americas, and MEA.

In 2004, orders from Asia increased faster than in any other region. Orders from the Americas also grew, driven by a large order from the United States automotive sector. European orders grew in 2004, as increases in orders from Western Europe, which accounted for more than 90 percent of European orders, more than offset a reduction in orders from Eastern Europe following the receipt of a large order in Poland during 2003. Orders from the MEA increased moderately.

Orders increased by \$1,263 million, or 15 percent (1 percent in local currencies), to \$9,691 million in 2003 compared to \$8,428 million in 2002. Over this period, the Automation Products business area experienced significant growth in Asia, which was partially offset by lower orders from Europe and America. The Process Automation business area increased the volume of large orders during 2003 by approximately 87 percent (59 percent in local currencies), led by a large order for \$173 million in the fourth quarter for turnkey gas compressors for a pipeline project in Poland. This increase in large orders, however, could not offset a lower volume of base orders from the paper and minerals industries. Orders in the Manufacturing Automation business area decreased on lower orders from the automotive industries in North America and Europe. Orders from other divisions were \$344 million in 2003 compared to \$311 million in 2002.

European orders increased, reflecting strong order increases in Eastern Europe moderated by the slower growth in Western Europe. Orders from the Americas declined in 2003, primarily reflecting lower orders from the automotive and other industrial sectors. Orders from Asia increased significantly in 2003, driven by China and India. Orders from the MEA in 2003 increased in U.S. dollar terms but decreased slightly in local currencies.

#### **Order backlog**

Order backlog increased by \$496 million, or 13 percent (6 percent in local currencies), to \$4,322 million as at December 31, 2004 from \$3,826 million as at December 31, 2003, principally as a result of increased order intake during 2004.

Order backlog increased by \$340 million, or 10 percent (decreased by 4 percent in local currencies), to \$3,826 million as at December 31, 2003 from \$3,486 million as at December 31, 2002.



**Revenues**

The distribution of revenues of the Automation Technologies division by business area were approximately as follows:

Business area	Year ended December 31,	
	2004	2003
Automation Products	47%	46%
Process Automation	40%	40%
Manufacturing Automation	13%	14%

Revenues increased by \$1,402 million, or 15 percent (7 percent in local currencies), to \$11,030 million in 2004 from \$9,628 million in 2003, principally due to 17 percent (9 percent in local currencies) revenue growth in the Automation Products business area. Revenues in 2004 for the Process Automation business area increased by 13 percent (5 percent in local currencies), reflecting growth in the Oil and Gas, Minerals, Turbocharging and Control Products business units moderated by declines in the Pulp and Paper and Marine business units. Our Manufacturing Automation business area, which accounted for 13 percent of Automation Technologies' 2004 revenues, grew more slowly at 4 percent (decreased 4 percent in local currencies) as a result of a weak backlog of system orders. Revenues from other divisions were \$391 million in 2004 compared to \$356 million in 2003 representing 4 percent of the division orders for both periods.

Revenues in the Automation Technologies division increased by \$1,427 million, or 17 percent (3 percent in local currencies), to \$9,628 million in 2003 compared to \$8,201 million in 2002. Revenues increased 14 percent (flat in local currencies) in 2003 in the Manufacturing Automation business area. Revenues in the businesses now constituting the Automation Products and Process Automation business areas increased 17 percent (2 percent in local currencies), as sales of products and services increased and despite declining revenues generated from the paper industry. Revenues from other divisions were \$356 million in 2003 compared to \$328 million in 2002, representing approximately 4 percent of division revenues in both periods.

The proportionate geographic distribution of revenues of the Automation Technologies division (based on the location of the customer, which may be different from the ultimate destination of the products' end use) were approximately as follows:

	Year ended December 31,	
	2004	2003
Europe	60%	61%
The Americas	15%	17%
Asia	19%	16%
MEA	6%	6%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The ultimate destination of our products' end use is relevant for the Automation Technologies division as some global distributors and wholesalers in Europe sell our products in Asia, the Americas, and MEA. We estimate this volume to be approximately 10 percent of the division revenues, divided between the ultimate destinations of Asia, the Americas, and MEA.

Revenues generated in Asia grew significantly in 2004, reflecting sales growth in China and India, with the result that Asia became Automation Technologies' second largest regional source of revenues. Revenues increased in Europe, which remained Automation Technologies' largest revenue contributor. Revenues from the Americas fell slightly in 2004 due to lower orders in 2003, principally from the

automotive industry. Revenues from the MEA increased following the receipt of several large orders in 2003.

In 2003, revenues from Europe increased, as increases in Eastern Europe were tempered by slower growth in Western Europe due to lower order backlog at the beginning of 2003. The Americas increased slightly as compared to 2002, while revenues from Asia and the MEA increased significantly, driven by higher revenues in 2003 from China, India, Algeria and the United Arab Emirates.

#### **Cost of sales**

Cost of sales increased \$950 million, or 14 percent (6 percent in local currencies), to \$7,785 million in 2004 from \$6,835 million in 2003. The Automation Technologies division's gross profit margin increased to 29.4 percent in 2004 from 29.0 percent in 2003 following cost reduction and productivity gains from the Step Change program and operational excellence initiatives, offset in part by increasing costs for raw materials, particularly steel, copper and oil.

Cost of sales increased \$1,075 million, or 19 percent (4 percent in local currencies), to \$6,835 million in 2003 from \$5,760 million in 2002. The Automation Technologies division's gross profit margin decreased to 29.0 percent in 2003 from 29.8 percent in 2002. Gross profit margin in 2003 decreased as savings in supply chain management and manufacturing and engineering activities were more than offset by increased input prices from our suppliers following the strengthening of the euro against the U.S. dollar and price reductions on certain of our products. In 2003, the gross profit margin remained flat in the Manufacturing Automation business area, as operational improvements were offset by an increase in material costs. For the businesses now constituting the Process Automation and Automation Products business areas, gross profit margin declined following cost increases related to systems projects, despite the declining percentage of revenue represented by such projects.

#### **Selling, general and administrative expenses**

Selling, general and administration expenses increased by \$258 million, or 14 percent (5 percent in local currencies), to \$2,147 million in 2004 from \$1,889 million in 2003. Expressed as a percentage of revenues, selling, general and administration expenses decreased to 19 percent in 2004 from 20 percent in 2003, reflecting cost reductions primarily from the Step change program.

Selling, general and administration expenses increased by \$103 million, or 6 percent (decreased 8 percent in local currencies), to \$1,889 million in 2003 compared to \$1,786 million in 2002. Expressed as a percentage of revenues, selling, general and administration expenses decreased to 20 percent in 2003 from 22 percent in 2002, reflecting the impact of the various restructuring and efficiency improvement programs.

#### **Earnings before interest and taxes**

EBIT grew \$289 million, or 39 percent (30 percent in local currencies) to \$1,027 million in 2004. EBIT margin increased to 9.3 percent in 2004 from 7.7 percent in 2003. EBIT margin increased in all business areas reflecting productivity improvements, benefits from operational excellence initiatives and a decrease in restructuring costs in 2004 to \$72 million from \$139 million in 2003.

EBIT increased by \$243 million, or 49 percent (30 percent in local currencies), to \$738 million in 2003 compared to \$495 million in 2002. All business areas improved in operating income in 2003, mainly due to productivity improvements and our cost savings programs. The increase in operating income was partially offset by higher restructuring costs in 2003, at \$139 million, as compared to \$126 million during 2002. As a result, the EBIT margin increased to 7.7 percent in 2003 compared to 6.0 percent in 2002.

**NON-CORE ACTIVITIES****Orders**

Orders received by Non-core activities were as follows:

	Year ended December 31,		
	2004	2003	2002
(U.S. dollars in millions)			
Oil, Gas and Petrochemicals	\$ 1,216	\$ 1,156	\$ 2,123
Building Systems	388	1,616	2,351
New Ventures	41	45	70
Equity Ventures	7	26	19
Structured Finance	6	48	77
Other Non-core activities	36	469	960
<b>Total Non-core activities</b>	<b>\$ 1,694</b>	<b>\$ 3,360</b>	<b>\$ 5,600</b>

Orders received declined by 50 percent and 40 percent (53 percent and 43 percent in local currencies) in 2004 and 2003, respectively. The reductions in orders over these periods were primarily due to ongoing divestments, declining orders in the Building Systems business area, the discontinuation and reduction of activities in the Group Processes business area and a shift in our Oil, Gas and Petrochemicals business away from entering into long-term fixed price contracts toward reimbursable contracts. Non-core activities orders from other divisions amounted to \$36 million in 2004 (representing 2 percent of the division orders in 2004), \$445 million in 2003 (representing 13 percent of the division orders in 2003) and \$980 million in 2002 (representing 17 percent of the division orders in 2002). The orders received by the Group Processes business area, which only received internal orders from other divisions, constituted \$413 million and \$755 million of Non-core activities orders received in 2003 and 2002, respectively.

In 2004, orders for Oil, Gas and Petrochemicals business area increased mainly through base orders (orders below \$15 million). Large orders in 2004, 2 percent below 2003, included major projects in Sweden, Russia, China, Poland and Middle East. Orders increased in all regions during 2004 compared to 2003.

Within the Building Systems business area, 91 percent of the orders in 2004 were received by our German business and 6 percent by the now-sold Swiss business.

In 2004, Non-core activities orders predominantly came from Europe, with approximately 50 percent of our orders from Western Europe and approximately 20 percent from Eastern Europe. The remaining orders were received in roughly equal proportions from the Americas (principally from the United States), Asia (principally from China) and the MEA.

In 2003, orders decreased by \$2,240 million, or 40 percent (43 percent in local currencies), to \$3,360 million. This reduction in orders is partially due to the divestment of businesses, the performance of the remaining businesses in the Building Systems business area and the discontinuation and reduction of activities in the Group Processes business area. Additionally, this reduction resulted in part from a decrease in large orders in our Oil, Gas and Petrochemical business, mainly attributable to our strategic decision to de-emphasize fixed priced EPC contracts in favor of lower-risk reimbursable contracts (which generally have lower order values) and to more selectively tender for project work.

**Order backlog**

Order backlog in Non-core activities was as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Oil, Gas and Petrochemicals	\$ 1,251	\$ 1,264	\$ 2,143
Building Systems	255	554	1,263
New Ventures	8	14	79
Equity Ventures			
Structured Finance		2	3
Other Non-core activities	19	31	91
<b>Total Non-core activities</b>	<b>\$ 1,533</b>	<b>\$ 1,865</b>	<b>\$ 3,579</b>

**Revenues**

Revenues from Non-core activities were as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Oil, Gas and Petrochemicals	\$ 1,079	\$ 1,895	\$ 2,321
Building Systems	508	1,829	2,375
New Ventures	49	53	50
Equity Ventures	7	26	19
Structured Finance	6	48	66
Other Non-core activities	44	471	783
<b>Total Non-core activities</b>	<b>\$ 1,693</b>	<b>\$ 4,322</b>	<b>\$ 5,614</b>

Revenues decreased by 61 percent and 23 percent (63 percent and 36 percent in local currencies) in 2004 and 2003, respectively. Revenues from other divisions amounted to \$52 million, \$476 million and \$882 million (representing 3 percent, 11 percent and 15 percent of Non-core activities revenues) in 2004, 2003 and 2002, respectively.

Oil, Gas and Petrochemicals revenues in 2004 were 43 percent (46 percent in local currencies) lower than 2003, primarily due to the winding down and reduced scope of large projects. Revenues from the licensing of process technologies significantly increased, led by revenues from the licensing of ethylene and novolen technologies. Revenues decreased by 18 percent (28 percent in local currencies) in 2003 compared to 2002, primarily due to the lower volume of order backlog going into 2003 as a consequence of our focus in pursuing reimbursable EPC projects. In an effort to reduce our exposure to risks associated with long-term fixed price contracts, particularly in our Oil, Gas and Petrochemicals business, we have been pursuing instead long-term reimbursable contracts in which we charge our customers the sum of our materials, production, logistics, administrative and financial costs, together with a negotiated operating profit. We believe that long-term reimbursable contracts, while not eliminating the risk of loss completely, should generally enable us to recover from the customer costs relating to contract delays or cost increases more easily than we can with fixed price contracts, where we generally must demonstrate that the delays and increased costs were a direct result of the customer's action or omission. Despite our strategy of focusing on reimbursable contracts, we may continue to experience losses on our contracts.

## Edgar Filing: ABB LTD - Form 20-F

Building Systems revenues decreased by 72 percent and 23 percent (74 percent and 34 percent in local currencies) in 2004 and 2003, respectively, primarily resulting from the sale of businesses. Building Systems revenues in 2004 were primarily generated in Germany, with 79 percent of 2004 business area revenues, the United States (which we plan to close) with 10 percent, and Switzerland (sold in February 2004) with 6 percent.

New Ventures revenues came from distributed energy operations in Europe.

Equity Ventures includes mainly equity accounted companies, the income from which, are recorded in other income (expense), net.

Structured Finance revenues decreased in each of 2004 and 2003 due to the ongoing portfolio reduction.

Other Non-core activities include Group Processes, Customer Service Workshops and Logistic Systems business areas. Group Processes revenues decreased by \$421 million, or 100 percent, to \$0 million in 2004. In 2003, Group Processes revenues decreased by \$183 million, or 30 percent (37 percent in local currencies), to \$421 million in 2003 from \$604 million in 2002. This business area does not generate revenue from third-party sales, with all the revenues of this business area resulting from internal charges to other divisions. These decreases were due principally to the transfer of activities to the other business areas or cessation of activities. Of the remaining businesses, revenues decreased by \$6 million and \$129 million in 2004 and 2003, respectively, due to the ongoing divestment and related closing processes in our Customer Service Workshop and Logistic Systems business areas.

### Earnings before interest and taxes

EBIT for Non-core activities was as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Oil, Gas and Petrochemicals	\$ (4)	\$ (296)	\$ (142)
Building Systems	(70)	(104)	(113)
New Ventures	(5)	(21)	(37)
Equity Ventures	69	76	43
Structured Finance	(14)	(65)	96
Other Non-core activities	(22)	(57)	(157)
	\$ (46)	\$ (467)	\$ (310)

The Oil, Gas and Petrochemicals business area in 2004 improved as compared to 2003, reflecting better project execution capabilities across the organization as well as a significant reduction in project-related write-offs in 2004. Stronger performance following the winding down or culmination of unprofitable long-term, fixed price EPC projects and increased revenue related to the licensing of process technologies was partially offset by under absorption of operating costs by the Floating Production Systems business. EBIT in 2004 was also negatively impacted by a charge to depreciation and amortization of \$26 million for the years 2003 and 2004. This charge was required in 2004 following the reclassification of this business area from discontinued operations to continuing operations (see the section entitled "Discontinued operations" below).

EBIT losses generated by the Oil, Gas and Petrochemicals business area increased in 2003 compared to 2002, primarily due to charges in 2003 of approximately \$399 million relating to four large, long-term fixed price projects booked prior to the implementation of our current bidding strategy that focuses on reimbursable contracts. The customers and countries in which these four projects were located are unrelated. The charges are related to delays, project cost overruns and write-downs of assets that we no longer considered recoverable.

EBIT losses generated by the Building Systems business area decreased by \$34 million in 2004 as compared to 2003, primarily due to operational improvements and a reduction in restructuring

expenses, primarily in Germany, partially offset by losses in the United States and the loss of income from the profitable Nordic businesses sold in 2003 and the Swiss business sold in February, 2004. In 2003, EBIT losses decreased by \$9 million as compared to 2002. EBIT for 2003 included the gain on sale of the Nordic businesses for approximately \$124 million, partially offset by a loss on sale of businesses located in several other countries, principally Belgium, the Netherlands, Austria and the UK, of approximately \$41 million.

EBIT losses in the New Ventures business area decreased by \$16 million in 2004 compared to 2003. This improvement resulted partly because in 2004 this area no longer included the income from our investment in Turbec AB, which generated negative earnings recognized in 2003. Turbec was sold in the fourth quarter of 2003. The 2004 operating loss also includes a \$20 million gain on the divestment of our equity interest in IXYS Corporation. In 2003, EBIT losses decreased by \$16 million as compared to 2002, largely due to restructuring activities leading to a significant reduction in selling, general and administrative expenses and lower asset write-downs, offset in part by negative earnings from equity accounted companies related to our investment in Turbec AB.

EBIT generated by the Equity Ventures business area decreased by \$7 million in 2004 as compared to 2003. The decline from the EBIT generated in 2003, which included a \$28 million gain on the sale of investments in Australia, was offset in part by an increase in EBIT from savings in sales, general and administrative expenses following the cessation of development activities and from a gain on the sale of an investment in Oman. In 2003, EBIT increased by \$33 million as compared to 2002, due to the gain realized from divestments in Australia and savings in sales, general and administrative expenses.

EBIT losses in the Structured Finance business area decreased by \$51 million in 2004 as compared to 2003, principally because 2003 included a loss of \$80 million on the disposal of our investment in the Swedish Export Credit Corporation (which was offset in part in 2003 by income from Swedish Export Credit Corporation of \$13 million recognized in other income (expense), net). In 2003, EBIT decreased by \$161 million as compared to 2002 due to the loss on disposal of our investment in the Swedish Export Credit Corporation and a reduction in income from the Swedish Export Credit Corporation of \$112 million.

EBIT generated by the businesses in Other Non-core activities increased by \$35 million in 2004 as compared to 2003. This improvement was due to the dissolution of the Group Processes business area, which represented \$0 million and \$42 million of the losses in 2004 and 2003, respectively. EBIT generated by the Customer Service Workshops business area improved in 2004 due to a reduction in restructuring expenses and improved operational performance by the few remaining units. The Logistic Systems business area recognized an operating loss of \$24 million in 2004 due to issues relating to the Harare airport project completed in 2001. In 2003, EBIT losses in Other Non-core activities decreased by \$100 million as compared to 2002. Group Processes represented approximately \$42 million and \$105 million of the losses in 2003 and 2002, respectively.

#### Corporate/Other

Corporate and other activities comprise headquarters and stewardship, research and development and other activities. EBIT for Corporate and other activities are as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Headquarters and stewardship	\$ (421)	\$ (352)	\$ (202)
Research & Development	(91)	(92)	(93)
Other	5	(65)	(142)
Total	\$ (507)	\$ (509)	\$ (437)

Headquarters and stewardship operating costs increased by \$69 million and \$150 million in 2004 and 2003, respectively. The 2004 expense included a \$14 million write-down in 2004 of an e-business

investment. The increase in 2003 as compared to 2002 was mainly due to events in 2002, such as the recovery of payments from two former chief executive officers, that did not recur in 2003.

Other operating costs (including Real Estate, Group Treasury Operations and consolidation) decreased by \$70 million and \$77 million in 2004 and 2003, respectively. The improvement in 2004 occurred in each of Real Estate, Group Treasury Operations and consolidation. Real estate improved in 2004 as compared to 2003 due to reduced restructuring expenses. Group Treasury Operations improved in 2004 due to a reduction in the level of general and administrative expenses.

Other operating costs improved in 2003 mainly due to lower costs following the cessation of proprietary trading in 2002 and the consequent reduction in employees in Group Treasury Operations, as well as a reduction in earnings from certain intra-company transactions as compared to 2002.

### **DISCONTINUED OPERATIONS**

Loss from discontinued operations, net of tax, in our Consolidated Income Statement reflects primarily the following.

Our Upstream Oil, Gas and Petrochemicals business, whose sale was completed in July 2004. The remaining portions of our oil, gas and petrochemicals business owned by us as at December 31, 2004 do not meet the accounting criteria required to be classified in discontinued operations.

Provisions and other expenses incurred in connection with asbestos-related claims, including those against our U.S. subsidiary, Combustion Engineering Inc. An overview of our potential asbestos-related obligations is contained in "Contingencies and retained liabilities" below, as well as in Note 18 "Commitments and Contingencies" of the Consolidated Financial Statements.

Our Reinsurance business, which was sold in April 2004.

Most of our Power Lines business area, including operations in Brazil, which were abandoned in 2004, Nigeria, which were sold in January 2005, Italy, which were sold in February 2005, and Germany.

Our foundry business, which was part of our Automation Technologies division.

Our Wind Energy business in Germany and Greece, the majority of which was sold in December 2003.

Most of our Structured Finance business, which we sold in November 2002.

Our MDCV Cable business located in Germany, which we sold in January 2004.

ABB Export Bank, which we sold in December 2003.

Our Metering business, which we sold in December 2002.

Legal, professional and other fees related to the above disposals.

## Edgar Filing: ABB LTD - Form 20-F

Loss from discontinued operations, net of tax, was \$483 million, \$408 million and \$693 million in 2004, 2003 and 2002, respectively. The loss from discontinued operations, net of tax, and including operational results, accumulated foreign currency translation adjustments, allocation of interest in accordance with Emerging Issues Task Force No. 87-24 (EITF 87-24), *Allocation of Interest to Discontinued Operations*, capital gains and losses on sale, impairment charges, goodwill write-offs and



## Edgar Filing: ABB LTD - Form 20-F

other costs for businesses classified in discontinued operations for the years ended December 31, 2004, 2003 and 2002 are as set forth below.

Discontinued operations	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Combustion Engineering (Asbestos)	\$ (262)	\$ (142)	\$ (395)
Powerlines	(75)	(10)	(17)
Upstream Oil, Gas and Petrochemicals	(70)	(44)	14
Reinsurance	(41)	(97)	22
Wind Energy	(25)	(42)	(1)
Foundry	(17)		
MDCV Cables		(24)	(1)
Export Bank		(9)	10
Metering	12	(3)	(54)
Structured Finance	14	(29)	(183)
Other abandoned or sold businesses	(19)	(8)	(88)
	\$ (483)	\$ (408)	\$ (693)

Income (loss) from discontinued operations, net of tax

In addition to the businesses already classified in discontinued operations, we may from time to time dispose of or close businesses that are not integral to our core divisions. If such a business meets the criteria of SFAS 144, we will reflect the results of operations from the business as discontinued operations in our Consolidated Income Statement and as assets and liabilities held for sale and in discontinued operations in our Consolidated Balance Sheet. We will reclassify the prior years' presentation to reflect any disposals or closures on a comparable basis.

### Asbestos

Loss from discontinued operations, net of tax, includes costs and provisions related to asbestos-related claims, including those against our U.S. subsidiary, Combustion Engineering Inc., of approximately \$262 million, \$142 million and \$395 million in 2004, 2003 and 2002, respectively.

An overview of our potential asbestos-related obligations is included separately in "Contingencies and retained liabilities."

### Powerlines

Our Powerlines business is a construction business that operates in a market with very low barriers to entry. This has resulted in increasing price-based competition with local competitors in the various countries in which we operate. The business has consequently experienced declining revenues, and net losses.

At the time we decided to exit the Powerlines business, this business operated in Austria, Germany, Italy, Saudi Arabia, Brazil, Venezuela, South Africa and Nigeria. The Nigerian and Italian businesses were sold in January 2005 and February 2005, respectively. The Brazilian business was abandoned in the fourth quarter of 2004. We expect the German business to be sold during 2005. In the fourth quarter of 2004, we reclassified the Nigerian, Italian, Brazilian and German businesses to discontinued operations. This reclassification has been reflected in the financial statements for 2004, 2003 and 2002 and the results of the reclassified businesses are discussed below. We intend to exit our remaining Powerlines businesses, although we have not classified them in discontinued operations.

Revenues were \$117 million, \$187 million and \$254 million in 2004, 2003 and 2002, respectively. We recorded net losses of \$75 million, \$10 million and \$17 million in 2004, 2003 and 2002, respectively. The increase in losses in 2004 relates to reducing the book value of net assets to fair value less costs to sell the operations in Italy, Germany and Nigeria, costs related to the abandonment in Brazil and operational losses.

### **Upstream Oil, Gas and Petrochemicals**

In July 2004 we closed the sale of the Upstream Oil, Gas and Petrochemicals business to a consortium of private equity investors, Candover Partners, JP Morgan Partners and 3i Group, for an initial sale price of \$925 million. We received net cash proceeds from the sale of approximately \$800 million after adjustments for approximately \$85 million of unfunded pension liabilities and changes in net working capital.

The Upstream Oil, Gas and Petrochemicals business generated revenues of \$855 million (up to the date of sale), \$1,499 million and \$1,535 million in 2004, 2003 and 2002, respectively.

Revenues declined in 2004 as compared to 2003 due to the sale of the business in July 2004. Revenues decreased in 2003 as compared to 2002 due to a large project in the Floating Production Systems unit nearing completion and the smaller value of new orders due to our pursuit of long-term reimbursable contracts, rather than long-term fixed price contracts.

We recorded net losses for the Upstream Oil, Gas and Petrochemicals business of \$70 million and \$44 million in 2004 and 2003, respectively, and a net income of \$14 million in 2002. The 2004 net loss of \$70 million includes a loss on disposal of approximately \$26 million and compliance costs relating to violations of the Foreign Corrupt Practices Act, including aggregate fines of \$10.5 million and a \$5.9 million payment to the United States Securities and Exchange Commission as a disgorgement of unlawful profits and in resolution of civil charges, as well as other related costs.

In 2003, this business generated a net loss of \$44 million, a \$58 million decline from net income in 2002 of \$14 million. This decline was primarily due to certain loss order provisions in Brazil and the settlement of a project-related dispute that resulted in an asset write-down in 2003.

### **Reinsurance business**

In April 2004 we sold our Reinsurance business to White Mountains Insurance Group Limited of Bermuda for gross cash proceeds of \$415 million.

Reinsurance revenues were \$139 million, \$782 million and \$644 million in 2004, 2003 and 2002, respectively. Reinsurance revenues decreased in 2004 due to the sale of the business in April 2004. The increase in revenues in 2003 as compared to 2002 was primarily due to higher premium income from increased volumes and higher insurance premium rates compared to the rates for comparable products and risks in 2002.

We recorded net losses for our Reinsurance business of \$41 million and \$97 million in 2004 and 2003, respectively, and a net income of \$22 million in 2002. The 2004 net loss was primarily a result of currency translation effects (as explained in Note 2 "Significant accounting policies Translation of foreign currencies and foreign exchange transactions" to our Consolidated Financial Statements) of \$32 million, transaction costs, and price adjustments (as part of the sales agreement all operational risks and results in 2004 were transferred to the purchaser). The 2003 net loss includes a \$154 million impairment charge, income from operations of approximately \$72 million (resulting from higher technical insurance results and improved investment income) in the major operating units and an allocation of interest of \$15 million in accordance with EITF 87-24. The impairment charge of \$154 million recorded in 2003 related to the anticipated disposal of the Reinsurance business and principally consisted of impairment charges to assets of \$48 million, to goodwill and other intangible assets of \$89 million and to deferred tax assets of approximately \$16 million, and selling costs of \$25 million, offset in part by an accumulated foreign currency translation gain of \$24 million. The 2002 net income of \$22 million reflects the normal operating results of the Reinsurance business.

### **Wind Energy**

Our Wind Energy business primarily focused on the development and operation of wind parks located mainly in Europe. While this business purchased equity interests in a number of established wind park companies, its main focus remained general wind park construction contracting.

In December 2003, we sold most of our Wind Energy business to GI Ventures AG of Munich, including the majority of our investment in Windpark Dahme. As part of this sale, GI Ventures also took over most of the projects under development in our German Wind Energy business and all the employees. The wind energy business has, since that time, been non-operative. We also sold one of our equity participations in Greece as part of a management buy-out in February 2004 and we intend to sell the remaining Greek equity participation during 2005. Once this sale is complete there will be no other projects or participations in respect of our Wind Energy business remaining.

Revenues were \$0 million, \$16 million and \$48 million in 2004, 2003 and 2002, respectively.

We recorded net losses of \$25 million, \$42 million and \$1 million in 2004, 2003 and 2002, respectively. The 2004 net loss of \$25 million was principally caused by asset impairment charges relating to the remaining windpark in Rhodes. The 2003 net loss of \$42 million was comprised principally of a \$25 million loss from disposal (net of a tax benefit of \$10 million), impairment charges to assets of \$9 million and loss from operations of \$8 million.

#### **Foundry**

Our Foundry business provides furnace systems, pouring systems, forging systems and related services in Germany, Sweden, the United States, Brazil and Thailand. We expect to sell this business in 2005.

Revenues were \$41 million, \$45 million and \$49 million in 2004, 2003 and 2002, respectively. We recorded net losses of \$17 million, \$0 million and \$0 million in 2004, 2003 and 2002, respectively. The 2004 net loss includes an anticipated capital loss on divestment and the operational results, which included restructuring costs.

#### **MDCV Cable business**

In January 2004, we sold our MDCV (Mitsubishi-Dainichi Continuous Vulcanization) cable business. This business was located in Germany and manufactured medium and high-voltage cables, cable-systems and accessories for power suppliers and network operators.

Revenues were \$0 million, \$74 million and \$78 million in 2004, 2003 and 2002, respectively. MDCV Cable business revenues were \$0 million in 2004 due to the sale of the business. The decrease in 2003 was mainly due to the loss of important projects. We recorded net losses of \$0 million, \$24 million and \$1 million in 2004, 2003 and 2002, respectively. The net loss was \$0 million in 2004 due to the sale of the business. The 2003 net loss of \$24 million was comprised principally of impairment charges to assets of \$10 million and a loss from operations of \$14 million.

#### **ABB Export Bank**

In December 2003, we completed the sale of ABB Export Bank, which was part of our Structured Finance business area and arranged export, trade and project financing. Revenues were \$0 million, \$9 million and \$17 million in 2004, 2003 and 2002, respectively. Revenues declined in 2003 due to lower business volumes, the sale of assets following our decision to divest the business and lower interest rates.

We recorded a net loss of \$0 million and \$9 million in 2004 and 2003, respectively, and a net income of \$10 million in 2002. The 2003 net loss of \$9 million includes a \$12 million loss on disposal, income from operations of \$6 million and the allocation of interest expense of \$3 million in accordance with EITF 87-24. The loss on disposal of \$12 million for the sold business was principally comprised of an asset write-down of \$20 million, transaction costs of \$1 million, capital tax expense associated with the disposal of \$4 million and an accumulated foreign currency translation gain of approximately \$13 million. The 2002 net income of \$10 million consisted of normal operational income and the release of approximately \$8 million of excess bad debt provisions.

## Metering

In December 2002, we sold our Metering business. This business produced electricity, water, energy and gas meters, metering systems and load control systems.

We recorded net income of \$12 million in 2004 and net losses of \$3 million and \$54 million in 2003 and 2002, respectively. The 2004 net income of \$12 million resulted from the release of provisions originally made at the date of sale for certain price and net equity adjustments. The 2003 net loss of \$3 million relates to transaction costs and price adjustments relating to the divestment in 2002. The 2002 net loss of \$54 million included a \$48 million loss on disposal, loss from operations of \$3 million and the allocation of interest expense of \$3 million in accordance with EITF 87-24. The loss on disposal of \$48 million principally consisted of impairment charges in respect of goodwill and other intangibles of \$65 million, transaction costs and other provisions of \$46 million, tax expense associated with the disposal of \$21 million and an accumulated currency translation loss of \$35 million, offset in part by a gain of \$119 million recognized in disposal of the business.

## Structured Finance

Our Structured Finance business provided debt capital for projects and equipment, and asset-based financing such as leasing. In November 2002, we completed the sale of most of our Structured Finance business to General Electric Capital Corporation (GE) and received cash proceeds of approximately \$2.0 billion. The divestment included a put right in favor of GE regarding certain designated assets which was exercised in January 2004 for \$28 million as well as some letters of credit for certain performance related obligations retained by us, of which approximately \$63 million were outstanding at December 31, 2004.

We recorded net income of \$14 million in 2004 and net losses of \$29 million and \$183 million in 2003 and 2002, respectively. The 2004 net income of \$14 million relates to the settlement of some outstanding matters with GE and resulted from the release of excess provisions. The 2003 net loss of \$29 million primarily relates to a provision taken with respect to these outstanding matters that were finalized in 2004. The 2002 net loss of \$183 million included a \$146 million loss on disposal, loss from operations of \$22 million and the allocation of interest expense of \$15 million in accordance with EITF 87-24. The loss on disposal of \$146 million for the sold business was principally comprised of an asset write-down of \$15 million, goodwill and other intangible write-offs of \$2 million, transaction costs of \$27 million, the fair value for GE's right to require us to repurchase certain designated assets for \$38 million, capital tax expense associated with the disposal of \$10 million and an accumulated foreign currency translation loss of \$54 million.

## LIQUIDITY AND CAPITAL RESOURCES

### Principal sources of funding

In 2004, 2003 and 2002, we met our liquidity needs using cash from operations, bank borrowings, the proceeds from the issuance of debt securities, divestment proceeds, as well as the sales of receivables under our securitization programs. The reductions in our credit rating during 2002 (see "Credit ratings") restricted our access to the capital markets during 2002 and the first half of 2003. As a result, we relied increasingly on proceeds from divestments, bank borrowings, cash from operations and, cash raised from our capital strengthening program in 2003. Also, in the first quarter of 2003, we raised approximately \$156 million from the sale of 80 million treasury shares in two transactions.

During the second half of 2003, we completed a number of steps to strengthen our Consolidated Balance Sheet and to improve our liquidity. In September 2003, we issued convertible unsubordinated bonds of an aggregate principal amount of CHF 1,000 million, due 2010. See "Bonds and notes." In October 2003, we announced a three-component capital strengthening program, consisting of a rights issue providing net proceeds of approximately \$2.5 billion, a new \$1 billion unsecured revolving credit facility to replace our \$1.5 billion credit facility and a bond offering of 650 million euro (equivalent to

approximately \$769 million at the date of issuance). This program has provided a stronger financial base for the growth of our core operations, has deleveraged our balance sheet by reducing our gearing (defined as total debt divided by the sum of total debt and the stockholders' equity including minority interest) from 87 percent at December 31, 2002 to 71 percent at December 31, 2003 (see " Financial position") and has given us more financial flexibility.

During 2004, our financial position was further strengthened by the positive cash flow from operating activities of \$962 million and the proceeds from sales of businesses (net of cash disposed) of \$1,182 million. The cash generated allowed us to repay maturing debt, repurchase debt (see " Bond repurchases") and further reduce gearing to 64 percent at December 31, 2004 (see " Financial position").

We believe that our ability to obtain funding from the sources described above will continue to provide the cash flows necessary to satisfy our working capital and capital expenditure requirements, as well as meet our debt repayments and other financial commitments for the next twelve months. Due to the nature of our operations, our cash flow from operations generally tends to be weaker in the first half of the year than in the second half of the year.

### **Rights issue**

On November 20, 2003, our shareholders approved the issuance of 840,006,602 new shares pursuant to a fully underwritten rights issue. For each share that they owned, holders of existing shares were allocated one right to purchase the offered shares. For every 10 rights, holders of existing shares were entitled to purchase seven offered shares. The banks agreed to underwrite 840,006,602 shares at an issue price of CHF 4.00 per share, representing an approximate 50 percent discount on the share price at the time and providing for net proceeds of \$2,487 million. The rights issue was completed on December 12, 2003 when the cash was received together with the net proceeds of the bonds of 650 million euro aggregate principal amount (see " Bonds and Notes"). Of these funds, approximately \$1.2 billion was used to repay debt maturing in December 2003 and repurchase bonds with a face value of \$94 million, while the remainder was placed on deposit with banks to be used to repay debt maturing in 2004.

### **Interest rates**

We have obtained financing in a range of currencies and maturities and on various interest rate terms. We use derivatives to reduce the interest rate and/or foreign exchange exposures arising on our debt. For example, to reduce our exposure to interest rates, we use interest rate swaps to effectively convert fixed rate borrowings into floating rate liabilities and we use cross currency swaps to effectively convert foreign currency denominated bonds into U.S. dollar liabilities. At December 31, 2004, after considering the effects of interest rate swaps, the effective average interest rate on our floating rate long-term borrowings (including current maturities) of \$1,950 million and our fixed rate long-term borrowings (including current maturities) of \$1,625 million was 5.8 percent and 5.5 percent, respectively. This compares with an effective rate of 3.2 percent for floating rate long-term borrowings and 5.8 percent for fixed-rate long-term borrowings as of December 31, 2003. A discussion of our use of derivatives to modify the characteristics of our long-term borrowings is contained in Note 15 to our Consolidated Financial Statements.

### **Bond repurchases**

During the first six months of 2004, through open market repurchases, we repurchased a portion of our public bonds with a total equivalent face value of \$458 million. These repurchases included 107 million euro (approximately \$131 million) of the 475 million euro 5.125 percent bonds due 2006, and 26,500 million Japanese yen (approximately \$243 million) of 50,000 million Japanese yen 0.5 percent bonds due 2005. The 26,500 million Japanese yen bonds and the 107 million euro bonds were subsequently cancelled at the end of July and mid-September 2004, respectively. During the second half of 2004, a further 6,075 million Japanese yen 0.5 percent bonds (approximately \$55 million)

were repurchased on the open market and were not cancelled. The open market repurchases resulted in a gain on extinguishments of debt of approximately \$6 million. During 2003, we repurchased outstanding bonds with a face value of \$94 million and recorded an insignificant gain on extinguishments of debt in connection with the repurchases.

On July 29, 2004, we announced tender offers to repurchase all of the outstanding 300 million euro 5.375 percent bonds due 2005 and 475 million euro 5.125 percent bonds due 2006, being approximately 275 million euro and approximately 368 million euro, respectively. In conjunction with the tender offers, we convened bondholders' meetings to vote on amendments to these bonds to allow us to call and redeem those bonds that were not tendered under the respective tender offer. Bonds validly tendered and accepted under the tender offers were settled on September 14, 2004. On September 9, 2004, bondholders approved the resolutions, which gave us the option to redeem the outstanding instruments. We exercised our option to redeem early the remaining outstanding 2005 and 2006 bonds that were not tendered and set the redemption date as September 29, 2004. The open market repurchases, combined with the tender offers and calls, resulted in a decrease in total borrowings during 2004 of \$1,330 million.

#### **Bonds and notes**

In 2004, we did not issue any bonds.

In 2003, we completed two note issuances, including the issuance of bonds convertible into our shares, as sources of funding.

In September 2003, we issued convertible unsubordinated bonds of an aggregate principal amount of CHF 1,000 million (approximately \$722 million at the date of issuance), due 2010. This transaction lengthened the maturity profile of our debt, thereby reducing our dependence on short-term funding. We used the proceeds, net of expenses and fees, to reduce our drawing under our \$1.5 billion credit facility (see "Credit Facilities"). The convertible bonds pay interest annually in arrears at a fixed annual rate of 3.5 percent. On issuance, each CHF 5,000 principal amount of bonds was convertible into 418.41004 fully paid ABB ordinary shares at an initial conversion price of CHF 11.95. The conversion price is subject to adjustment provisions to protect against dilution or change in control. As a result of the rights issue discussed above, the conversion price and conversion ratio of the bonds were adjusted to CHF 9.53 and 524.65897 shares, respectively, effective December 12, 2003, representing 104,931,794 fully paid ordinary ABB shares if the bonds are fully converted.

The bonds are convertible at the option of the bondholder at any time from October 21, 2003 up to and including the tenth business day prior to September 10, 2010. We may at any time on or after September 10, 2007 redeem the outstanding bonds at par plus accrued interest if, for a certain number of days during a specified period of time, the official closing price of our ordinary shares on the relevant exchange has been at least 150 percent of the conversion price. In addition, at any time prior to maturity, we can redeem the outstanding bonds at par plus accrued interest, if at least 85 percent in aggregate of the principal amount of bonds originally issued have been redeemed, converted or purchased and cancelled. We have the option to redeem the bonds when due in cash, ordinary shares or any combination thereof.

In November 2003, as part of our three-component capital strengthening program, we issued bonds of an aggregate principal amount of 650 million euro (approximately \$769 million at the time of issuance), due 2011. These bonds pay interest semi-annually in arrears at a fixed annual rate of 6.5 percent. In the event of a change of control of ABB Ltd, the terms of the bonds require us to offer to repurchase the bonds at 101 percent of the principal amount thereof, plus any accrued interest.

In May 2002, we issued \$968 million aggregate principal amount of convertible unsubordinated bonds due 2007. The bonds pay interest semi-annually in arrears at a fixed annual rate of 4.625 percent. On issuance each \$1,000 principal amount of bonds was convertible into 87.7489 fully paid ABB ordinary shares at an initial conversion price of CHF 18.48 (converted into U.S. dollars at a fixed conversion rate of CHF 1.6216 per U.S. dollar). The conversion price is subject to adjustment

provisions to protect against dilution or change in control. As a result of the rights issue and resulting increase in our share capital discussed above, the conversion price of the bonds was adjusted, effective November 21, 2003, to CHF 14.64 (converted into U.S. dollars at the fixed exchange rate of CHF 1.6216 per U.S. dollar), representing a total of 107,220,546 shares if the bonds were fully converted. As a result of the amendment to the bonds in May 2004, described below, the conversion price of the bonds was amended to \$9.03, representing 107,198,228 shares if the bonds are fully converted.

The \$968 million bonds are convertible at the option of the bondholder at any time from June 26, 2002 up to and including May 2, 2007. We may, at any time on or after May 16, 2005, redeem the outstanding bonds at par plus accrued interest if (1) for a certain number of days during a specified period of time, the official closing price of our American Depositary Shares on the New York Stock Exchange exceeds 170 percent of the conversion price or (2) at least 85 percent in aggregate principal amount of bonds originally issued have been exchanged, redeemed or purchased and cancelled. We have the option to redeem the bonds when due, in cash, American Depositary Shares or any combination thereof.

Under Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended, a component of the convertible bonds due 2007 had to be accounted for as an embedded derivative as the shares to be issued upon conversion were denominated in Swiss francs, while the bonds are denominated in U.S. dollars. A portion of the issuance proceeds was deemed to relate to the value of the derivative on issuance and subsequent changes in value of the derivative were recorded through earnings and as an adjustment to the carrying value of the bonds. The allocation of a portion of the proceeds to the derivative created a discount on issuance that was being amortized to earnings over the life of the bonds. On May 28, 2004, bondholders voted in favor of our proposed amendment to the terms of the bonds whereby, if the bonds are converted, we will deliver U.S. dollar-denominated American Depositary Shares rather than Swiss franc-denominated ordinary shares. The conversion price was set at \$9.03. As a result of the amendment, we are no longer required to account for a portion of the bonds as a derivative. Consequently, on May 28, 2004, the value of the derivative was fixed and the amount previously accounted for separately as an embedded derivative was considered to be a component of the carrying value of the bonds. This carrying value is being accreted to the \$968 million par value of the bonds as an expense in interest and other finance expense over the remaining life of the bonds. The amortization of the discount on the bonds will be between \$7 million and \$9 million per quarter until the bonds mature in May 2007.

Also in May 2002, we issued 200 million pounds sterling (approximately \$292 million at the time of issuance) aggregate principal amount of bonds due 2009 (sterling-denominated bonds), which were issued under our medium term note program and pay interest semi-annually in arrears at 10 percent per annum. We also issued in May 2002, 500 million euro (approximately \$466 million at the time of issuance) aggregate principal amount of bonds due 2008 (euro-denominated bonds), which were also issued under our medium term note program and pay interest annually in arrears at 9.5 percent per annum.

The sterling-denominated bonds and the euro-denominated bonds contain certain clauses linking the interest paid on the bonds to the credit rating assigned to the bonds. If the rating assigned to these bonds by both Moody's and Standard & Poor's remains at or above Baa3 and BBB-, respectively, then the interest rate on the bonds remains at the level at issuance, that is 10 percent and 9.5 percent, for the sterling-denominated and euro-denominated bonds, respectively. If the rating assigned by either Moody's or Standard & Poor's decreases below Baa3 or BBB-, respectively, then the annual interest rate on the bonds increases by 1.5 percent per annum to 11.5 percent and 11 percent, for the sterling-denominated and euro-denominated bonds, respectively. If after such a rating decrease, the rating assigned by both Moody's and Standard & Poor's returns to a level at or above Baa3 and BBB-, respectively, then the interest rates on the bonds return to their original levels. As a result of the downgrade of our long-term credit rating by Moody's to Ba2 on October 31, 2002, this step-up clause

in interest was triggered on both bonds. The increase in interest costs is effective for interest periods beginning after the payment of the coupon accruing at the date of the downgrade. This increase in interest rates had no significant impact on 2002 interest expense. The total impact on 2004 and 2003 was an increase in interest expense of approximately \$15 million and \$13 million, respectively. Future years will also be affected if our credit ratings do not return to at least both Baa3 and BBB- from Moody's and Standard & Poor's, respectively.

A cross-currency swap has been used to modify the characteristics of the sterling-denominated bonds and an interest rate swap has been used to modify the euro-denominated bonds. After considering the impact of the cross-currency and interest rate swaps, the sterling-denominated bonds effectively became a floating rate U.S. dollar obligation, while the euro-denominated bonds became a floating rate euro obligation. In both cases, the floating rate resets every three months. See Note 15 to our Consolidated Financial Statements.

Almost all of our publicly traded bonds contain cross-default clauses which would allow the bondholders to demand repayment if we were to default on certain borrowings at or above a specified threshold amount.

### **Credit facilities**

On November 17, 2003, as part of our three-component capital strengthening program, we entered into a unsecured syndicated \$1 billion three-year revolving credit facility which became available in December 2003 after the fulfillment of certain conditions including the repayment and cancellation of the previous \$1.5 billion facility and the raising of specified minimum levels of gross proceeds from the rights issue (see " Rights Issue") and from the bonds denominated in euros which were issued in November 2003 (see " Bonds and Notes"). The \$1 billion facility is for general corporate purposes. At December 31, 2004 and 2003, nothing was outstanding under the facility and although we currently do not intend to draw on it, it provides us with additional financial flexibility.

In November 2004, the facility was amended. The amendments included a reduction in the level of commitment fees and the removal of restrictions on us to redeem early capital market instruments, such as bonds, having a maturity date beyond that of the facility.

The facility contains certain financial covenants in respect of minimum interest coverage, maximum net leverage and a minimum level of consolidated net worth. We are required to meet these covenants on a quarterly basis. Should our unsecured long-term debt ratings reach certain defined levels (basically investment grade), these covenants will only have to be calculated as of June and December of each year. The facility also contains provisions for the mandatory prepayment and cancellation of the facility upon a change of control of ABB Ltd.

The facility imposes restrictions on the amount of third party indebtedness in subsidiaries other than in the obligors under the facility, subject to certain exceptions. The facility also contains certain other undertakings including certain limitations on disposals of assets, certain restrictions on mergers and acquisitions and negative pledges.

The facility contains cross-default clauses whereby an event of default would occur if we were to default on indebtedness, as defined in the facility, at or above a specified threshold.

The facility replaced a \$1.5 billion 364-day revolving facility entered into in December 2002 and secured by a package of assets with a net carrying value of \$3.5 billion at December 31, 2002 and by certain intra-group loans.



The \$1.5 billion facility contained certain stringent financial covenants in respect of minimum interest coverage, total gross debt, a maximum level of debt in subsidiaries other than those specified as borrowers under that facility, a minimum level of consolidated net worth, as well as specific negative pledges. We were required to meet these financial covenants at each quarter-end commencing December 31, 2002. In addition, in order to ensure the continued availability of the \$1.5 billion facility until its cancellation in December 2003, we were required to obtain minimum levels of proceeds from the disposal of specified assets and businesses and/or equity issuances during 2003.

### Securitization programs

In addition to the aforementioned primary sources of liquidity and capital resources, we also sell certain trade receivables to Qualifying Special Purpose Entities ("QSPEs"), unrelated to us, primarily through two revolving-period securitization programs. Solely for the purpose of credit enhancement from the perspective of the QSPEs, we retain an interest in the sold receivables. Retained interests at December 31, 2004 and 2003 amounted to \$373 million and \$390 million, respectively. The fair value of the retained interests at December 31, 2004 and 2003 was approximately \$349 million and \$367 million, respectively.

The net cash received from (paid to) QSPEs during 2004, 2003 and 2002 was \$130 million, \$(119) million and \$(384) million, respectively, as follows:

	At December 31,		
	2004	2003	2002
Gross trade receivables sold to QSPEs (\$25, \$505 and \$832) <sup>(1)</sup>	\$ 5,846	\$ 5,661	\$ 5,972
Collections made on behalf of and paid to QSPEs (\$23, \$(696) and \$(753)) <sup>(1)</sup>	(5,713)	(5,883)	(6,074)
Purchaser, liquidity and program fees (\$0, \$(2) and \$(5)) <sup>(1)</sup>	(20)	(21)	(37)
Decrease (increase) in retained interests (\$0, \$117 and \$(87)) <sup>(1)</sup>	17	124	(245)
<b>Net cash received from (paid to) QSPEs during the year (\$2, \$(76) and \$(13))<sup>(1)</sup></b>	<b>\$ 130</b>	<b>\$ (119)</b>	<b>\$ (384)</b>

<sup>(1)</sup> Related to assets held for sale and in discontinued operations for 2004, 2003 and 2002, respectively.

At December 31, 2004 and 2003, of the gross trade receivables sold, the total trade receivables for which cash has not been collected at those dates amounted to \$1,083 million and \$898 million, respectively. Of these amounts, \$54 million and \$34 million at December 31, 2004 and 2003, respectively, was more than 90 days past due.

In addition, we transfer receivables outside of the above described securitization programs. These transfers were sales, made without recourse, directly to banks or pursuant to factoring or similar type arrangements. Total sold receivables included in these transactions during 2004 and 2003 were approximately \$902 million and \$1,400 million, respectively, of which, sales of \$159 million and \$594 million, respectively, related to assets held for sale and in discontinued operations. During 2004 and 2003, the related costs, including the associated gains and losses, were \$10 million and \$12 million, respectively, of which, costs of \$1 million and \$3 million, respectively, related to assets held for sale and in discontinued operations.

For further discussion of our securitization programs, see the section entitled "Off-balance sheet arrangements" below and Notes 2 and 7 to our Consolidated Financial Statements.

### **Credit ratings**

Debt ratings are an assessment by the rating agencies of the credit risk associated with our company and are based on information provided by us or other sources that the rating agencies consider reliable. Lower ratings generally result in higher borrowing costs and reduced access to capital markets.

At December 31, 2002, after a series of rating downgrades during 2002, our long-term company ratings were Ba3 and BBB- (our long-term unsecured debt was rated B1 and BB+) from Moody's and Standard & Poor's, respectively. On January 13, 2003, Standard & Poor's further lowered our long-term company rating to BB+ and our long-term unsecured debt to BB-. In late October 2003, both rating agencies changed the outlook on these ratings to positive from negative. On May 18, 2004, Moody's increased our long-term company rating from Ba3 to Ba2 and our long-term unsecured debt from B1 to Ba2, both with stable outlook. On December 6, 2004, Standard & Poor's changed the outlook on these ratings from positive to stable. Our ratings are currently below "investment grade" that would be represented by Baa3 (or above) and BBB- (or above) from Moody's and Standard & Poor's, respectively. A rating below investment grade is reflected in higher interest costs on borrowings. Until our credit rating has returned to investment grade, we do not anticipate having the ability to access the commercial paper markets.

### **Restrictions on transfers of funds**

We face restrictions on the transfer of funds in various countries due to local regulations and foreign exchange restrictions. Funds, other than regular dividends, fees or loan repayments, cannot be transferred offshore from these countries and are therefore deposited locally. As a consequence, these funds are not available within our Group Treasury Operations to meet short-term cash obligations. These funds are reported as cash on our Consolidated Balance Sheet, but we do not consider these funds as available for the repayment of debt outside the respective countries where the cash is situated, including those described below.

Currency and other local regulatory restrictions exist in a number of countries where we operate, including: Brazil, China, Egypt, India, Korea, Malaysia, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

Furthermore, restricted cash amounting to \$452 million and \$433 million at December 31, 2004 and 2003, respectively, is not included in cash and equivalents but is reflected in long-term assets on our Consolidated Balance Sheet.

## **FINANCIAL POSITION**

### **Balance sheet**

During 2004 and 2003, the divestments and discontinuations of certain businesses were recorded as discontinued operations pursuant to SFAS 144, as discussed in detail under "Application of Critical Accounting Policies Accounting for discontinued operations" above. Accordingly, the balance sheet data for all periods presented have been restated to present the financial position and results of operations of the businesses meeting the criteria of SFAS 144 as assets and liabilities held for sale and in discontinued operations.

**Current assets**

	At December 31,	
	2004	2003
	(U.S. dollars in millions)	
Cash and equivalents	\$ 3,676	\$ 4,783
Marketable securities and short-term investments	524	473
Receivables, net	6,330	6,049
Inventories, net	2,977	2,671
Prepaid expenses and other	1,688	1,794
Assets held for sale and in discontinued operations	155	4,981
<b>Total current assets</b>	<b>\$ 15,350</b>	<b>\$ 20,751</b>

Our total current assets, at December 31, 2004, decreased by 26 percent, compared to December 31, 2003. See " Cash Flows" for a detailed discussion on changes in cash and equivalents.

Our Group Treasury Operations invest the surplus cash available from time to time in time deposits and marketable securities, with varied maturities based on defined investment guidelines and the liquidity requirements of the business. Investments which are less than three months in duration are classified as part of cash equivalents, and those of more than three months in duration are classified as part of marketable securities and short term investments. Receivables, net, as at the end of 2004 increased from the end of 2003, primarily as a result of a decline in the value of the U.S. dollar, which we use for reporting purposes, against local currencies. A reduction in receivables, particularly from Non-core activities is primarily due to collections from the contracts completed over the same period, was more than offset by increases in receivables in the core divisions resulting from higher volume of revenues. Inventories, net, increased by 5 percent in local currencies reflecting a higher order backlog at the end of 2004 compared to the end of 2003.

**Current liabilities**

	At December 31,	
	2004	2003
	(U.S. dollars in millions)	
Accounts payable, trade	\$ 4,272	\$ 4,034
Accounts payable, other	1,437	1,395
Short-term borrowings and current maturities of long-term borrowings	633	1,644
Accrued liabilities and other	6,436	5,957
Liabilities held for sale and in discontinued operations	290	3,990
<b>Total current liabilities</b>	<b>\$ 13,068</b>	<b>\$ 17,020</b>

Total current liabilities as at the end of December 2004 decreased by 23 percent compared to December 31, 2003. Operating liabilities, excluding liabilities held for sale and in discontinued operations, include accounts payable, short-term borrowings including current maturities of long-term borrowings and accrued liabilities and other.

Total accounts payable increased at December 31, 2004 compared to December 31, 2003, as increases in this account from the core divisions were partially offset by reductions, primarily from the Oil, Gas and Petrochemicals business.

Our short-term debt was lower at the end of 2004 than at the end of 2003, reflecting our debt repayments during the year (see " Liquidity and capital resources").

Accrued liabilities and other increased primarily as a result of higher volume of advances received from customers and additional provisions in respect of asbestos-related liabilities, recorded at December 31, 2004 (see "Asbestos liability").

#### Non-current assets

	At December 31,	
	2004	2003
	(U.S. dollars in millions)	
Financing receivables, non-current	\$ 1,233	\$ 1,372
Property, plant and equipment, net	2,981	2,858
Goodwill	2,602	2,528
Other intangible assets, net	493	601
Prepaid pension and other related benefits	549	564
Investments and other	1,469	1,727
<b>Total Non-current assets</b>	<b>\$ 9,327</b>	<b>\$ 9,650</b>

Financing receivables at December 31, 2004, which include receivables from leases and loans receivable, decreased compared to December 31, 2003, as we continue to terminate our lease portfolios and loan receivables within our Structured Finance business area.

The increase in the value of property, plant and equipment, net, at December 31, 2004, mainly reflects the decline in the value of the U.S. dollar, which we use for reporting purposes, against local currencies. Expressed in local currency terms, property, plant and equipment decreased by 3 percent primarily as a result of the sale of real estate properties, mainly in Switzerland, and normal levels of depreciation. Capital expenditure during 2004 increased, with major investments in the core divisions in machinery and equipments in Germany, Italy, Finland and Sweden partially offset by reduced investments in Non-core activities, particularly in the Equity Ventures business area.

The reduction in other intangible assets, net mainly reflects amortization on capitalized software and other intangible assets.

During 2004, goodwill increased principally due to a decline in the value of the U.S. dollar, which we use for reporting purposes, partly offset by a write-off of \$21 million goodwill related to the sale of businesses.

Investments and other decreased, mainly due to write-down of certain deferred tax assets created in the previous years as we did not believe the tax assets were more likely than not to be realized and to a lesser extent due to the sale of our ownership interests in investments during 2004.

#### Non-current liabilities

	At December 31,	
	2004	2003
	(U.S. dollars in millions)	
Long-term borrowings	\$ 4,901	\$ 6,290
Pension and other related benefits	1,551	1,790
Deferred taxes	953	1,022
Other liabilities	1,083	1,077
<b>Total Non-current liabilities</b>	<b>\$ 8,488</b>	<b>\$ 10,179</b>

During 2004, long-term borrowings were significantly reduced through the repayment of maturing bonds, open market repurchases of public bonds, the tender offer for certain of our bonds and the call



of those bonds not tendered. Our gearing ratio (defined as total borrowings divided by the sum of total borrowings and the stockholders equity including minority interest), excluding the borrowings in the discontinued operations, was 64 percent at December 31, 2004, compared to 71 percent at December 31, 2003, reflecting the reduction of our total debt. The reduction in the value of pension and other employee benefits at December 31, 2004, was mainly due to our contribution of \$549 million of available-for-sale debt securities to certain of our pension plans in Germany, offset in part by an increase in liabilities related to the decline in value of the U.S. dollar, our use of a lower discount rate compared to 2003 and lower performance of existing plan assets, along with the normal increase in the pension liabilities during the year.

Other liabilities include non-current provisions of \$439 million and \$441 million, deferred income of \$143 million and \$158 million, and non-current derivative liabilities of \$53 million and \$40 million at December 31, 2004 and 2003, respectively. Included in non-current provisions are amounts accrued for the estimated environmental remediation costs related to our former Nuclear Technology business (see Note 18 to our Consolidated Financial Statements) of \$266 million and \$276 million at December 31, 2004 and 2003, respectively.

We entered into certain leasing transactions with U.S. investors prior to 1999. Prepaid rents that have been received on these transactions are \$314 million and \$312 million at December 31, 2004 and 2003, respectively, and have been recorded as deposit liabilities. Net gains on these transactions are being recognized over the lease terms.

### Cash flows

In the Consolidated Statements of Cash Flows, the effects of the discontinued operations are not segregated, as permitted by Statement of Financial Accounting Standards No. 95 (SFAS 95), *Statement of Cash Flows*. The Consolidated Statements of Cash Flows can be summarized into main activities as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Cash flows provided by (used in) operating activities	\$ 962	\$ (173)	\$ 0
Cash flows provided by investing activities	354	754	2,651
Cash flows provided by (used in) financing activities	(2,805)	1,603	(2,793)
Effects of exchange rate changes	74	150	141
Adjustment for the net change in cash and equivalents in assets held for sale and in discontinued operations	308	(80)	60
Net change in cash and equivalents continuing operations	\$ (1,107)	\$ 2,254	\$ 59

#### *Cash flows provided by (used in) operating activities*

Operating assets and liabilities include marketable securities held for trading purposes, trade receivables, inventories, payables and other assets and liabilities. Debt and equity securities that are purchased and held principally for the purpose of sale in the near term are classified as trading securities. Cash flows from marketable securities classified as available-for-sale are reflected in investing

## Edgar Filing: ABB LTD - Form 20-F

activities. Cash flows from discontinued operations are included in the table below in the respective divisions in which these businesses were formerly classified.

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Net loss, net of adjustments for non-cash items	\$ 942	\$ (431)	\$ (419)
Changes in operating assets and liabilities	20	\$ 258	\$ 419
	\$ 962	\$ (173)	\$ 0
Sub-total: Cash flows provided by (used in) operating activities			
Consisting of:			
Power Technologies	\$ 499	\$ 639	\$ 337
Automation Technologies	1,090	814	503
Non-core activities*	(69)	(754)	(27)
Corporate and Other	\$ (558)	\$ (872)	\$ (813)

\*

Including the entire Oil, Gas and Petrochemicals, Wind Energy, Reinsurance and Export Bank businesses.

In 2004, as compared to 2003, cash from operations from the Power Technologies division decreased, primarily influenced by lower advances from customers and increased volume of project receivables. Over the same period, cash from operations provided by the Automation Technologies division increased, mainly through higher earnings, higher advances from customers and the increase of trade payables. Cash used in Non-core activities was lower compared to 2003 primarily from the improvements in our Oil, Gas and Petrochemicals business due to a stronger focus on cash management and improved collection of receivables from customers as a result of completion of several large projects. These factors more than offset the cash outflows from the Upstream Oil, Gas and Petrochemicals business due to the cancellation of securitization programs and other activities involved in the preparation for the sale of this business. Other cash inflows in Non-core activities mainly represented the dividend received from Jorf Lasfar by our Equity Ventures business area in 2004. Cash used in corporate was lower in 2004 compared to 2003, influenced primarily by lower cash payments to the Combustion Engineering settlement trust. The cash payments in 2004 relating to the settlement of asbestos-related issues were \$45 million. Cash inflows from operating activities improved by \$1,135 million over 2003.

During 2003, higher earnings and working capital improvements contributed to increased cash in 2003 as compared to 2002 from the operating activities of the Power Technologies and Automation Technologies divisions. These cash flows were more than offset by cash used in corporate, which included cash payments of \$388 million towards the settlement of asbestos-related issues as well as cash used in corporate overheads and interest payments. In addition, losses from Building Systems and New Ventures business areas mainly contributed to cash outflows in Non-core activities during 2003. The net cash used in operating activities during 2003 was \$173 million, compared to a break even level of cash during the year 2002.

During 2002, net cash provided by operating activities of the Power Technologies and Automation Technologies divisions primarily resulted from improved earnings and a reduction of net working capital. Net cash provided by Non-core activities, excluding the Oil, Gas and Petrochemicals businesses, mainly consisted of net cash proceeds from the sale of marketable securities (trading) of \$498 million. The Oil, Gas and Petrochemicals businesses had an operating cash outflow due to project losses and higher working capital levels. Corporate cash outflows were influenced by increased costs in respect of the credit facility and other financing arrangements, and included cash payments related to asbestos-related claims of \$246 million. These resulted in a break-even level of cash from operations for 2002.

*Cash flows provided by (used in) investing activities*

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Acquisitions, investments, divestitures, net	\$ 1,158	\$ 488	\$ 2,365
Asset purchases, net of disposals	(420)	(392)	(126)
Other investing activities	(384)	658	412
Sub-total: Cash flows provided by investing activities	\$ 354	\$ 754	\$ 2,651

Investing activities include: accounts receivable from leases and third party loans (financing receivables); net investments in marketable securities that are not held for trading purposes; purchases of property, plant and equipment, net of disposals; and acquisitions of, investments in and divestitures of businesses. Net cash provided by investing activities was \$354 million during 2004, a decrease of \$400 million from \$754 million during 2003.

We continued our program of divesting non-core businesses and other assets during 2004. For 2004, cash inflows from acquisitions, investments and divestitures, net, were higher by \$670 million compared to 2003. Significant divestitures during 2004 were the sale of our Upstream Oil, Gas and Petrochemicals business (\$800 million), the sale of our Re-insurance business (approximately \$280 million) and the sale of our participations in IXYS Corporation (\$42 million).

During 2003, we received cash proceeds of approximately \$149 million from the sale of our 35 percent stake in Swedish Export Credit Corporation and approximately \$90 million from the sale of our investments in two projects in Equity Ventures business area in Australia. Cash proceeds of approximately \$213 million were received through the sale of our Building Systems businesses in Sweden, Norway, Denmark, Finland and Russia. In addition, the sale of the ABB Export Bank for approximately \$50 million, and the sale of part of our Wind Energy business, part of the New Ventures business in Non-core activities, were completed during the fourth quarter of 2003. As a result of these significant divestitures and net cash outflows of \$24 million for certain smaller investments and disposals, net cash inflows from purchases of, investments in and divestitures of businesses was \$488 million during 2003.

The net cash outflows from the purchase and sale of property, plant and equipment was higher in 2004 as compared to 2003, reflecting fewer properties sold in 2004. Cash outflow for capital investment in property, plant and equipment remained at the same level for 2004 compared to 2003. Major capital expenditures on investment in machinery and equipment during 2004 occurred in Germany, Italy, Finland and Sweden. For 2004, proceeds of \$123 million were received on the sale of property, plant and equipment compared to \$155 million in 2003. Significant asset sales during 2004 included the sale of real estate properties in Switzerland, Germany and Italy.

Cash used for purchases of property, plant and equipment, net of disposals, was \$392 million during 2003, an increase of \$266 million compared to \$126 million during 2002. While investment in property plant and equipment remained at nearly the same level in both 2003 and 2002, proceeds of approximately \$300 million from the sale of our real estate properties in Sweden in 2002, substantially offset the outflows of investment in property, plant and equipment.

During 2004, we made a non-cash contribution of \$549 million in available-for-sale debt securities to certain of our pension plans in Germany. Prior to the non-cash contribution, a significant portion of these securities was purchased during 2004, which significantly increased net cash used in other investing activities. Additionally, cash outflows in investing activities for 2004 represents the net investment of cash in marketable securities by Group Treasury Operations and our Group captive



insurance companies, partly offset by cash inflows from the termination of lease portfolios and loan receivables from our remaining Structured Finance business.

Cash provided by other investing activities increased to \$658 million in 2003 from \$412 million in 2002. The cash provided by other investing activities largely resulted from cash proceeds of \$390 million from the sale of financing receivables related to our Structured Finance business and net cash proceeds of \$268 million from the sale of marketable securities that were not held for trading purposes, primarily relating to the Reinsurance business which we sold in April 2004 and the sale of our shares in the China National Petrochemical Corporation (Sinopec Corp.) for approximately \$80 million. The increase in cash provided by other activities in 2002 was primarily due to a reduction in investments in financing receivables.

*Cash flows provided by (used in) financing activities*

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Change in borrowings, net of repayments	\$ (2,752)	\$ (1,016)	\$ (2,796)
Treasury and capital stock transactions	(36)	2,675	0
Other financing activities	(17)	(56)	3
Sub-total: Cash flows provided by financing activities	\$ (2,805)	\$ 1,603	\$ (2,793)

Our financing activities primarily include borrowings, both from the issuance of debt securities and directly from banks, treasury and capital stock transactions.

Significant cash outflow from financing activities during the year 2004 included the repayment of maturing bonds, open market repurchases of public bonds, the tender offer for certain of our bonds and the call of those bonds not tendered. See "Liquidity and Capital Resources" for a detailed discussion on the nature of borrowings. The cash outflow for the treasury and capital stock transactions represented payments made in 2004 in respect of certain tax and other liabilities incurred in connection with the rights issue carried out during the fourth quarter of 2003.

During 2003, as part of our strategy to lengthen our debt maturity profile, we replaced maturing short-term borrowings with long-term borrowings. Cash outflows in connection with borrowings reflected the repayment of short-term (including current portion of long-term) borrowings as they fell due, partially offset by cash inflows from the proceeds of the CHF 1,000 million convertible bonds and 650 million euro aggregate principal of bonds issued in September and November 2003, respectively. The net proceeds of the rights issuance of \$2.5 billion, completed in December 2003 and the proceeds from the sale of treasury shares during the first quarter of 2003 for \$156 million, contributed to the overall net cash inflow of \$2,675 million during 2003.

During 2002, net cash outflows from borrowings reflected our strategy to reduce our overall level of borrowings, particularly in respect of borrowings with maturities of 90 days or less. There were no treasury and capital stock transactions or dividends paid in 2002.

**DISCLOSURES ABOUT CONTRACTUAL OBLIGATIONS AND COMMITMENTS****Contractual obligations**

The following table summarizes certain of our contractual obligations and principal payments under our debt instruments and leases at December 31, 2004:

Payments due by period	Total	Less than 1 year	1 3 years	3 5 years	After 5 years
(U.S. dollars in millions)					
Long-term debt obligations	\$ 5,350	\$ 449	\$ 1,040	\$ 1,854	\$ 2,007
Operating lease obligations	1,924	347	536	389	652
Purchase obligations	\$ 3,013	\$ 2,003	\$ 651	\$ 186	\$ 173

**OFF-BALANCE SHEET ARRANGEMENTS****Commercial commitments**

Certain guarantees issued or modified after December 31, 2002 are accounted for in accordance with Financial Accounting Standards Board Interpretation No. 45 (FIN 45), *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*. Upon issuance of certain guarantees, a liability, equal to the fair value of the guarantee, is recorded.

FIN 45 requires that we disclose the "maximum potential exposure" of certain guarantees, as well as possible recourse provisions that may allow us to recover from third parties amounts paid out under such guarantees. The "maximum potential exposure" as defined by FIN 45 does not allow any discounting of our assessment of actual exposure under the guarantees. The information below reflects our maximum potential exposure under the guarantees, which is higher than our assessment of the expected exposure.

**Guarantees**

The following table provides quantitative data regarding our third-party guarantees. The maximum potential payments represent a "worst-case scenario," and do not reflect our expected results.

The carrying amount of liabilities recorded in the Consolidated Balance Sheets reflects our best estimate of future payments we may incur as part of fulfilling our guarantee obligations.

At December 31,

	2004		2003	
	Maximum potential payments	Carrying amount of liabilities	Maximum potential payments	Carrying amount of liabilities
(U.S. dollars in millions)				
Third-party performance guarantees	\$ 1,525	\$ 2	\$ 1,200	\$
Financial guarantees	253	1	207	
Indemnification guarantees	198	16		
Total	\$ 1,976	\$ 19	\$ 1,407	\$

#### *Guarantees related to third-party performance*

Performance guarantees represent obligations where we guarantee the performance of a third party's product or service according to the terms of a contract. Such guarantees may include guarantees that a project will be completed within a specified time. If the third party does not fulfill the obligation, we will compensate the guaranteed party in cash or in kind.

We retained obligations for guarantees related to the Power Generation business contributed in mid-1999 to the former ABB ALSTOM POWER NV joint venture. The guarantees primarily consist of performance guarantees, advance payment guarantees and other miscellaneous guarantees under certain contracts such as indemnification for personal injuries and property damages, taxes, and compliance with labor laws, environmental laws and patents. The guarantees are related to projects that are expected to be completed by 2015, but in some cases the guarantees have no definite expiration. In May 2000, we sold our interest in the ABB ALSTOM POWER NV joint venture to ALSTOM SA (ALSTOM). As a result, ALSTOM and its subsidiaries have primary responsibility for performing the obligations that are the subject of the guarantees. Further, ALSTOM, the parent company, and ALSTOM POWER NV, formerly ABB ALSTOM POWER NV, have undertaken jointly and severally to fully indemnify and hold us harmless against any claims arising under such guarantees. Our best estimate of the total maximum potential exposure of quantifiable guarantees issued by us on behalf of the Power Generation business is approximately \$875 million and \$1,200 million at December 31, 2004 and 2003, respectively. We have not experienced any losses related to guarantees issued on behalf of the Power Generation business.

We have retained obligations for guarantees related to the Upstream Oil, Gas and Petrochemicals business sold in July 2004. The guarantees primarily consist of third-party performance guarantees, advance payment guarantees and other miscellaneous guarantees. The guarantees have maturity dates ranging from one to five years. The maximum amount payable under the guarantees is approximately \$650 million at December 31, 2004. We have the ability to recover potential payments under these guarantees through certain backstop guarantees. The maximum potential recovery under these backstop guarantees is approximately \$146 million at December 31, 2004.

#### *Guarantees relating to financial obligations*

Financial guarantees represent irrevocable assurances that we will make payment to a beneficiary in the event that a third party fails to fulfill its financial obligations and the beneficiary under the guarantee incurs a loss due to that failure.

At December 31, 2004 and 2003, we had \$253 million and \$207 million, respectively, of financial guarantees outstanding. Of those amounts, \$123 million and \$189 million, respectively, were issued on behalf of companies in which we currently have or formerly had an equity interest. The guarantees have original maturity dates ranging from one to thirteen years. Also included in the \$253 million are financial guarantees we retained related to the Upstream Oil, Gas and Petrochemicals business sold in July 2004. The maximum amount payable under these guarantees is approximately \$101 million and the

guarantees have original maturity dates ranging from one to six years and in some cases have no time-related expiry as they are contingent on future events.

#### *Guarantees relating to indemnification*

We delivered to the purchasers of the Upstream Oil, Gas and Petrochemicals business and Reinsurance business guarantees related to assets and liabilities divested in 2004. The maximum liability at December 31, 2004, of approximately \$49 million and \$149 million, relating to the Upstream Oil, Gas and Petrochemicals business and Reinsurance business, respectively, will reduce over time, pursuant to the agreements. The fair value of these guarantees is not material.

We have indemnified certain purchasers of divested businesses for potential claims arising from the operations of the divested businesses, including for asbestos-related claims arising from the operations of Combustion Engineering and its predecessors and affiliates. Such indemnifications have not been fair valued to the extent they were issued prior to the effective date of FIN 45. Additionally, in cases where we could not calculate the maximum loss related to such indemnifications, no amounts have been included under maximum potential payments in the table above. Indemnifications for which maximum losses could not be calculated include indemnifications for legal claims.

#### **Other commitments**

We have granted lines of credit and have committed to provide additional capital for certain equity accounted companies. At December 31, 2004, the total unused lines of credit amounted to \$78 million and capital commitments amounted to \$24 million.

#### **Securitization programs**

In addition to the primary sources of liquidity and capital resources described in the section entitled "Liquidity and Capital Resources", we also sell certain trade receivables to Qualifying Special Purpose Entities ("QSPEs"), unrelated to us, primarily through two revolving-period securitization programs. Under the two securitization programs, neither QSPE commits to purchase our trade receivables, and the QSPEs may at any time refuse to continue purchasing our trade receivables. If both QSPEs simultaneously refuse to purchase additional receivables, then we would experience a temporary loss of cash flow from the sale of trade receivables over a period of several weeks until new trade receivables generated by us began to convert to cash in the normal course of our business.

Solely for the purpose of credit enhancement from the perspective of the QSPEs, we retain an interest in the sold receivables. Pursuant to the requirements of the revolving-period securitizations, we effectively bear the risk of potential delinquency or default associated with trade receivables sold or interests retained. Retained interests included in other receivables at December 31, 2004 and 2003 amounted to \$373 million and \$390 million, respectively. The decrease in the retained interest during 2004 of \$17 million was mainly due to a change in terms of one program, resulting in a reduction in the level of reserves required. In the normal course of servicing the assets sold, we evaluate potential collection losses and delinquencies and update the estimated fair value of our retained interest. Pursuant to the terms of the securitization programs, receivables more than 90 days overdue are considered delinquent. An increase in delinquency rates compared to historic levels will cause an increase in retained interests, while a decrease in delinquency rates compared to historic levels will cause a corresponding decrease in retained interests. Ultimately, if the customer defaults, we will be responsible for the uncollected amount up to the amount of our retained interest relating to the relevant securitization program. The fair value of the retained interests at December 31, 2004 and 2003 was approximately \$349 million and \$367 million, respectively.

We retain servicing responsibility relating to the sold receivables. Net cash settlements on both programs take place twice per month. However, in one of the programs there is, in addition, the daily

transfer of collections of sold receivables. Under the terms of the latter program, if our rating falls below BB+ (Standard & Poor's) or Ba3 (Moody's) then we may be required to relinquish the right to collect the sold receivables on behalf of the QSPE, and instead the cash collection of such sold receivables would be made directly to the accounts of the QSPE rather than via us.

The net cash received from (paid to) QSPEs during 2004, 2003 and 2002 was \$130 million, \$(119) million and \$(384) million, respectively, as follows:

	Year ended December 31,		
	2004	2003	2002
	(U.S. dollars in millions)		
Gross trade receivables sold to QSPEs (\$25, \$505 and \$832) <sup>(1)</sup>	\$ 5,846	\$ 5,661	\$ 5,972
Collections made on behalf of and paid to QSPEs (\$23), \$(696) and \$(753) <sup>(1)</sup>	(5,713)	(5,883)	(6,074)
Purchasers, liquidity and program fees (\$0, \$(2) and \$(5)) <sup>(1)</sup>	(20)	(21)	(37)
Decrease (increase) in retained interests (\$0, \$117 and \$(87)) <sup>(1)</sup>	17	124	(245)
<b>Net cash received from (paid to) QSPEs (\$2, \$(76) and \$(13))<sup>(1)</sup></b>	<b>\$ 130</b>	<b>\$ (119)</b>	<b>\$ (384)</b>

<sup>(1)</sup> Related to assets held for sale and in discontinued operations for 2004, 2003 and 2002, respectively.

The increase in gross receivables sold in 2004 compared to 2003, is due primarily to an increase in the programs' size, a change in the definition of receivables eligible to be sold in one program and the addition of new sellers to one of the programs. The decrease in gross receivables sold in 2003, as compared to 2002, is due primarily to the fact that businesses which were either classified as discontinued operations or which we sold were phased out of the securitization programs during 2003.

We pay purchaser, liquidity and program fees on our securitization programs. Purchaser and program fees are based on the amount of funding that we receive, while liquidity fees are based on the programs' size. These costs of \$20 million, \$21 million and \$37 million in 2004, 2003 and 2002, respectively, are included in interest and other finance expense.

At December 31, 2004 and 2003, of the gross trade receivables sold, the total trade receivables for which cash has not been collected at those dates amounted to \$1,083 million and \$898 million, respectively. Of these amounts, \$54 million and \$34 million at December 31, 2004 and 2003, respectively, was more than 90 days past due.

In addition, we transfer receivables outside of the above described securitization programs. These transfers were sales, made without recourse, directly to banks and/or sales pursuant to factoring or similar type arrangements. Total sold receivables included in these transactions during 2004 and 2003 were approximately \$902 million and \$1,400 million, respectively, of which, sales of \$159 million and \$594 million, respectively, related to assets held for sale and in discontinued operations. During 2004 and 2003, the related costs, including the associated gains and losses, were \$10 million and \$12 million, respectively, of which, costs of \$1 million and \$3 million, respectively, related to assets held for sale and in discontinued operations. The reduction in the amount of receivables transferred outside of the securitization programs in 2004 compared to 2003 was mainly the result of the sale of a business classified in discontinued operations that had in 2003 generated significant sales of receivables.

For a further discussion of our securitization programs, see Notes 2 and 7 to our Consolidated Financial Statements.

#### **Pension and other post-retirement obligations**

At December 31, 2004 and 2003, our pension liabilities exceeded plan assets by \$1,451 million and \$1,680 million, respectively. Our other post-retirement plan liabilities exceeded plan assets by \$369 million and \$397 million at December 31, 2004 and 2003, respectively. This underfunding is not a



short-term obligation for us as the settlement of the pension liability will take place as the covered employees draw benefits from the plans in the future. At the end of April 2005, we announced that we anticipate contributing a total of \$187 million and \$29 million to our pension plans and our postretirement benefit plans, respectively, in 2005.

#### **Variable interests**

We are a party to certain off-balance sheet arrangements including variable interests in unconsolidated entities. See Note 8 to the Consolidated Financial Statements for additional information on variable interests.

### **ENVIRONMENTAL LIABILITIES**

All of our operations, but particularly our manufacturing operations, are subject to comprehensive environmental laws and regulations. Violations of these laws could result in fines, injunctions (including orders to cease the violating operations) or other penalties (including orders to improve the condition of the environment in the affected area or to pay for such improvements). In addition, environmental permits are required for our manufacturing facilities (for example, with respect to air emissions and wastewater discharges). In most countries in which we operate, environmental permits must be renewed on a regular basis and we must submit reports to environmental authorities. These permits may be revoked, renewed or modified by the issuing authorities at their discretion and in compliance with applicable laws. We have implemented formal environmental management systems at nearly all of our manufacturing sites in accordance with the international environmental management standard ISO 14001, and we believe that we are in substantial compliance with environmental laws, regulations and permit requirements in the various jurisdictions in which we operate, except for such instances of non-compliance that, in the aggregate, are not reasonably likely to be material.

In a number of jurisdictions, including the United States, we may be liable for environmental contamination at our present or former facilities, or at other sites where wastes generated from our present or former facilities were disposed. In the United States, the Environmental Protection Agency and various state agencies are responsible for regulating environmental matters. These agencies have identified certain of our current and former U.S. based companies as potentially responsible parties in respect to a number of such sites under the Comprehensive Environmental Response, Compensation, and Liability Act, the Resource Conservation and Recovery Act and other federal and state environmental laws. As a potentially responsible party, we may be liable for a share of the costs associated with cleaning up these sites. As of December 31, 2004, there were approximately 25 sites, at which, our companies have, or may be potentially responsible for, environmental clean up costs. These 25 sites include several of our current or former facilities where we have undertaken voluntary corrective actions. The clean up of these sites involves primarily soil and groundwater contamination. We do not believe that our aggregate liability in connection with these sites will have a material adverse impact on our consolidated financial position, results of operations and cash flows.

Generally, our liability with regard to any specific site will depend on the number of potentially responsible parties, their relative contributions of hazardous substances or wastes to the site and their financial resources, as well as on the nature and extent of the contamination. Nevertheless, such laws commonly impose strict liability jointly and severally on the parties involved, so that any one party may be liable for the entire cost of cleaning up a contaminated site.

In addition, we retained liability for certain specific environmental remediation costs at two sites in the United States that were operated by our Nuclear technology business, which has been sold to British Nuclear Fuels PLC (BNFL) in April 2000. Pursuant to the purchase agreement with BNFL, we have retained all of the environmental liabilities associated with our subsidiary Combustion Engineering Inc.'s (Combustion Engineering) Windsor, Connecticut facility and a portion of the environmental liabilities associated with our ABB C-E Nuclear Power Inc. subsidiary's Hematite,

Missouri facility. The primary environmental liabilities associated with these sites relate to the costs of remediating radiological and chemical contamination at these facilities. Such costs are not payable until a facility is taken out of use and generally are incurred over a number of years. Although it is difficult to predict with accuracy the amount of time it may take to remediate radiological contamination upon decommissioning, based on information that BNFL has made publicly available, we believe that it may take until 2013 to remediate the Hematite site. With respect to the Windsor site, we believe the remediation may take until 2008. At the Windsor site, a significant portion of the contamination is related to activities that were formerly conducted by or for the United States government. We believe that a significant portion of the remediation costs for this facility will be covered by the United States government under the government's Formerly Utilized Sites Remedial Action Program. As a result of the sale of the Nuclear Technology business, in 2000 we established in other liabilities a reserve of \$300 million in connection with our estimated remediation costs related to both facilities. We have estimated the total contingent liability in a range of loss from \$266 million to \$447 million. As such, at December 31, 2004, we have recorded in other liabilities a reserve of \$266 million, net of payments since inception of \$34 million. Expenditures charged to the remediation reserve were \$10 million, \$6 million and \$12 million during 2004, 2003 and 2002, respectively. In connection with the Chapter 11 filing by Combustion Engineering discussed below, we will assume any and retain all remaining environmental liabilities of Combustion Engineering in respect to the Windsor and Hematite sites.

Estimates of the future costs of environmental compliance and liabilities are imprecise due to numerous uncertainties. Such costs are affected by the enactment of new laws and regulations, the development and application of new technologies, the identification of new sites for which we may have remediation responsibility and the apportionment of remediation costs among, and the financial viability of, responsible parties. In particular, the exact amount of the responsibility of the United States government for the Windsor site cannot be precisely estimated. It is possible that final resolution of environmental matters may require us to make expenditures in excess of our expectations, over an extended period of time and in a range of amounts that cannot be reasonably estimated. Although final resolution of such matters could have a material effect on our Consolidated Income Statement in a particular reporting period in which the expenditure is incurred, we believe that these expenditures will not have a material adverse impact on our consolidated financial position, results of operations and cash flows.

## **ASBESTOS LIABILITIES**

### ***Summary***

Our Combustion Engineering subsidiary has been a co-defendant in a large number of lawsuits claiming damage for personal injury resulting from exposure to asbestos. A smaller number of claims have also been brought against two other subsidiaries, ABB Lummus Global Inc. ("Lummus") (which is part of our Oil, Gas and Petrochemicals business and was formerly a subsidiary of Combustion Engineering) and Basic Incorporated ("Basic") (which was a subsidiary of Combustion Engineering and of Asea Brown Boveri Inc. ("Asea Brown Boveri") and is now a subsidiary of ABB Holdings Inc. ("Holdings") following the merger in December 2004 of Asea Brown Boveri into Holdings), as well as against other ABB group entities. In late 2002, taking into consideration the growing number and cost of asbestos-related claims, Combustion Engineering and we determined that Combustion Engineering's asbestos-related liability should be resolved through a comprehensive settlement that included a plan of reorganization for Combustion Engineering under Chapter 11 of the U.S. Bankruptcy Code.

In November 2002, Combustion Engineering and the representatives of various asbestos claimants entered into a Master Settlement Agreement which settled the value of approximately 154,000 open asbestos-related claims against Combustion Engineering. Under that agreement, Combustion Engineering established and funded a trust (the "CE Settlement Trust") to provide for partial payment on such settled claims.



In January 2003, Combustion Engineering reached agreement with various creditors (including representatives of the asbestos claimants who participated in the Master Settlement Agreement and a representative of future claimants) on the terms of a proposed "Pre-Packaged Plan of Reorganization for Combustion Engineering" under Chapter 11 of the U.S. Bankruptcy Code (as amended through June 4, 2003, the "CE Plan"). The CE Plan provided for a "channeling injunction" to be issued, under which asbestos-related claims related to the operations of Combustion Engineering, Lummus and Basic could only be brought against a trust (separate from the CE Settlement Trust established under the Master Settlement Agreement) to be established and funded by Combustion Engineering, ABB Ltd and other ABB group companies. This channeling injunction was intended to free Combustion Engineering, ABB Ltd and affiliates, as well as certain former direct or indirect owners, joint venture partners and affiliates of Combustion Engineering, including ALSTOM and ABB ALSTOM POWER NV, from further liability for such claims.

The CE Plan was filed with the U.S. Bankruptcy Court on February 17, 2003, and confirmed by the District Court on August 8, 2003. However, on December 2, 2004, the Court of Appeals for the Third Circuit effectively reversed the District Court's confirmation order. The Court of Appeals remanded the CE Plan to the District Court for a determination of whether, in light of the pre-petition payments made by Combustion Engineering to the CE Settlement Trust under the Master Settlement Agreement and the fact that claimants who received partial payments of their claims under the Master Settlement Agreement participated in the approval of the plan, the treatment of asbestos-related personal injury claims against Combustion Engineering under the CE Plan was consistent with the requirements of the Bankruptcy Code. Combustion Engineering and we have been reviewing the Court of Appeals' decision and considering various options to resolve the asbestos-related liability of Combustion Engineering, Lummus and Basic.

In March 2005, following extensive discussions with certain representatives of various parties, including the Creditors Committee and the Future Claimants Representative appointed in the Combustion Engineering case, we reached an agreement on certain "settlement points" for modifying the CE Plan with a view to bringing it into conformity with the Court of Appeals' decision and for providing a mechanism for resolving finally Lummus' potential asbestos liability. The settlement points contemplate that the modified plan will continue to reflect the CE Plan's fundamental approach of channeling asbestos-related claims against Combustion Engineering to a trust funded in part by other entities of the ABB group of companies. The settlement points provide for us to make an additional contribution of approximately \$232 million to pay present and future asbestos claimants of Combustion Engineering and Lummus. In addition, the settlement points provide that we will pay directly or indirectly up to \$8 million in respect of certain approved legal fees in the Chapter 11 case of Combustion Engineering. The settlement points contemplate that the modified CE Plan will become effective under the Bankruptcy Code concurrently with a separate Chapter 11 plan of reorganization for Lummus. The parties are now working to reach agreement on other issues relating to, and details of, the proposed modified plan and related proceedings involving Lummus and to prepare the related documentation. Each of the proposed plans will require approval of creditors and be subject to court review.

One of the holdings of the Court of Appeals was that the asbestos-related claims against Basic that are not related to Combustion Engineering's operations could not be "channeled" to the proposed trust under the CE Plan. The proposed plans do not address Basic, and we expect that Basic's asbestos-related liabilities will have to be resolved through its own bankruptcy or similar U.S. state court liquidation proceeding, or through the tort system.

### ***Background***

When we sold our 50 percent interest in the former ABB ALSTOM POWER NV joint venture to ALSTOM in May 2000, we retained ownership of Combustion Engineering, a subsidiary that had conducted part of our former power generation business and that now owns commercial real estate that

it leases to third parties. Combustion Engineering is a co-defendant, together with other third parties, in numerous lawsuits in the United States in which the plaintiffs claim damages for personal injury arising from exposure to asbestos in equipment or materials that Combustion Engineering allegedly supplied or was responsible for, primarily during the early 1970s and before.

From 1989 through February 17, 2003 (the date that Combustion Engineering filed for Chapter 11 as described below), approximately 438,000 asbestos-related claims were filed against Combustion Engineering. On February 17, 2003, there were approximately 164,000 asbestos related personal injury claims pending against Combustion Engineering. There were approximately 138,000 such claims pending against Combustion Engineering on December 31, 2002, and approximately 94,000 such claims were pending on December 31, 2001. Of the approximately 164,000 claims that were pending on February 17, 2003, approximately 154,000 are claims by asbestos claimants who participated in the Master Settlement Agreement. Approximately 29,000 new claims were made in the period from January 1, 2003, to February 17, 2003 (all but 111 of which agreed to participate in the Master Settlement Agreement). Approximately 34,500 claims were resolved in 2002 and approximately 27,000 claims were resolved in 2001.

Other entities of ours have sometimes been named as defendants in asbestos-related claims, including Lummus and Basic. At December 31, 2004 and 2003, there were approximately 11,000 claims pending against Lummus and 4,300 and 4,200 claims, respectively, pending against Basic.

Additionally, at December 31, 2004 and 2003, there were approximately 12,400 and 8,700 asbestos-related claims pending against our entities other than Combustion Engineering, Lummus and Basic. These claims are unrelated to Combustion Engineering and will not be resolved in the Combustion Engineering bankruptcy case. Of the 12,400 claims outstanding at December 31, 2004, approximately 3,660 are claims that were brought in the state of Mississippi in the United States, in 7 cases that include multiple plaintiffs and hundreds of co-defendants and make no specific allegations of any relationship between any entity of ours and the plaintiffs. Approximately 4,240 of such claims have been brought in the state of Ohio in the United States by claimants represented by a single law firm in cases that typically name 50 to 60 co-defendants and do not allege any specific linkage between the plaintiffs and any entity of ours. Approximately 2,700 such claims are pending in the state of West Virginia in the United States. The remaining such claims are pending in various jurisdictions. We generally seek dismissals from claims where there is no apparent linkage between the plaintiffs and any entity of ours. To date, resolving claims against our entities other than Combustion Engineering, Lummus and Basic has not had a material impact on our consolidated financial position, results of operations or cash flows.

#### *Negotiations with representatives of asbestos claimants and pre-packaged Chapter 11 filing*

During 2001 and 2002, Combustion Engineering experienced a significant increase in the level of new claims and higher total and per-claim settlement costs as compared to prior years. In October 2002, Combustion Engineering and we determined that it was likely that the expected asbestos-related costs of Combustion Engineering would exceed the value of its assets (\$812 million at September 30, 2002 and \$828 million at December 31, 2002) if its historical settlement patterns continued into the future. In October 2002, Combustion Engineering and we determined to resolve the asbestos-related liability of Combustion Engineering and its affiliates by reorganizing Combustion Engineering under Chapter 11, the principal business reorganization chapter of the U.S. Bankruptcy Code. Combustion Engineering and we determined to structure the Chapter 11 reorganization as a "pre-packaged plan," in which Combustion Engineering would solicit votes from asbestos claimants to approve the plan before the Chapter 11 case was filed with the Bankruptcy Court.

Beginning in October 2002, Combustion Engineering and we conducted extensive negotiations with representatives of certain asbestos claimants with respect to a pre-packaged plan. On November 22, 2002, Combustion Engineering and the asbestos claimants' representatives entered into a Master

Settlement Agreement for settling open asbestos-related personal injury claims that had been filed against Combustion Engineering prior to November 15, 2002. Combustion Engineering also agreed, pursuant to the Master Settlement Agreement, to form and fund the CE Settlement Trust to administer and pay the asbestos-related personal injury claims settled under the Master Settlement Agreement. Under the terms of the Master Settlement Agreement, eligible claimants who met all criteria to qualify for payment were entitled to receive a percentage of the value of their claim from the CE Settlement Trust and retain a claim against Combustion Engineering for the unpaid balance (the "stub claim"). The Master Settlement Agreement divides claims into three categories based on the status of the claim at November 14, 2002, the status of the documentation relating to the claim and whether or not the documentation establishes a valid claim eligible for settlement and payment by Combustion Engineering. The Master Settlement Agreement was supplemented in January 2003 to clarify the rights of certain claimants whose right to participate in a particular payment category was disputed. The Master Settlement Agreement, as supplemented, settles the value of and provides for the partial payment on approximately 154,000 open asbestos-related personal injury claims that had been lodged against Combustion Engineering.

The Master Settlement Agreement, as supplemented, provided that the CE Settlement Trust was to be funded by:

cash contributions from Combustion Engineering in the amount of \$5 million;

cash contributions from ABB Inc., a subsidiary of ABB Ltd, in the amount of \$30 million;

a promissory note from Combustion Engineering in the principal amount of approximately \$101 million (guaranteed by Asea Brown Boveri, now merged into Holdings); and

an assignment by Combustion Engineering of the \$311 million unpaid balance of principal and interest due to Combustion Engineering from Asea Brown Boveri, now merged into Holdings, under a loan agreement dated May 12, 2000 (guaranteed by ABB Ltd).

Approximately 154,000 eligible claimants have entered into the Master Settlement Agreement or adoption agreements with Combustion Engineering and the CE Settlement Trust and have received partial payment on their claims.

***Pre-packaged plan of reorganization***

On January 17, 2003, we announced that Combustion Engineering and we had reached an agreement on a proposed Pre-Packaged Plan of Reorganization for Combustion Engineering under Chapter 11 of the U.S. Bankruptcy Code. The agreement was reached with representatives of certain asbestos claimants with existing asbestos-related personal injury claims against Combustion Engineering (encompassing both claimants who had lodged claims prior to November 15, 2002, and claimants who had filed claims on or after that date and were not eligible to participate in the Master Settlement Agreement) and with the proposed representative of persons who may be entitled to bring asbestos-related personal injury claims in the future.

As proposed, the CE Plan provided for the creation of the Asbestos PI Trust, an independent trust separate and distinct from the CE Settlement Trust, and addressed Asbestos PI Trust Claims, which consist of present and future asbestos-related personal injury claims (including the stub claims of claimants who previously settled pursuant to the Master Settlement Agreement) that arise directly or indirectly from any act, omission, products, or operations of Combustion Engineering, Lummus or Basic. The CE Plan provided that, if it were to become effective, a channeling injunction would be issued under Section 105 of the U.S. Bankruptcy Code pursuant to which the Asbestos PI Trust Claims against ABB Ltd and certain of its affiliates (including Combustion Engineering, Lummus and Basic) would be channeled to the Asbestos PI Trust. The effect of the channeling injunction contemplated by the CE Plan would be that the sole recourse of a holder of an Asbestos PI Trust Claim would be to the Asbestos PI Trust and such holder would be barred from asserting such a claim against ABB Ltd and

the affiliates covered by the injunction (including Combustion Engineering and, under the CE Plan as proposed, Lummus and Basic).

As proposed, the CE Plan provided that on its effective date, the Asbestos PI Trust would be funded with the following:

a \$20 million 5 percent term note (the "CE Convertible Note") with a maximum term of ten years from the effective date of the CE Plan, to be issued by Combustion Engineering and secured by its Windsor, Connecticut real estate and real estate leases (under certain specified contingencies, the Asbestos PI Trust may have the right to convert the term note into ownership of 80 percent of the voting securities of the reorganized Combustion Engineering);

excess cash held by Combustion Engineering on the effective date of the CE Plan (the "Excess CE Cash");

a non-interest bearing promissory note (the "ABB Promissory Note") to be issued by ABB Inc. and ABB Ltd, and guaranteed by certain ABB Ltd subsidiaries, in an aggregate amount of up to \$350 million payable in installments (including two \$25 million payments contingent upon ABB Ltd generating an earnings before interest and taxes margin of 12 percent in 2007 and 2008);

a non-interest bearing promissory note to be issued on behalf of Lummus (the "Lummus Note") in the amount of \$28 million payable in relatively equal annual installments over 12 years;

a non-interest bearing promissory note (the "Basic Note") to be issued on behalf of Basic in the aggregate amount of \$10 million payable in relatively equal annual installments over 12 years;

30,298,913 shares of ABB Ltd (the "CE Settlement Shares"), which had a fair value of \$170 million, \$154 million and \$86 million at December 31, 2004, 2003 and 2002, respectively; and

an assignment by Combustion Engineering, Lummus, and Basic to the Asbestos PI Trust of any proceeds under certain insurance policies. As of December 31, 2004, aggregate unexhausted product liability limits under such policies were approximately \$200 million for Combustion Engineering, approximately \$43 million for Lummus and approximately \$28 million for Basic, although amounts ultimately recovered by the Asbestos PI Trust under these policies may be substantially different from the policy limits. In addition, Combustion Engineering would assign to the Asbestos PI Trust scheduled payments under certain of its insurance settlement agreements (\$78 million at December 31, 2004). (The proceeds and payments to be assigned are together referred to as "Certain Insurance Amounts".)

In addition, the CE Plan as proposed provided that if Lummus were sold within 18 months after the CE Plan's effective date, ABB Inc. would contribute \$5 million to the CE Settlement Trust and \$5 million to the Asbestos PI Trust (together, these payments are referred to as the "Lummus Sale Payments"). If the CE Settlement Trust has ceased to exist at that time, both \$5 million payments would be made to the Asbestos PI Trust, but in no event would this contribution exceed the net proceeds from the sale of Lummus.

Upon the effective date under the CE Plan, ABB Inc. would indemnify the Combustion Engineering estate against up to \$5 million of liability on account of certain contingent claims held by certain indemnified insurers. Further, on the effective date, Asea Brown Boveri (now merged into Holdings) would provide for the benefit of Combustion Engineering a nuclear and environmental indemnity with regard to obligations arising out of Combustion Engineering's Windsor, Connecticut, site. The two indemnities described in this paragraph are referred to as the "Related Indemnities".

*Judicial review process*

The solicitation of votes to approve the CE Plan began on January 19, 2003. Combustion Engineering filed for Chapter 11 in the U.S. Bankruptcy Court in Delaware on February 17, 2003, based on the terms previously negotiated in connection with the CE Plan. On June 23, 2003, the Bankruptcy Court issued its Order Approving the Disclosure Statement but Recommending Withholding of Confirmation of the Plan of Reorganization for Combustion Engineering for Ten Days (the "Initial Ruling") and related findings of fact. The Initial Ruling approved the disclosure statement that was the document used as the basis for soliciting approval of the CE Plan from asbestos claimants and verified the voting results that approved the CE Plan and indicated that the Bankruptcy Court would recommend that the CE Plan be confirmed if Combustion Engineering and we could establish to the court's satisfaction certain specified information. We then submitted the additional information for the court's consideration.

On July 10, 2003, the Bankruptcy Court issued a Supplemental and Amendatory Order Making Additional Findings and Recommending Confirmation of Plan of Reorganization (the "Supplemental Ruling"). The Supplemental Ruling recommended to the U.S. District Court, among other things, that the CE Plan be confirmed.

Following the issuance of the Supplemental Ruling, interested parties had a period during which they could appeal the Initial Ruling and the Supplemental Ruling. This appeal period expired on July 24, 2003. A number of interested parties, including a small number of asbestos claimants and certain insurance companies which historically have provided insurance coverage to Combustion Engineering, Lummus and Basic filed appeals based on various objections to the CE Plan. The District Court held a hearing on July 31, 2003, with respect to the appeals and entered its confirmation order on August 8, 2003.

Various parties appealed the District Court's confirmation order to The United States Court of Appeals for the Third Circuit, which granted a motion for expedition of appeals and ordered that all briefs were to be filed by October 7, 2003. On June 3, 2004, the Court of Appeals held a hearing with respect to the appeals of the confirmation order of the District Court. On December 2, 2004, the Court of Appeals issued its decision (the "Third Circuit Decision").

The effect of the Third Circuit Decision was to reverse the District Court's confirmation order in respect of the CE Plan. The Third Circuit Decision focused on three issues raised by the appealing parties which relate to the ultimate terms of the CE Plan: (i) whether the Bankruptcy Court had "related to" jurisdiction over the claims against the non-debtors, Lummus and Basic, that do not arise from any products or operations of Combustion Engineering (the "non-derivative claims"); (ii) whether the non-debtors, Lummus and Basic, could avail themselves of the protection of the channeling injunction by invoking Section 105 of the Bankruptcy Code and contributing assets to the Asbestos PI Trust; and (iii) whether the two-trust structure and use of stub claims in the voting process comply with the Bankruptcy Code. The Court of Appeals held that there were insufficient factual findings to support "related-to" jurisdiction and that Section 105 of the Bankruptcy Code could not be employed to extend the channeling injunction to the non-derivative claims against nondebtors, such as Lummus and Basic. With regard to the two-trust structure, the Court of Appeals remanded the CE Plan to the District Court to determine whether creditors received fair treatment in light of the pre-petition payments made to the CE Settlement Trust participants and the use of stub claims in the voting process. Among other things, the Court of Appeals instructed the lower courts to consider whether payments under the CE Settlement Trust constituted voidable preferences that were inconsistent with the fair distribution scheme of the Bankruptcy Code.

On December 15, 2004, Combustion Engineering filed a petition seeking a rehearing en banc by the Court of Appeals. Specifically, Combustion Engineering and its immediate parent, Asea Brown Boveri, now merged into Holdings, challenged the holding in the Third Circuit Decision that the Bankruptcy and District Courts did not have "related to" jurisdiction over the non-derivative claims against Lummus and Basic and that Section 105 of the Bankruptcy Code could not be used to extend the channeling injunction to such claims. On January 19, 2005, the Court of Appeals denied the petition for rehearing en banc.

Notwithstanding the Third Circuit Decision, the Master Settlement Agreement, which settles the amount of and provides for partial payment on approximately 154,000 asbestos-related claims, remains effective. Early in the Combustion Engineering bankruptcy case, an asbestos claimant commenced an action against the trustee of the CE Settlement Trust and individuals who had received distributions from such trust, asserting that further distributions by the CE Settlement Trust should be enjoined because the transaction that created the CE Settlement Trust was a voidable preference. The Bankruptcy Court ruled that it would not dismiss that action for lack of standing. On October 22, 2004, the trustee of the CE Settlement Trust moved to dismiss the complaint in that action. This matter is pending and no decision has been rendered by the Court.

Following the Third Circuit Decision, the lower courts assumed jurisdiction over further confirmation proceedings in respect of the CE Plan. On January 27, 2005, the Bankruptcy Court authorized the Future Claimants Representative and the Creditors Committee to file any available bankruptcy-related and similar claims against third parties, including preference claims against certain claimants that did not participate in the CE Settlement Trust, and any potential bankruptcy related claims against us. The Bankruptcy Court further stated that if Combustion Engineering and we cannot agree on modifications to the CE Plan with the Future Claimants Representatives and Creditors Committee, and the representative of Combustion Engineering claimants who opposed the confirmation order, the Bankruptcy Court would appoint an independent representative to prosecute all of the foregoing preference claims and bankruptcy related claims asserted against us. We also entered into a tolling agreement to extend the time period within which bankruptcy related claims against us could be brought.

Since February 17, 2003, a stay and preliminary injunction have barred the commencement and prosecution of certain asbestos-related claims against Combustion Engineering, Lummus, Basic, certain other ABB group entities and certain other parties, including parties indemnified by us. The barred claims include, among others, claims arising from asbestos exposure caused by Combustion Engineering, Lummus or Basic and claims alleging fraudulent conveyance, successor liability and veil piercing. We do not know the number or nature of claims that would now be pending against the protected entities if those legal measures had not been in place.

#### ***Modified CE Plan***

In March 2005, following extensive discussions with certain representatives of various claimants, the Creditors Committee and the Future Claimants Representative, we reached an agreement on certain "settlement points" for modifying the CE Plan with a view to bringing it into conformity with the Third Circuit Decision and for providing a mechanism for resolving finally Lummus' potential asbestos liability.

The settlement points contemplate the following elements for finally resolving both Combustion Engineering's and Lummus' potential asbestos liability:

The modified plan for Combustion Engineering (the "Modified CE Plan") would continue to reflect the CE Plan's fundamental approach of channeling claims against Combustion Engineering to a trust funded, in part, by other entities in the ABB group of companies.

Confirmation and effectiveness of the Modified CE Plan would be obtained concurrently with a Chapter 11 Plan for Lummus (the "Lummus Plan"), acceptances to which would be obtained from voting Lummus asbestos claimants prior to Lummus commencing a Chapter 11 case.

We would contribute to the Asbestos PI Trust the CE Convertible Note, the ABB Promissory Note, the Excess CE Cash and the CE Settlement Shares and would provide the Related Indemnities and assign the Certain Insurance Amounts, as contemplated by the CE Plan, subject to any modifications that may be agreed.

We would make an additional contribution (the "Additional Contribution") of \$232 million. The Additional Contribution will be used as follows: (i) up to \$28 million will be used to fund payment of all current and future asbestos claims against Lummus by a trust created under §524(g) of the Bankruptcy Code pursuant to the Lummus Plan; and (ii) the remaining amounts will be used to provide additional funding under the Modified CE Plan to pay CE's asbestos creditors through the Asbestos PI Trust. Under the Modified CE Plan, the Lummus Sale Payments would not be required and the Lummus Note would be replaced by contributions to a separate Lummus §524(g) trust as discussed below.

Lummus has retained a person to act as a representative for future Lummus asbestos personal injury claimants (the "Lummus FCR"). The parties to the settlement points have agreed that the Lummus FCR will determine the appropriate funding to pay in full all current and future Lummus asbestos claims. In the event the Lummus FCR concludes that such amount exceeds \$28 million, we will increase the amount of our contribution for the benefit of such Lummus claims by the amount in excess of \$28 million, up to an additional \$5 million. If the Lummus FCR concludes that such amount exceeds \$33 million, we will have the option to terminate the settlement with no further obligations under the settlement points.

We will directly or indirectly pay up to \$8 million in respect of certain approved legal fees in the Chapter 11 case of Combustion Engineering.

The Modified CE Plan would provide for a settlement of all pending preference claims and related claims, including any claims against us, our affiliates, and our and their officers, directors and employees, being asserted in the CE case.

The scope of the channeling injunction to be issued under the Modified CE Plan would be the same as under the CE Plan, except that non-derivative claims against Basic would not be subject to the injunction.

Basic would not be addressed in the Modified CE Plan and would therefore not contribute the Basic Note.

The Modified CE Plan would also involve certain other adjustments, including certain changes in the relative amounts to be paid by the CE Asbestos PI Trust to different categories of claimants and changes in the administration of the trust.

In a status conference on April 5, 2005, the Bankruptcy Court instructed the Company to submit the documentation relating to the Modified CE Plan and the Lummus Plan to the Bankruptcy Court within approximately 60 days. We and various other interested parties are now working to reach agreement on open issues, details relating to the Modified CE Plan and the Lummus Plan and the form and substance of the operative documents and related Bankruptcy Court motions and other pleadings. We cannot be certain when those negotiations will be concluded or whether or on what terms the parties will resolve outstanding issues. The Modified CE Plan and the Lummus Plan will become effective only if different classes of their respective creditors vote in favor of the respective plans. The Modified CE Plan and the Lummus Plan will be subject to the approval of the Bankruptcy and District Courts, as well as to further judicial review if appeals are made. While we believe that the Modified CE Plan and the Lummus Plan are consistent with the Third Circuit Decision and other applicable laws and precedents, we cannot be certain whether the courts will approve the plans, nor can we predict whether the plans will receive the needed creditor votes.

We do not know whether any plan of reorganization for Combustion Engineering or Lummus will ultimately be confirmed or whether asbestos-related liabilities of any other ABB group entities would be resolved by any such plan. If for any reason a Chapter 11 plan relating to Combustion Engineering is not eventually confirmed, Combustion Engineering could be required to enter a Chapter 7

proceeding. If for any reason a Chapter 11 plan relating to Lummus is not eventually confirmed, we expect that Lummus' asbestos-related liabilities will have to be resolved through the tort system.

Because the Third Circuit Decision held that non-derivative claims cannot be subject to the CE Plan's proposed channeling injunction, Basic will not be included in the Modified CE Plan. We expect that Basic's asbestos-related liabilities will have to be resolved through its own bankruptcy or similar U.S. state court liquidation proceeding or through the tort system.

If any ABB group entities are not included in the protection offered by the channeling injunction entered pursuant to any Combustion Engineering plan that is confirmed, such entities could be required to resolve in the tort system, or otherwise, current and future asbestos-related claims that are asserted against such entities. Such events would be subject to numerous uncertainties, risk and expense.

If U.S. federal legislation addressing asbestos personal injury claims is passed, which is speculative at this time, such legislation may affect the amount that will be required to resolve the asbestos-related claims against ABB group entities.

### *Effect on our financial position*

*Expenses.* We recorded expenses related to asbestos of \$262 million, \$142 million and \$395 million in loss from discontinued operations, net of tax, and \$1 million, \$3 million and \$25 million in income from continuing operations, net of tax, for 2004, 2003 and 2002, respectively. Loss from discontinued operations, net of tax, for 2004 reflects a charge of \$232 million taken in connection with the agreement we reached in March 2005 on the basic terms of the Modified CE Plan, \$17 million resulting from the mark-to-market adjustment relating to the CE Settlement Shares, a credit of \$6 million resulting from adjustment of the provision for the estimated liability of Basic as described below, and other costs of \$19 million. Loss from discontinued operations, net of tax, for 2003 includes a charge of \$68 million, net of tax, resulting from the mark-to-market adjustment relating to the CE Settlement Shares, a provision of \$41 million, representing the present value of the first two \$25 million payments under the ABB Promissory Note, which were previously considered contingent, as well as \$33 million of other costs. The 2002 amount reflected our estimate of incremental total costs to be incurred based upon the terms of the CE Plan.

*Cash Payments.* Cash payments, before insurance recoveries, related to Combustion Engineering's asbestos-related claims were \$56 million (including \$49 million contributed to the CE Settlement Trust, described above), \$391 million (including \$365 million contributed to the CE Settlement Trust), and \$236 million (including \$30 million contributed into the CE Settlement Trust), in 2004, 2003 and 2002, respectively. Administration and defense costs were \$10 million, \$36 million and \$32 million in 2004, 2003 and 2002, respectively.

Cash payments related to asbestos-related claims against Lummus and Basic made through December 31, 2004 were approximately \$3 million and \$3 million, respectively. Cash payments to resolve asbestos-related claims against entities other than Combustion Engineering, Lummus and Basic have been immaterial to date, totaling less than \$1 million in the aggregate. We have not maintained a reserve for the claims pending against entities other than Combustion Engineering, Lummus and Basic.

*Provisions.* At December 31, 2004, 2003 and 2002, we recorded total provisions on a consolidated basis of \$1,023 million, \$815 million and \$1,095 million in respect of asbestos-related claims and defense costs related to Combustion Engineering, Lummus and Basic. Our provisions in continuing operations for asbestos-related liabilities at December 31, 2003 and 2002, now include \$2 million and \$4 million, respectively, previously classified in liabilities held for sale and in discontinued operations. Based upon the expected implementation of the Modified CE Plan and the Lummus Plan, we recorded provisions of \$985 million and \$33 million, respectively, at December 31, 2004, in accrued liabilities and



other. If the Modified CE Plan and Lummus Plan become effective, certain amounts will be reclassified as of the effective date to other long-term liabilities based on the timing of the future cash payments to the Asbestos PI Trust or any similar trust created under the Lummus Plan. Future earnings will be affected by mark-to-market adjustments relating to the CE Settlement Shares through the effective date of the Plan, as well as contingent payments when they become probable of payment. The provisions as of December 31, 2003 and 2002, were based on our obligations under the CE Plan and assumed that the CE Plan would be confirmed and become effective as proposed.

In light of the decision of the Court of Appeals, we have made a separate provision as of December 31, 2004 with respect to Basic in accordance with Financial Accounting Standard Board Statement No. 5, *Accounting for Contingencies*, and Financial Accounting Standards Board Interpretation No. 14, *Reasonable Estimation of the Amount of a Loss: an interpretation of FASB Statement No. 5*. With respect to Basic, we have established a provision of \$5 million relating to its asbestos-related liabilities based on analysis of historical claims statistics and related settlement costs and a projection of such claims activity over the next several years.

Management believes that it is probable that the full amount of the relevant provisions will be required to settle the respective asbestos-related liabilities of Combustion Engineering, Lummus and Basic. We may incur liability greater than the existing provisions, whether in connection with a modified plan of bankruptcy or otherwise, but management does not believe that the amount of any such incremental liability can be reasonably estimated or that there is a better estimate of these liabilities than the amounts that are provided for.

Our provisions in respect of asbestos-related claims include, as stated above, amounts for each of Combustion Engineering, Lummus and Basic. The assets of Combustion Engineering include amounts receivable of approximately \$221 million, \$232 million and \$241 million at December 31, 2004, 2003 and 2002, respectively, for probable insurance recoveries, which were established with respect to asbestos-related claims.

The ultimate outcome of our efforts to resolve the asbestos-related personal injury claims against Combustion Engineering and other entities of ours (including any such claims against third parties indemnified by entities of ours) remains uncertain. The related costs may be higher than our provisions reflect and could have a material adverse impact on our consolidated financial position, results of operations and cash flows. In the event the Modified CE Plan or Lummus Plan do not become effective, the ultimate cost for the resolution of asbestos-related personal injury claims against Combustion Engineering and Lummus may be significantly higher and could have a material adverse impact on our consolidated financial position, results of operations and cash flows.

**Item 6. Directors, Senior Management and Employees****BOARD OF DIRECTORS**

Our board of directors defines the ultimate direction of the business of ABB and issues the necessary instructions. It determines the organization of the ABB Group and appoints, removes and supervises the persons entrusted with the management and representation of ABB. The internal organizational structure and the definition of the areas of responsibility of our board of directors, as well as the information and control instruments vis-à-vis the executive committee, are set forth in the regulations of the board of directors. We have been granted an exception by the Federal Office of Justice of Switzerland (*Bundesamt für Justiz*) to the rule that a majority of the members of the board of directors of ABB must be citizens of Switzerland with residence in Switzerland according to Article 708 para 1 of the Swiss Code of Obligations.

Our articles of incorporation stipulate that the board of directors must consist of not fewer than seven and no more than 13 members at any time. Swiss law and our articles of incorporation also provide that each director must be a shareholder of ABB Ltd. Directors are elected for terms of one year by the shareholders in a shareholders' meeting. Members of the board of directors whose terms of office have expired are immediately eligible for re-election. Our articles of incorporation do not provide for the retirement or non-retirement of directors under an age-limit requirement. Our internal regulations provide that a director shall resign at the annual general meeting of shareholders taking place in the year of his 70th birthday.

The board of directors appoints its Chairman and one or more Vice Chairmen, as well as the persons entrusted with our management and representation, whom the board of directors is also responsible for removing. At present, the position of Vice Chairman is vacant.

The following table sets forth the names and the years of birth of our directors and their current positions with ABB.

<b>Name</b>	<b>Born</b>	<b>Current Position</b>
Jürgen Dormann	1940	Chairman of the Board
Roger Agnelli	1958	Director
Louis R. Hughes	1949	Director
Hans Ulrich Märki	1946	Director
Michel de Rosen	1951	Director
Michael Treschow	1943	Director
Bernd W. Voss	1939	Director
Jacob Wallenberg	1956	Director

ABB Ltd became the ultimate holding company of the ABB Group on June 28, 1999. The biographies of Messrs. Dormann and Wallenberg also note the years of service they provided to ABB Asea Brown Boveri Ltd, the former parent company of the ABB Group.

*Jürgen Dormann* has been the Chairman of ABB's board of directors since November 2001 and served as ABB's President and Chief Executive Officer from September 5, 2002 until December 31, 2004. He has been a member of ABB's board of directors since June 28, 1999. From 1998 to 1999, he served as a member of the board of directors of ABB Asea Brown Boveri Ltd. He is the vice-chairman of the board of directors of sanofi aventis (France). He is a member of the boards of directors of Adecco (Switzerland), IBM (U.S.) and BG Group (U.K., as from June 1, 2005). Mr. Dormann is a German citizen.

*Roger Agnelli* was elected to ABB's board of directors at the annual general meeting of shareholders on March 12, 2002. He is the President and Chief Executive Officer of Companhia Vale do Rio Doce (Brazil). He is also a member of the board of directors of Duke Energy (U.S.) and Suzano Petroquímica (Brazil, as of April 2005). Mr. Agnelli is a full member of the Economic and Social Development Council (CDGS), an advisory council to the President of Brazil, and member of

the International Investments Council, which advises the President of the Republic of South Africa. He is also President of the Chinese-Brazilian Business Council. Mr. Agnelli is a Brazilian citizen.

*Louis R. Hughes* was elected to ABB's board of directors at the annual general meeting of shareholders on May 16, 2003. Mr. Hughes is the chairman of the board of directors of Maxager Technology and appointed Chief Executive Officer of GBS Laboratories (both U.S.). He is also a member of the boards of directors of BT Group (U.K.), Sulzer (Switzerland) and Electrolux (Sweden). Mr. Hughes was the president and chief operating officer of Lockheed Martin Corp. in 2000 and was an executive vice president of General Motors from 1992 to 2000. He was also the acting chief executive officer of Wavecrest Laboratories from 2002 to 2003. Mr. Hughes is a United States citizen. As announced on October 28, 2004, Louis R. Hughes has taken a temporary leave of absence from ABB's board of directors to serve the United States government as chief of staff of the Afghanistan Reconstruction Group.

*Hans Ulrich Märki* was elected to ABB's board of directors at the annual general meeting of shareholders on March 12, 2002. He is chairman of IBM Europe, Middle East and Africa (France) and a member of the board of directors of Mettler-Toledo International (Switzerland). Mr. Märki is a Swiss citizen.

*Michel de Rosen* was elected to ABB's board of directors at the annual general meeting of shareholders on March 12, 2002. He is the chairman, president and chief executive officer of ViroPharma (U.S.). He is a member of the boards of directors of Ursinus College and Pennsylvania Biotech (both U.S.). He is also a member of the advisory boards of Paul Capital Partners Royalty Fund and the Global Business Coalition on HIV/AIDS (both U.S.). Mr. de Rosen is a French citizen.

*Michael Treschow* was elected to ABB's board of directors at the annual general meeting of shareholders on May 16, 2003. He is the chairman of the boards of directors of Ericsson, Electrolux and the Confederation of Swedish Enterprise (all Sweden). From 1997 to 2002, he was the president and chief executive officer of Electrolux (Sweden). Prior to 1997, he was the president and chief executive officer of Atlas Copco. Mr. Treschow is a Swedish citizen.

*Bernd W. Voss* was elected to ABB's board of directors at the annual general meeting of shareholders on March 12, 2002. He is a member of the supervisory board of Dresdner Bank (Germany). He is also a member of the boards of directors of Allianz Leben, Continental, Quelle, Hapag-Lloyd, Wacker Chemie and Osram (all Germany). Mr. Voss is a German citizen.

*Jacob Wallenberg* has been a member of ABB's board of directors since June 28, 1999. From March 1999 to June 1999, he served as a member of the board of directors of ABB Asea Brown Boveri Ltd. He is the chairman of the board of directors of Investor and W Capital Management (both Sweden). He is vice-chairman of Skandinaviska Enskilda Banken, Atlas Copco and SAS (all Sweden). He is also a member of the boards of directors of the Knut and Alice Wallenberg Foundation, the Nobel Foundation (both Sweden) and the Wharton European Advisory Board (U.S.). Mr. Wallenberg is a Swedish citizen.

## SENIOR MANAGEMENT

Our board of directors has delegated the executive management of ABB to the chief executive officer and the other members of the executive committee. The chief executive officer, and under his direction the other members of the executive committee, are responsible for our overall business and affairs and day-to-day management. The chief executive officer reports to the board regularly, and whenever extraordinary circumstances so require, on the course of our business and financial performance and on all organizational and personnel matters, transactions and other issues relevant to the group.

Upon proposal by the nomination and compensation committee, the executive committee is appointed and discharged by the board and consists of the chief executive officer, the chief financial officer and the other executive vice presidents.

The following table sets forth the names and the years of birth of the members of the executive committee, their current positions with us and the dates of their initial appointment to their current positions.

<b>Name</b>	<b>Born</b>	<b>Current Position</b>	<b>Year of Appointment</b>
Fred Kindle	1959	President and Chief Executive Officer	2005
Michel Demaré	1956	Chief Financial Officer	2005
Dinesh C. Paliwal	1957	Head of Automation Technologies Division	2003
Peter Smits	1951	Head of Power Technologies Division	2003
Gary Steel	1952	Head of Human Resources	2003

*Fred Kindle* has been our Chief Executive Officer since January 2005, after joining ABB on September 1, 2004. Mr. Kindle is a member of the board of directors of VZ Holding Ltd. (Switzerland). Before joining ABB he has been the chief executive officer of Sulzer (Switzerland). Mr. Kindle has been with the Sulzer Group since 1992. In 1999, he became responsible for Sulzer Industries. In 2001, he became chief executive officer of Sulzer. From 2003 to 2004 he has also been a member of Sulzer's board of directors. Mr. Kindle has dual Liechtenstein and Swiss citizenship.

*Michel Demaré* joined ABB as Chief Financial Officer on January 1, 2005. He succeeded Peter Voser, who left ABB on September 30, 2004 to become chief financial officer of Royal Dutch/Shell (Netherlands/U.K.). From 2002 until 2004 Mr. Demaré has been vice president and chief financial officer Europe of Baxter International. From 1984 until 2002 he held various positions within Dow Chemical (U.S.), including group finance director for the global polyolefins and elastomers business from 1997 to 2002. Mr. Demaré is a Belgian citizen.

*Dinesh C. Paliwal* has been the Head of our Automation Technologies division since January 2003. From April 2002 to January 2003, he was our Executive Vice President responsible for our Industries Division. Between January 1, 2001 and March 2002, he was our Executive Vice President responsible for our Process Industries division. From 1999 to 2001, he was responsible for our worldwide activities in the Automation Segment for the paper, printing, metals, mining and cement industries. From 1998 to 1999, he was responsible for our worldwide activities in the Automation Segment for the pulp, paper and printing industries. From 1994 to 1998, he was Vice President responsible for our automation activities in process industries in China and Northeast Asia. From 1990 to 1994, he was Director of Marketing and Sales for our automation activities for the paper industry in Asia. Prior to 1990, he held several positions in sales and project management. Mr. Paliwal has dual Indian and U.S citizenship.

*Peter Smits* has been the Head of our Power Technologies division since January 2003. From 2001 to January 2003, he was Executive Vice President responsible for the Power Technology Products division. From 1998 to 2001, he was Senior Vice President, Business Area Manager Distribution Transformers, at ABB T&D Ltd. From 1994 to 1998, he was President and Country Manager at Asea Brown Boveri SA, Belgium. From 1990 to 1994, he served as President at Pfleiderer Verkehrstechnik GmbH. From 1988 to 1990, he held the position of Vice-President at ABB Schaltanlagen GmbH and was Business Unit Manager within our High-Voltage Switchgear business area. From 1980 to 1988, he held several positions at Asea Lepper GmbH. Mr. Smits is a German citizen.

*Gary Steel* was appointed our Head of Human Resources in January 2003. In 2002, he was the Human Resources Director, Group Finance at Shell. Between 1976 and 2002, he held several human resources and employee relations positions at Shell. Mr. Steel is a British citizen.

## CORPORATE GOVERNANCE

We are committed to the highest international standards of corporate governance, and we support the general principles as set forth in the Swiss Code of Best Practice for Corporate Governance as well as those of the capital markets where ABB shares are listed: the SWX Swiss Exchange, the Stockholm Exchange, the London Stock Exchange, the Frankfurt Stock Exchange and the New York Stock Exchange (where our shares are traded in the form of ADSs).

In addition to the provisions of the Swiss Code of Obligations, our principles and rules on corporate governance are laid down in our articles of incorporation, our board regulations, our standards for corporate governance, the charters of our board committees, the board membership guidelines, several internal directives (such as the directive on insider information) and the code on business ethics. It is the duty of our board of directors to review and amend or propose amendments to those documents from time to time to reflect the most recent developments and practices as well as to ensure compliance with applicable laws and regulations.

In November 2003, the Securities and Exchange Commission approved changes to the New York Stock Exchange's listing standards related to the corporate governance practices of listed companies. Under these rules, listed foreign private issuers, such as ABB, must disclose any significant ways in which their corporate governance practices differ from those followed by U.S. domestic companies under the New York Stock Exchange listing standards. This disclosure can be found on our web site under [www.abb.com/about](http://www.abb.com/about).

### **Duties of Directors and Officers**

The directors and officers of a Swiss corporation are bound, as specified in the Swiss Code of Obligations, to perform their duties with all due care, to safeguard the interests of the corporation in good faith and to extend equal treatment to shareholders in like circumstances.

The Swiss Code of Obligations does not specify what standard of due care is required of the directors of a corporate board. However, it is generally held in Swiss doctrine and jurisprudence that the directors must have the requisite capability and skill to fulfill their function, and must devote the necessary time to the discharge of their duties. Moreover, the directors must exercise all due care that a prudent and diligent director would have taken in like circumstances. Finally, the directors may not take any actions that may be harmful to the corporation.

#### ***Exercise of Powers***

Directors as well as other persons authorized to act on behalf of a Swiss corporation may perform all legal acts on behalf of the corporation which the business purpose as set forth in the articles of incorporation of the corporation, may entail. Pursuant to court practice, such directors and officers can take any action that is not explicitly excluded by the business purpose of the corporation. In so doing, however, the directors and officers must still pursue the duty of due care and the duty of loyalty described above and must extend equal treatment to the corporation's shareholders in like circumstances. Our articles of incorporation do not contain provisions concerning a director's power, in the absence of an independent quorum, to vote on the compensation to themselves or any members of their body.

#### ***Conflicts of Interest***

Swiss law does not have a general provision on conflicts of interest and our articles of incorporation do not limit our directors' power to vote on a proposal, arrangement or contract in which the director or officer is materially interested. However, the Swiss Code of Obligations requires directors and officers to safeguard the interests of the corporation and, in this connection, imposes a duty of care and loyalty on directors and officers. This rule is generally understood and so recommended by the Swiss Code of Best Practice for Corporate Governance as disqualifying directors and officers from participating in decisions, other than in the shareholders' meeting, that directly affect them.

#### ***Confidentiality***

Confidential information obtained by directors and officers of a Swiss corporation acting in such capacity must be kept confidential during and after their term of office.

### *Sanctions*

If directors and officers transact on behalf of the corporation with bona fide third parties in violation of their statutory duties, the transaction is nevertheless valid as long as it is not explicitly excluded by the corporation's business purpose as set forth in its articles of incorporation. Directors and officers acting in violation of their statutory duties whether transacting with *bona fide* third parties or performing any other acts on behalf of the company may, however, become liable to the corporation, its shareholders and its creditors for damages. The liability is joint and several, but the courts may apportion the liability among the directors and officers in accordance with their degree of culpability.

In addition, Swiss law contains a provision under which payments made to a shareholder or a director or any person(s) associated therewith other than at arm's length must be repaid to the company if the shareholder or director or any person associated therewith was acting in bad faith.

If the board of directors has lawfully delegated the power to carry out day-to-day management to a different corporate body, *e.g.*, the executive committee, it is not liable for the acts of the members of that different corporate body. Instead, the directors can only be held liable for their failure to properly select, instruct and supervise the members of that different corporate body.

### **Board Practices**

Board meetings are convened by the chairman or upon request by a director or the chief executive officer. During 2004, five board meetings were held. Written documentation covering the various items of the agenda for each board meeting is sent out in advance to each board member in order to allow the member time to study the covered matters prior to the meetings. Decisions made at the board meetings are recorded in written minutes of the meetings. Our board membership guidelines require that the board of directors be comprised of a substantial majority of independent directors. Currently all board members, with the exception of Jürgen Dormann are independent, non-executive directors. The board of directors has made this determination in accordance with the Swiss Code of Best Practice and the independence criteria set forth in the corporate governance rules of the New York Stock Exchange. Mr. Dormann held also the position of president and chief executive officer from September 5, 2002 until December 31, 2004 in addition to his ongoing role as chairman.

In order to address potential conflict of interests, which Jürgen Dormann in his dual role could have experienced, the board created in 2003 the new position of lead director. The additional tasks of Jacob Wallenberg, who was appointed as lead director, were to act as counselor to the chairman and facilitate the dialogue between the members of the board and the chairman. He held special sessions without the chairman's presence where the chairman's role and performance was discussed. The position of lead director ceased to exist as of January 1, 2005, when Fred Kindle took over the position of president and chief executive officer from Jürgen Dormann, who remains chairman of the board of directors.

Our board of directors has appointed from among its members three board committees, the finance and audit committee, the nomination and compensation committee and the strategy committee, which has recently been dissolved. The duties and objectives of the board committees (except for the strategy committee, which was created in July 2003 and was only a temporary committee) are set forth in charters issued or approved by the board of directors. These committees assist the board in its tasks and report regularly to the board.

The finance and audit committee oversees the financial reporting processes and accounting practices, evaluates the independence, objectivity and effectiveness of external and internal auditors, reviews audit results, monitors compliance with the laws and regulations governing the preparation of our financial statements and assesses the processes relating to our risk management and internal control systems. The finance and audit committee is required to be composed of three or more independent directors who have a thorough understanding of finance and accounting. The chief

financial officer and, as determined by the committee's chairman for matters related to their respective functions, the head of internal audit, as well as the external auditors may participate in the finance and audit committee meetings. Mr. Voss is the chairman of the finance and audit committee, and Messrs. Agnelli and Wallenberg are members. The committee met six times in 2004.

The nomination and compensation committee determines the selection of candidates for the board of directors and its committees, plans for the succession of directors and ensures that newly elected directors receive the appropriate introduction and orientation and that all directors receive adequate continuing education and training to fulfill their obligations. The nomination and compensation committee proposes the remuneration of the members of the executive committee. The nomination and compensation committee is required to be composed of three or more independent directors. Upon invitation by the committee's chairman, the chief executive officer or other members of the group executive committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained. Mr. Märki is the chairman of the nomination and compensation committee, and Messrs. de Rosen and Wallenberg are members. The committee met seven times in 2004.

During a review of the group's medium-term strategy in 2003 and 2004, the board's strategy committee worked in cooperation with the ABB Group executive committee to discuss proposals for the group's future focus and direction. The committee completed its work in 2004 and was then dissolved. Mr. Hughes was the chairman of the strategy committee, and Messrs. Märki and Treschow were members. Most meetings of the strategy committee were also attended by all of the members of the group executive committee. The committee met four times in 2004.

## COMPENSATION

### Board of Directors

For the period from the annual general meeting of shareholders in 2004 to the annual general meeting of shareholders in 2005, the compensation of the board of directors was kept at the previous year's level, which is:

Chairman: CHF 1,000,000 (approximately \$876,271 at December 31, 2004);

Member: CHF 250,000 (approximately \$219,068 at December 31, 2004);

Committee chairman: CHF 50,000 (approximately \$43,814 at December 31, 2004); and

Committee member: CHF 20,000 (approximately \$17,525 at December 31, 2004).

Payments to board members are made in May and November in advance of each term.

Board members receive at least 50 percent (and may elect to receive a higher ratio) of their net compensation (*i.e.*, after deduction of social security costs and withholding tax, where applicable), in ABB shares, which they are entitled to receive at a discount of 10 percent of the average share trading price during a 30-day reference period. During the term of board membership, the ABB shares are kept in a blocked account and may be disposed of only after the respective person has left the board of directors. The gross compensation paid to board members in shares and cash with respect to 2004 amounted to CHF 2,870,000 (\$2,514,897 at December 31, 2004).

## Edgar Filing: ABB LTD - Form 20-F

Our current board members received the following compensation with respect to 2004 (the calculation of the number of shares and the cash amount varies depending on whether the person is subject to taxation at source):

	<b>Total Annual Compensation (gross)</b>	<b>Amount received in cash (net)</b>	<b>Number of shares received</b>
	<b>CHF</b>		
Jürgen Dormann <sup>(1)</sup>	1,000,000		93,382
Roger Agnelli	270,000		27,630
Louis R. Hughes <sup>(2)</sup>	150,000	52,202	7,848
Hans Ulrich Märki	320,000		44,922
Michel de Rosen	270,000	93,901	13,815
Michael Treschow	270,000	93,901	13,815
Bernd W. Voss	300,000		30,832
Jacob Wallenberg	290,000		29,688
<b>Total</b>	<b>2,870,000</b>	<b>240,004</b>	<b>261,932</b>

(1) Jürgen Dormann received this compensation in addition to his compensation as chief executive officer (see below).

(2) Louis R. Hughes received compensation only for the first semester as thereafter he took a temporary leave of absence (see above).

With the exception of Jürgen Dormann for the period during which he served as both chairman of the board and chief executive officer, board members do not receive pension benefits and are not eligible to participate in any of our incentive programs.

No payments were made to former board members in 2004.

### Executive Committee

Members of the group executive committee receive annual base compensation. They are further eligible for annual bonus compensation, determined in accordance with the principles explained below.

In addition to receiving annual base and bonus compensation, members of the group executive committee may participate in the newly created employee share acquisition plan and performance incentive share plan. Some members of the group executive committee have participated in the earlier launches of our management incentive plan (MIP). Group executive committee members receive customary additional benefits such as a company car and health insurance compensation and contributions to children education in some cases (see table below).

The table below shows the gross payments (i.e. compensation before deduction of employee social insurance and pension contributions) that were made to the members of the group executive committee with respect to 2004, as well as the employer's part of the ordinary pension contributions. All members of the group executive committee are insured in the ABB Pension Fund, the ABB Supplementary Insurance Plan and the Tödi Foundation (the regulations are available under [www.abbvorsorge.ch](http://www.abbvorsorge.ch)), with the exception of Dinesh Paliwal, who is insured under the U.S. pension plan. The table also shows the numbers of conditionally granted shares under the performance incentive share plan (see "Performance Incentive Share Plan"). The exact number of shares to be received will be known in March 2006. In addition to the figures provided in the table below, Peter Smits and Gary Steel, but none of the other members of the group executive committee, participate in the employee share acquisition plan (see



## Edgar Filing: ABB LTD - Form 20-F

details of the plan further below) with the maximum annual savings amount of CHF 9,000 (\$7,886 at December 31, 2004).

	<u>Currency</u>	<u>Salary</u>	<u>Bonus<sup>(1)</sup></u>	<u>Additional compensation</u>	<u>Total annual compensation<sup>(8)</sup></u>	<u>Employer's pension contributions</u>	<u>No. of shares granted<sup>(2)</sup></u>	<u>Costs of company car</u>	<u>Costs of health insurance</u>	<u>Costs of Children education</u>
Jürgen Dormann <sup>(3)</sup>	CHF	3,372,508	1,046,250	0	4,418,758	1,352,544	0	31,440	3,926	0
Fred Kindle <sup>(4)</sup>	CHF	433,336	400,000	200,000	1,033,336	99,607	130,480	5,814	1,787	0
Dinesh Paliwal <sup>(5)</sup>	USD	654,167	557,125	800,000	2,011,292	370,970	110,475	24,000	22,365	114,905
Peter Smits	CHF	862,500	743,850	0	1,606,350	237,407	113,282	41,738	7,925	0
Gary Steel	CHF	670,840	585,675	0	1,256,515	170,134	89,193	31,475	8,093	64,700
Peter Voser <sup>(6)</sup>	CHF	600,837	498,000	0	1,098,837	132,997	0	30,740	5,269	0
<b>Total<sup>(7)</sup></b>	<b>CHF</b>	<b>6,686,556</b>	<b>3,909,566</b>	<b>1,112,960</b>	<b>11,709,082</b>	<b>2,416,039</b>	<b>443,430</b>	<b>168,596</b>	<b>52,523</b>	<b>195,830</b>

- (1) The table above provides compensation amounts with respect to 2004 on an accrual basis. Bonuses with respect to 2004 were paid in 2005.
- (2) All such shares were granted under the Performance Incentive Plan. The shares will only vest if certain targets are met.
- (3) This compensation as chief executive officer is in addition to the compensation received as chairman of the board.
- (4) As Fred Kindle joined ABB on September 1, 2004, this table shows his salary from September 1, 2004 until December 31, 2004. The additional compensation was for share options due to change of employment. The number of shares conditionally granted under the Performance Incentive Share Plan is pro-rated.
- (5) As Dinesh Paliwal has a U.S. employment contract, he received his salary in U.S. dollars. His pension contributions are based on the U.S. pension plan. The additional compensation of USD 800,000 was paid in January 2005 as a stay-on bonus agreed by the previous management for staying until December 31, 2004.
- (6) As Peter Voser left ABB on September 30, 2004, this table shows his salary from January 1, 2004 until September 30, 2004. The bonus of CHF 498,000 is a pro-rated performance bonus for 2004.
- (7) For the purpose of calculating the total, the U.S. dollar amounts relating to Dinesh Paliwal have been converted into Swiss francs using the noon buying rate for Swiss francs on December 31, 2004 (\$1.00 = CHF 1.1412).
- (8) Excluding Employer's pension contributions, costs of the company car, costs of health insurance, contributions to children education and the number of shares conditionally granted.

### Bonus determination

In 2003, ABB introduced a structure for aligning the performance expectations of its senior managers.

Group executive committee members, corporate staff and country managers of the 19 largest countries receive targets and are measured on ABB Group results, rather than on the basis of individual businesses. Business area managers and local country divisional managers receive targets and are measured on ABB Group results (60 percent) and on their business area or divisional results (40 percent). At least 20 percent of this "scorecard" must be made up of qualitative measurements relating, for example, to customers, employees or an issue of focus for the ABB Group.

In addition to this group of senior managers, all other participating managers are measured with a minimum of 30 percent on ABB Group results. Resulting bonuses are paid in March each year after full-year results are announced. In applying the scorecard principles, group executive committee members have a maximum bonus opportunity of 100 percent of their base salary.

### Employee participation programs

## Edgar Filing: ABB LTD - Form 20-F

In order to align its employees' interests with the business goals and financial results of the company, we operate a number of participation programs, linked to ABB's shares, which are described below.

### **Employee share acquisition plan (ESAP)**

To incentivize employees, we granted stock options under an Employee Share Acquisition Plan (ESAP Plan) in November 2004. In the initial launch of the ESAP Plan, employees in eleven countries, including the United States, were invited to participate. The ESAP Plan is an employee stock option plan with a savings feature. Employees save over a twelve-month savings period, by way of monthly salary deductions. The maximum monthly savings amount is the lower of 10 percent of gross monthly salary or the local currency equivalent of CHF 750. At the end of the savings period, employees choose whether to exercise their stock options using their savings plus interest to buy ABB Ltd shares (American Depository Shares (ADS) in the case of employees in the United States) each ADS

representing one registered share of the Company) at the exercise price set at the grant date, or have their savings returned with interest. The savings are accumulated in a bank account held by a third party trustee on behalf of the participants and earn interest.

The maximum number of shares that each employee can purchase has been determined based on the exercise price and the aggregate savings for the twelve-month period, increased by 10 percent to allow for currency fluctuations. If, at the exercise date, the balance of savings plus interest exceeds the maximum amount of cash the employee must pay to fully exercise his stock options, the excess funds will be returned to the employee. If the balance of savings and interest is insufficient to permit the employee to fully exercise his stock options, the employee has the choice but not the obligation, to make an additional payment so that the employee may fully exercise his stock options.

If an employee ceases to be employed by us, the accumulated savings as of the date of cessation of employment will be returned to the employee and the employee's right to exercise his stock options will be forfeited. Employees can withdraw from the ESAP Plan at any time during the savings period and will be entitled to a refund of their accumulated savings.

The exercise price per share and ADS of CHF 6.95 and \$5.90, respectively, was determined using the respective closing price of the ABB Ltd share on SWX Swiss Exchange (virt-x) and ADS on the New York Stock Exchange on November 9, 2004, the grant date. We granted stock options, such that, if fully exercised, we would issue 7,548,360 registered shares (including shares represented by ADS). The aggregate fair value of the awards at the date of grant was \$5 million, assuming zero percent dividend yield, expected volatility of 28.25 percent, a risk-free interest rate of 0.97 percent and a life of one year from the grant date. Forfeitures since the date of the grant have been insignificant. See Note 22 to the Consolidated Financial Statements for additional information regarding the Employee Share Acquisition Plan.

#### **Management Incentive Plan (MIP)**

We have a management incentive plan under which approximately 1,200 key employees received warrants and warrant appreciation rights for no consideration over the course of eight launches from 1998 to 2004. The warrants are exercisable for shares at a predetermined price, not less than the fair market value as of the date of grant. Participants may also sell the warrants rather than exercise the right to purchase shares. Equivalent warrants are listed on the SWX Swiss Exchange, which facilitates valuation and transferability of warrants granted under the management incentive plan.

Each warrant appreciation right entitles the holder to an amount in cash equal to the market price of one equivalent warrant on the SWX Swiss Exchange on the date of exercise of the warrant appreciation right. Warrant appreciation rights are not transferable. Participants may exercise or sell warrants or exercise warrant appreciation rights only during the 30 days immediately following publication of our interim or annual results. No exercise or sale is permitted until after the vesting period, which is three years from date of grant, although vesting restrictions can be waived in certain circumstances such as death or disability. All warrants and warrant appreciation rights expire six years from the date of grant.

As of March 31, 2005, the warrants outstanding represented the rights to acquire 21,894,263 of our shares (representing less than 2 percent of our total outstanding shares), including the right of the current members of our executive committee to acquire an aggregate of 740,330 shares. Also on that date, the warrant appreciation rights represented the rights to receive the cash equivalent to the market price of 131,030,020 warrants, including the right of the current members of our executive committee to receive the cash equivalent to the market price of 2,350,000 warrants. Our obligations under the management incentive plan are covered by contingent share capital. See Note 22 to the Consolidated Financial Statements for additional information regarding the management incentive plan.

The amounts of warrants outstanding include those instruments held by employees of the former ABB ALSTOM POWER joint venture, a discontinued operation. Under the terms and conditions of the management incentive program, employees of the former ABB ALSTOM POWER joint venture retain their entitlements in the management incentive plan.

As of March 31, 2005, 55,230,560 warrants representing the right to purchase 13,923,413 shares (representing less than 1 percent of our total outstanding shares) were exercisable and 80,540,520 warrant appreciation rights were exercisable.

## Edgar Filing: ABB LTD - Form 20-F

The following table sets forth the number of warrants outstanding under the management incentive plan as of March 31, 2005.

Launch (Year)	Warrants Outstanding	Exercise Ratio (Warrants: Shares)	Number of Shares Underlying Warrants	Exercise Price (CHF)	Expiration Date
3 (1999)	4,648,060 <sup>(1)</sup>	1:0.2521	1,171,758 <sup>(1)</sup>	29.75	06/10/05
4 (1999)	14,565,000 <sup>(1)</sup>	1:0.2521	3,671,781 <sup>(1)</sup>	32.73	11/11/05
5 (2000)	19,630,000 <sup>(1)</sup>	1:0.2521	4,948,648 <sup>(1)</sup>	42.05	06/13/06
6 (2001)	16,387,500 <sup>(1)</sup>	1:0.2521	4,131,226 <sup>(1)</sup>	13.49	12/10/07
7 (2003)	25,379,250	1:0.2000	5,075,850	7.00	12/08/09
8 (2004)	14,475,000	1:0.2000	2,895,000	7.50	12/13/10

(1) All of the warrants from Launches 3, 4, 5 and 6, representing the right to purchase an aggregate of 13,923,413 shares, are currently exercisable.

The following table sets forth the number of warrant appreciation rights outstanding under the management incentive plan as of March 31, 2005.

Launch (Year)	Warrant Appreciation Rights Outstanding <sup>(1)</sup>	Expiration Date
3 (1999)	345,520	06/09/05
4 (1999)	16,700,000	11/10/05
5 (2000)	30,335,000	06/12/06
6 (2001)	33,160,000	12/09/07
7 (2003)	19,999,500	12/07/09
8 (2004)	30,490,000	12/13/10

(1) With respect to each launch, the warrant appreciation right represents a future right to receive the cash equivalent of the market price of a warrant issued in the same launch year.

### Performance incentive share plan

In December 2004, we introduced a performance incentive share plan (Performance Plan) for members of our Group executive committee (EC Members). EC Members did not participate in the management incentive plan in 2004.

The Performance Plan involves annual conditional grants of ABB Ltd shares (or ADSs where deemed appropriate by the Nomination and Compensation Committee). The number of shares conditionally granted is dependent upon the base salary of the EC Member. The actual number of shares that the participants will receive free of charge at a future date is dependent on 1) the performance of ABB Ltd shares during a defined period (Evaluation Period) compared to those of a selected peer group of publicly-listed multinational companies and 2) the term of service of the respective EC Member in that capacity during the Evaluation Period. The actual number of shares received after the Evaluation Period cannot exceed 100 percent of the conditional grant.

The Evaluation Period of the initial launch was defined as the period from March 15, 2004, to March 15, 2006. The reference price of CHF 7.68 for the purpose of comparison with the peers was calculated as the average of the closing prices of the ABB Ltd share on SWX Swiss Exchange (virt-x) over the 20 trading days preceding March 15, 2004.

Our performance compared to our peers over the Evaluation Period will be measured as the sum, in percentage terms, of the average percentage price development of the ABB share price over the Evaluation Period and an average annual dividend yield percentage (Our Performance).

In order for shares to vest, Our Performance over the Evaluation Period must be positive and equal to or better than half of the defined peers. The actual number of shares to be delivered will be

dependent on our ranking in comparison with the defined peers. The full amount of the conditional grant will vest when Our Performance is better than three-quarters of the defined peers.

If an EC Member gives notice of resignation or, under certain circumstances is given notice of termination, and the vesting period has not expired, then the right to shares is forfeited. In the event of death or disability during the vesting period, the conditional grant size for that participant is reduced pro rata based on the remaining vesting period. An evaluation of the Company's Performance for the Evaluation Period up to the date of death or disability is made to establish the number of shares that vest. If a Performance Plan participant ceases to be an EC Member for reasons other than described above, the conditional grant size is reduced pro rata based on the portion of the vesting period remaining when the participant ceases to be an EC Member. In respect of a Performance Plan grant for which the vesting period has not expired, the Nomination and Compensation Committee can invite a new EC Member to receive a conditional grant, adjusted to reflect the shorter service period.

In 2004, 443,430 shares were conditionally granted to EC Members. In January 2005, a further 59,001 shares were conditionally granted under the 2004 launch to Michel Demaré as a new EC Member. See Note 22 to the Consolidated Financial Statements for additional information regarding the Performance Incentive Share Plan.

#### **Compensation to former members of the group executive committee**

In 2004, we made a total payment of CHF 1,454,722 (\$1,274,730 at December 31, 2004) gross to two former members of the group executive committee who departed before the calendar year 2004, in fulfillment of contractual pension commitments (whereof CHF 589,592 (\$516,642 at December 31, 2004) was made in January 2004, as already reported in the 2003 annual report on Form 20-F).

#### **Employment Contracts**

None of our board members or executive committee members benefits from a "golden parachute" clause which would become effective upon a change of control. Employment contracts normally contain notice periods of 12 months for executive committee members, during which they are entitled to salaries and bonuses. No director has a contract with us providing for further benefits upon termination of his board membership, other than pursuant to applicable employment agreements in case of simultaneous termination of their employment.

#### **Additional fees and remuneration**

Other than as disclosed herein, none of the members of our board of directors, our group executive committee, or persons closely linked to any of them received any additional fees and remunerations for services rendered to us. A closely linked person includes a spouse, children below the age of eighteen, legal or natural person acting as a fiduciary and legal entities controlled by a member of the board of directors or the executive committee.

#### **Loans and guarantees granted to the board of directors or group executive committee.**

We have not granted any loans or guarantees to our board members or members of our group executive committee.

### **SHARE OWNERSHIP**

Under our management incentive plan, certain members of the executive committee have received warrants and warrant appreciation rights in the years 1998 to 2003, although there were no grants to members of the executive committee in 2002 and 2004. For details of the various warrant launches please see "Item 6. Directors, Senior Management and Employees Management Incentive Plan."

## Edgar Filing: ABB LTD - Form 20-F

As of March 31, 2005 the current members of the board of directors and executive committee held the following numbers of shares (or ADSs representing such shares), warrants and warrant appreciation rights:

	Number of Shares	Number of Shares granted <sup>(2)</sup>	Number of Warrants and Warrant Appreciation Rights Granted under Management Incentive Plan			
			Launch Year 1999	Launch Year 2000	Launch Year 2001	Launch Year 2003
Jürgen Dormann	673,797					1,000,000
Roger Agnelli	98,243					
Louis R. Hughes	44,504					
Hans Ulrich Märki	240,499					
Michel de Rosen	68,843					
Michael Treschow	51,898					
Bernd W. Voss	136,970					
Jacob Wallenberg	124,017					
Fred Kindle	2,500	130,480				
Dinesh Paliwal <sup>(1)</sup>	110,000	110,475	100,000	250,000	1,000,000	1,000,000
Peter Smits	51,000	113,282	100,000	250,000	1,000,000	1,000,000
Gary Steel		89,193				1,000,000
Michel Demaré <sup>(1)</sup>	500	59,001				
<b>Total</b>	<b>1,602,771</b>	<b>502,431</b>	<b>200,000</b>	<b>500,000</b>	<b>2,000,000</b>	<b>4,000,000</b>

(1) Shares held jointly with his wife.

(2) All such shares were granted under the Performance Incentive Plan. The shares will only vest if certain targets are met.

The current members of our board of directors and executive committee owned less than 1 percent of our total shares outstanding as of March 31, 2005.

Other than as stated in the table above, no person closely linked to any member of the executive committee holds any shares of ABB or options in ABB shares. A closely linked person includes a spouse, children below the age of eighteen, legal or natural person acting as a fiduciary and legal entities controlled by a member of the board of directors or the executive committee.

Share amounts provided in this section do not include the shares beneficially owned by Investor AB, of which Mr. Wallenberg is chairman. See "Item 7. Major Shareholders and Related Party Transactions Major Shareholders."

### EMPLOYEES

As of April 30, 2005, we employed approximately 102,100 people. A breakdown of our employees by geographic region for the years ended December 31, 2004, 2003 and 2002, is as follows:

Region	At December 31,		
	2004	2003	2002
Europe	60,200	70,500	89,200
The Americas	16,300	19,000	23,700
Asia	16,500	15,700	15,900
Middle East and Africa	9,500	11,300	10,300

Edgar Filing: ABB LTD - Form 20-F

At December 31,

Total	102,500	116,500	139,100

The proportion of our employees that are represented by labor unions or are the subject of collective bargaining agreements varies based on the labor practices of each country in which we operate. We estimate that approximately 63 percent of all ABB Group employees are covered by collective bargaining agreements. We believe that our employee relations are good.

**Item 7. Major Shareholders and Related Party Transactions****MAJOR SHAREHOLDERS**

To the best of our knowledge, as of May 23, 2005, the following persons held 5 percent or more of our total current issued share capital:

Name	Number of Shares Owned	Total Percentage of Share Capital
Investor AB <sup>(1)(2)</sup>	181,975,142	8.8%
FMR Corp. <sup>(3)</sup>	152,535,942	7.4%

(1) Mr. Jacob Wallenberg, a member of our board of directors, is the chairman of Investor AB. The number of shares indicated above does not include 124,017 shares owned by Mr. Wallenberg as an individual and earned as compensation for services as a member of our board of directors. See "Item 6. Directors, Senior Management and Employees Compensation."

(2) According to a Schedule 13D filed with the U.S. Securities and Exchange Commission on November 22, 2002, Investor AB first acquired in excess of 5 percent of our total share capital on November 4, 2002, when it had beneficial ownership of 120,067,731 of our registered shares, which at that time constituted 10.01 percent of our total share capital. On March 8, 2005, Investor AB amended its Schedule 13D, stating that it had beneficial ownership of 187,374,142 registered shares, a reduction in its holdings from the former number of 204,115,142 registered shares. Based on information from our share register, Investor AB subsequently further reduced its holdings to 181,975,142 shares.

(3) In its notice to us, FMR Corp. indicated that as of April 7, 2005, the number of shares held or deemed to be held by FMR Corp. and Fidelity International Limited and their respective direct and indirect subsidiaries together was 152,535,942 shares. To our knowledge, neither FMR Corp. or Fidelity International Limited has filed a Schedule 13D or other statement with the U.S. Securities and Exchange Commission concerning its beneficial ownership in our registered shares, and we have not been able to ascertain whether FMR Corp. beneficially owns 5% or more of our outstanding registered shares pursuant to the rules of the Securities Exchange Act of 1934, as amended.

On March 19, 2003, pursuant to the rules of the Federal Act on Stock Exchanges and Securities Trading (the "Swiss Stock Exchange Act"), the Capital Group International, Inc. and certain of its affiliates announced that, as at March 11, 2003, it held a total of 64,043,388 of our registered shares, which at that time constituted 5.33 percent of our total share capital. On July 30, 2003, Capital Group International, Inc. reported pursuant to the rules of the Swiss Stock Exchange Act that as at July 22, 2003, it held a total of 59,978,124 of our registered shares, which at the time constituted less than 5 percent of our total share capital. On December 1, 2003, Capital Group International, Inc. and certain of its affiliates filed a Schedule 13D with the U.S. Securities and Exchange Commission, stating that as at November 21, 2003, these shareholders beneficially owned 84,099,190 of our registered shares, which at the time constituted 6.8 percent of our total share capital. On February 13, 2004, these shareholders amended their Schedule 13D, stating that as at December 31, 2003, Capital Group International, Inc. and certain of its affiliates held 133,888,830 of our registered shares, which at the time constituted 6.5 percent of our total share capital. On April 30, 2004, pursuant to the rules of the Swiss Stock Exchange Act, these shareholders announced that as at April 23, 2004, they owned less than five percent of our registered shares. On February 14, 2005, Capital Group International, Inc. and certain of its affiliates amended their Schedule 13D, stating that at December 31, 2004, these shareholders beneficially owned 184,350 registered shares, which at the time constituted less than 1 percent of our total share capital.

Under our articles of incorporation, each registered share represents one vote. Major shareholders do not have different voting rights.



To our knowledge, we are not directly or indirectly owned or controlled by any government or by any other corporation or person.

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who reach, exceed or fall below the thresholds of 5 percent, 10 percent, 20 percent, 33<sup>1</sup>/<sub>3</sub> percent, 50 percent or 66<sup>2</sup>/<sub>3</sub> percent of the voting rights of a Swiss listed corporation must notify the corporation and the exchange(s) in Switzerland on which such shares are listed of such holdings in writing within four trading days, whether or not the voting rights can be exercised. Following receipt of such a notification, the corporation must inform the public within two trading days.

An additional disclosure requirement exists under the Swiss Federal Code of Obligations, according to which we must disclose individual shareholders and groups of shareholders and their shareholdings if they hold more than 5 percent of all voting rights and we know or have reason to know of such major shareholders. Such disclosures must be made once a year in the notes to the financial statements as published in our annual report.

At April 14, 2005, we had approximately 288,000 shareholders. Approximately 30,000 were U.S. holders, of which approximately 700 were record holders. Based on the share register, U.S. holders (including holders of ADSs) held approximately 6 percent of the total number of shares issued, including treasury shares, at that date.

### RELATED PARTY TRANSACTIONS

In the normal course of our industrial activities, we sell products and derive certain other revenues from companies in which we hold an equity interest. The revenues derived from these transactions are not material for ABB Ltd. In addition, in the normal course of our industrial activities, we purchase products from companies in which we hold an equity interest. The amounts involved in these transactions are not material for ABB Ltd. Also, in the normal course of our industrial activities, we engage in transactions with businesses that we have divested. We believe that the terms of the transactions we conduct with these companies are negotiated on an arm's length basis.

We have participations in joint ventures and affiliated companies, which are accounted for using the equity method. Many of these entities have been established to perform specific functions, such as constructing, operating and maintaining a power plant. In addition to our investments, we may provide products to specific projects, may act as contractor of such projects or may operate the finished products. We may also grant lines of credit to these entities or for specific projects and guarantee their obligations, as discussed under the section entitled "Off-balance sheet arrangements" above. These joint ventures, affiliated companies or project-specific entities generally receive revenues either from the sale of the final product or from selling the output generated by the product. The revenue usually is defined by a long-term contract with the end user of the output.

Our risk with respect to these entities is substantially limited to the carrying value of the companies on our Consolidated Balance Sheets. The carrying value for the equity accounted companies at December 31, 2004 and 2003, was \$596 million and \$642 million, respectively.

Our 2004 and 2003 Consolidated Financial Statements include the following aggregate amounts related to transactions with equity accounted investees and other related parties, including related party transactions, that are recorded in loss from discontinued operations, net of tax, and assets and liabilities held for sale and in discontinued operations:

	Year ended December 31,	
	2004	2003
	(U.S. dollars in millions)	
Revenues	\$ 57	\$ 99
Receivables	11	105
Other current assets	13	23
Financing receivables (non-current)	45	22
Payables	1	6
Other current liabilities	1	4
Short-term borrowings	18	32
Non-current liabilities	4	2

	Year ended December 31,	
Long-term borrowings	\$	\$ 48
	127	

## Edgar Filing: ABB LTD - Form 20-F

In December 2001, we entered into, and, in April 2002, we amended and restated, a \$3 billion 364 day revolving credit facility. Skandinaviska Enskilda Banken ("SEB") was one of the lenders under the credit facility with a \$155 million commitment representing approximately 5 percent of the total commitment available to us under the credit facility. In December 2002, we replaced that credit facility with a \$1.5 billion 364 day revolving credit facility. SEB was also a lender under this credit facility, with a \$145 million commitment, representing approximately 9.6 percent of the total commitment available to us. In addition, Dresdner Bank Luxembourg S.A. was a lender under the \$1.5 billion credit facility, with a \$97 million commitment, representing approximately 6.5 percent of the total commitment available to us. We repaid and cancelled the \$1.5 billion bank facility in December 2003. On November 17, 2003, we entered into a new unsecured syndicated \$1 billion three year revolving credit facility, which became available in December 2003 after the fulfillment of certain conditions including the repayment and cancellation of the former \$1.5 billion facility. Each of SEB and Dresdner Bank Luxembourg S.A. has committed to \$70.8 million out of the \$1 billion total. Jacob Wallenberg, a member of our board of directors, is the vice-chairman of SEB and Bernd W. Voss, a member of our board of directors, is a member of the supervisory board of Dresdner Bank AG.

We consider our relationships with SEB and Dresdner Bank to be among our primary banking relationships. In addition to participating in the credit facilities described above, each of these banks has from time to time provided commercial banking, lending, investment banking and financial advisory services to us and our affiliates in the ordinary course of business. They have received customary fees and/or commissions for such services. We expect to continue to conduct transactions with them in the future on an arm's length basis.

In June 2003, we entered into a 10 year global framework agreement with International Business Machines Corporation ("IBM") to outsource our information systems infrastructure services to IBM. This global framework agreement forms the basis for country agreements entered into with IBM in 15 countries (status as of December 31, 2004) in Europe, North America and our headquarters representing a significant portion of our information systems infrastructure. The agreement involved the transfer to IBM of 800 of our employees, in addition to the 380 employees transferred under pilot programs prior to 2003. Our total expenditure in respect of the agreement will amount to approximately \$1.7 billion over 10 years, based on the current level of usage of the services. While the agreement was negotiated and transacted at arm's length with IBM, it should be noted that Jürgen Dormann, our chairman (who at the time also served as our president and chief executive officer), was a member of the board of directors of IBM until April 29, 2003, and has again been appointed member of IBM's board of directors as of February 22, 2005. Hans Ulrich Märki, a member of our board of directors, is chairman of IBM Europe, Middle East and Africa.

During 2004 and during the first four months of 2005, we were party to several contracts with Companhia Vale do Rio Doce (CVRD), a Brazilian company with operations in mining, logistics (railways and ports) and power generation, and its subsidiaries. The largest contracts were for engineering services and the supply of electrical equipment for CVRD's pellets plant in the North of Brazil with a value of approximately \$4.6 million. There are also various purchase orders for spare parts and machinery in general. The total value of such contracts is approximately \$17 million. Roger Agnelli, a member of our board of directors, is president and chief executive officer of CVRD.

We are a supplier of transmission and distribution equipment to Duke Power. In 2004, we supplied turnkey installation support for both capital improvements and operation and maintenance projects. We recognized revenues in 2004 from Duke Power of \$10 million, with a turnkey circuit breaker replacement order representing \$3 million of that total. Roger Agnelli, a member of our board of directors, is a member of the board of directors of Duke Energy, the parent corporation of Duke Power.

In February 2004, we completed the sale of Etavis AG, our Building Systems business located in Switzerland, but retained a 10 percent ownership interest. In connection with this transaction, Etavis AG and our wholly owned subsidiary ABB Switzerland Ltd entered into a loan agreement, pursuant to

which we have extended a loan in the amount of CHF 1,858,974 to Etavis AG. This loan bears an interest at an annual rate of 3.5 percent. The largest amount of this loan outstanding during the period covered by this report was CHF 1,909,941 (or \$1,673,625) as at December 31, 2004. As of April 27, 2005, the outstanding amount of this loan was CHF 1,909,941. Additionally, under the terms of the sale agreement, ABB Switzerland Ltd and our other affiliates in Switzerland are obligated to continue using Etavis AG as their preferred installations service provider until September 2005. In addition, we have agreed to use our best efforts to grant Etavis AG "most-favored nation" treatment for our new building technology products in Switzerland until March 2006.

There are no cross-shareholdings in excess of 5 percent of the share capital or the voting rights between ABB and another company.

**Item 8. Financial Information**

**CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION**

See "Item 18. Financial Statements" for a list of financial statements contained in this report.

**LEGAL PROCEEDINGS**

We are involved in legal proceedings from time to time incidental to the ordinary conduct of our business. These proceedings principally involve matters relating to warranties, personal injury, damage to property, environmental liabilities and intellectual property rights.

ABB Barranquilla Inc. ("ABB Barranquilla"), a subsidiary of our ABB Equity Ventures Inc. ("ABB Equity Ventures") subsidiary, is an equity investor in Termobarranquilla S.A., Empresa de Servicios Publicos ("TEBSA"), which owns a Colombian independent power generation project known as Termobarranquilla. One of the other shareholders of TEBSA is Corporación Electrica de la Costa Atlántica ("CORELCA"), a government-owned Colombian electric utility. CORELCA also purchases the electricity produced from the Termobarranquilla project. In addition to our equity investment, our former power generation business was EPC contractor for Termobarranquilla. The project was awarded to us and another company, as joint bidders, after a competitive bidding process in 1994. The co-bidder manages the operation and maintenance of the facility. We entered into certain side agreements with the co-bidder for a sharing and reallocation of a portion of the amounts paid to us and to the co-bidder under the EPC contracts and the operation and maintenance contract. These side agreements were not disclosed at the time they were entered into to TEBSA or CORELCA. They also were not disclosed to the lenders who provided financing to TEBSA for the project, including U.S. Overseas Private Investment Corporation and U.S. Export Import Bank, at the time of the closing of such financing, as required pursuant to the lending documents.

On June 28, 2002, ABB Barranquilla, ABB Equity Ventures, the co-bidder, TEBSA and CORELCA settled all claims and potential claims by TEBSA and CORELCA arising out of the entry into or performance of the side agreements. CORELCA and TEBSA released and discharged ABB and its affiliates from any claims that TEBSA and CORELCA had, may have or may thereafter claim to have, arising on or before June 28, 2002 (the effective date of the settlement) and whether or not previously asserted, which in any way may arise out of or relate to the entry into or the performance of any of the side agreements. As consideration, we terminated the side agreements, paid \$13 million to CORELCA, and reimbursed CORELCA for its legal expenses. We also agreed to indemnify (i) TEBSA for any and all penalties, fines and interest, if any, incurred by TEBSA arising out of or in connection with the entry into or performance of the side agreements and (ii) CORELCA for liabilities, costs or expenses related to certain taxes payable by CORELCA as a result of the settlement. On June 28, 2002, TEBSA's project lenders consented to the terms of the settlement and waived all defaults under the project lending documents arising out of the entry into or performance of the side agreements. As consideration for the lenders' consent and waiver, ABB Switzerland Holding Ltd. and the co-bidder agreed to indemnify the project lenders from and against (i) any investigation, litigation or proceeding related to the entry into or performance of the side agreements and (ii) any other exposure as a consequence of, or which might be asserted against any of the project lenders by virtue of, the failure of ABB or the co-bidder to disclose the side agreements. The indemnification obligation is joint but not several and is limited to the credit exposure of the project lenders. On December 31, 2004, the outstanding balance owed by TEBSA to the project lenders was approximately \$160.5 million.

On February 3, 2003, ABB Ltd, ABB Holdings Inc. and ABB Equity Ventures entered into a compliance agreement with U.S. Export-Import Bank. The compliance agreement, among other things, requires us to adopt and maintain additional compliance procedures and allow U.S. Export-Import Bank to audit our compliance.

In response to information provided by our employees, during 2002 and 2003 we undertook an investigation of potentially improper business conduct within our Oil, Gas and Petrochemical division. In such internal investigations, we uncovered a limited number of improper payments by some of our employees and agents in the upstream business in Africa, Central Asia, and South America, which we have voluntarily disclosed to the U.S. Department of Justice and the U.S. Securities and Exchange Commission. The payments, which violated our internal policies on business ethics, were made in order to obtain from local officials confidential information and commercial advantages, including with respect to contracts on which we were bidding. For further information on the sale of the upstream part of the Oil, Gas and Petrochemicals business, see "Item 5. Operating and Financial Review and Prospects Acquisitions, Investments and Divestitures Divestitures of businesses, joint ventures and affiliated companies Divestitures in 2004" and "Item 10. Additional Information Material Contracts Sale Agreement for Part of the Oil, Gas and Petrochemicals Business."

Subsequently, ABB Vetco Gray Inc. and ABB Vetco Gray UK Ltd., two of our subsidiaries that were sold as part of the Oil, Gas and Petrochemicals upstream business in July 2004, pleaded guilty on July 6, 2004, to two counts of conduct in violation of the U.S. Foreign Corrupt Practices Act of 1977 (FCPA), relating to the payment of bribes to officials of NAPIMS, a Nigerian government agency that evaluates and approves potential bidders for contract work on oil exploration projects in Nigeria, including bidders seeking subcontracts with foreign oil and gas companies. According to the stipulated statement of facts, the two former subsidiaries paid more than \$1 million in exchange for obtaining confidential bid information and favorable recommendations from Nigerian government agencies in connection with seven oil and gas construction contracts in Nigeria from which the companies expected to realize profits of almost \$12 million. As part of the plea agreement, we paid a criminal fine of \$10.5 million to the Department of Justice.

In a separate, but related, action, the U.S. Securities and Exchange Commission filed a complaint against us. The complaint alleges violations of anti-bribery, books and records, and internal control provisions of the FCPA, arising from alleged payments in Nigeria, Kazakhstan and Angola. ABB Ltd has agreed to a civil settlement that includes (i) the hiring of an independent consultant to review our policies and procedures as they relate to compliance with the books and records, internal accounting controls and anti-bribery provisions of the FCPA, (ii) the disgorgement of profits and pre-judgment interest of \$5.9 million, and (iii) a civil penalty payment of \$10.5 million, which is to be deemed satisfied by payment of the criminal fine to the Department of Justice discussed above.

In May 2004, we announced that we had undertaken an internal investigation which uncovered that certain of our employees together with employees of other companies active in the gas insulated switchgear business were involved in anti-competitive practices. We have reported promptly such practices to the appropriate authorities including the European Commission. We have received an amnesty decision from the European Commission and are cooperating with it in the investigation that it has launched.

In June 2004, we disclosed to the U.S. Securities and Exchange Commission and the Italian authorities the preliminary results of our inquiry conducted with the assistance of outside counsel and forensic accountants. Those results showed that from the first quarter of 1998 through the first quarter of 2004, the PT-MV BAU overstated its earnings before interest and taxes (operating income) and net income through the early recognition of certain revenue from incomplete projects, improper capitalization of costs on certain projects, unrecorded liabilities and borrowings, and other improper journal entries. As a result, the financial statements and certain financial data set forth in our Consolidated Financial Statements as of December 31, 2003 and 2002 and for each of the years in the three year period ended December 31, 2003 were restated in September 2004. The inquiry also uncovered improper payments to an employee of an Italian power generation company. The investigation by the Italian authorities is ongoing and we are not currently in a position to predict the outcome.

On April 19, 2005, we announced that we had made a voluntary disclosure to the U.S. Department of Justice and the U.S. Securities and Exchange Commission of certain suspect payments made by employees of ABB network management, a specialized U.S.-based business unit. The suspect payments became apparent during an internal investigation following the dismissal of two managers from the company in mid-2004. The payments were made to intermediaries in Latin America and in the Middle East in connection with the company's business, which is control software for utility customers. We are continuing our investigation and compliance review of this business.

If these payments are found to have been illegal, we could be subject to civil and criminal penalties. There can be no assurance that any governmental investigation or our investigation of these matters will not conclude that violations of applicable laws have occurred or that the results of these investigations will not have a material adverse effect on our business and results of operations.

For a description of our involvement in asbestos litigation, see "Item 3. Risk Factors We are subject to ongoing litigation and potentially substantial liabilities arising out of asbestos claims" and "Item 5. Operating and Financial Review and Prospects Asbestos Liabilities."

#### **DIVIDENDS AND DIVIDEND POLICY**

See "Item 3. Key Information Dividends and Dividend Policy."

#### **SIGNIFICANT CHANGES**

Except as otherwise described in this report, there has been no significant change in our financial position since December 31, 2004.

**Item 9. The Offer and Listing****MARKETS**

The shares of ABB Ltd are principally traded on virt-x (under the symbol "ABBN") and on the Stockholm Exchange (under the symbol "ABB"). The shares are also traded on the Frankfurt Exchange and the London Stock Exchange.

ADSs of ABB Ltd have been traded on the New York Stock Exchange under the symbol "ABB" since April 6, 2001. ABB Ltd's ADSs are issued under the Amended and Restated Deposit Agreement, dated May 7, 2001, with Citibank, N.A. as depository. Each ADS represents one share.

**TRADING HISTORY**

In connection with the sale of our structured finance business, on September 4, 2002, trading in our shares was suspended for approximately two hours on virt-x, but not on any other exchange on which our shares trade. No other suspension in the trading of our shares occurred in the years ended December 31, 2002, 2003 and 2004.

The table below sets forth, for the periods indicated, the reported high and low closing sale prices for the shares on virt-x and the Stockholm Exchange and for the ADSs on the New York Stock Exchange. All share prices have been adjusted to reflect the share capital increase completed in December 2003.

	virt-x(1)		Stockholm Exchange		New York Stock Exchange		
	High	Low	High	Low	High	Low	
	(CHF)		(SEK)		(\$)		
<b>Annual highs and lows</b>							
2000	43.24	30.10	232.43	173.22			
2001	35.20	7.93	208.66	52.77	18.95(2)	6.49(2)	
2002	14.52	1.29	91.44	8.30	11.11	1.14	
2003	6.66	2.02	39.88	12.81	6.24	1.95	
2004	8.18	6.20	48.00	36.10	6.70	4.93	
<b>Quarterly highs and lows</b>							
2002	First Quarter	14.52	8.73	91.44	54.78	11.11	6.60
	Second Quarter	12.50	9.64	79.36	60.83	9.77	7.84
	Third Quarter	10.87	3.86	68.48	24.57	9.07	3.40
	Fourth Quarter	4.26	1.29	26.59	8.30	3.54	1.14
2003	First Quarter	3.74	2.02	24.09	12.81	3.51	1.95
	Second Quarter	4.05	2.56	24.01	16.27	3.95	2.43
	Third Quarter	6.66	3.29	39.88	20.14	6.12	3.01
	Fourth Quarter	6.53	5.39	37.95	32.07	6.24	4.79
2004	First Quarter	8.01	6.26	46.70	36.10	6.44	5.08
	Second Quarter	8.18	6.51	48.00	38.90	6.34	5.10
	Third Quarter	7.75	6.20	45.40	37.20	6.20	4.93
	Fourth Quarter	8.00	6.20	46.70	36.10	6.70	5.43
2005	First Quarter	7.64	6.35	44.70	37.30	6.52	5.42





**Monthly highs and lows**

2004	November	7.14	6.65	42.10	39.60	6.24	5.69
	December	7.04	6.20	41.40	36.10	6.17	5.43
2005	January	6.93	6.35	40.50	37.30	5.91	5.42
	February	7.18	6.69	42.30	39.10	6.12	5.59
	March	7.64	7.12	44.70	42.10	6.52	6.15
	April	7.80	7.22	45.90	42.70	6.53	6.10

(1) Until June 25, 2001, the shares were traded on the SWX Swiss Exchange.

(2) From April 6, 2001.

**THE SWX SWISS EXCHANGE AND VIRT-X**

ABB Ltd's shares are listed on the main board of the SWX Swiss Exchange and are included in the Swiss Market Index, a capitalization-weighted index of the shares of 27 large Swiss corporations currently traded on virt-x. ABB Ltd is subject to the regulations and listing rules of the SWX Swiss Exchange.

The SWX Swiss Exchange was founded in 1993 as the successor to the local stock exchanges of Zurich, Basel and Geneva. Trading in foreign equities and derivatives began in December 1995. In August 1996, the SWX Swiss Exchange introduced full electronic trading in Swiss equities, derivatives and bonds. The aggregate value of trading activity of Swiss shares, investment funds, warrants, and bonds as well as other non-Swiss shares, warrants and bonds on the SWX Swiss Exchange and on virt-x was in excess of CHF 1,200 billion in 2004. As of December 31, 2004, the equity securities of 409 corporations, including 120 foreign corporations, were listed and traded on the SWX Swiss Exchange.

In 2001, virt-x Exchange Limited (formerly Tradepoint Financial Networks plc), a pan-European blue chip trading platform based in London, was created as a collaboration among the SWX Swiss Exchange, the U.K.-based securities exchange TradepointFinancial Networks plc and a consortium of internationally active investment banks and financial services companies (called the TP Consortium) to provide an efficient and cost effective pan-European equities market. virt-x is a Recognized Investment Exchange supervised by the Financial Services Authority in the United Kingdom. On February 2, 2003, the SWX Swiss Exchange announced that as of January 31, 2003, it controlled 94.8 percent of the equity capital and voting rights of virt-x following a successful public tender offer.

All trading in the 27 stocks included in the Swiss Market Index, including ABB, was transferred to virt-x on June 25, 2001. The trading of these stocks is conducted in Swiss francs. virt-x uses the SWX Swiss Exchange trading platform and network under a facilities management agreement. Most of the systems operation and development capability is outsourced to the SWX Swiss Exchange in Switzerland.

Trading begins each business day at 9:00 a.m. (CET) and continues until 5:30 p.m. (CET). At 5:20 p.m. (CET) the exchange moves into "Closing Auction" status. The closing auction stops at 5:30 p.m. (CET). Orders can be placed up to 10:00 p.m. (CET) and again from 6:00 a.m. (CET) onwards.

Members register incoming orders from their customers in their trading system. These orders are forwarded to the relevant trader and checked, or fed directly into the trading system by the trader. From here they are submitted to the central exchange system of virt-x, which acknowledges receipt of the order, assigns a time stamp to it and verifies its formal correctness.

Market information (last paid price, volume, timestamp, current best bid and ask orders) are also transmitted in real time to data vendors (such as Reuters, Bloomberg and Telekurs). In the fully automated exchange system in use at virt-x, buy and sell orders are matched according to clearly defined matching rules.

Regardless of their size or origin, incoming orders are executed in the order of price (first priority) and time received (second priority).

Transactions take place through the automatic matching of orders. Each valid order of at least one share is entered and listed according to its price. In general, orders placed at the best price (known as "market orders") are executed first followed by orders placed with a price limit (known as "limit orders"). If several orders are listed at the same price, they are executed in the order of the time they were entered.

Any transaction executed under the rules of virt-x must be reported. Order book executions are automatically and immediately reported by the trading system. There are separate provisions for the delayed reporting of certain qualifying trades. Individual elements of portfolio trades must be reported within one hour, while block trades and enlarged risk trades must be reported when the business is substantially (80 percent) completed, or by 5:30 p.m. (CET) on the day of trade, unless the trade is agreed after 4:30 p.m. (CET), in which case the trade must be reported by 5:30 p.m. (CET) the following business day. Block trades and enlarged risk trades are subject to minimum trade size criteria. All other transactions must be reported within three minutes, except when the transaction is conducted in a SWX Swiss Exchange listed security, in which case the trade must be reported within 30 minutes.

virt-x trades can be settled by CRESTCo, SIS SegInterSettle AG or Euroclear Bank S.A./N.V. Members may employ one, two or a combination of all three depositories to settle their virt-x transactions. Each depository maintains its own unique service offering and facilitates settlements with the other depositories by real-time links. Exchange transactions are usually settled on a T+3 basis, meaning that delivery against payment of exchange transactions occurs three days after the trade date. Where any settlement is due to take place on a day on which the central bank for the currency in which the transaction is conducted is closed, the settlement due date is adjusted to be the next business day after the currency holiday.

The traded prices of all securities are constantly monitored. As soon as the difference between two successive trade prices is greater than a specific predefined value, a brief trading suspension, called "stop trading," is automatically triggered. The triggering parameters and length of a stop trading differ according to the security.

## THE SWEDISH SECURITIES MARKET

ABB Ltd's shares are listed on the A-list (consisting of the largest companies in Sweden) on the Stockholm Exchange and are included in the OMX Index, which mirrors the total price changes in the 30 most traded shares on the Stockholm Exchange. ABB Ltd is subject to the regulations and listing rules of the Stockholm Exchange.

### Trading System

Trading on the Stockholm Exchange is conducted on behalf of clients by banks and brokers. While banks and brokers are permitted to act as principal in trading both on and off the Stockholm Exchange, they generally engage in transactions as agents. There are no market maker or specialist systems on the Stockholm Exchange.

Each trading day on the Stockholm Exchange begins with an open morning call and ends with an open closing call. At 8:45 a.m. (CET) an open call procedure begins for all shares simultaneously, preceding the commencement of trading at 9:00 a.m. (CET), when the first share is assigned its

opening price, and then becomes subject to continuous trading. After approximately 8 minutes, at 9:08 a.m. (CET), the opening prices for all the shares have been established and trading continues at prices based on market demand until 5:20 p.m. (CET) when the closing call is initiated. The closing call ends at 5:30 p.m. (CET), which is the Stockholm Exchange's closing time. Buy and sell orders are registered on the Stockholm Automated Exchange System, or SAXESS, a computerized order-matching system, in round lots, typically of 100 shares, and odd lots are matched separately at the last price for round lots.

The Stockholm Exchange is a fully electronic marketplace. Trading on the SAXESS comprises all Swedish stocks traded on the Stockholm Exchange and the new paperless account-based security system, administered by the VPC, was introduced full scale. Member firms of the Stockholm Exchange are able to operate from an optional geographic location via advanced data communications. The brokers' representatives are able to trade via network stations that have been developed by the Stockholm Exchange or via their own electronic data processing systems which are linked to SAXESS.

In addition to official trading on the Stockholm Exchange, there is also trading off the Stockholm Exchange during and after official trading hours. Trades in excess of 20 round lots can be effected off the Stockholm Exchange if the transaction price lies within the spread then appearing on SAXESS. Trades in excess of 250 round lots, however, may be effected off the Stockholm Exchange without regard to that spread. Trades after official trading hours off the Stockholm Exchange that relate to 250 round lots or less must normally be effected at a transaction price that lies within the spread appearing on SAXESS at the time of the closing. If there are no orders in SAXESS at that time, the trade may be effected at a price that otherwise reflects the market situation at that time. Trading on the Stockholm Exchange tends to involve a higher percentage of retail clients, while trading off the Stockholm Exchange, whether through intermediaries or directly, often involves larger Swedish institutions, banks arbitraging between the Swedish market and foreign markets and foreign buyers and sellers purchasing shares from or selling shares to Swedish institutions.

The Stockholm Exchange is an authorized stock exchange in accordance with the Swedish Stock Exchange and Clearing House Act (*lag 1992:543 om börs-och clearingverksamhet*) and is subject to regulation by the Swedish Financial Supervisory Authority. The Swedish Stock Exchange and Clearing House Act provides for the regulation and supervision of the Swedish securities markets and market participants and the Swedish Financial Supervisory Authority implements this regulation and supervision.

The regulatory system governing trading on and off the Stockholm Exchange is intended to achieve transparency and equality of treatment. All trades on the Stockholm Exchange are made through SAXESS to the Stockholm Exchange, which records information as to the banks and the brokers involved, the issuer, the number of shares and the price and the time of the transaction. Each bank or broker is required to maintain records indicating trades carried out as agent or, in the case of banks, as principal. All trades off the Stockholm Exchange by or through members of the Stockholm Exchange must also be reported to the Stockholm Exchange within 5 minutes, unless they are effected after 5:30 p.m. (CET). Trades after 5:30 p.m. (CET) must be reported no later than 15 minutes prior to the opening of the next trading day. All trading information reported on the Stockholm Exchange is publicly available. The Stockholm Exchange also maintains a Market Supervision Unit that reviews trading during the day on a "real time" basis, as described below.

Under the Act on Reporting Obligations for Certain Holdings of Financial Instruments (*lag 2000:1087 om anmälningsskyldighet för vissa innehav av finansiella instrument*), certain natural persons may have an obligation to report their shareholdings and changes in shareholdings to the Swedish Financial Supervisory Authority. The persons covered by this obligation are persons who through their position or mandate normally obtain non-public information which can be presumed to affect the price of the listed securities (so called "insider information"), such as members of the board of directors of

the listed Swedish company in question, the CEO or deputy CEO. The Swedish Financial Supervisory Authority keeps an insider register containing such reported information, which is publicly available.

The Swedish Insider Penal Act (*insiderstrafflagen 2000:1086*) provides sanctions against insider trading. The insider trading rules are policed by the Swedish Financial Supervisory Authority and the Market Supervision Unit of the Stockholm Exchange reviews trading data for indications of unusual market activity or trading behavior.

The Market Supervision Unit also continually examines information disseminated by listed companies. Accordingly, information such as earnings reports, acquisition and other investment plans and changes in ownership structure, is reviewed on a daily basis. When the Market Supervision Unit becomes aware of non-public price sensitive information, it monitors trading in the shares concerned to ensure that if unusual trading activity develops which evidences that persons may be trading on that information, the information is made public as soon as possible.

Certain types of agreements in connection with financial instruments trading, such as fictitious transactions or transactions aiming to withdraw financial instruments from public trading, if entered into with the intention of improperly influencing the market price of these instruments, constitutes a criminal offense under the Insider Penal Act. Similarly, other measures taken with a view to improperly influencing the market price constitute a criminal offense. Market manipulation may also constitute fraud or swindlers under Swedish law. However, as previously described, trading data is recorded as to all securities and derivative transactions relating to listed securities and data related to trading activity is subject to supervisory review by the Swedish Financial Supervisory Authority. This provides an enforcement mechanism for reducing market manipulation. The Swedish Financial Supervisory Authority may cause the operating license of a bank or broker to be revoked if the bank or broker has engaged in improper conduct. Improper conduct could include behavior constituting market manipulation.

#### **Registration Process**

The shares of ABB are registered in the account-based security system of VPC, and the register of shareholders of ABB is kept by VPC. VPC is an authorized central securities depository under the Swedish Act on Registration of Financial Instruments (*lag 1998:1479 om kontoföring av finansiella instrument*) and carries out, among other things, the duties of registrar for Swedish companies listed on the Stockholm Exchange.

The VPC keeps a paperless share registration system. Share certificates in ABB are not issued. Title to shares is ensured only through registration with VPC.

In accordance with Swedish law and practice and the regulations of VPC:

Only one person is normally registered as the holder of a share. Joint holders are not usually recorded on the VPC register. Shareholders may be entered on the register in the name of the beneficial owner or in the name of the person designated as nominee for the beneficial owner. In the latter case, a note is made in the register to the effect that the nominee is holding the share(s) in such capacity. There is also a separate register maintained by VPC for the recording of persons who have other interests in respect of shares, such as the interest of a pledgee.

Where the registered holder is a nominee, the nominee receives, for the account of the beneficial owner, dividends and, on capital increases, shares as well as rights in respect of shares such as in relation to a rights issue or a bonus issue. Dividends are remitted in a single payment to the nominee. That nominee is then responsible for the distribution of these dividends to the beneficial owner. A similar procedure is used for share issues.

Specific authority to act as a nominee must be given by VPC.

## Edgar Filing: ABB LTD - Form 20-F

A nominee is required to file a report with VPC with regard to any holding on behalf of a single beneficial owner in excess of 500 shares in one company. A list containing this information must be open to public inspection. Such a list must reveal the name of the beneficial owner but need not reveal the name of the nominee in whose name the shares have been registered. The beneficial owner would need to reveal its name if it wishes to vote at a shareholders' meeting, since a holder must re-register nominee-held shares in the name of such beneficial holder no later than ten calendar days prior to the shareholders' meeting (the record day).

The rights attaching to shares that are eligible for dividends, rights issues or bonus issues, accrue to those persons whose names are recorded in the register of shareholders on a particular day (the record day). Dividends are paid to an account designated by the shareholder or, in the absence of an account, sent to the shareholder at the address registered with VPC.

**Item 10. Additional Information**

**DESCRIPTION OF SHARE CAPITAL AND ARTICLES OF INCORPORATION**

This section summarizes the material provisions of ABB Ltd's articles of incorporation and the Swiss Federal Code of Obligations relating to the shares of ABB Ltd. The description is only a summary and is qualified in its entirety by ABB Ltd's articles of incorporation, a copy of which has been filed as Exhibit 1.1 to this report, and the commercial registry of the Canton of Zurich (Switzerland) and by Swiss statutory law.

**Registration and Business Purpose**

ABB Ltd was registered as a corporation (*Aktiengesellschaft*) in the commercial register of the Canton of Zurich (Switzerland) on March 5, 1999, under the name of "New ABB Ltd" and its name was subsequently changed to "ABB Ltd." Its commercial registry number is CH-020.3.021.615-2.

ABB Ltd's purpose, as set forth in Article 2 of its articles of incorporation, is to hold interests in business enterprises, particularly in enterprises active in the area of industry, trade and services. It may acquire, encumber, exploit or sell real estate and intellectual property rights in Switzerland and abroad and may also finance other companies. It may engage in all types of transactions and may take all measures that appear appropriate to promote, or that are related to, its purpose.

**Our Shares**

ABB Ltd's shares are registered shares (*Namenaktien*) with a par value of CHF 2.50 each. The shares are fully paid and non-assessable. The shares rank *pari passu* in all respects with each other, including in respect of entitlements to dividends, to a share of the liquidation proceeds in the case of a liquidation of ABB Ltd, and to preemptive rights.

Each share carries one vote in ABB Ltd's general shareholders' meeting. Voting rights may be exercised only after a shareholder has been recorded in ABB Ltd's share register (*Aktienbuch*) as a shareholder with voting rights, or with VPC in Sweden, which maintains a subregister of ABB Ltd's share register. Registration with voting rights is subject to the restrictions described in "Transfer of Shares."

The shares are not issued in certificated form and are held in collective custody at SIS SegInterSettle AG. Shareholders do not have the right to request printing and delivery of share certificates (*aufgehobener Titeldruck*), but may at any time request ABB Ltd to issue a confirmation of the number of registered shares held.

**The Ordinary Capital Increase**

On November 20, 2003, the extraordinary general meeting of shareholders resolved to increase our share capital by CHF 2,100,016,505 by issuing 840,006,602 new shares. Shareholders who did not wish to exercise their rights to subscribe for new shares could sell them. 99.4 percent of the rights were exercised. The shares related to unexercised rights were sold in the market and the proceeds were received by ABB. ABB's new share capital of CHF 5,100,040,085, divided into 2,040,016,034 shares, was registered in the commercial register on December 9, 2003.

**The Creation of the Asbestos Shares**

Subsequent to the ordinary capital increase, in December 2003, ABB issued 30,298,913 shares out of its authorized capital for purposes of fulfilling ABB's obligations under the pre-packaged plan of reorganization of Combustion Engineering. In accordance with its then-current articles of incorporation, the pre-emptive rights of shareholders were excluded and allocated to an ABB

subsidiary, which has subscribed for these shares and holds them until they will be contributed to the Asbestos PI Trust or any similar trust, once a plan of reorganization of Combustion Engineering has become effective. The new share capital of CHF 5,175,787,367.50 divided into 2,070,314,947 shares was registered in the commercial register on December 15, 2003.

## Capital Structure

### Issued Shares

ABB Ltd was incorporated with an initial share capital of CHF 100,000 divided into 10,000 fully paid registered shares with a par value of CHF 10 each. With effect as of June 28, 1999, ABB Ltd's share capital was increased to CHF 3,000,023,580 by the issuance of additional 299,992,358 registered shares with a par value of CHF 10 each. In accordance with the requirements of the Swiss Federal Code of Obligations, the following information was recorded in the commercial register in connection with the capital increase:

- (i) that 145,807,329 registered shares with par value of CHF 10 each were issued against contribution in kind of 5,453,500 registered shares with a par value of CHF 10 each and 7,904,200 bearer shares with a par value of CHF 50 each of ABB Participation AG (formerly ABB AG) in Baden, Switzerland, as per a contribution agreement of June 26, 1999;
- (ii) that 142,830,293 registered shares with par value of CHF 10 each were issued against contribution in kind of 651,818,826 A shares and 241,261,761 B shares of ABB Participation AB (formerly ABB AB) in Västerås, Sweden, as per a contribution agreement of June 26, 1999;
- (iii) that pursuant to an acquisition agreement of June 26, 1999, ABB Ltd acquired 16,383,744 A shares and 28,453,689 B shares of ABB Participation AB (formerly ABB AB) in Västerås, Sweden, for the price of CHF 71,708,860; and
- (iv) that ABB Ltd intended to acquire, after the capital increase, all shares of ABB Participation AG (formerly ABB AG) in Baden, Switzerland, which were not tendered to ABB Ltd in connection with the exchange offer of March 26, 1999 from the public shareholders or pursuant to the cancellation procedures in accordance with Article 33 of the Swiss Stock Exchange Act. See "Item 4. Information on the Company Introduction History of the ABB Group."

With effect as of May 11, 2001, by way of a share split each registered share with par value of CHF 10 was split into four registered shares with par value of CHF 2.50 each. The share split had no effect on the total amount of ABB Ltd's share capital.

With effect as of December 9, 2003, ABB's share capital was increased to CHF 5,100,040,085 (see " The Ordinary Capital Increase").

With effect as of December 15, 2003, ABB's share capital was increased to CHF 5,175,787,367.50 (see " The Creation of the Asbestos Shares").

The following table sets forth the changes in the issued share capital of ABB Ltd since ABB Ltd's incorporation in 1999:

Year	Transaction	Change of no. in shares	Change in share capital	Total no. of shares	Total share capital	Nominal value
			(CHF)		(CHF)	(CHF)
1999	Capital increase	299,992,358	2,999,923,580	300,002,358	3,000,023,580	10.00
2001	Share split	900,007,074		1,200,009,432	3,000,023,580	2.50
2003	Capital increase	840,006,602	2,100,016,505	2,040,016,034	5,100,040,085	2.50
2003	Capital increase (Asbestos shares)	30,298,913	75,747,282.50	2,070,314,947	5,175,787,367.50	2.50



## Edgar Filing: ABB LTD - Form 20-F

The current issued share capital of ABB Ltd (including treasury shares), as registered in the commercial register, is CHF 5,175,787,367.50 divided into 2,070,314,947 fully paid registered shares, with a par value of CHF 2.50 per share.

### *Contingent Share Capital*

ABB Ltd's share capital may be increased in an amount not to exceed CHF 550,000,000 through the issuance of up to 220,000,000 fully paid shares with a par value of CHF 2.50 per Share (a) up to the amount of CHF 525,000,000 (equivalent to 210,000,000 shares) through the exercise of conversion rights and/or warrants granted in connection with the issuance on national or international capital markets of newly or already issued bonds or other financial market instruments by ABB Ltd or one of its group companies and (b) up to the amount of CHF 25,000,000 (equivalent to 10,000,000 shares) through the exercise of warrant rights granted to its shareholders by ABB Ltd or by one of its subsidiaries. ABB Ltd's board of directors may grant warrant rights not taken up by shareholders for other purposes in the interest of ABB Ltd.

The preemptive rights of the shareholders are excluded in connection with the issuance of convertible or warrant-bearing bonds or other financial market instruments or the grant of warrant rights. The then-current owners of conversion rights and/or warrants will be entitled to subscribe for the new shares. The conditions of the conversion rights and/or warrants will be determined by the board of directors of ABB Ltd.

The acquisition of shares through the exercise of conversion rights and/or warrants and each subsequent transfer of the shares will be subject to the transfer restrictions of ABB Ltd's articles of incorporation. See " Transfer of Shares."

In connection with the issuance of convertible or warrant-bearing bonds or other financial market instruments, the board of directors is authorized to restrict or deny the advance subscription rights of shareholders if such bonds or other financial market instruments are for the purpose of financing or refinancing the acquisition of an enterprise, parts of an enterprise, participations or new investments or an issuance on national or international capital markets. If the board of directors denies advance subscription rights, the convertible or warrant-bearing bonds or other financial market instruments will be issued at the relevant market conditions and the new shares will be issued pursuant to the relevant market conditions taking into account the share price and/or other comparable instruments having a market price. Conversion rights may be exercised during a maximum ten-year period, and warrants may be exercised during a maximum seven-year period, in each case from the date of the respective issuance. The advance subscription rights of the shareholders may be granted indirectly.

ABB Ltd's share capital may be increased by an amount not to exceed CHF 200,000,000 through the issuance of up to 80,000,000 fully paid new shares to employees of ABB Ltd and its group companies. The preemptive and advance subscription rights of ABB Ltd's shareholders are excluded. The shares or rights to subscribe for shares will be issued to employees pursuant to one or more regulations to be issued by the board of directors, taking into account performance, functions, levels of responsibility and profitability criteria. ABB Ltd may issue shares or subscription rights to employees at a price lower than that quoted on the stock exchange. The acquisition of shares within the context of employee share ownership and each subsequent transfer of the shares will be subject to the transfer restrictions of ABB Ltd's articles of incorporation. See " Transfer of Shares."

### *Authorized Share Capital*

ABB Ltd's authorized share capital expired on May 19, 2005. Consequently the respective Article 4ter of ABB Ltd's articles of incorporation will be deleted. Previously ABB Ltd's board of directors was authorized to increase ABB Ltd's share capital in an amount not to exceed CHF

174,252,717.50 through the issuance of up to 69,701,087 paid registered shares with a par value of CHF 2.50 per share by not later than May 19, 2005.

### **Transfer of Shares**

The transfer of shares is effected by corresponding entry in the books of a bank or depository institution following an assignment in writing by the selling shareholder and notification of such assignment to ABB Ltd by the bank or depository institution. The transfer of shares also requires that the purchaser file a share registration form in order to be registered in ABB Ltd's share register (*Aktienbuch*) as a shareholder with voting rights. Failing such registration, the purchaser may not be able to participate in or vote at shareholders' meetings, but will be entitled to dividends and liquidation proceeds. Shares and associated pecuniary rights may only be pledged to the depository institution that administers the book entries of those shares for the account of the shareholder.

A purchaser of shares will be recorded in ABB Ltd's share register with voting rights upon disclosure of its name and address. However, ABB Ltd may decline a registration with voting rights if the shareholder does not declare that it has acquired the shares in its own name and for its own account. If the shareholder refuses to make such declaration, it will be registered as a shareholder without voting rights. If persons fail to expressly declare in their registration application that they hold the shares for their own accounts ("nominees"), the board of directors may still enter such persons in the share register with the right to vote, provided that the nominee has entered into an agreement with the board of directors concerning his status, and further provided the nominee is subject to recognized bank or financial market supervision.

After having given the registered shareholder or nominee the right to be heard, the board of directors may cancel registrations in the share register retroactive to the date of registration if such registrations were made on the basis of incorrect information. The relevant shareholder or nominee will be informed immediately as to the cancellation. The board of directors will regulate the details and issue the instructions necessary for compliance with the preceding regulations. In special cases, it may grant exemptions from the rule concerning nominees.

Acquirors of registered shares who have chosen to have their shares registered in the share register with VPC do not have to present any written assignment from the selling shareholder nor may they be requested to file a share registration form or declare that they have acquired the shares in their own name and for their own account in order to be registered as a shareholder with voting rights. However, in order to be entitled to vote at a shareholders' meeting those acquirors need to be entered in the VPC share register in their own name no later than ten calendar days prior to the shareholders' meeting. Uncertificated shares registered with VPC may be pledged in accordance with Swedish law.

### **Shareholders' Meetings**

Under Swiss law, the annual general meeting of shareholders must be held within six months after the end of ABB Ltd's fiscal year. Annual general meetings of shareholders are convened by the board of directors, liquidators or representatives of bondholders or, if necessary, by the statutory auditors. The board of directors is further required to convene an extraordinary general meeting of shareholders if so resolved by the shareholders in a general meeting of shareholders or if so requested by one or more shareholders holding in aggregate at least 10 percent of ABB Ltd's nominal share capital. A general meeting of shareholders is convened by publishing a notice in the Swiss Official Gazette of Commerce (*Schweizerisches Handelsamtsblatt*) at least 20 days prior to the meeting date. Holders of VPC-registered shares are able to attend shareholders' meetings in respect of such shares. Notices of shareholders' meetings are published in at least three national Swedish daily newspapers, as well as on ABB Ltd's Internet website. Such notices contain information as to procedures to be followed by shareholders in order to participate and exercise voting rights at the shareholders' meetings.

## Edgar Filing: ABB LTD - Form 20-F

One or more shareholders whose combined holdings represent an aggregate par value of at least CHF 1,000,000 may request in writing 40 calendar days prior to a general meeting of shareholders that specific items and proposals be included on the agenda and voted on at the next general meeting of shareholders.

The following powers are vested exclusively in the general meeting of the shareholders:

adoption and amendment of the articles of incorporation;

election of members of the board of directors, the auditors, the group auditors and the special auditors referred to below;

approval of the annual report and the consolidated financial statements;

approval of the annual financial statements and decision on the allocation of profits shown on the balance sheet, in particular with regard to dividends;

granting discharge to the members of the board of directors and the persons entrusted with management; and

passing resolutions as to all matters reserved to the authority of the shareholders' meeting by law or under the articles of incorporation or that are submitted to the shareholders' meeting by the board of directors to the extent permitted by law.

There is no provision in ABB Ltd's articles of incorporation requiring a quorum for the holding of shareholders' meetings.

Resolutions and elections usually require the approval of an "absolute majority" of the shares represented at a shareholders' meeting (*i.e.*, a majority of the shares represented at the shareholders' meeting with abstentions having the effect of votes against the resolution). If the first ballot fails to result in an election and more than one candidate is standing for election, the presiding officer will order a second ballot in which a relative majority shall be decisive.

A resolution passed with a qualified majority of at least two-thirds of the shares represented at a shareholders' meeting is required for:

a modification of the purpose of ABB Ltd;

the creation of shares with increased voting powers;

restrictions on the transfer of registered shares and the removal of those restrictions;

restrictions on the exercise of the right to vote and the removal of those restrictions;

an authorized or conditional increase in share capital;

an increase in share capital through the conversion of capital surplus, through an in-kind contribution or in exchange for an acquisition of property, and the grant of special benefits;

the restriction or denial of preemptive rights;

## Edgar Filing: ABB LTD - Form 20-F

a transfer of ABB Ltd's place of incorporation; and

ABB Ltd's dissolution without liquidation.

In addition, the introduction or abolition of any provision in the articles of incorporation providing for a qualified majority must be resolved in accordance with such qualified majority voting requirements.

At shareholders' meetings, shareholders can be represented by proxy, but only by their legal representative, another shareholder with the right to vote, a corporate body (*Organvertreter*), an independent proxy (*unabhängiger Stimmrechtsvertreter*) or a depository institution (*Depotvertreter*). All shares held by one shareholder may be represented by only one representative. Votes are taken on a

show of hands unless a secret ballot is required by the general meeting of shareholders or the presiding officer. The presiding officer may arrange for resolutions and elections to be carried out by electronic means. As a result, resolutions and elections carried out by electronic means will be deemed to have the same effect as secret ballots. The presiding officer may at any time order that a resolution or election decided by a show of hands be repeated through a secret ballot if, in his view, the results of the vote are in doubt. In this case, the preceding decision by a show of hands shall be deemed to have not occurred.

Only shareholders registered in ABB Ltd's share register with the right to vote are entitled to participate at shareholders' meetings. See " Transfer of Shares." For practical reasons, shareholders must be registered in the share register with the right to vote no later than ten calendar days prior to a shareholders' meeting in order to be entitled to participate and vote at such shareholders' meeting.

Holders of VPC-registered shares are provided with financial and other information on ABB Ltd in the Swedish language in accordance with regulatory requirements and market practice. For shares that are registered in the VPC system in the name of a nominee, such information is to be provided by the nominee.

### **Net Profits and Dividends**

Swiss law requires that ABB Ltd retain at least 5 percent of its annual net profits as legal reserves for so long as these reserves amount to less than 20 percent of ABB Ltd's nominal share capital. Any net profits remaining in excess of those reserves are at the disposal of the shareholders' meeting.

Under Swiss law, ABB Ltd may pay dividends only if it has sufficient distributable profits from previous business years, or if its reserves are sufficient to allow distribution of a dividend. In either event, dividends may be paid out only after approval by the shareholders' meeting. The board of directors may propose that a dividend be paid out, but cannot itself set the dividend. The statutory auditors must confirm that the dividend proposal of the board of directors conforms with statutory law. In practice, the shareholders' meeting usually approves the dividend proposal of the board of directors.

Dividends are usually due and payable after the shareholders' resolution relating to the allocation of profits has been passed by the shareholders' meeting. Under Swiss law, the statute of limitations in respect of dividend payments is five years. Dividends not collected within five years after their due date accrue to ABB Ltd and will be allocated to ABB Ltd's other reserves.

Payment of dividends on VPC-registered shares is administered by VPC and paid out to the holder that is registered with VPC on the record date. Through the dividend access facility, shareholders with tax residence in Sweden will be entitled to receive, through the VPC system, a dividend in Swedish kronor equivalent to the dividend paid in Swiss francs without deduction of Swiss withholding tax. For further information, see " Taxation."

### **Preemptive Rights**

Shareholders of a Swiss corporation have certain preemptive rights to subscribe for new shares issued in connection with capital increases in proportion to the nominal amount of their shares held. A resolution adopted at a shareholders' meeting with a supermajority of two-thirds of the shares represented may, however, repeal, limit or suspend (or authorize the board of directors to repeal, limit or suspend) preemptive rights for cause. Cause includes an acquisition of a business or a part thereof, an acquisition of a participation in a company or the grant of shares to employees. However, based on Article 4bis para. 1 and 4 and Article 4ter para. 4 of the articles of incorporation of ABB Ltd, preemptive rights of the shareholders are excluded in connection with the issuance of convertible or warrant-bearing bonds or other financial market instruments or the grant of warrant rights or may be restricted or denied by the board of directors of ABB Ltd under certain circumstances. See " Capital Structure Authorized Capital."

### **Advance Subscription Rights**

Shareholders of a Swiss corporation may have an advance subscription right with respect to bonds and other instruments issued in connection with options or conversion rights for shares if such option or conversion rights are based on the corporation's conditional capital. However, the shareholders' meeting can, with a supermajority of two-thirds of the shares represented at the meeting, exclude or restrict (or authorize the board of directors to exclude or restrict) such advance subscription rights for cause. See " Capital Structure Contingent Capital."

### **Borrowing Power**

Neither Swiss law nor ABB Ltd's articles of incorporation restrict in any way ABB Ltd's power to borrow and raise funds. The decision to borrow funds is taken by or under the direction of the board of directors or the executive committee, and no shareholders' resolution is required. The articles of incorporation of ABB Ltd do not contain provisions concerning borrowing powers exercisable by its directors or how such borrowings could be varied.

### **Repurchase of Shares**

Swiss law limits a corporation's ability to repurchase or hold its own shares. ABB Ltd and its subsidiaries may only repurchase shares if ABB Ltd has sufficient freely distributable reserves to pay the purchase price, and if the aggregate par value of such shares does not exceed 10 percent of ABB Ltd's nominal share capital. Furthermore, ABB Ltd must create a special reserve on its balance sheet in the amount of the purchase price of the acquired shares. Such shares held by ABB Ltd or its subsidiaries do not carry any rights to vote at shareholders' meetings, but are entitled to the economic benefits applicable to the shares generally and are considered to be "outstanding" under Swiss law.

At the annual general meeting of ABB Ltd held on March 20, 2001, the shareholders approved a share repurchase in the nominal amount of CHF 60,000,000, corresponding to 6,000,000 shares (24,000,000 shares after implementation of the share split), which at such time represented approximately 2 percent of ABB Ltd's nominal share capital. This share repurchase took place exclusively on the SWX Swiss Exchange and was completed in May 2001. At the annual general meeting of ABB Ltd held on March 12, 2002, the shareholders took notice that such shares would not be cancelled and would become treasury shares. ABB Ltd sold 80 million treasury shares in the first quarter of 2003. In connection with the capital increase in December 2003, ABB Ltd or its subsidiaries exercised its rights in respect of the remaining 6,830,312 treasury shares and received 4,781,217 shares at the offer price of CHF 4 per share. In December 2003, ABB Ltd issued to a subsidiary 30,298,913 shares for use with the pre-packaged plan of reorganization of its U.S. subsidiary, Combustion Engineering Inc. These shares will be held as treasury shares until used in connection with such a plan.

ABB Ltd may make additional repurchases of shares for treasury from time to time in the future. Treasury shares are available for issuance to satisfy obligations under the management incentive plan and for other corporate purposes. As of December 31, 2004, ABB Ltd held 41,910,442 shares, directly and indirectly through subsidiaries.

### **Notices**

Written communication by ABB Ltd to its shareholders will be sent by ordinary mail to the last address of the shareholder or authorized recipient entered in the share register. To the extent that personal notification is not mandated by law, all communications to the shareholders are validly made by publication in the Swiss Official Gazette of Commerce (*Schweizerisches Handelsamtsblatt*).

Notices required under the Listing Rules of the SWX Swiss Exchange will be published in two Swiss newspapers in German and French. ABB Ltd or the SWX Swiss Exchange may also disseminate the relevant information on the online exchange information systems. Notices required under the listing

rules of the Stockholm Exchange will be published in three national daily Swedish newspapers, as well as on ABB Ltd's website.

### **Duration, Liquidation and Merger**

The duration of ABB Ltd as a legal entity is unlimited. It may be dissolved at any time by a shareholders' resolution which must be approved by (1) an absolute majority of the shares represented at the general meeting of shareholders in the event it is to be dissolved by way of liquidation or (2) a supermajority of two-thirds of the shares represented at the general meeting of shareholders in other events (*e.g.*, in a merger where it is not the surviving entity). Dissolution by court order is possible if it becomes bankrupt or if shareholders holding at least 10 percent of the share capital can establish cause for dissolution.

Under Swiss law, any surplus arising out of a liquidation of a corporation (after the settlement of all claims of all creditors) is distributed to the shareholders in proportion to the paid-up par value of shares held but this surplus is subject to Swiss withholding tax of 35 percent (see "Taxation").

### **Disclosure of Major Shareholders**

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who directly or indirectly acquire or sell shares of a listed Swiss corporation and thereby reach, exceed or fall below the thresholds of 5 percent, 10 percent, 20 percent, 33<sup>1</sup>/<sub>3</sub> percent, 50 percent or 66<sup>2</sup>/<sub>3</sub> percent of the voting rights of the corporation must notify the corporation and the exchange(s) in Switzerland on which such shares are listed of such holdings in writing within four trading days, whether or not the voting rights can be exercised. Following receipt of such a notification, the corporation must inform the public within two trading days.

An additional disclosure requirement exists under the Swiss Federal Code of Obligations, according to which ABB Ltd must disclose individual shareholders and groups of shareholders acting in concert and their shareholdings if they hold more than 5 percent of all voting rights and ABB Ltd knows or has reason to know of such major shareholders. Such disclosures must be made once a year in the notes to the financial statements as published in its annual report. For a list of our major shareholders, see "Item 7. Major Shareholders and Related Party Transactions Major Shareholders."

### **Mandatory Offering Rules**

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who acquire more than 33<sup>1</sup>/<sub>3</sub> percent of the voting rights (whether exercisable or not) of a listed Swiss company have to submit a takeover bid to all remaining shareholders unless the articles of incorporation of the company provide for an alteration of this obligation. ABB Ltd's articles of incorporation do not provide for any alterations of the bidder's obligations under the Swiss Stock Exchange Act. The mandatory offer obligation may be waived under certain circumstances, for example if another shareholder owns a higher percentage of voting rights than the acquirer. A waiver from the mandatory bid rules may be granted by the Swiss Takeover Board or the Swiss Federal Banking Commission. If no waiver is granted, the mandatory takeover bid must be made pursuant to the procedural rules set forth in the Swiss Stock Exchange Act and the implementing ordinances.

### **Cancellation of Remaining Equity Securities**

Under Swiss law, any offeror who has made a tender offer for the shares of a Swiss target company and who, as a result of such offer, holds more than 98 percent of the voting rights of the target company, may petition the court to cancel the remaining equity securities. The corresponding petition must be filed against the target company within three months after the lapse of the exchange offer period. The remaining shareholders may join in the proceedings. If the court orders cancellation of the remaining equity securities, the target company will reissue the equity securities and deliver such

securities to the offeror against performance of the offer for the benefit of the holders of the cancelled equity securities.

#### **Directors and Officers**

For further information regarding the material provisions of ABB Ltd's articles of incorporation and the Swiss Federal Code of Obligations regarding directors and officers, see "Item 6. Directors, Senior Management and Employees Corporate Governance Duties of Directors and Officers."

#### **Auditors**

The auditors are subject to confirmation by the shareholders at the annual general meeting on an annual basis. Ernst & Young AG, with its registered head office at Bleicherweg 21, CH-8002 Zurich, Switzerland, has been the independent auditor of ABB Ltd and the ABB Group for the years ended December 31, 2002, 2003 and 2004.

OBT AG, with its registered office at Hardturmstrasse 120, CH-8005 Zurich, Switzerland, has been the special auditor to issue special review reports required in connection with capital increases (if any) for the years ended December 31, 2002, 2003 and 2004. The special auditors are subject to confirmation by the shareholders at the annual general meeting on an annual basis.

Ernst & Young AG assumed the existing auditing mandate as auditor of the ABB Group in 1994. The head auditor responsible for the mandate, Mr. Charles Barone, began serving in this function in May 2003.

Ernst & Young AG periodically reads the approved minutes of meetings of our board of directors. Ernst & Young AG is present at the finance and audit committee meetings where audit planning is discussed and the results of our internal audit department's audit procedures are presented. Ernst & Young AG also periodically meets with the finance and audit committee to discuss the results of its audit procedures.

See "Item 16C. Principal Accountant Fees and Services" for information regarding the fees paid to Ernst & Young AG.

### **MATERIAL CONTRACTS**

The following descriptions of the material provisions of the referenced agreements do not purport to be complete and are subject to, and qualified in their entirety by reference to, the agreements which have been filed as exhibits to this report.

#### **Revolving Credit Facility**

On November 17, 2003, we entered into a \$1 billion credit facility. For a description of the facility, see "Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Credit Facilities" and Note 15 to the Consolidated Financial Statements. See also Exhibits 4.3 and 4.4 to this report.

#### **Medium Term Note Program**

Two of our subsidiaries, ABB International Finance Limited and ABB Capital BV, have entered into a medium term note program ("MTN Program") under which they are authorized to issue up to \$5,250 million in certain debt instruments. The terms of the MTN Program do not obligate any third party to extend credit to us, and the terms and availability of issuances under the MTN Program are determined with respect to, and at the date of issuance of, each debt instrument. As a result, we may be unable to access capital through the MTN Program on terms favorable to us, if at all. As at December 31, 2004, the aggregate amount outstanding under the MTN Program was approximately



\$2.3 billion from nine separate issuances of debt instruments. See Exhibits 2.3, 2.4, 2.5, 2.6 and 2.6 to this report.

#### **Sale Agreement for Structured Finance Business**

Pursuant to an agreement dated September 4, 2002 between ABB Financial Services B.V., General Electric Capital Corporation ("GE Capital") and ABB Ltd, as amended and restated by an agreement dated November 29, 2002, we sold most of our structured finance business, including our project finance, export and trade finance and leasing and similar businesses. The cash consideration for the sale was approximately \$2,000 million.

The business was sold with the benefit of customary warranties, covenants and indemnities in addition to those described herein. We agreed to indemnify GE Capital with respect to certain intra-group guarantees granted by ABB entities for the benefit of certain businesses sold to GE Capital, and this indemnity is supported by letters of credit provided by one or more banks. As of December 31, 2004, the aggregate outstanding value of these letters of credit totaled approximately \$63 million.

With respect to certain specified receivables sold in the transaction, GE Capital agreed to make payments to us if the amount recovered by GE Capital in respect of those receivables exceeded the recovery amount projected by GE Capital. All such payments have been made as of December 31, 2004. In addition, certain other designated assets were acquired by GE Capital with the understanding that third-party purchasers would be sought for such assets. We have repurchased certain of these assets for an aggregate consideration of approximately \$28 million. Letters of credit supporting our obligations to repurchase certain assets have expired without any amounts thereunder having been claimed.

See Exhibits 4.5 and 4.6 to this report and Note 3 to our Consolidated Financial Statements.

#### **ALSTOM Settlement**

Pursuant to a Share Purchase and Settlement Agreement, dated as of March 31, 2000, among ABB Ltd, ALSTOM and ABB ALSTOM POWER, as amended by the Amendment to Share Purchase and Settlement Agreement, dated as of May 11, 2000 (which we refer to collectively as the Settlement Agreement), ALSTOM purchased our 50 percent interest in the joint venture ABB ALSTOM POWER for a cash payment of €1.25 billion. The Settlement Agreement provided for the termination of various joint venture agreements, the execution of various releases, the settlement of certain disputed items in relation to the joint venture, the unwinding of various financial arrangements between ABB ALSTOM POWER and the ABB Group, the prospective transfer to the joint venture of various assets and liabilities required to have been transferred to the joint venture under the original joint venture agreements, the transfer to us of certain subsidiaries of the joint venture, various payments among members of the ALSTOM group and the ABB Group in connection with the foregoing transactions (separate from the purchase price mentioned above), indemnification and the execution of various ancillary documents. The transaction was consummated on May 11, 2000. See Exhibit 4.1 to this report.

#### **Sale Agreement for Nuclear Business**

On December 21, 1999, our subsidiary, ABB Handels-Und Verwaltungs AG, entered into an agreement to sell our nuclear business to BNFL for \$485 million. Under the agreement, we have undertaken not to compete with the divested business during a seven-year period ending April 28, 2007. We have agreed to indemnify BNFL against, among other things, certain environmental and other liabilities arising from specific sites operated by the nuclear business and certain tax liabilities of the nuclear business. These potential liabilities are described in "Item 3. Key Information Risk Factors" and "Item 5. Operating and Financial Review and Prospects Environmental Liabilities." The transaction was consummated on April 28, 2000. See Exhibit 4.2 to this report.

### **Sale Agreement for Part of the Oil, Gas and Petrochemicals Business**

On January 16, 2004 we announced that our subsidiary, ABB Handels-Und Verwaltungs AG, had entered into an agreement to sell the upstream part of our Oil, Gas and Petrochemicals business to Laradew Limited, a new company formed by a private equity consortium consisting of Candover Partners, JP Morgan Partners and 3i Group. The sale includes our U.S.-based Vetco Gray unit and our Norway-based Offshore Systems business. In July 2004, the Company completed the sale of the Upstream business for an initial purchase price of \$925 million. Net cash proceeds from the sale were approximately \$800 million, reflecting the initial purchase price adjusted for unfunded pension liabilities and changes in net working capital. On February 9, 2005, the purchasers and we entered into a Settlement Agreement and Amendment finalizing the sales price. As part of the sale, we have agreed, among other things, to terminate certain securitization programs and operational leases, to indemnify the purchaser against certain pre-existing environmental and tax liabilities, to reimburse the purchaser against financial losses that may be incurred on certain ongoing projects of the business. See Exhibits 4.7 and 4.8 to this report.

### **Sale Agreement for the Sale of the Global Reinsurance and Insurance Businesses**

On December 8, 2003, our subsidiary ABB Holding AG (which in December 2003 was merged into ABB Asea Brown Boveri Ltd) entered into an agreement to sell the global reinsurance and insurance businesses which we have operated through the Sirius group of companies to a subsidiary of White Mountains Insurance Group ("WMI") for an initial purchase consideration of SEK 3.22 billion (approximately \$425 million). The transaction closed in April, 2004. As part of the sale we have undertaken to indemnify WMI, among other things, for potential losses in excess of reserves established in the 2003 financial accounts relating to the future final settlement of certain disputes as well as potential losses arising from certain guarantees issued by the Sirius business. See Exhibits 4.9 and 4.10 to this report.

## **EXCHANGE CONTROLS**

Other than in connection with government sanctions imposed on Cote d'Ivoire, Iraq, Liberia, Myanmar, Yugoslavia, Zimbabwe and persons and organizations with connection to Osama bin Laden, the "al Qaeda" group or the Taliban, there are currently no laws, decrees or regulations in Switzerland that restrict the export or import of capital, including, but not limited to, Swiss foreign exchange controls on payment of dividends, interest or liquidation proceeds, if any, to non-Swiss resident holders of shares. In addition, there are no limitations imposed by Swiss law or our articles of incorporation on the rights of non-Swiss residents or non-Swiss citizens to hold or vote our shares.

## **TAXATION**

The following is a summary of the material Swiss and United States federal income tax consequences of the purchase, ownership and disposition of our shares or ADSs.

## Swiss Taxation

### *Withholding Tax on Dividends and Distributions*

Dividends paid and similar cash or in-kind distributions that we make to a holder of shares or ADSs (including dividends on liquidation proceeds and stock dividends) are subject to a Swiss federal withholding tax at a rate of 35 percent. We must withhold the tax from the gross distribution and pay it to the Swiss Federal Tax Administration.

### *Obtaining a Refund of Swiss Withholding Tax for U.S. Residents*

The Convention Between the United States of America and the Swiss Confederation for the Avoidance of Double Taxation with Respect to Taxes on Income, which entered into force on December 19, 1997 and which we will refer to in the following discussion as the Treaty, allows U.S. resident individuals or U.S. corporations to seek a refund of the Swiss withholding tax paid on dividends in respect of our shares or ADSs. U.S. resident individuals and U.S. corporations holding less than 10 percent of the voting rights in respect of our shares or ADSs are entitled to seek a refund of withholding tax to the extent the tax withheld exceeds 15 percent of the gross dividend. U.S. corporations holding 10 percent or more of the voting rights of our shares or ADSs are entitled to seek a refund of withholding tax to the extent the tax withheld exceeds 5 percent of the gross dividend.

Claims for refunds must be filed with the Swiss Federal Tax Administration, Eigerstrasse 65, 3003 Bern, Switzerland. The form used for obtaining a refund is Swiss Tax Form 82 (82C for companies; 82E for other entities; 82I for individuals). This form may be obtained from any Swiss Consulate General in the United States or from the Swiss Federal Tax Administration at the address above. The form must be filled out in triplicate with each copy duly completed and signed before a notary public in the United States. The form must be accompanied by evidence of the deduction of withholding tax withheld at the source.

### *Stamp Duties upon Transfer of Securities*

The sale of shares or ADSs, whether by Swiss resident or non-resident holders, may be subject to a Swiss securities transfer stamp duty of up to 0.15 percent calculated on the sale proceeds if it occurs through or with a Swiss bank or other Swiss securities dealer as defined in the Swiss Federal Stamp Tax Act. In addition to the stamp duty, the sale of shares or ADSs by or through a member of the SWX Swiss Exchange may be subject to a stock exchange levy.

## United States Taxes

The following is a summary of the material U.S. federal income tax consequences of the ownership of shares or ADSs. This summary does not purport to address all of the tax considerations that may be relevant to a decision to purchase, own or dispose of shares or ADSs. This summary assumes that holders are initial purchasers of shares or ADSs and hold shares or ADSs as capital assets. This summary does not address tax considerations applicable to holders that may be subject to special tax rules, such as dealers or traders in securities or currencies, partnerships owning shares or ADSs, tax-exempt entities, banks, insurance companies, holders that own (or are deemed to own) at least 10 percent or more (by voting power or value) of the stock of ABB, investors whose functional currency is not the U.S. dollar, and persons that will hold shares or ADSs as part of a position in a straddle or as part of a hedging or conversion transaction for U.S. tax purposes. This discussion does not address aspects of U.S. taxation other than U.S. federal income taxation, nor does it address state, local or foreign tax consequences of an investment in shares or ADSs.

This summary is based (1) on the Internal Revenue Code of 1986, as amended, U.S. Treasury Regulations and judicial and administrative interpretations thereof, in each case as in effect and

available on the date of this registration statement and (2) in part, on representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms. The U.S. tax laws and the interpretation thereof are subject to change, which change could apply retroactively and could affect the tax consequences described below.

For purposes of this summary, a U.S. holder is a beneficial owner of shares or ADSs that, for U.S. federal income tax purposes, is:

a citizen or resident of the United States;

a corporation created or organized in or under the laws of the United States or any state, including the District of Columbia;

an estate if its income is subject to U.S. federal income taxation regardless of its source; or

a trust if such trust validly has elected to be treated as a U.S. person for U.S. federal income tax purposes or if (1) a U.S. court can exercise primary supervision over its administration and (2) one or more U.S. persons have the authority to control all of its substantial decisions.

If a partnership (including any entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of shares or ADSs the treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. If you are a partner in a partnership that holds shares or ADSs you should consult your tax advisor.

A non-U.S. holder is a beneficial owner of shares or ADSs that is not a U.S. holder.

Each prospective purchaser should consult the purchaser's tax advisor with respect to the U.S. federal, state, local and foreign tax consequences of acquiring, owning or disposing of shares or ADSs.

#### ***Ownership of ADSs in General***

For U.S. federal income tax purposes, a holder of ADSs generally will be treated as the owner of the shares represented by the ADSs.

The U.S. Treasury Department has expressed concern that depositaries for American depositary receipts, or other intermediaries between the holders of shares of an issuer and the issuer, may be taking actions that are inconsistent with the claiming of U.S. foreign tax credits by U.S. holders of those receipts or shares. Accordingly, the analysis regarding the availability of a U.S. foreign tax credit for Swiss taxes and sourcing rules described below could be affected by future actions that may be taken by the U.S. Treasury Department.

#### ***Distributions***

Subject to the discussion below under " Passive Foreign Investment Company Considerations," if you are a U.S. holder, for U.S. federal income tax purposes, the gross amount of any distribution (other than certain distributions, if any, of shares distributed to all shareholders of ABB, including holders of ADSs) made to you with respect to shares or ADSs, including the amount of any Swiss taxes withheld from the distribution, will constitute dividends to the extent of ABB's current and accumulated earnings and profits (as determined under U.S. federal income tax principles). Subject to the discussion below under " Passive Foreign Investment Company Considerations," non-corporate U.S. Holders generally will be taxed on such distributions at the lower rates applicable to long-term capital gains (i.e., gains from the sale of capital assets held for more than one year) with respect to taxable years beginning on or before December 31, 2008. These dividends will not be eligible for the dividends received deduction generally allowed to corporate U.S. holders. Subject to the discussion below under " Passive Foreign Investment Company Considerations," if distributions with respect to shares or ADSs exceed ABB's current and accumulated earnings and profits as determined under U.S.

federal income tax principles, the excess would be treated first as a tax-free return of capital to the extent of your adjusted tax basis in the shares or ADSs. Any amount in excess of the amount of the dividend and the return of capital would be treated as capital gain. ABB does not maintain calculations of its earnings and profits under U.S. federal income tax principles.

If you are a U.S. holder, dividends paid in Swiss francs, including the amount of any Swiss taxes withheld from the dividends, will be included in your gross income in an amount equal to the U.S. dollar value of the Swiss francs calculated by reference to the spot exchange rate in effect on the day the dividends are includible in income. In the case of ADSs, dividends generally are includible in income on the date they are received by the depositary, regardless of whether the payment is in fact converted into U.S. dollars at that time. If dividends paid in Swiss francs are converted into U.S. dollars on the day they are includible in income, you generally should not be required to recognize foreign currency gain or loss with respect to the conversion, if you are a U.S. holder. However, any gains or losses resulting from the conversion of Swiss francs between the time of the receipt of dividends paid in Swiss francs and the time the Swiss francs are converted into U.S. dollars will be treated as ordinary income or loss to you, as the case may be, if you are a U.S. holder. The amount of any distribution of property other than cash will be the fair market value of the property on the date of distribution.

If you are a U.S. holder, you will have a basis in any Swiss francs received as a refund of Swiss withholding taxes equal to a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt of the dividend on which the tax was withheld. (See " Swiss Taxation Obtaining a Refund of Swiss Withholding Tax for U.S. Residents" above.)

If you are a U.S. holder, dividends received by you with respect to shares or ADSs will be treated as foreign source income, which may be relevant in calculating your foreign tax credit limitation. Subject to certain conditions and limitations, Swiss tax withheld on dividends may be deducted from your taxable income or credited against your United States federal income tax liability. However, to the extent that you are a U.S. holder and would be entitled to a refund of Swiss withholding taxes pursuant to the U.S. Switzerland tax treaty, you may not be eligible for a United States foreign tax credit with respect to the amount of such withholding taxes which may be refunded, even if you fail to claim such refund. See " Swiss Taxation Obtaining a Refund of Swiss Withholding Tax for U.S. Residents." The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by ABB generally will constitute passive income, or, in the case of certain U.S. holders, financial services income. The rules relating to the determination of the U.S. foreign tax credit are complex, and, if you are a U.S. holder, you should consult your tax advisor to determine whether and to what extent you would be entitled to this credit.

Subject to the discussion below under " Backup Withholding and Information Reporting," if you are a non-U.S. holder of shares or ADSs, you generally will not be subject to U.S. federal income or withholding tax on dividends received on shares or ADSs, unless the dividends are effectively connected with the conduct by you of a trade or business in the United States, or the dividends are attributable to a permanent establishment or fixed base that is maintained in the United States if that is required by an applicable income tax treaty as a condition for subjecting a non-U.S. holder to U.S. taxation on a net income basis. In such cases, you will be taxed in the same manner as a U.S. holder. Moreover, if you are a corporate non-U.S. holder, you may be subject, under certain circumstances, to an additional branch profits tax on any effectively connected dividends at a 30 percent rate, or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

#### ***Sale or Exchange of Shares or ADSs***

Subject to the discussion below under " Passive Foreign Investment Company Considerations," if you are a U.S. holder that holds shares or ADSs as capital assets, you generally will recognize capital

gain or loss for U.S. federal income tax purposes upon a sale or exchange of your shares or ADSs in an amount equal to the difference between your adjusted tax basis in the shares or ADSs and the amount realized on their disposition. If you are a noncorporate U.S. holder, the maximum marginal U.S. federal income tax rate applicable to the gain will be lower than the maximum marginal U.S. federal income tax rate applicable to ordinary income (other than certain dividends) if your holding period for the shares or ADSs exceeds one year (i.e., long-term capital gains). If you are a U.S. holder, the gain or loss, if any, recognized by you generally will be treated as U.S. source income or loss, as the case may be, for U.S. foreign tax credit purposes. Certain limitations exist on the deductibility of capital losses for U.S. federal income tax purposes.

If you are a U.S. holder and you receive any foreign currency on the sale of shares or ADSs, you may recognize U.S. source ordinary income or loss as a result of currency fluctuations between the date of the sale of the shares or ADS, as the case may be, and the date the sales proceeds are converted into U.S. dollars.

Subject to the discussion below under " Backup Withholding and Information Reporting," if you are a non-U.S. holder of shares or ADSs, you generally will not be subject to U.S. federal income or withholding tax on gain realized on the sale or exchange of your shares or ADSs unless (1) the gain is effectively connected with the conduct by you of a trade or business in the United States, or the gain is attributable to a permanent establishment or fixed base that is maintained in the United States if that is required by an applicable income tax treaty as a condition for subjecting a non-U.S. holder to U.S. taxation on a net income basis, or (2) if you are an individual non-U.S. holder, you are present in the United States for 183 days or more in the taxable year of the sale or exchange and certain other conditions are met. Moreover, if you are a corporate non-U.S. holder, you may be subject, under certain circumstances, to an additional branch profits tax on any effectively connected gains at a 30 percent rate, or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

#### ***Passive Foreign Investment Company Considerations***

A non-U.S. corporation will be classified as a "passive foreign investment company," or a PFIC, for United States federal income tax purposes in any taxable year in which, after applying certain look-through rules, either

at least 75 percent of its gross income is "passive income"; or

at least 50 percent, on average, of the gross value of its assets is attributable to assets that produce "passive income" or are held for the production of passive income.

Passive income for this purpose generally includes dividends, interest, certain royalties, certain rents and gains from commodities and securities transactions.

Based on certain estimates of its gross income and gross assets and the nature of its business, ABB believes that it will not be classified as a PFIC for the taxable year ending December 31, 2004. ABB's status in future years will depend on its assets and activities in those years. ABB has no reason to believe that its assets or activities will change in a manner that would cause it to be classified as a PFIC. If ABB were a PFIC, and you are a U.S. holder, you generally would be subject to imputed interest charges and other disadvantageous tax treatment with respect to any gain from the sale or exchange of, and certain distributions with respect to, your shares or ADSs, including the denial of the taxation of certain dividends at the lower rates applicable to long-term capital gains (as discussed above in " Distributions").

If ABB were a PFIC, you may be able to make a variety of elections which might alleviate certain of the tax consequences referred to above. However, it is expected that the conditions necessary for

making such elections will not be present in the case of shares or ADSs. You should consult your own tax advisor regarding the tax consequences that would arise if ABB were treated as a PFIC.

***Backup Withholding and Information Reporting***

U.S. backup withholding tax and information reporting requirements generally apply to certain payments to certain noncorporate holders of stock. Information reporting generally will apply to payments of dividends on, and to proceeds from the sale or redemption of, shares or ADSs made within the United States to a holder of shares or ADSs (other than an exempt recipient, including a corporation, a payee that is a non-U.S. holder that provides an appropriate certification, and certain other persons).

A payor will be required to withhold backup withholding tax from any payments of dividends on, or the proceeds from the sale or redemption of, shares or ADSs within the United States to you, unless you are an exempt recipient, if you fail to furnish your correct taxpayer identification number or otherwise fail to establish an exception from backup withholding tax requirements or otherwise fail to establish an exception from backup withholding. The amount of any backup withholding from a payment to you will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that the required information is furnished to the U.S. Internal Revenue Service. The backup withholding tax rate is 28 percent for years 2004 through 2010.

In the case of payments made within the United States to a foreign simple trust, foreign grantor trust, or foreign partnership (other than payments to a foreign simple trust, foreign grantor trust, or foreign partnership that qualifies as a withholding foreign trust or withholding foreign partnership within the meaning of the applicable U.S. Treasury Regulations and payments to a foreign simple trust, foreign grantor trust, or foreign partnership that are effectively connected with the conduct of a trade or business in the United States), the beneficiaries of the foreign simple trust, the persons treated as the owners of the foreign grantor trust or the partners of the foreign partnership, as the case may be, will be required to provide the certification discussed above in order to establish an exemption from backup withholding tax and information reporting requirements. Moreover, if you are a non-U.S. holder, a payor may rely on a certification provided by you only if the payor does not have actual knowledge or a reason to know that any information or certification stated in the certificate is incorrect.

THE ABOVE SUMMARIES ARE NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSEQUENCES RELATING TO THE OWNERSHIP OF SHARES OR ADSs. PROSPECTIVE PURCHASERS OF SHARES OR ADSs SHOULD CONSULT THEIR TAX ADVISORS CONCERNING THE TAX CONSEQUENCES OF THEIR PARTICULAR SITUATIONS.

**DOCUMENTS ON DISPLAY**

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, we file reports and other information with the Securities and Exchange Commission. These materials, including this report and the exhibits thereto, may be inspected and copied at prescribed rates at the Commission's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Further information on the operation of the public reference room may be obtained by calling the Commission at 1-800-SEC-0330. The Commission also maintains a web site at <http://www.sec.gov> that contains reports and other information regarding registrants that file electronically with the Commission. Our annual reports and some of the other information we submit to the Commission may be accessed through this web site. In addition, material that we file can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005.

## **Item 11. Quantitative and Qualitative Disclosures About Market Risk**

### **Market Risk Disclosure**

The continuously evolving financial markets and the dynamic business environment expose us to changes in foreign exchange, interest rate and other market price risks. We have developed and implemented comprehensive policies, procedures, and controls to identify, mitigate, and monitor financial risk on a firm-wide basis. To efficiently aggregate and manage financial risk that could impact our financial performance, we operate a Group Treasury function. Our Group Treasury function provides an efficient source of liquidity, financing, risk management, and other global financial services to our group companies. The Group does not permit proprietary trading activities. The market risk management activities are focused on mitigating material financial risks resulting from our global operating and financing activities.

The Group Treasury function maintains risk management control systems to monitor foreign exchange and interest rate risks and exposures arising from our underlying business, as well as the associated hedge positions. Such exposures are governed by written policies. Financial risks are monitored using a number of analytical techniques including market value and sensitivity analysis. The following quantitative analyses are based on sensitivity analysis tests, which assume parallel shifts of interest rate yield curves, foreign exchange rates, equity prices and commodity prices, as applicable.

### **Currency Fluctuations and Foreign Exchange Risk**

It is our policy to identify and manage all transactional foreign exchange exposures to minimize risk. With the exception of certain financing subsidiaries and certain operating subsidiaries domiciled in high inflation environments, the functional currency of each of our companies is considered to be its local currency. Our policies require our subsidiaries to hedge all contracted foreign exchange exposures, as well as a portion of their forecast exposures, against their local currency. These transactions are undertaken mainly with our Group Treasury function.

We have foreign exchange transaction exposures related to our global operating and financing activities in currencies other than the functional currency in which our entities operate. Specifically, we are exposed to foreign exchange risk related to future earnings, assets or liabilities denominated in foreign currencies. The most significant currency exposures relate to operations in Sweden, Switzerland and Germany. In addition, the Group is exposed to currency risk associated with translating our functional currency financial statements into our reporting currency, which is the U.S. dollar.

Our operating companies are responsible for identifying their foreign currency exposures and entering into intercompany hedge contracts with the Group Treasury function, where legally possible, or external transactions to hedge this risk. The intercompany transactions have the effect of transferring the operating companies' currency risk to the Group Treasury function, but create no additional market risk to our consolidated results. The Group Treasury function then manages this risk by entering into offsetting transactions with third party financial institutions. According to our policy, material net currency exposures are hedged. Exposures are primarily hedged with forward foreign exchange contracts. The majority of the foreign exchange hedge instruments have, on average, a maturity of less than twelve months. The Group Treasury function also hedges currency risks associated with their financing of other ABB companies. For certain non-U.S. dollar denominated borrowings, we use cross currency swaps to hedge the currency risk and effectively convert the borrowings into U.S. dollar obligations. These swap contracts have maturity dates that exactly match the associated borrowings.

As of December 31, 2004 and December 31, 2003, the net fair value of financial instruments with exposure to foreign currency rate movements was \$1,158 million and \$164 million, respectively. The potential loss in fair value of such financial instruments from a hypothetical 10 percent move in foreign exchange rates against our position would be approximately \$67 million and \$91 million for



December 31, 2004 and December 31, 2003, respectively. The analysis reflects the aggregate adverse foreign exchange impact associated with transaction exposures, as well as translation exposures where appropriate. Our sensitivity analysis assumes a simultaneous shift in exchange rates against our positions exposed to foreign exchange risk and as such assumes an unlikely adverse case scenario. Exchange rates rarely move in the same direction. Therefore, the assumption of a simultaneous shift may overstate the impact of changing rates on assets and liabilities denominated in foreign currencies. The underlying trade related transaction exposures of the industrial companies are not included in the quantitative analysis. This represents a material limitation of the quantitative risk analysis. If these underlying transaction exposures were included, they would tend to have an offsetting effect on the potential loss in fair value detailed above.

#### **Interest Rate Risk**

We are exposed to interest rate risk due to our financing, investing, and liquidity management activities. Our operating companies primarily invest excess cash with and receive funding from our Group Treasury function on an arm's length basis. It is our policy that the primary third party funding and investing activities, as well as the monitoring and management of the resulting interest rate risk, are the responsibility of the Group Treasury function. The Group Treasury function adjusts the duration of the overall funding portfolio through derivative instruments in order to better match underlying assets and liabilities, as well as minimize the cost of capital. As of December 31, 2004 and December 31, 2003, the net fair value of interest rate instruments was \$(1,582) million and \$(865) million, respectively. The potential loss in fair value for such financial instruments from a hypothetical 100 basis point parallel shift in interest rates against ABB's position (or a multiple of 100 basis points where 100 basis points is less than 10 percent of the applicable interest rate) would be approximately \$164 million and \$130 million for December 31, 2004 and December 31, 2003, respectively.

Leases are not included as part of the sensitivity analysis. This represents a limitation of the analysis. While sensitivity analysis includes the interest rate sensitivity of the funding of the lease portfolio, a corresponding change in the lease portfolio was not considered in the sensitivity model.

#### **Equity Risk**

At December 31, 2003, we were exposed to equity risk primarily due to the equity conversion option feature (the right to convert the bonds into shares of ABB Ltd) of the \$968 million convertible bonds due 2007. Our shares are denominated in Swiss francs, while the bonds are denominated in U.S. dollars. Under SFAS 133, the equity conversion option had to be accounted for as a derivative and the changes in its fair value recorded through earnings. As of December 31, 2003, the fair value of this option was \$45 million and an increase in the ABB Ltd share price by 10 percent would have resulted in an adverse impact on earnings of \$15 million. During 2004, the terms of the bonds were amended whereby, if the bonds are converted, we will deliver U.S. dollar-denominated American Depositary Shares of ABB Ltd rather than the Swiss franc-denominated ordinary shares. Consequently, we are no longer exposed to equity risk on the conversion feature of these bonds, as of December 31, 2004.

In addition, certain ABB entities have equity investments that expose the Group to equity price risk. As of December 31, 2004 and 2003, the net fair value of equity risk sensitive instruments was \$107 million and \$477 million, respectively. The potential loss in fair value of such financial instruments from a hypothetical 10 percent move in equity prices against our position would be approximately \$11 million and \$48 million, respectively.

#### **Item 12. Description of Securities Other than Equity Securities**

Not applicable.

**PART II**

**Item 13. Defaults, Dividend Arrearages and Delinquencies**

Not applicable.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

Not applicable.

**Item 15. Controls and Procedures**

(a) Evaluation of disclosure controls and procedures.

We maintain controls and procedures designed to provide reasonable assurance that the information required to be disclosed in our filings under the Securities Exchange Act of 1934, is recorded, processed, summarized and reported on a timely basis. Our chief executive officer, Fred Kindle, and chief financial officer, Michel Demaré, with the participation of key corporate senior management and management of key Group functions, performed an evaluation of our disclosure controls and procedures as of December 31, 2004. While we have not yet completed our assessment of internal controls under Section 404 of the Sarbanes-Oxley Act, we have made the following determination with respect to our internal control environment. Our determination is based on our interpretation of the internal control-related definitions of the new Public Company Accounting Oversight Board (PCAOB) Standard 2. PCAOB Standard 2 changed the definitions of internal control deficiencies and added the concept of aggregation of internal control deficiencies. Specifically, a material weakness is defined as a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

In connection with this evaluation and taking into account observations from our outside auditor, our Chief Executive Officer and Chief Financial Officer have concluded that the September 2004 restatement of our financial statements for the year ended December 31, 2003 in connection with the earnings misstatements by the Power Technologies division's medium voltage business in Italy, and in conjunction with the failure to remediate certain root causes that facilitated the misstatement prior to December 31, 2004, is a material weakness in our internal control over our financial reporting process. Further details on the restatement are set forth in Item 5 "Operating and Financial Review and Prospects Restatement."

Additionally, we have concluded that a series of significant deficiencies in our financial reporting process, including deficiencies identified in prior years not yet remediated, are, in the aggregate, evidence of a material weakness in the financial statement reporting process.

In order to address the above material weaknesses, we performed additional procedures during the preparation of our 2004 consolidated financial statements to compensate for the potential effect of such matters on our reporting. In addition, we are taking steps to remedy the matters referred to above, which include, among other things, implementation of more detailed financial statement review procedures, documentation of information technology-related controls, continued documentation of internal controls as part of the implementation of Section 404 of the Sarbanes-Oxley Act, and strengthening of U.S. GAAP skills of our accounting staff on a regional basis and at the Corporate Center.

We have implemented a global Ethics & Compliance policy, which includes a strict zero-tolerance stance on misconduct and a whistleblowing process with appropriate follow-up from our investigation group. In addition, in each country where we have significant operations, employees generally must sign an ethics letter wherein they confirm compliance with conflict of interest rules, insider trading rules,

political contribution rules and corporate policies. Beginning in 2005, on a quarterly basis, finance managers in each country are required to sign a certification as to the quality of the financial reporting information and disclosure of significant events in their respective areas of responsibility.

In April 2005, in accordance with our 2004 civil settlement with the U.S. Securities and Exchange Commission, we appointed an independent consultant to review our policies and procedures as they relate to compliance with the books and records, internal accounting controls and anti-bribery provisions of the FCPA. The consultant is expected to submit a report in August 2005 documenting findings and making recommendations (the "Report") to our Board of Directors. Within ninety days after receiving the Report, we are required to adopt the recommendations contained in the Report, except in certain limited circumstances.

Based on their evaluation of our disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer were not able to conclude that as of December 31, 2004 our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. We performed additional procedures in the preparation of our 2004 consolidated financial statements in order to ascertain that they were fairly presented in all material respects in accordance with U.S. GAAP.

(b) Changes in internal control.

Except as discussed above, there has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during the period covered by this report, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

In addition, we will continue to evaluate the effectiveness of our disclosure controls and procedures and may make such changes from time to time as we consider appropriate.

**Item 16A. Audit Committee Financial Expert**

Our board of directors has determined that Bernd W. Voss, who serves on our audit committee, is independent, as that term is defined in the listing standards promulgated by the New York Stock Exchange, and is an audit committee financial expert.

**Item 16B. Code of Ethics**

Our chief executive officer, chief financial officer, principal accounting officer and persons performing similar functions are bound to adhere to our code on business ethics, which applies to all employees of all companies in the ABB Group. Our code of business ethics is accessible on our web site at [www.abb.com/about](http://www.abb.com/about).

**Item 16C. Principal Accountant Fees and Services**

*Audit Fees*

Fees for audit services provided by Ernst & Young totaled approximately \$30 million and \$21 million in 2004 and 2003, respectively. Audit fees include the standard audit work performed each fiscal year necessary to allow the auditor to issue an opinion on our consolidated financial statements and to issue an opinion on the local statutory financial statements of ABB Ltd and its subsidiaries. Audit fees also include services that can be provided only by the group auditor such as assistance with the application of new accounting policies, pre-issuance reviews of quarterly financial results and

## Edgar Filing: ABB LTD - Form 20-F

comfort letters delivered to underwriters in connection with debt and equity offerings. Included in 2004 audit fees is \$6 million related to the 2003 audit, which fees were not agreed until after the Company had filed its Annual Report on Form 20-F dated April 9, 2004 and also fees associated with the Company's filing of its Annual Report on Form 20-F/A (Amendment No. 1) dated September 24, 2004.

### *Audit-Related Fees*

Fees for audit-related services provided by Ernst & Young totaled approximately \$5 million and \$11 million in 2004 and 2003, consisting primarily of accounting consultations and audits in connection with divestments, audits of pension and benefit plans and accounting advisory services.

### *Tax Fees*

Fees for tax services provided by Ernst & Young totaled approximately \$3 million and \$2 million in 2004 and 2003, respectively, representing tax compliance fees as well as tax advice and planning fees.

### *All Other Fees*

Fees for other services provided not included in the above three categories by Ernst & Young totaled approximately \$0.3 million and \$0.4 million in 2004 and 2003, respectively.

### *Pre-Approval Procedures and Policies*

In accordance with the requirements of the U.S. Sarbanes-Oxley Act of 2002 and rules issued by the Securities and Exchange Commission, we introduced a procedure for the review and pre-approval of any services performed by Ernst & Young. The procedure requires that all proposed engagements of Ernst & Young for audit and permitted non-audit services are submitted to the Finance & Audit Committee for approval prior to the beginning of any such services.

### *Other Matters*

Our auditor, Ernst & Young AG has informed the Finance & Audit Committee of our Board of Directors that certain non-audit services performed for us by affiliates of Ernst & Young AG in several countries have raised questions regarding Ernst & Young's independence in the performance of audit services. Ernst & Young AG has disclosed that, during 2004 or a prior year: its affiliate in Hong Kong received funds from an ABB subsidiary in Switzerland to be used to make tax payments of *de minimis* amounts on behalf of certain expatriate employees of one of our subsidiaries in Hong Kong and Ernst & Young's affiliate paid such funds to the tax authorities; its affiliate in Sri Lanka provided certain payroll services for our employees in one of our subsidiaries in Sri Lanka; its affiliate in Kazakhstan provided personnel to assist us in the preparation of certain of our required tax filings; its affiliates in Singapore provided company secretary services to one of our subsidiaries; its affiliate in Poland provided expatriate related services to one of our subsidiaries; and the aggregate compensation paid for the above services was an immaterial amount. Such services are not permitted under applicable auditor independence rules. These services have been discontinued. Ernst & Young AG and the Finance & Audit Committee have discussed these circumstances and Ernst & Young AG and the Finance & Audit Committee have concluded that Ernst & Young AG's independence with respect to ABB has not been compromised by the provision of such services.

### **Item 16D. Exemptions from the Listing Standards for Audit Committees.**

Not yet applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.**

The table below sets forth the information with respect to purchases made by or on behalf of ABB Ltd or any "affiliated purchaser", as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934, of ABB Ltd shares for the year ended December 31, 2004.

Period		Total Number of Shares Purchased <sup>(1)</sup>	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
		(CHF)			
January	1/1/04 1/31/04			N/A	N/A
February	2/1/04 2/28/04				
March	3/1/04 3/31/04				
April	4/1/04 4/30/04				
May	5/1/04 5/31/04	137,631	6.95		
June	6/1/04 6/30/04				
July	7/1/04 7/31/04				
August	8/1/04 8/31/04				
September	9/1/04 9/30/04				
October	10/1/04 10/31/04	124,301	7.73		
November	11/1/04 11/30/04				
December	12/1/04 12/31/04				
Total		261,932	7.32	N/A	N/A

(1) The total number of shares purchased were purchased through open-market transactions. These purchases were made in respect of our obligation to deliver shares as compensation to our directors.

**PART III**

**Item 17. Financial Statements**

We have elected to provide financial statements and the related information pursuant to Item 18.

**Item 18. Financial Statements**

See pages F-1 to F-84 and pages S-1 to S-2, which are incorporated herein by reference.

- (a) Reports of Independent Registered Public Accounting Firms.
- (b) Consolidated Income Statements for the years ended December 31, 2004, 2003 and 2002.
- (c) Consolidated Balance Sheets at December 31, 2004 and 2003.
- (d) Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002.
- (e) Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2004, 2003 and 2002.
- (f) Notes to Consolidated Financial Statements.
- (g) Report of Independent Registered Public Accounting Firm on Financial Statement Schedule.
- (h) Schedule II Valuation and Qualifying Accounts.

**Item 19. Exhibits**

- 1.1 Articles of Incorporation of ABB Ltd as amended to date. Incorporated by reference to Exhibit 1.1 to the Annual Report on Form 20-F filed by ABB Ltd on April 9, 2004.
- 2.1 Form of Amended and Restated Deposit Agreement, by and among ABB Ltd, Citibank, N.A., as Depositary, and the holders and beneficial owners from time to time of the American Depositary Shares issued thereunder (including as an exhibit the form of American Depositary Receipt). Incorporated by reference to Exhibit (a)(i) to Post-Effective Amendment No. 1 on Form F-6 (File No. 333-13346) filed by ABB Ltd on May 7, 2001.
- 2.2 Form of American Depositary Receipt (included in Exhibit 2.1).
- 2.3 EMTN Amended and Restated Fiscal Agency Agreement, dated November 24, 2004 between ABB International Finance Limited, ABB Capital B.V., Banque Generale du Luxembourg S.A., JPMorgan Chase Bank and Banque Meespierson BGL S.A.
- 2.4 EMTN Amended and Restated Dealership Agreement, dated November 24, 2004, between ABB International Finance Limited, ABB Capital B.V., ABB Ltd and Morgan Stanley & Co. International Limited.
- 2.5 EMTN Deed of Covenant, dated March 10, 1993, by ABB International Finance N.V. Incorporated by reference to Exhibit 2.4 to the Annual Report on Form 20-F filed by ABB Ltd on June 27, 2002.
- 2.6 EMTN Deed of Covenant, dated March 10, 1993, by ABB Finance Inc. Incorporated by reference to Exhibit 2.5 to the Annual Report on Form 20-F filed by ABB Ltd on June 27, 2002.
- 2.7 EMTN Deed of Covenant, dated March 10, 1993, by ABB Capital B.V. Incorporated by reference to Exhibit 2.6 to the Annual Report on Form 20-F filed by ABB Ltd on June 27, 2002.

The total amount of long-term debt securities of ABB Ltd authorized under any other instrument does not exceed 10 percent of the total assets of the ABB Group on a consolidated basis. ABB Ltd hereby agrees to furnish to the Commission, upon its request, a copy of any instrument defining the rights of holders of long-term debt of ABB Ltd or of its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.

- 4.1 Share Purchase and Settlement Agreement dated as of March 31, 2000 among ABB Ltd, ALSTOM and ABB ALSTOM POWER N.V., as amended. Incorporated by reference to Exhibit 4.1 to the Annual Report on Form 20-F filed by ABB Ltd on June 27, 2002.
- 4.2 Purchase Agreement, dated as of December 21, 1999, between ABB Handels-Und Verwaltungs AG, as Seller, and British Nuclear Fuels plc, as Purchaser, as amended. Incorporated by reference to Exhibit 4.2 to the Annual Report on Form 20-F filed by ABB Ltd on June 27, 2002.
- 4.3 \$1,000,000,000 Multicurrency Revolving Credit Agreement, dated November 17, 2003 and as amended on December 10, 2003. Incorporated by reference to Exhibit 4.3 to the Annual Report on Form 20-F filed by ABB Ltd on April 9, 2004.
- 4.4 Amendment dated November 1, 2004 to the \$1,000,000,000 Multicurrency Revolving Credit Agreement dated November 17, 2003, as amended on December 10, 2003.

## Edgar Filing: ABB LTD - Form 20-F

- 4.5 Sale and Purchase Agreement, dated 4 September 2002, between ABB Financial Services B.V., General Electric Capital Corporation and ABB Ltd. Incorporated by reference to Exhibit 4.5 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.6 Amendment Agreement, dated 29 November 2002, between ABB Financial Services B.V., General Electric Capital Corporation and ABB Ltd. Incorporated by reference to Exhibit 4.6 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.7 Stock and Asset Purchase Agreement, dated January 16, 2004, between ABB Handels-und Verwaltungs AG and Laradew Limited. Incorporated by reference to Exhibit 4.6 to the Annual Report on Form 20-F filed by ABB on April 9, 2004.
- 4.8 Settlement Agreement and Amendment, dated as of February 9, 2005, between ABB Handels-und Verwaltungs AG and Vetco Limited (formerly known as Laradew Limited), relating to the Stock and Asset Purchase Agreement dated as of January 16, 2004, between Handels-und Verwaltungs AG and Laradew Limited.
- 4.9 Purchase Agreement, dated as of December 8, 2003, between ABB Holding AG, Zurich, and Lagrummet December NR 919 AB (under change of name to "Fund American Holdings AB"). Incorporated by reference to Exhibit 4.7 to the Annual Report on Form 20-F filed by ABB on April 9, 2004.
- 4.10 Amendment and Acknowledgement, dated April 14, 2004, to the Purchase Agreement, dated as of December 8, 2003, between ABB Holding AG, Zurich, and Lagrummet December NR 919 AB (under change of name to "Fund American Holdings AB").
- 4.11 Employment Agreement of Jürgen Dormann, dated December 5, 2002. Incorporated by reference to Exhibit 4.7 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.12 Employment Agreement of Peter Voser, dated November 21, 2001. Incorporated by reference to Exhibit 4.8 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.13 Employment Agreement of Dinesh Paliwal, dated as of February 21, 2003. Incorporated by reference to Exhibit 4.9 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.14 Employment Agreement of Peter Smits, dated November 1, 2001. Incorporated by reference to Exhibit 4.10 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.15 Employment Agreement of Gary Steel, dated August 27, 2002. Incorporated by reference to Exhibit 4.11 to the Annual Report on Form 20-F filed by ABB on June 30, 2003.
- 4.16 Employment Agreement of Fred Kindle, dated February 21, 2004.
- 4.17 Employment Agreement of Michel Demaré, dated October 28, 2004.
- 8.1 Subsidiaries of ABB Ltd as of March 31, 2005.
- 12.1 Certification of the chief executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 12.2 Certification of the chief financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 13.1 Certification by the chief executive officer of ABB Ltd pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*
- 13.2 Certification by the chief financial officer of ABB Ltd pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*

\* This document is being furnished in accordance with SEC Release Nos. 33-8212 and 34-74551.





**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this report on its behalf.

ABB LTD

By: /s/ MICHEL DEMARÉ

---

Name: MICHEL DEMARÉ  
Title: Executive Vice President  
and Chief Financial Officer

By: /s/ RICHARD A. BROWN

---

Name: RICHARD A. BROWN  
Title: Group Vice President  
and Assistant General Counsel

Date: May 27, 2005.

**ABB Ltd**

**Index to Consolidated Financial Statements and Schedules**

**Consolidated Financial Statements:**

Reports of Independent Registered Public Accounting Firms	F-2
Consolidated Income Statements for the years ended December 31, 2004, 2003 and 2002	F-5
Consolidated Balance Sheets at December 31, 2004 and 2003	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002	F-7
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2004, 2003 and 2002	F-8
Notes to the Consolidated Financial Statements	F-9

**Financial Statement Schedule:**

Report of Independent Registered Public Accounting Firm	S-1
Schedule II Valuation and Qualifying Accounts	S-2

F-1

---

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of ABB Ltd:

We have audited the accompanying consolidated balance sheets of ABB Ltd as of December 31, 2004 and 2003, and the related consolidated income statements, statements of cash flows and statements of changes in stockholders' equity for each of the three years in the period ended December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of Jorf Lasfar Energy Company, a corporation in which the Company has a 50% interest, (the Company's equity in Jorf Lasfar Energy Company's net income is stated at \$63 million in 2004, \$60 million in 2003 and \$66 million in 2002) and we did not audit the 2002 consolidated financial statements of Swedish Export Credit Corporation, a corporation in which the Company had a 35% interest, (the Company's equity in Swedish Export Credit Corporation's consolidated net income is stated at \$89 million in 2002). Those statements were audited by other auditors whose reports have been furnished to us. Our opinion, insofar as it relates to amounts included for those companies and their subsidiaries, is based solely on the reports of the other auditors.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits and the reports of other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of ABB Ltd at December 31, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, in 2003 the Company changed its method of consolidation relating to variable interest entities.

/s/ ERNST & YOUNG AG  
Zurich, Switzerland  
April 6, 2005

**Report of Independent Registered Public Accounting Firm**

To the Management Committee  
and Stockholders of Jorf Lasfar  
Energy Company S.C.A.  
B.P. 99 Sidi Bouzid  
El Jadida

We have audited the accompanying balance sheets of Jorf Lasfar Energy Company S.C.A. (the "Company") as of December 31, 2004, 2003 and 2002, and the related statements of income, of stockholders' equity and of cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Accounting Oversight Board (United States of America). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Jorf Lasfar Energy Company S.C.A. at December 31, 2004, 2003 and 2002, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ PRICE WATERHOUSE  
Casablanca, Morocco,  
February 11, 2005

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors of  
AB Svensk Exportkredit:

We have audited the accompanying consolidated and parent company balance sheets of AB Svensk Exportkredit (Swedish Export Credit Corporation) (the "Company") as of December 31, 2002, and the related consolidated and parent company statements of income and of cash flows for each of the two years in the period ended December 31, 2002 (not presented separately herein). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated and parent company financial statements referred to above present fairly, in all material respects, the respective financial position of the Company at December 31, 2002, and the respective results of operations and of cash flows for each of the two years in the period ended December 31, 2002, in conformity with generally accepted accounting principles in Sweden.

Accounting principles generally accepted in Sweden vary in certain significant respects from accounting principles generally accepted in the United States of America. Application of accounting principles generally accepted in the United States of America would have affected consolidated results of operations for each of the two years in the period ended December 31, 2002 and consolidated shareholders' funds as of December 31, 2002, to the extent summarized in Note 33 to the consolidated financial statements (not presented separately herein). As more fully described in Note 33 to the consolidated financial statements, the originally reported amount of net income for the year ended December 31, 2001 under U.S GAAP has been restated (not presented separately herein).

KPMG

By: /s/ ANDERS LINER

---

Authorized Public Accountant

Stockholm, Sweden

February 20, 2003 except Note 32 and

Note 33, which are as of March 31, 2003

## ABB Ltd

## Consolidated Income Statements

for the years ended December 31, 2004, 2003 and 2002

	Year ended December 31,		
	2004	2003	2002
	(in millions, except per share data)		
Revenues	\$ 20,721	\$ 20,427	\$ 19,472
Cost of sales	(15,757)	(15,928)	(15,098)
<b>Gross profit</b>	<b>4,964</b>	<b>4,499</b>	<b>4,374</b>
Selling, general and administrative expenses	(3,786)	(3,917)	(4,050)
Amortization expense	(45)	(31)	(45)
Other income (expense), net	(49)	(194)	(80)
<b>Earnings before interest and taxes</b>	<b>1,084</b>	<b>357</b>	<b>199</b>
Interest and dividend income	164	152	194
Interest and other finance expense	(387)	(569)	(327)
<b>Income (loss) from continuing operations before taxes and minority interest</b>	<b>861</b>	<b>(60)</b>	<b>66</b>
Provision for taxes	(311)	(245)	(81)
Minority interest	(102)	(66)	(111)
<b>Income (loss) from continuing operations</b>	<b>448</b>	<b>(371)</b>	<b>(126)</b>
Loss from discontinued operations, net of tax	(483)	(408)	(693)
<b>Net loss</b>	<b>\$ (35)</b>	<b>\$ (779)</b>	<b>\$ (819)</b>
Basic earnings (loss) per share:			
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.11)
Net loss	\$ (0.02)	\$ (0.64)	\$ (0.74)
Diluted earnings (loss) per share:			
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.27)
Net loss	\$ (0.02)	\$ (0.64)	\$ (0.86)

See accompanying notes to the Consolidated Financial Statements

## ABB Ltd

## Consolidated Balance Sheets

at December 31, 2004 and 2003

	December 31,	
	2004	2003
	(in millions, except share data)	
Cash and equivalents	\$ 3,676	\$ 4,783
Marketable securities and short-term investments	524	473
Receivables, net	6,330	6,049
Inventories, net	2,977	2,671
Prepaid expenses and other	1,688	1,794
Assets held for sale and in discontinued operations	155	4,981
<b>Total current assets</b>	<b>15,350</b>	<b>20,751</b>
Financing receivables, non-current	1,233	1,372
Property, plant and equipment, net	2,981	2,858
Goodwill	2,602	2,528
Other intangible assets, net	493	601
Prepaid pension and other employee benefits	549	564
Investments and other	1,469	1,727
<b>Total assets</b>	<b>\$ 24,677</b>	<b>\$ 30,401</b>
Accounts payable, trade	\$ 4,272	\$ 4,034
Accounts payable, other	1,437	1,395
Short-term borrowings and current maturities of long-term borrowings	633	1,644
Accrued liabilities and other	6,436	5,957
Liabilities held for sale and in discontinued operations	290	3,990
<b>Total current liabilities</b>	<b>13,068</b>	<b>17,020</b>
Long-term borrowings	4,901	6,290
Pension and other employee benefits	1,551	1,790
Deferred taxes	953	1,022
Other liabilities	1,083	1,077
<b>Total liabilities</b>	<b>21,556</b>	<b>27,199</b>
Minority interest	297	285
Stockholders' equity:		
Capital stock and additional paid-in capital	3,083	3,067
Retained earnings	1,725	1,760
Accumulated other comprehensive loss	(1,846)	(1,772)
Less: Treasury stock, at cost (11,611,529 shares at December 31, 2004 and 2003)	(138)	(138)
<b>Total stockholders' equity</b>	<b>2,824</b>	<b>2,917</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 24,677</b>	<b>\$ 30,401</b>

See accompanying notes to the Consolidated Financial Statements





## ABB Ltd

## Consolidated Statements of Cash Flows

for the years ended December 31, 2004, 2003 and 2002

	Year ended December 31,		
	2004	2003	2002
	(in millions)		
<b>Operating activities</b>			
Net loss	\$ (35)	\$ (779)	\$ (819)
<i>Adjustments to reconcile net loss to net cash provided by (used in) operating activities:</i>			
Depreciation and amortization	633	585	611
Provisions	92	(728)	(132)
Pension and postretirement benefits	55	21	37
Deferred taxes	3	47	(123)
Net gain from sale of property, plant and equipment	(36)	(26)	(23)
Loss on sale of discontinued operations	63	38	194
Other	167	411	(164)
Changes in operating assets and liabilities:			
Marketable securities (trading)	43	13	498
Trade receivables	(160)	85	627
Inventories	(74)	238	369
Trade payables	(63)	(381)	79
Other assets and liabilities, net	274	303	(1,154)
<b>Net cash provided by (used in) operating activities</b>	<b>962</b>	<b>(173)</b>	
<b>Investing activities</b>			
Changes in financing receivables	176	390	264
Purchases of marketable securities and short-term investments (other than trading)	(2,877)	(2,781)	(4,377)
Purchases of property, plant and equipment	(543)	(547)	(602)
Acquisitions of businesses (net of cash acquired)	(24)	(55)	(144)
Proceeds from sales of marketable securities and short-term investments (other than trading)	2,317	3,049	4,525
Proceeds from sales of property, plant and equipment	123	155	476
Proceeds from sales of businesses (net of cash disposed)	1,182	543	2,509
<b>Net cash provided by investing activities</b>	<b>354</b>	<b>754</b>	<b>2,651</b>
<b>Financing activities</b>			
Net changes in borrowings with maturities of 90 days or less	(104)	(99)	(1,677)
Increases in borrowings	265	1,976	9,069
Repayment of borrowings	(2,913)	(2,893)	(10,188)
Treasury and capital stock transactions	(36)	2,675	
Other	(17)	(56)	3
<b>Net cash provided by (used in) financing activities</b>	<b>(2,805)</b>	<b>1,603</b>	<b>(2,793)</b>
Effects of exchange rate changes on cash and equivalents	74	150	141
Adjustment for the net change in cash and equivalents in assets held for sale and in discontinued operations	308	(80)	60
<b>Net change in cash and equivalents continuing operations</b>	<b>(1,107)</b>	<b>2,254</b>	<b>59</b>
Cash and equivalents beginning of year	4,783	2,529	2,470

	Year ended December 31,		
	2019	2018	2017
<b>Cash and equivalents end of year</b>	<b>\$ 3,676</b>	<b>\$ 4,783</b>	<b>\$ 2,529</b>
Interest paid	\$ 382	\$ 438	\$ 482
Taxes paid	\$ 379	\$ 238	\$ 298

See accompanying notes to the Consolidated Financial Statements

**ABB Ltd**  
**Consolidated Statements of Changes in Stockholders' Equity**  
**for the years ended December 31, 2004, 2003 and 2002**

Accumulated other comprehensive loss

	Capital stock and additional paid-in capital	Retained earnings	Foreign currency translation adjustment	Unrealized gain (loss) on available- for-sale securities	Minimum pension liability adjustment	Unrealized gain (loss) of cash flow hedge derivatives	Total accumulated other comprehensive loss	Treasury stock	Total stockholders' equity
(in millions)									
<b>Balance at January 1, 2002,</b>	<b>\$ 2,028</b>	<b>\$ 3,358</b>	<b>\$ (1,521)</b>	<b>\$ (41)</b>	<b>\$ (49)</b>	<b>\$ (87)</b>	<b>\$ (1,698)</b>	<b>\$ (1,750)</b>	<b>\$ 1,938</b>
Comprehensive loss:									
Net loss		(819)							(819)
Foreign currency translation adjustments			(304)				(304)		(304)
Accumulated foreign currency translation adjustments allocated to divestments of businesses			90				90		90
Effect of change in fair value of available-for-sale securities, net of tax of \$1				3			3		3
Minimum pension liability adjustments, net of tax of \$30					(107)		(107)		(107)
Change in derivatives qualifying as cash flow hedges, net of tax of \$52						131	131		131
<b>Total comprehensive loss</b>									<b>(1,006)</b>
Other	(1)								(1)
<b>Balance at December 31, 2002,</b>	<b>2,027</b>	<b>2,539</b>	<b>(1,735)</b>	<b>(38)</b>	<b>(156)</b>	<b>44</b>	<b>(1,885)</b>	<b>(1,750)</b>	<b>931</b>
Comprehensive loss:									
Net loss		(779)							(779)
Foreign currency translation adjustments			25				25		25
Accumulated foreign currency translation adjustments allocated to divestments of businesses			(37)				(37)		(37)
Effect of change in fair value of available-for-sale securities, net of tax of \$18				65			65		65
Minimum pension liability adjustments, net of tax of \$5					19		19		19
Change in derivatives qualifying as cash flow hedges, net of tax of \$13						41	41		41

Edgar Filing: ABB LTD - Form 20-F

Accumulated other comprehensive loss

Total comprehensive loss									(666)
Sale of treasury stock	(1,456)						1,612		156
Capital stock issued in connection with rights offering, net	2,487								2,487
Call options	9								9
<b>Balance at December 31, 2003,</b>	<b>3,067</b>	<b>1,760</b>	<b>(1,747)</b>	<b>27</b>	<b>(137)</b>	<b>85</b>	<b>(1,772)</b>	<b>(138)</b>	<b>2,917</b>
<b>Comprehensive loss:</b>									
<b>Net loss</b>		<b>(35)</b>							<b>(35)</b>
<b>Foreign currency translation adjustments</b>			<b>19</b>				<b>19</b>		<b>19</b>
<b>Accumulated foreign currency translation adjustments allocated to divestments of businesses</b>			<b>20</b>				<b>20</b>		<b>20</b>
<b>Effect of change in fair value of available- for-sale securities, net of tax of \$6</b>				<b>(15)</b>			<b>(15)</b>		<b>(15)</b>
<b>Minimum pension liability adjustments, net of tax of \$37</b>					<b>(69)</b>		<b>(69)</b>		<b>(69)</b>
<b>Change in derivatives qualifying as cash flow hedges, net of tax of \$16</b>						<b>(29)</b>	<b>(29)</b>		<b>(29)</b>
<b>Total comprehensive loss</b>									<b>(109)</b>
<b>Call options</b>	<b>8</b>								<b>8</b>
<b>Other</b>	<b>8</b>								<b>8</b>
<b>Balance at December 31, 2004,</b>	<b>\$ 3,083</b>	<b>\$ 1,725</b>	<b>\$ (1,708)</b>	<b>\$ 12</b>	<b>\$ (206)</b>	<b>\$ 56</b>	<b>\$ (1,846)</b>	<b>\$ (138)</b>	<b>\$ 2,824</b>

See accompanying notes to the Consolidated Financial Statements

**ABB Ltd**

**Notes to the Consolidated Financial Statements**

**(U.S. dollar amounts in millions, except per share amounts)**

**Note 1 The company**

ABB Ltd and its subsidiaries (collectively, the "Company") is a leading global company in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The Company works with customers to engineer and install networks, facilities and plants with particular emphasis on enhancing efficiency and productivity for customers that source, transform, transmit and distribute energy.

**Note 2 Significant accounting policies**

The following is a summary of significant accounting policies followed in the preparation of these Consolidated Financial Statements.

**Basis of presentation**

The Consolidated Financial Statements are prepared in accordance with United States generally accepted accounting principles and are presented in United States dollars (\$) unless otherwise stated. Par value of capital stock is denominated in Swiss francs.

**Scope of consolidation**

The Consolidated Financial Statements include 100 percent of the assets, liabilities, revenues, expenses, income, loss and cash flows of ABB Ltd and companies in which ABB Ltd has a controlling interest (subsidiaries), as if ABB Ltd and its subsidiaries were a single company. Intercompany accounts and transactions have been eliminated. Minority interest is calculated for entities fully consolidated but not wholly owned. The components of net income and equity attributable to the minority shareholders are presented in the minority interest line items included in the Consolidated Income Statements and Consolidated Balance Sheets, respectively.

Effective January 31, 2003, variable interest entities (VIEs) are consolidated when the Company is considered the primary beneficiary. Also, effective January 31, 2003, previously consolidated VIEs would be deconsolidated when a triggering event, as defined by Financial Accounting Standards Board Interpretation No. 46(R) (FIN 46R), *Consolidation of Variable Interest Entities an Interpretation of ARB No. 51*, indicates the Company is no longer the primary beneficiary. For those VIEs where the Company is not the primary beneficiary, existing consolidation policies are applied. See Note 8 for information relating to the impact of adopting FIN 46R.

Investments in joint ventures and affiliated companies in which the Company has significant influence, but not a controlling interest, are accounted for using the equity method. This is generally presumed to exist when the Company owns between 20 percent and 50 percent of the investee. In certain circumstances, the Company's ownership is between 20 percent and 50 percent of the investee but it consolidates the investment because the Company participates in significant operating and financial decisions of the investee.

Under the equity method, the Company's investment in and amounts due to and from an equity investee are included in the Consolidated Balance Sheets; the Company's share of an investee's earnings is included in the Consolidated Income Statements; and the dividends, cash distributions, loans or other cash received from the investee, additional cash investments, loan repayments or other cash paid to the investee, are included in the Consolidated Balance Sheets and the Consolidated Statements

of Cash Flows. Additionally, the carrying values of investments accounted for using the equity method of accounting are adjusted downward to reflect any other-than-temporary declines in value.

Investments in non-public companies in which the Company does not have a controlling interest or significant influence are accounted for at cost. This is generally presumed to exist when the Company owns less than 20 percent of the investee. Dividends and other distributions of earnings from these investments are included in income when received. The carrying value of investments accounted for using the cost method of accounting are adjusted downward to reflect any other-than-temporary declines in value.

#### **Reclassifications**

Amounts reported for prior years in the Consolidated Financial Statements and Notes have been reclassified to conform to the current year's presentation, primarily as a result of the application of Statement of Financial Accounting Standards No. 144 (SFAS 144), *Accounting for the Impairment or Disposal of Long-Lived Assets*, in reflecting assets and liabilities held for sale and in discontinued operations.

#### **Operating cycle**

A portion of the Company's operating cycle, including long-term construction activities, exceeds one year. For classification of current assets and liabilities related to these types of construction activities, the Company elected to use the duration of the contract as its operating cycle.

#### **Use of estimates**

The preparation of the Consolidated Financial Statements requires management to make estimates and assumptions that affect reported amounts and related disclosures. Actual results could differ from those estimates.

#### **Concentrations of credit risk**

The Company sells a broad range of products, systems and services to a wide range of industrial and commercial customers throughout the world. Concentrations of credit risk with respect to trade receivables are limited, as the Company's customer base is comprised of a large number of individual customers. Ongoing credit evaluations of customers' financial positions are performed and, generally, no collateral is required.

Subsequent to the sale of a significant portion of the Company's Structured Finance business during 2002, the Financial Services activities of the Company were substantially reduced. As a consequence of this divestment, the credit risk of the Company's remaining Financial Services activities is primarily concentrated in the remaining lease and loan portfolio. Policies and procedures to control the remaining credit risks include measurements to develop and ensure the maintenance of a diversified portfolio through the active monitoring of counterparty, country and industry exposure.

The Company maintains reserves for potential credit losses and such losses, in the aggregate, are in line with the Company's expectations.

It is Company policy to invest cash in deposits with banks throughout the world with certain minimum credit ratings and in high quality, low risk, liquid investments. The Company actively manages its credit risk by routinely reviewing the creditworthiness of the banks and the investments held, as well as maintaining such investments in deposits or liquid investments. The Company has not incurred significant credit losses related to such investments.

The Company's exposure to credit risk on derivative financial instruments is the risk that a counterparty will fail to meet its obligations. To reduce this risk, the Company has credit policies that require the establishment and periodic review of credit limits for individual counterparties. In addition, the Company has entered into close-out netting agreements with most counterparties. Close-out netting agreements provide for the termination, valuation and net settlement of some or all outstanding transactions between two counterparties on the occurrence of one or more pre-defined trigger events.

#### **Cash and equivalents**

Cash and equivalents include highly liquid investments with original maturities of three months or less. Cash and equivalents does not include restricted cash of \$452 million and \$433 million at December 31, 2004 and 2003, respectively, which are reflected as long-term assets.

#### **Marketable securities and short-term investments**

Debt and equity securities are classified as either trading or available-for-sale at the time of purchase and are carried at fair value. Debt and equity securities that are purchased and held principally for the purpose of sale in the near term are classified as trading securities and unrealized gains and losses thereon are included in the determination of earnings. Unrealized gains and losses on available-for-sale securities are excluded from the determination of earnings and are instead recognized in the accumulated other comprehensive loss component of stockholders' equity, net of tax (accumulated other comprehensive loss) until realized. Realized gains and losses on available-for-sale securities are computed based upon the historical cost of these securities applied using the specific identification method. Declines in fair values of available-for-sale securities that are other-than-temporary are included in the determination of earnings.

The Company analyzes its available-for-sale securities for impairment during each reporting period to evaluate whether an event or change in circumstances has occurred in that period that may have a significant adverse effect on the fair value of the investment. The Company records an impairment charge through current period earnings and adjusts the cost basis for such other-than-temporary declines in fair value when the fair value is not anticipated to recover above cost within a three-month period after the measurement date unless there are mitigating factors that indicate an impairment charge through earnings may not be required. If an impairment charge is recorded, subsequent recoveries in fair value are not reflected in earnings until sale of the security.

#### **Revenue recognition**

The Company recognizes revenues from the sale of manufactured products when persuasive evidence of an arrangement exists, the price is fixed or determinable, collectibility is reasonably assured and upon transfer of title, including the risks and rewards of ownership to the customer, or upon the



rendering of services. If contracts for sale of manufactured products require installation that can only be performed by the Company, revenues are deferred until installation of the products is complete. In accordance with Emerging Issues Task Force No. 00-21, *Revenue Arrangements with Multiple Deliverables*, when multiple elements such as products and services are contained in a single arrangement or in related arrangements with the same customer, the Company allocates revenues to each element based on its relative fair value, provided that such element meets the criteria for treatment as a separate unit of accounting. Revenues from contracts that contain customer acceptance provisions are deferred until customer acceptance occurs, the Company has tested to the level required to ensure that acceptance will occur or the contractual acceptance period has lapsed.

Revenues under long-term contracts are recognized using the percentage-of-completion method of accounting. The Company principally uses the cost-to-cost or delivery events methods to measure progress towards completion on contracts. Management determines the method to be used by type of contract based on its judgment as to which method best measures actual progress towards completion. Revenues under cost-reimbursement contracts are recognized as costs are incurred.

#### **Product-related expenses and contract loss provisions**

Anticipated costs for warranties are recorded when revenues are recognized. Losses on product and maintenance-type contracts are recognized in the period when they are identified and are based upon the anticipated excess of contract costs over the related contract revenues. Shipping and handling costs are recorded as a component of cost of sales.

#### **Receivables**

The Company accounts for the securitization of trade receivables in accordance with Statement of Financial Accounting Standards No. 140 (SFAS 140), *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*. SFAS 140 requires an entity to recognize the financial and servicing assets it controls and the liabilities it has incurred and to derecognize financial assets when control has been surrendered, as evaluated in accordance with the criteria provided in SFAS 140.

The Company accounts for the transfer of its receivables to Qualifying Special Purpose Entities (QSPEs) as a sale of those receivables to the extent that consideration other than beneficial interests in the transferred accounts receivable is received. The Company does not recognize the transfer as a sale unless the receivables have been put presumptively beyond the reach of the Company and its creditors, even in bankruptcy or other receivership. In addition, the QSPEs must obtain the right to pledge or exchange the transferred receivables, and the Company cannot retain the ability or obligation to repurchase or redeem the transferred receivables.

At the time the receivables are sold, the balances are removed from trade receivables and a retained interest or deferred purchase price component is recorded in other receivables. The retained interest is recorded at its estimated fair value. Costs associated with the sale of receivables are included in the determination of earnings.

The Company, in its normal course of business, sells receivables outside its securitization programs without recourse (see Note 7). Sales or transfers that do not meet the requirements of SFAS 140 are accounted for as secured borrowings.

## Inventories

Inventories are stated at the lower of cost (determined using either the first-in, first-out or the weighted-average cost method) or market. Inventoried costs relating to percentage-of-completion contracts are stated at actual production costs, including overhead incurred to date, reduced by amounts recognized in cost of sales. For inventory relating to long-term contracts, inventoried costs include amounts relating to contracts with long production cycles, a portion of which is not expected to be realized within one year.

## Impairment of long-lived assets and accounting for discontinued operations

Long-lived assets that are "held and used" are assessed for impairment when events or circumstances indicate the carrying amount of the asset may not be recoverable. If the asset's net carrying value exceeds the asset's net undiscounted cash flows expected to be generated over its remaining useful life, the carrying amount of the asset is reduced to its estimated fair value, pursuant to the measurement criteria of Statement of Financial Accounting Standards No. 144 (SFAS 144), *Accounting for the Impairment or Disposal of Long-Lived Assets*. The Company adopted SFAS 144 as of January 1, 2002. In the Consolidated Statements of Cash Flows, the amounts related to businesses with assets and liabilities held for sale and in discontinued operations are not segregated, as permitted by Statement of Financial Accounting Standards No. 95, *Statement of Cash Flows*.

In accordance with SFAS 144, the Company includes in assets and liabilities held for sale and in discontinued operations the assets and liabilities that meet certain criteria with respect to the Company's plans for their sale or abandonment. Depreciation and amortization cease when the asset meets the criteria to be classified as held for sale. If (1) a planned or completed disposal involves a component (disposal group) of the Company whose operations and cash flows can be distinguished operationally and for financial reporting purposes; (2) such operations and cash flows will be (or have been) eliminated from the Company's ongoing operations; and (3) the Company will not have any significant continuing involvement in the disposal group, then the disposal group's results of operations are presented as discontinued operations for all periods. Operating losses from discontinued operations are recognized in the period in which they occur. Long-lived assets (or groups of assets and related liabilities) classified as held for sale, are measured at the lower of carrying amount or fair value less cost to sell.

In addition to the interest expense contained within businesses classified as discontinued operations, a portion of the Company's interest expense is reclassified from interest and other finance expense to loss from discontinued operations, net of tax, in accordance with Emerging Issues Task Force No. 87-24 (EITF 87-24), *Allocation of Interest to Discontinued Operations*. Such amounts were \$20 million, \$33 million and \$41 million in 2004, 2003 and 2002, respectively. These amounts were calculated based upon the ratio of net assets of the discontinued business less debt that is required to be paid as a result of the disposal, divided by the sum of total net assets and total debt (other than the portion of debt directly attributable to other operations of the Company, debt of the discontinued operation that will be assumed by the buyer and debt that is required to be paid as a result of the disposal transaction). This ratio was multiplied by the portion of total interest expense not directly attributable to other operations of the Company to arrive at allocable interest attributable to businesses reflected as discontinued operations.

### **Goodwill and other intangible assets**

The excess of cost over the fair value of net assets of acquired businesses is recorded as goodwill. The Company accounts for its goodwill in accordance with Statement of Financial Accounting Standards No. 142 (SFAS 142), *Goodwill and Other Intangible Assets*. Under SFAS 142, effective January 1, 2002, the Company ceased amortizing goodwill. In accordance with SFAS 142, goodwill is tested for impairment annually and also upon the occurrence of a triggering event requiring the re-assessment of a business' carrying value of its goodwill. The Company performs its annual impairment assessment on October 1. A fair value approach is used to identify potential goodwill impairment and, when necessary, measure the amount of impairment. The Company uses a discounted cash flow model to determine the fair value of reporting units, unless there is a readily determinable fair market value.

The cost of acquired intangible assets is amortized on a straight-line basis over their estimated useful lives, typically ranging from 3 to 10 years. Intangible assets are tested for impairment upon the occurrence of certain triggering events.

### **Capitalized software costs**

Capitalized costs of software for internal use are accounted for in accordance with Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, and are amortized on a straight-line basis over the estimated useful life of the software, typically ranging from 3 to 5 years. Capitalized costs of a software product to be sold are accounted for in accordance with Statement of Financial Accounting Standards No. 86, *Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed*, and are carried at the lower of unamortized cost or net realizable value until the product is available for general release to customers, at which time capitalization ceases and costs are amortized on a straight-line basis over the estimated life of the product. The Company expenses costs incurred prior to technological feasibility, and thereafter capitalizes costs incurred in developing or obtaining software for internal use and for software products to be sold.

### **Property, plant and equipment**

Property, plant and equipment is stated at cost, less accumulated depreciation, and is depreciated using the straight-line method over the estimated useful lives of the assets as follows: 10 to 50 years for buildings and leasehold improvements and 3 to 15 years for machinery and equipment.

### **Derivative financial instruments**

The Company uses derivative financial instruments to manage interest rate and currency exposures, and to a lesser extent commodity exposures, arising from its global operating, financing and investing activities. The Company's policies require that its industrial entities hedge their exposure from firm commitments denominated in foreign currencies, as well as at least fifty percent of the anticipated foreign currency denominated sales volume of standard products over the next twelve months. In addition, derivative financial instruments were also used for proprietary trading purposes within the

Company's former Financial Services division and within limits determined by the Company's Board of Directors until June 2002, when the Company ceased entering into new positions.

The Company accounts for its derivative financial instruments in accordance with Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as subsequently amended (SFAS 133). SFAS 133 requires the Company to recognize all derivatives, other than certain derivatives indexed to the Company's own stock, on the Consolidated Balance Sheets at fair value. Derivatives that are not designated as hedges must be adjusted to fair value through earnings. If the derivatives are designated as a hedge, depending on the nature of the hedge, changes in the fair value of the derivatives will either be offset against the change in fair value of the hedged item through earnings or recognized in accumulated other comprehensive loss until the hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value is immediately recognized in earnings.

Forward foreign exchange contracts are the primary instrument used to manage foreign exchange risk. Where forward foreign exchange contracts are designated as cash flow hedges under SFAS 133, changes in their fair value are recorded in accumulated other comprehensive loss until the hedged item is recognized in earnings. The Company also enters into forward foreign exchange contracts that serve as economic hedges of existing assets and liabilities. These are not designated as accounting hedges under SFAS 133 and, consequently, changes in their fair value are reported in earnings where they offset the translation gain or loss on the foreign currency denominated asset or liability.

To reduce its interest rate and currency exposure arising from its funding activities and to hedge specific assets, the Company uses interest rate and currency swaps. Where interest rate swaps are designated as fair value hedges, the changes in fair value of the swaps are recognized in earnings, as are the changes in the fair value of the underlying assets or liabilities. Where such interest rate swaps do not qualify for the short cut method as defined under SFAS 133, any ineffectiveness is included in earnings. Where interest rate swaps are designated as cash flow hedges, their change in value is recognized in accumulated other comprehensive loss until the hedged item is recognized in earnings.

All other swaps, futures, options and forwards that are designated as effective hedges of specific assets, liabilities or committed or forecasted transactions are recognized in earnings consistent with the effects of the hedged transactions.

If an underlying hedged transaction is terminated early, the hedging derivative financial instrument is treated as if terminated simultaneously, with any gain or loss on termination of the derivative immediately recognized in earnings. Where derivative financial instruments have been designated as hedges of forecasted transactions, and such forecasted transactions become probable of not occurring, hedge accounting ceases and any derivative gain or loss previously included in accumulated other comprehensive loss is reclassified into earnings.

Certain commercial contracts may grant rights to the Company or other counterparties, or contain other provisions considered to be derivatives under SFAS 133. Such embedded derivatives are assessed at inception of the contract and depending on their characteristics accounted for as separate derivative instruments pursuant to SFAS 133.

### **Sale-leasebacks**

The Company periodically enters into transactions accounted for as sale-leasebacks, in which fixed assets, generally real estate and/or equipment, are sold to a third party and then leased for use by the Company. Under certain circumstances, the necessary criteria to recognize a sale of the assets may not occur, and the transaction is reflected as a financing transaction, with the proceeds received from the transaction reflected as a borrowing or as a deposit liability. When the necessary criteria have been met to recognize a sale, gains or losses on the sale of the assets are generally deferred and amortized over the term of the transaction, except in certain limited instances when a portion of the gain or loss may be recognized. The lease of the assets is accounted for as either an operating lease or a capital lease depending upon its specific terms, as required by Statement of Financial Accounting Standards No. 13, *Accounting for Leases*. By their nature, sale-leaseback transactions are generally highly structured and complex transactions, which therefore require detailed analyses to be made by the Company in determining the appropriate accounting treatment.

### **Insurance**

The following accounting policies apply specifically to the Reinsurance business. In April 2004, the Company completed the sale of its Reinsurance business and reflected the results of operations in loss from discontinued operations, net of tax, and the assets and liabilities in assets and liabilities held for sale and in discontinued operations for all periods presented.

#### ***Premiums and acquisition costs***

Premiums were generally earned pro rata over the period coverage was provided. Premiums earned included estimates of certain premiums due, including adjustments on retrospectively rated contracts. Premium receivables included premiums related to retrospectively rated contracts that represented the estimate of the difference between provisional premiums received and the ultimate premiums due. Unearned premiums represented the portion of premiums written that was applicable to the unexpired terms of reinsurance contracts or certificates in force. These unearned premiums were calculated by the monthly pro rata method or were based on reports from ceding companies. Acquisition costs were costs related to the acquisition of new business and renewals. These costs were deferred and charged against earnings ratably over the terms of the related policy.

#### ***Profit commission***

Certain contracts carried terms and conditions that resulted in the payment of profit commissions. Estimates of profit commissions were reviewed based on underwriting experience to date and, as adjustments become necessary, such adjustments were reflected in earnings.

#### ***Loss and loss adjustment expenses***

Loss and loss adjustment expenses were charged to operations as incurred. The liabilities for unpaid loss and loss adjustment expenses were determined on the basis of reports from ceding companies and underwriting associations, as well as estimates by management and in-house actuaries, including those for incurred, but not reported, losses, salvage and subrogation recoveries. Inherent in the estimates of losses were expected trends of frequency, severity and other factors that could vary significantly as claims were settled. The Company estimated expected trends using actuarial methods

widely used in the insurance industry, such as the Bornhuetter-Ferguson method, utilizing the Company's historically paid and incurred losses.

***Fees***

Contracts that neither result in the transfer of insurance risk nor the reasonable possibility of significant loss to the reinsurer were accounted for as financing arrangements rather than reinsurance. Consideration received for such contracts was reflected as accounts payable, other, and was amortized on a pro rata basis over the life of the contract.

***Funds withheld***

Under the terms of certain reinsurance agreements, the ceding reinsurer retained a portion of the premium to provide security for expected loss payments. The funds withheld were generally invested by the ceding reinsurer and earn an investment return that became additional funds withheld.

***Reinsurance***

The Company sought to reduce the loss that may have arisen from catastrophes and other events that may have caused unfavorable underwriting results by reinsuring certain levels of risks with other insurance enterprises or reinsurers. Reinsurance contracts were accounted for by reducing premiums earned by amounts paid to the reinsurers. Recoverable amounts were established for paid and unpaid losses and loss adjustment expense ceded to the reinsurer. Amounts recoverable from the reinsurer were estimated in a manner consistent with the claim liability associated with the reinsurance policy. Contracts where it was not reasonably possible that the reinsurer would realize a significant loss from the insurance risk generally did not meet the conditions for reinsurance accounting and were recorded as deposits. The Company assessed probability of risks transferred in significant loss realization based on the terms in the reinsurance contract that impact the timing and amount of reimbursement under the contract and the present value of all cash flows without regard to how cash flows are characterized, in accordance with Statement of Financial Accounting Standards No. 113, *Accounting and Reporting for Reinsurance of Short Duration and Long Duration Contracts*.

**Translation of foreign currencies and foreign exchange transactions**

The functional currency for most of the Company's operations is the applicable local currency. The translation from the applicable functional currencies into the Company's reporting currency is performed for balance sheet accounts using exchange rates in effect at the balance sheet date, and for income statement accounts using average rates of exchange prevailing during the year. The resulting translation adjustments are excluded from the determination of earnings and are recognized in accumulated other comprehensive loss until the entity is sold, substantially liquidated or being evaluated for impairment in anticipation of disposal.

Foreign currency exchange gains and losses, such as those resulting from foreign currency denominated receivables or payables, are included in the determination of earnings, except as they relate to intra-Company loans that are equity-like in nature with no reasonable expectation of repayment, which are recognized in accumulated other comprehensive loss.

In highly inflationary countries, monetary balance sheet positions in local currencies are converted into U.S. dollars at the year-end rate. Fixed assets are kept at historical U.S. dollar values from

acquisition dates. Sales and expenses are converted at the exchange rates prevailing upon the date of the transaction. All translation gains and losses resulting from the restatement of balance sheet positions are included in the determination of earnings.

## **Taxes**

The Company uses the asset and liability method to account for deferred taxes. Under this method, deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and the tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. For financial statement purposes the Company records a deferred tax asset when it determines that it is probable that the deduction will be sustained based upon the deduction's technical merit. Deferred tax assets are reduced by a valuation allowance to reflect the amount that is more likely than not to be realized.

Generally, deferred taxes are not provided on the unremitted earnings of subsidiaries to the extent it is expected that these earnings are permanently reinvested. Such earnings may become taxable upon the sale or liquidation of these subsidiaries or upon the remittance of dividends. Deferred taxes are provided in situations where the Company's subsidiaries plan to make future dividend distributions.

The Company operates in numerous tax jurisdictions and, as a result, is regularly subject to audit by tax authorities. The Company provides for tax contingencies relating to audits by tax authorities based upon its best estimate of the facts and circumstances as of each reporting period. Changes in the facts and circumstances could result in a material change to the tax accruals. The Company provides for contingencies whenever it is deemed probable that a tax asset has been impaired or a tax liability has been incurred for events such as tax claims or changes in tax laws.

## **Research and development**

Research and development expense was \$690 million, \$635 million and \$572 million in 2004, 2003 and 2002, respectively. These costs are included in selling, general and administrative expenses.

## **Earnings per share**

Basic earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year. Diluted earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise: outstanding written call options, if dilutive; the securities issued under the Company's employee incentive plans, if dilutive; and shares issuable in relation to outstanding convertible bonds, if dilutive (See Notes 15, 22 and 24).

## **Stock-based compensation**

The Company has certain employee incentive plans under which it offers stock-based securities to employees. The plans are described more fully in Note 22. The Company accounts for such stock-based securities using the intrinsic value method of APB Opinion No. 25 (APB 25), *Accounting for Stock Issued to Employees*, as permitted by Statement of Financial Accounting Standards No. 123 (SFAS 123), *Accounting for Stock Based Compensation*. All such securities were issued with exercise prices greater

than or equal to the market prices of the stock on the dates of grant. Accordingly, the Company has recorded no compensation expense related to these securities, except in circumstances when a participant receives appreciation rights or ceases to be employed by a consolidated subsidiary, such as after a divestment by the Company. The following table illustrates the effect on net loss and on loss per share (see Note 24) if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee compensation. Fair value of these securities offered to employees was determined on the date of grant by using a dynamic proprietary option-pricing model (see Note 22).

	Year ended December 31,		
	2004	2003	2002
Net loss, as reported	\$ (35)	\$ (779)	\$ (819)
Less: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(8)	(11)	(22)
<b>Pro forma net loss</b>	<b>\$ (43)</b>	<b>\$ (790)</b>	<b>\$ (841)</b>
Loss per share:			
Basic as reported	\$ (0.02)	\$ (0.64)	\$ (0.74)
Basic pro forma	\$ (0.02)	\$ (0.65)	\$ (0.76)
Diluted as reported	\$ (0.02)	\$ (0.64)	\$ (0.86)
Diluted pro forma	\$ (0.02)	\$ (0.65)	\$ (0.88)

#### **New accounting pronouncements**

In January 2003, the Financial Accounting Standards Board issued Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities - an Interpretation of ARB No. 51*. FIN 46 requires variable interest entities (VIEs) to be consolidated by their primary beneficiaries. During 2003, the Company adopted the requirements of FIN 46 and applied the guidance to VIEs in which the Company has an interest. See Note 8 for information relating to the impact of adopting FIN 46. FIN 46 was revised in December 2003. The Company adopted the December revision (FIN 46R) effective March 31, 2004. The adoption of FIN 46R did not have a material impact on the Company's financial position or results of operations.

In December 2004, the Financial Accounting Standards Board issued Statement No. 123R (SFAS 123R), *Share-Based Payment*, which replaces SFAS 123 and APB 25 and requires the Company to measure compensation cost for all share-based payments at fair value. The Company plans to adopt SFAS 123R as of July 1, 2005. The Company will recognize share-based employee compensation cost from July 1, 2005, as if the fair-value-based accounting method had been used to account for all employee awards granted, modified, or settled after the effective date and for any awards that were not fully vested as of the effective date. Based on currently existing share-based compensation plans, the Company does not expect the adoption of SFAS 123R to have a material impact on its financial position or results of operations.

#### **Note 3 Discontinued operations**

In December 2002, the Company's Board of Directors approved management's plans to sell the Company's Oil, Gas and Petrochemicals business. As discussed below, the Company completed the sale of the upstream part of the Oil, Gas and Petrochemicals business (Upstream business) in July 2004. In



December 2002 management did not believe the divestment of the remaining Oil, Gas and Petrochemicals business would be contingent on the resolution of the asbestos litigation facing Combustion Engineering, Inc, a subsidiary of the Company, as described in Note 18. Subsequently, after discussions with potential purchasers, management determined the divestment would likely only occur upon a pre-packaged plan of reorganization for Combustion Engineering, Inc becoming effective. Following the U.S. Third Circuit Court's decision in December 2004 that effectively reversed the District Court's confirmation order regarding the reorganization under the U.S. Bankruptcy Code of Combustion Engineering, Inc, the Company determined it no longer met the criteria required to continue to classify the remaining Oil, Gas and Petrochemicals business in discontinued operations. Therefore, as of the fourth quarter of 2004, the results of operations of the remaining Oil, Gas and Petrochemicals business were reclassified to continuing operations for all periods presented. Additionally, the assets and liabilities of the remaining Oil, Gas and Petrochemicals business are no longer included in assets and liabilities held for sale and in discontinued operations but have been reclassified to the appropriate asset and liability lines in the Consolidated Balance Sheet for all periods presented. The remaining Oil, Gas and Petrochemicals business had revenues of \$1,076 million, \$1,876 million and \$2,314 million and losses before interest and taxes of \$4 million, \$296 million and \$142 million in 2004, 2003 and 2002, respectively.

The following are divestments of businesses no longer pursued for strategic reasons and which are in line with the Company's strategy to focus on Power Technologies and Automation Technologies as described in Note 26.

During the fourth quarter of 2004, the Company reclassified most of its Power Lines business, part of the Power Technologies division, to discontinued operations. The businesses that have been reclassified are in Brazil, which was abandoned in the fourth quarter of 2004, and Nigeria and Italy, whose sales were completed in January and February 2005, respectively. Also reclassified is the business in Germany, which the Company plans to sell during 2005. These reclassified businesses had revenues of \$117 million, \$187 million and \$254 million and net losses of \$75 million, \$10 million and \$17 million for the years ended December 31, 2004, 2003 and 2002, respectively. The net loss related to these businesses in 2004 relates to operational losses of \$46 million and costs to sell these businesses of \$29 million. Losses recorded in 2003 and 2002 relate to operational losses incurred in such years.

During the fourth quarter of 2004, the Company reclassified its Foundry business, part of the Automation Technologies division, to discontinued operations. The Company plans to sell this business in 2005. The Foundry business had revenues of \$41 million, \$45 million and \$49 million and net losses of \$17 million, \$0 million and \$0 million for the years ended December 31, 2004, 2003 and 2002, respectively. The net loss recorded in 2004 includes \$10 million related to costs to sell the Foundry business.

In January 2004, the Company agreed to sell the Upstream business to a consortium of private equity investors consisting of Candover Partners Limited, JP Morgan Partners LLC and 3i Group PLC (collectively, the "Purchasers"). In July 2004, the Company completed the sale of the Upstream business for an initial purchase price of \$925 million. Net cash proceeds from the sale were approximately \$800 million, reflecting the initial sales price adjusted for unfunded pension liabilities and changes in net working capital. The Upstream business had revenues of \$855 million, \$1,499 million and \$1,535 million in 2004, 2003 and 2002, respectively, and net losses of \$70 million and \$44 million in 2004 and 2003, respectively, and net income of \$14 million in 2002. Included in the

\$70 million net loss recorded in 2004 is the loss on sale of approximately \$26 million which includes goodwill and other intangible assets of approximately \$350 million. On February 9, 2005, the Company and the Purchasers entered into a Settlement Agreement and Amendment (Settlement Agreement) finalizing the sales price. The Settlement Agreement also contains provisions to indemnify the Purchasers with respect to certain incomplete projects (see Note 18). The Company believes the provisions recorded for such indemnified projects are adequate.

In April 2004, the Company completed the sale of its Reinsurance business to White Mountains Insurance Group Limited, a Bermuda-based insurance holding company, receiving gross cash proceeds of \$415 million and net cash proceeds of approximately \$280 million. As a result of the anticipated sale, the Company recorded an impairment charge of \$154 million in the fourth quarter of 2003. The Company recorded losses totaling \$41 million and \$97 million in 2004 and 2003, and net income of \$22 million in 2002 and revenues of \$139 million, \$782 million and \$644 million in 2004, 2003 and 2002, respectively. The \$41 million net loss related primarily to foreign exchange effects of the business in 2004 through the date of sale. The 2003 net loss of \$97 million includes a \$154 million impairment charge, income from operations of approximately \$72 million and an allocation of interest of \$15 million in accordance with EITF 87-24. The impairment charge recorded in 2003 from the anticipated disposal of the Reinsurance business of \$154 million was principally comprised of an asset write-down of \$48 million, goodwill and other intangible write-offs of \$89 million, selling costs of \$25 million, deferred tax write-offs of approximately \$16 million, offset in part by an accumulated foreign currency translation gain of \$24 million.

In November 2002, the Company completed the sale of most of its Structured Finance business to General Electric Capital Corporation (GE) and received cash proceeds of approximately \$2.0 billion, including a contingent payment of \$20 million to be released to the Company should amounts ultimately collected by GE, from a portfolio transferred by the Company to GE, reach specified targets. The Company received the last portion of the contingent payment amount in August 2004. The Company's Structured Finance business had revenues of \$262 million in 2002, and a net loss of \$183 million in 2002. The 2002 net loss of \$183 million included a \$146 million loss on disposal, loss from operations of \$22 million and the allocation of interest expense of \$15 million in accordance with EITF 87-24. The loss on disposal of \$146 million was principally comprised of asset write-downs of \$15 million, goodwill and other intangible write-offs of \$2 million, transaction costs of \$27 million, the fair value for GE's right to require the Company to repurchase certain designated assets of \$38 million, capital tax expense associated with the disposal of \$10 million and an accumulated foreign currency translation loss of \$54 million. Upon final settlement in 2004 of a purchase price dispute with GE, the Company recorded a net gain of \$14 million.

Pursuant to the sale and purchase agreement, the Company provided GE with cash collateralized letters of credit totaling \$202 million as security for certain performance-related obligations retained by the Company, of which approximately \$63 million were outstanding at December 31, 2004. The remaining cash collateralized letters of credit will further be reduced as the performance-related obligations of the Company expire.

The sale and purchase agreement provided GE the option to require the Company to repurchase certain designated financial assets transferred to GE upon the occurrence of certain events, but in any event no later than February 1, 2004. In January 2004, the Company repurchased the financial assets

for approximately \$28 million. No further obligation exists for the Company to repurchase any assets under the sale and purchase agreement with GE.

As a continuation of the Company's divestment of its Structured Finance business, the Company completed the sale of ABB Export Bank in December 2003 for approximately \$50 million. ABB Export Bank had revenues of \$9 million and \$17 million in 2003 and 2002, respectively, and a net loss of \$9 million in 2003 and net income of \$10 million in 2002. The 2003 net loss of \$9 million in loss from discontinued operations, net of tax, includes a \$12 million loss on disposal, income from operations of \$6 million and the allocation of interest expense of \$3 million in accordance with EITF 87-24. The loss on disposal of \$12 million was principally comprised of an asset write-down of \$20 million, transaction costs of \$1 million, capital tax expense associated with the disposal of \$4 million offset by an accumulated foreign currency translation gain of approximately \$13 million.

In December 2002, the Company completed the sale of its Metering business to Ruhrgas Industries GmbH of Essen, Germany, for \$223 million, including \$15 million held in escrow until certain disputed items were resolved. The cash held in escrow was released after the resolution of these items in 2003. The Metering business sold to Ruhrgas Industries GmbH had revenues of \$372 million and a net loss of \$54 million in 2002. The 2002 net loss of \$54 million included a \$48 million loss on disposal, loss from operations of \$3 million and the allocation of interest expense of \$3 million in accordance with EITF 87-24. The loss on disposal of \$48 million for the sold business was principally comprised of goodwill and other intangible write-offs of \$65 million, transaction costs and other provisions of \$46 million, tax expense associated with the disposal of \$21 million and an accumulated foreign currency translation loss of \$35 million, offset in part by a gain of \$119 million, being the difference between the proceeds received and net assets of the business. Upon final settlement in 2004 of a purchase price dispute with Ruhrgas Industries GmbH, the Company recorded a net gain of \$12 million.

During the fourth quarter of 2002, the Company reclassified its Wind Energy business to discontinued operations. In December 2003, the Company sold a portion of its Wind Energy business in Germany to GI Ventures AG of Munich, Germany, for proceeds of approximately \$35 million including a vendor note of approximately \$10 million. The Wind Energy business had revenues of \$0 million, \$16 million and \$48 million and net losses of \$25 million, \$42 million and \$1 million in 2004, 2003 and 2002, respectively. The 2003 net loss of \$42 million was comprised principally of a \$25 million loss from disposal (net of a tax benefit of \$10 million), asset write-downs of \$9 million and a loss from operations of \$8 million. The 2004 net loss of \$25 million, consisted of an additional impairment charge related to a portion of the unsold Wind Energy business.

In January 2004, the Company completed the sale of its MDCV cable business based in Germany to the Wilms Group of Menden, Germany. This business was part of the Power Technologies division. It had revenues of \$74 million and \$78 million and net losses of \$24 million and \$1 million in 2003 and 2002, respectively. The 2003 net loss of \$24 million was comprised principally of asset write-downs of \$10 million and a loss from operations of \$14 million.

Loss from discontinued operations, net of tax, also includes costs related to the Company's potential asbestos obligation of the Company's U.S. subsidiary, Combustion Engineering Inc., of approximately \$262 million, \$142 million and \$395 million in 2004, 2003 and 2002, respectively (see Note 18).

Edgar Filing: ABB LTD - Form 20-F

Operating results of the discontinued businesses are summarized as follows:

	Year ended December 31,		
	2004	2003	2002
Revenues	\$ 1,165	\$ 2,641	\$ 3,379
Costs and expenses, finance loss	(1,569)	(2,963)	(3,818)
<b>Loss before taxes</b>	<b>(404)</b>	<b>(322)</b>	<b>(439)</b>
Tax expense	(16)	(48)	(60)
<b>Net loss from discontinued operations</b>	<b>(420)</b>	<b>(370)</b>	<b>(499)</b>
Loss from dispositions, net of a tax benefit (expense) of \$(25) million, \$6 million and \$(31) million in 2004, 2003 and 2002, respectively	(63)	(38)	(194)
<b>Loss from discontinued operations, net of tax</b>	<b>\$ (483)</b>	<b>\$ (408)</b>	<b>\$ (693)</b>

The components of assets and liabilities held for sale and in discontinued operations are summarized as follows:

	December 31,	
	2004	2003
Cash and equivalents	\$ 9	\$ 317
Marketable securities and short-term investments		1,625
Receivables, net	59	1,904
Inventories, net	16	283
Prepaid expenses and other	11	148
Financing receivables, non-current		10
Goodwill and Other intangible assets	6	360
Property, plant and equipment, net	50	223
Other assets	4	111
<b>Assets held for sale and in discontinued operations</b>	<b>\$ 155</b>	<b>\$ 4,981</b>
Accounts payable	\$ 49	\$ 1,060
Short-term borrowings and current maturities of long-term borrowings	2	14
Accrued liabilities and other	112	2,425
Long-term borrowings	18	47
Other liabilities, non-current	109	444
<b>Liabilities held for sale and in discontinued operations</b>	<b>\$ 290</b>	<b>\$ 3,990</b>

Included in the table above are the assets and the liabilities held for sale of the Building Systems businesses of approximately \$81 million and \$42 million, respectively, at December 31, 2003. In accordance with SFAS 144, certain Building Systems businesses met the criteria for the classification of assets and liabilities as held for sale, but did not meet the additional criteria for its results of operations to be classified as discontinued operations (see Note 4).

At December 31, 2004 and 2003, the Consolidated Balance Sheets included \$18 million and \$79 million of pledged cash balances, respectively. Approximately \$0 million and \$44 million related to the Company's Reinsurance business and \$0 million and \$8 million related to the Upstream business and, as such, were included in assets held for sale and in discontinued operations in 2004 and 2003, respectively.

#### **Note 4 Business combinations and other divestments**

##### **Acquisitions and investments**

During 2004, 2003, and 2002, the Company invested \$24 million, \$55 million and \$154 million in 24, 24 and 32 new businesses, joint ventures or affiliated companies, respectively. The aggregate excess of the purchase price over the fair value of the net assets acquired totaled \$15 million, \$2 million and \$93 million, in 2004, 2003 and 2002, respectively, and has been recorded as goodwill. Assuming these acquisitions had occurred on the first day of the year prior to their purchase, the pro forma Consolidated Income Statements for those years would not have materially differed from reported amounts either on an individual or an aggregate basis.

##### **Other divestitures**

In addition to the sold businesses described under discontinued operations, the Company periodically divests businesses and investments not considered by management to be aligned with its focus on Power Technologies and Automation Technologies as described in Note 26. The results of operations of these divested businesses are included in the Company's Consolidated Income Statements in the respective line items of income from continuing operations, through the date of disposition.

##### *Divestment of Building Systems businesses*

In April 2002, the Company decided to dispose of its Building Systems businesses. The gradual disposal process was envisaged to extend over a non-defined period of time preceded by restructurings in several locations. The disposal of the Building Systems businesses contemplated that the Company would retain an involvement in the disposed operations through a combination of technology license agreements, supplier relationships, retention of certain orders and participation on the Board of Directors of some of the disposed of companies. As a result of these factors, the Company concluded that classification of the Building Systems businesses as discontinued operations in accordance with SFAS 144 was not appropriate.

In August 2003, the Company completed the sale of its Building Systems businesses located in Sweden, Norway, Denmark, Finland, Russia and the Baltics to YIT Corporation of Helsinki, Finland, for consideration of approximately \$213 million. The Company recognized a net gain on disposal of \$124 million, which is included in other income (expense), net.

During 2003, the Company completed, in a series of transactions, the sale of its Building Systems businesses located in several other countries, principally Belgium, the Netherlands, Austria, and the UK for aggregate proceeds of approximately \$21 million. The Company recognized a net loss on disposal of \$41 million, which is included in other income (expense), net.

In February 2004, the Company completed the sale of its Building Systems business located in Switzerland to CapVis Equity Partners AG, a Swiss private equity company, for a purchase price of approximately \$39 million. The Company retained a 10 percent ownership interest in the sold business and recognized a net gain on disposal of \$12 million, which is included in other income (expense), net.

***Divestment of Air Handling business***

In January 2002, the Company sold its Air Handling business to Global Air Movement (Luxembourg) Sarl for proceeds of \$147 million, including a vendor note of 39 million euro principal value, issued by the purchaser. The Company recognized a net gain on disposal of \$74 million, which is included in other income (expense), net.

***Other divestitures***

In June 2003, the Company sold its interests in certain equity investees in Australia for approximately \$90 million, resulting in a gain on disposal of \$28 million recorded in other income (expense), net.

In June 2003, the Company sold its entire 35 percent interest in Swedish Export Credit Corporation to the Government of Sweden for 1,240 million Swedish krona (\$159 million), resulting in net proceeds of approximately \$149 million and a loss on disposal of \$80 million recorded in other income (expense), net.

In June 2004, the Company sold a business in Sweden, formerly part of the automation technologies division, for \$11 million, resulting in a gain on disposal of \$7 million recorded in other income (expense), net.

In December 2004, the Company sold its entire 15.7 percent interest in IXYS Corporation, Santa Clara, California, mainly to institutional investors, for approximately \$42 million and recorded a gain on disposal of \$20 million in other income (expense), net.

During 2004, 2003 and 2002, the Company sold several operating units and investments, excluding the divestments disclosed above, for total proceeds of \$39 million, \$31 million and \$209 million, respectively, and recognized net gains on disposal of \$13 million, \$12 million and \$24 million, respectively, which are included in other income (expense), net. Revenues and net income from these businesses and investments were not significant in 2004, 2003 and 2002.

**Note 5 Marketable securities and short-term investments**

Marketable securities and short-term investments consist of the following:

	December 31,	
	2004	2003
Available-for-sale securities	\$ 263	\$ 314
Time deposits	247	142
Securities serving as hedges of the Company's management incentive plan (see Note 22)	14	17
<b>Total</b>	<b>\$ 524</b>	<b>\$ 473</b>

To hedge its exposure to fluctuations in fair value of the Company's warrant appreciation rights (WARs) issued under the Company's management incentive plan, the Company purchases cash-settled call options, which entitle the Company to receive amounts equivalent to its obligations under the outstanding WARs. In accordance with Emerging Issues Task Force No. 00-19 (EITF 00-19), *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, the cash-settled call options have been recorded as assets measured at fair value, with subsequent changes in fair value recorded through earnings as an offset to the compensation expense recorded in connection with the WARs.

Available-for-sale securities classified as marketable securities consist of the following:

	Cost	Unrealized gains	Unrealized losses	Fair value
At December 31, 2004:				
<b>Equity securities</b>	<b>\$ 28</b>	<b>\$ 9</b>	<b>\$</b>	<b>\$ 37</b>
Debt securities:				
U.S. government obligations	99			99
European government obligations	30		(1)	29
Corporate	59	1	(1)	59
Other	33	6		39
<b>Total debt securities</b>	<b>221</b>	<b>7</b>	<b>(2)</b>	<b>226</b>
<b>Total</b>	<b>\$ 249</b>	<b>\$ 16</b>	<b>\$ (2)</b>	<b>\$ 263</b>
At December 31, 2003:				
<b>Equity securities</b>	<b>\$ 76</b>	<b>\$ 25</b>	<b>\$ (1)</b>	<b>\$ 100</b>
Debt securities:				
U.S. government obligations	71	2	(1)	72
European government obligations	29	1	(1)	29
Corporate	5			5
Other	87	21		108
<b>Total debt securities</b>	<b>192</b>	<b>24</b>	<b>(2)</b>	<b>214</b>
<b>Total</b>	<b>\$ 268</b>	<b>\$ 49</b>	<b>\$ (3)</b>	<b>\$ 314</b>

## Edgar Filing: ABB LTD - Form 20-F

At December 31, 2004, contractual maturities of the above available-for-sale debt securities consist of the following:

	Cost	Fair value
Less than one year	\$ 37	\$ 36
One to five years	99	99
Six to ten years	56	57
Due after ten years	29	34
	\$ 221	\$ 226

Gross realized gains on available-for-sale securities were \$85 million, \$8 million and \$11 million in 2004, 2003 and 2002, respectively. The \$85 million gain included a realized gain of \$43 million relating to the non-cash contribution of \$549 million of marketable securities to the Company's German pension plans as described in Note 21. Gross realized losses on available-for-sale securities were \$5 million, \$2 million and \$9 million in 2004, 2003 and 2002, respectively. Additionally, in 2004, 2003 and 2002, the Company recorded charges of \$0 million, \$36 million and \$6 million, respectively, related to the impairment of available-for-sale securities. The charges recorded in 2003 and 2002 are included in interest and other finance expense and other income (expense), net, respectively. In 2003, the Company sold available-for-sale securities in a strategic investment included in investments and other resulting in realized loss of \$40 million, which was recorded in interest and other finance expense.

The following table reflects gross unrealized losses and the fair value of those available-for-sale securities, aggregated by investment category, that at December 31, 2004, have been in a continuous unrealized loss position.

Description of securities:	Securities with unrealized losses for a period less than 12 months		Securities with unrealized losses for a period greater than 12 months	
	Fair value	Unrealized losses	Fair value	Unrealized losses
Corporate obligations	\$ 29	\$ (1)	\$ 27	\$ (1)
European government obligations				
	\$ 29	\$ (1)	\$ 27	\$ (1)

Unrealized losses on equity and debt securities held and classified as available-for-sale are judged to be only temporary based on the creditworthiness of the obligors as it relates to debt securities and as it relates to all corporate securities held, the financial position of the underlying companies, the significance of the unrealized losses relative to the asset cost and the duration that the securities have been in an unrealized loss position.

The net change in unrealized gains and losses in fair values of trading securities was not significant in 2004, 2003 or 2002.

At December 31, 2004 and 2003, the Company pledged \$51 million and \$41 million, respectively, of marketable securities as collateral for issued letters of credit and other security arrangements.



## **Note 6 Financial instruments**

### **Cash flow hedges**

The Company enters into forward foreign exchange contracts to manage the foreign exchange risk of its operations. To a lesser extent the Company also uses commodity contracts to manage its commodity risks. Where such instruments are designated and qualify as cash flow hedges, the changes in their fair value are recorded in accumulated other comprehensive loss, until the hedged item is recognized in earnings. At such time, the respective amount in accumulated other comprehensive loss is released to earnings and is shown in either revenues or cost of sales consistent with the classification of the earnings impact of the underlying transaction being hedged. Any hedge ineffectiveness is included in revenues and cost of sales, but was not significant for 2004 or 2003.

The amount of derivative financial instrument net gains or losses reclassified from accumulated other comprehensive loss to earnings was a net gain of \$31 million (excluding the \$14 million loss described below) and \$58 million in 2004 and 2003, respectively. It is anticipated that during 2005, \$30 million of net gains included in accumulated other comprehensive loss at December 31, 2004, will be reclassified to earnings when the underlying hedged transactions impact earnings. Derivative financial instrument gains and losses reclassified to earnings offset the losses and gains on the items being hedged.

While the Company's cash flow hedges are primarily hedges of exposures over the next twelve months, the amount included in accumulated other comprehensive loss at December 31, 2004 includes hedges of certain exposures maturing up to 2009.

During 2004, the Company reclassified losses of \$14 million from accumulated other comprehensive loss to earnings as a result of the discontinuance of certain cash flow hedges as it became probable that the original forecasted transactions related to these hedges would not occur within the forecasted time period.

### **Fair value hedges**

To reduce its interest rate and foreign currency exposures arising primarily from its funding activities, the Company uses interest rate and cross-currency swaps. Where such instruments are designated as fair value hedges, the changes in fair value of these instruments, as well as the changes in fair value of the underlying liabilities, are recorded as offsetting gains and losses in the determination of earnings. The hedge ineffectiveness in both 2004 and 2003 resulted in a gain of \$11 million.

### **Disclosure about fair values of financial instruments**

The Company uses the following methods and assumptions in estimating fair values for financial instruments:

Cash and equivalents, receivables, accounts payable, short-term borrowings and current maturities of long-term borrowings: The carrying amounts approximate the fair values.

*Marketable securities and short-term investments:* Fair values of marketable securities are based on quoted market prices, where available. If quoted market prices are not available, fair values are based on quoted market prices of comparable instruments. The carrying amounts of short-term investments approximate the fair values.

*Financing receivables and loans (non-current portion):* Fair values are determined using a discounted cash flow methodology based upon loan rates of similar instruments. The carrying values and estimated fair values of long-term loans granted at December 31, 2004, were \$337 million and \$337 million, respectively, and at December 31, 2003 were \$437 million and \$424 million, respectively.

*Long-term borrowings (non-current portion):* Fair values are based on the present value of future cash flows discounted at estimated borrowing rates for similar debt instruments or in the case of bond or note issuances, using the relevant borrowing rates derived from interest rate swap curves. Such swap curves are composed of interest rates quoted by market participants for the relevant maturities, excluding any component associated with the credit risk of counterparties. As these bonds or note issuances reflect liabilities of the Company, if the Company's credit rating were reflected in these discount rates, the present value calculation would result in a lower fair value liability. The carrying values and estimated fair values of long-term borrowings at December 31, 2004, were \$4,901 million and \$5,533 million, respectively, and at December 31, 2003, were \$6,290 million and \$6,936 million, respectively.

*Derivative financial instruments:* Fair values are the amounts by which the contracts could be settled. These fair values are estimated by using a discounted cash flow methodology based on available market data, option pricing models or by obtaining quotes from brokers. At December 31, 2004 and 2003, the carrying values equal fair values. Current derivative assets are recorded in prepaid expenses and other, and non-current derivative assets are recorded in investments and other. Current derivative liabilities are recorded in accrued liabilities and other, and non-current derivative liabilities are recorded in other liabilities. Current derivative assets and current derivative liabilities in 2003 have been reclassified to conform with the current year's presentation. The fair values are:

	December 31,	
	2004	2003
Derivative assets, current	\$ 374	\$ 398
Derivative assets, non-current	251	287
<b>Total</b>	<b>\$ 625</b>	<b>\$ 685</b>
Derivative liabilities, current	\$ 324	\$ 180
Derivative liabilities, non-current	53	40
<b>Total</b>	<b>\$ 377</b>	<b>\$ 220</b>

**Note 7 Receivables**

Receivables consist of the following:

	December 31,	
	2004	2003
Trade receivables	\$ 4,022	\$ 3,647
Other receivables	1,289	1,263
Allowance	(317)	(245)
	<b>4,994</b>	<b>4,665</b>
<b>Unbilled receivables, net:</b>		
Costs and estimated profits in excess of billings	2,257	2,233
Advance payments received	(921)	(849)
	<b>1,336</b>	<b>1,384</b>
<b>Total</b>	<b>\$ 6,330</b>	<b>\$ 6,049</b>

Trade receivables include contractual retention amounts billed to customers of \$124 million and \$101 million at December 31, 2004 and 2003, respectively. Management expects the majority of related contracts will be completed and substantially all of the billed amounts retained by the customer will be collected within one year of the respective balance sheet date. Other receivables consist of value added tax, claims, employee and customer related advances, the current portion of direct finance and sales-type leases and other non-trade receivables, including the retained interests on sold receivables under the Company's securitization programs.

Costs and estimated profits in excess of billings represent sales earned and recognized under the percentage-of-completion method. Amounts are expected to be collected within one year of the respective balance sheet date.

During 2004 and 2003, the Company sold trade receivables to two separate QSPEs, unrelated to the Company, in revolving-period securitizations. The Company retains servicing responsibility relating to the sold receivables. Solely for the purpose of credit enhancement from the perspective of the QSPEs, the Company retains an interest in the sold receivables (retained interests). These retained interests are initially measured at estimated fair values, which the Company believes approximate historical carrying values, and are subsequently measured based on a periodic evaluation of collections and delinquencies.

Given the short-term, lower-risk nature of the assets securitized, market movements in interest rates would not significantly impact the carrying value of the Company's retained interests. An adverse movement in foreign currency rates could have an impact on the carrying value of these retained interests as the retained interests are denominated in the original currencies underlying the sold receivables. While such remeasurements are recognized in earnings, the impact has historically not been significant due to the short-term nature of the receivables and economic hedges in place relating to foreign currency movement risk.

The Company routinely evaluates its portfolio of trade receivables for risk of non-collection and records an allowance for doubtful debts to reflect the carrying value of its trade receivables at

estimated net realizable value. Pursuant to the requirements of the revolving-period securitizations through which the Company securitizes certain of its trade receivables, the Company effectively bears the risk of potential delinquency or default associated with trade receivables sold up to the amount of its retained interest relating to the relevant securitization program. Accordingly, in the normal course of servicing the assets sold, the Company evaluates potential collection losses and delinquencies and updates the estimated fair value of the Company's retained interests. An increase in delinquency rates compared to historic levels would cause an increase in the retained interest. Ultimately, if the customer defaults, the Company will be responsible for absorbing the amount. The fair value of the retained interests at December 31, 2004 and 2003, was approximately \$349 million and \$367 million, respectively.

In accordance with SFAS 140, the Company has not recorded a servicing asset or liability as management believes it is not practicable to estimate this value given that verifiable data as to the fair value of the compensation and/or cost related to servicing the types of the assets sold are not readily obtainable nor reliably estimable for the multiple geographic markets in which the entities selling receivables operate.

During 2004, 2003 and 2002, the following cash flows were received from and paid to QSPEs:

	December 31,		
	2004	2003	2002
Gross trade receivables sold to QSPEs (\$25, \$505 and \$832) <sup>(1)</sup>	\$ 5,846	\$ 5,661	\$ 5,972
Collections made on behalf of and paid to QSPEs (\$23), \$(696) and \$(753) <sup>(1)</sup>	(5,713)	(5,883)	(6,074)
Purchaser, liquidity and program fees (\$0, \$(2) and \$(5)) <sup>(1)</sup>	(20)	(21)	(37)
Decrease (increase) in retained interests (\$0, \$117 and \$(87)) <sup>(1)</sup>	17	124	(245)
<b>Net cash received from (paid to) QSPEs during the year (\$2, \$(76) and \$(13))<sup>(1)</sup></b>	<b>\$ 130</b>	<b>\$ (119)</b>	<b>\$ (384)</b>

<sup>(1)</sup> Related to assets held for sale and in discontinued operations for 2004, 2003 and 2002, respectively.

Net cash settlements on the Company's programs take place twice per month. However, in one of the programs there is, in addition, the daily transfer of collections of sold receivables. Under the terms of the latter program, if the Company's rating falls below BB+ (Standard & Poor's) or Ba3 (Moody's) then the Company may be required to relinquish its right to collect the sold receivables on behalf of the QSPE, and instead the cash collection of such sold receivables would be made directly to the account of the QSPE.

The Company records a loss on sale at the time of sale of the receivables to the QSPEs and subsequently records purchaser, liquidity and program fees. The total cost of \$20 million, \$21 million and \$37 million in 2004, 2003 and 2002, respectively, related to the securitization of trade receivables, is included in interest and other finance expense.

The increase in gross trade receivables sold in 2004 compared to 2003, is due primarily to an increase in the programs' size, a change in the definition of receivables eligible to be sold in one program and the addition of new sellers to one of the programs. The decrease in gross receivables sold in 2003 compared to 2002 is due primarily to the fact that businesses which were either classified as discontinued operations or which were sold by the Company were phased out of the securitization programs during the year.

The following table reconciles total gross receivables to the amounts in the Consolidated Balance Sheets after the effects of securitization at December 31, 2004 and 2003:

	December 31,	
	2004	2003
Total trade receivables	\$ 5,132	\$ 4,784
Portion derecognized	(710)	(508)
Retained interests included in other receivables	(373)	(390)
<b>Trade receivables</b>	<b>4,049</b>	<b>3,886</b>
Less: Trade receivables included in assets held for sale and in discontinued operations	(27)	(239)
<b>Trade receivables continuing operations</b>	<b>\$ 4,022</b>	<b>\$ 3,647</b>

The increase in the portion derecognized at December 31, 2004, compared to December 31, 2003, is due primarily to an increase in the programs' size, a change in the definition of receivables eligible to be sold in one program and the addition of new sellers to one of the programs.

At December 31, 2004 and 2003, of the gross trade receivables sold, the total trade receivables for which cash has not been collected at those dates amounted to \$1,083 million and \$898 million, respectively. At December 31, 2004 and 2003, an amount of \$54 million and \$34 million, respectively, was more than 90 days past due which is considered delinquent pursuant to the terms of the programs.

In addition, the Company transfers receivables outside of the above described securitization programs. These transfers were sales, made without recourse, directly to banks and/or sales pursuant to factoring or similar type arrangements. Total sold receivables included in these transactions during 2004 and 2003 were approximately \$902 million and \$1,400 million, respectively, of which sales of \$159 million and \$594 million, respectively, related to assets held for sale and in discontinued operations. During 2004 and 2003, the related costs, including the associated gains and losses, were \$10 million and \$12 million, respectively, of which costs of \$1 million and \$3 million, respectively, related to assets held for sale and in discontinued operations.

**Note 8 Variable interest entities**

**The following VIEs are consolidated, as the Company is the primary beneficiary as defined by FIN 46R.**

In March 2003, the Company sold its aircraft-leasing portfolio in Sweden to a third party. Subsequent to divestment, the Company continued its involvement in this business by providing significant financial support in the form of mezzanine and subordinated financing of approximately

\$90 million to the VIE formed by the buyer upon acquisition, exclusively for the purpose of servicing the aircraft leasing portfolio. As the primary beneficiary of the VIE, the Company retained approximately \$148 million of assets and acquired approximately \$84 million of third party long-term borrowings provided to the VIE at December 31, 2004. All of the VIE's assets serve as collateral for the senior debt provided by third parties. The Company has no ownership interest and there is no recourse to the general credit of the Company.

The Company also has interests in other VIEs which are consolidated as the Company is considered the primary beneficiary. These VIEs are immaterial both individually and in the aggregate.

**The following VIEs are not consolidated, as the Company is not the primary beneficiary as defined by FIN 46R.**

The Company maintains a combined equity and financing interest of approximately \$354 million in six VIEs that were established as joint ventures to develop power plants in various countries. The Company's involvement with these VIEs began between 1995 and 2000 at the dates of inception of the VIEs. The purpose of the VIEs is to contract the engineering, procurement, commissioning and financing of the power plants. At and for the year ended December 31, 2004, these VIEs have combined total assets of approximately \$2,920 million and reported combined total revenues and earnings before interest and taxes of \$749 million and \$308 million, respectively. The exposure to loss as a result of involvement with the VIEs is limited to the Company's equity and financing interests.

The Company maintains a 50 percent equity interest in two VIEs that were established to build four transmission power lines and 22 substations in Mexico. The equity interests are not significant in value. The Company's involvement with these VIEs began in September and November 1997, respectively, when the VIEs were formed. The purpose of the VIEs is to contract the engineering, procurement, commissioning and financing of these projects. At and for the year ended December 31, 2004, these VIEs have total assets of approximately \$85 million, and reported insignificant combined total revenues and earnings before interest and taxes. The exposure to loss as a result of involvement with the VIEs is limited to the Company's equity interest.

The Company maintains a combined equity and financing interest of \$8 million in two VIEs that were established to execute a project in London, England. One VIE was established to serve as a consortium among two third parties and the Company. The purpose of this VIE is to operate, maintain and finance the power distribution project. The second VIE is the financing vehicle for the project. The Company's involvement began at the inception of these VIEs in August 1998. At and for the year ended December 31, 2004, these VIEs have total assets of approximately \$449 million and reported combined total revenues and earnings before interest and taxes of \$125 million and \$18 million, respectively. The Company's exposure to loss as a result of involvement with the VIEs is limited to the Company's equity and financing interest.

The Company has an equity interest of approximately \$0.4 million in four VIEs that were established for developing, holding and leasing real estate in Germany. The Company's involvement with these VIEs began when they were established in 1993 and 1995, respectively. At and for the year ended December 31, 2004, these VIEs have total assets of approximately \$102 million and earnings

before interest and taxes of the VIEs is approximately break-even. The Company's exposure to loss as a result of involvement with the VIEs is limited to the Company's equity interest.

The Company also has interests in other VIEs which are not consolidated as the Company is not considered the primary beneficiary. These VIEs are immaterial both individually and in the aggregate.

#### Note 9 Inventories

Inventories, including inventories related to long-term contracts, consist of the following:

	December 31,	
	2004	2003
Commercial inventories, net:		
Raw materials	\$ 1,260	\$ 1,082
Work in process	1,215	1,129
Finished goods	395	371
	<u>2,870</u>	<u>2,582</u>
Contract inventories, net:		
Inventoried costs	395	426
Contract costs subject to future negotiation	20	29
Advance payments received related to contracts	(308)	(366)
	<u>107</u>	<u>89</u>
<b>Total</b>	<b>\$ 2,977</b>	<b>\$ 2,671</b>

Contract costs subject to future negotiation are deemed probable of recovery through changes in the contract price and are deferred until the parties have agreed on these changes.

#### Note 10 Prepaid expenses and other

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2004	2003
Prepaid expenses	\$ 194	\$ 209
Interest receivable	143	224
Deferred taxes	670	579
Advances to suppliers and contractors	227	226
Derivatives	374	398
Income tax receivable	80	158
	<u>1,688</u>	<u>1,794</u>
<b>Total</b>	<b>\$ 1,688</b>	<b>\$ 1,794</b>

**Note 11 Financing receivables**

Financing receivables consist of the following:

	December 31,	
	2004	2003
Loans receivable	\$ 337	\$ 437
Finance leases (see Note 17)	362	425
Other	534	510
<b>Total</b>	<b>\$ 1,233</b>	<b>\$ 1,372</b>

Loans receivable primarily represent financing arrangements provided to customers under long-term construction contracts and other activities, including financing relating to a divestment in 2002 as described in Note 4.

Included in finance leases at December 31, 2004 and 2003, are \$7 million and \$8 million, respectively, of assets pledged as security for other liabilities. Additionally, \$204 million and \$246 million of finance lease receivables were pledged as security for long-term borrowings at December 31, 2004 and 2003, respectively.

Other financing receivables at December 31, 2004 and 2003, include \$314 million and \$312 million, respectively, of assets pledged as security for other liabilities. Of these amounts, \$58 million and \$54 million, respectively, are marketable securities.

During 2004 and 2003, the Company sold or transferred to financial institutions various portfolios and individual financing receivables (see Note 17). These transfers included sales of finance lease receivables and loan receivables. Financing receivables sold or transferred and derecognized from the Consolidated Balance Sheets in accordance with SFAS 140 totaled \$57 million and \$338 million in 2004 and 2003, respectively.

**Note 12 Property, plant and equipment**

Property, plant and equipment consist of the following:

	December 31,	
	2004	2003
Land and buildings	\$ 2,684	\$ 2,518
Machinery and equipment	4,946	4,627
Construction in progress	121	105
	7,751	7,250
Accumulated depreciation	(4,770)	(4,392)
<b>Total</b>	<b>\$ 2,981</b>	<b>\$ 2,858</b>

At December 31, 2004 and 2003, the Company had \$85 million and \$150 million, respectively, of property, plant and equipment pledged as security or collateral for certain liabilities or other obligations of the Company.



**Note 13 Goodwill and other intangible assets**

The changes in the carrying amount of goodwill for the year ended December 31, 2004, are as follows:

	<b>Automation Technologies</b>	<b>Power Technologies</b>	<b>Non-core activities</b>	<b>Corporate/ Other</b>	<b>Total</b>
Balance at January 1, 2004	\$ 1,816	\$ 439	\$ 201	\$ 72	\$ 2,528
Goodwill acquired during the year	15				15
Goodwill written off related to sale of businesses	(3)	(2)	(4)	(12)	(21)
Other		(4)	10		6
Reallocations	(86)	116	9	(39)	
Foreign currency translation	53	12	9		74
<b>Balance at December 31, 2004</b>	<b>\$ 1,795</b>	<b>\$ 561</b>	<b>\$ 225</b>	<b>\$ 21</b>	<b>\$ 2,602</b>

The changes in the carrying amount of goodwill for the year ended December 31, 2003, are as follows:

	<b>Automation Technologies</b>	<b>Power Technologies</b>	<b>Non-core activities</b>	<b>Corporate/ Other</b>	<b>Total</b>
Balance at January 1, 2003	\$ 1,732	\$ 427	\$ 180	\$ 58	\$ 2,397
Goodwill acquired during the year	1	1			2
Impairment losses				(2)	(2)
Goodwill written off related to sale of businesses			(2)	(1)	(3)
Other	(4)				(4)
Reallocations	1		(10)	9	
Foreign currency translation	86	11	33	8	138
<b>Balance at December 31, 2003</b>	<b>\$ 1,816</b>	<b>\$ 439</b>	<b>\$ 201</b>	<b>\$ 72</b>	<b>\$ 2,528</b>

The Company's presentation of goodwill by division has been corrected and restated for all periods presented to adjust amounts of goodwill related to Automation Technologies previously reflected under Non-core activities. Such goodwill was tested for impairment in 2004, 2003 and 2002, as a component of the Company's Automation Technologies division. At December 31, 2004 and 2003, the \$225 million and the \$201 million of goodwill, respectively, in Non-core activities was principally related to the Company's remaining Oil, Gas and Petrochemicals business. The reallocations in the table above relate to Company internal reorganizations. During 2004, the reallocations are principally due to the Substation Automation business formerly in the Automation Technologies division that was integrated in to the Power Technologies division. The goodwill reallocated for the Substation Automation business was \$107 million based on fair value. During 2004, the Company also reallocated goodwill from the Corporate/Other division to the Automation Technologies and Power Technologies division as the expected benefit of goodwill resides in these divisions.

Edgar Filing: ABB LTD - Form 20-F

The goodwill of \$15 million acquired in 2004 relates to the purchase of two entities and the increase in majority interest in two consolidated subsidiaries of the Company for consideration of \$19 million.

Other intangible assets consist of the following:

	December 31,					
	2004			2003		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Capitalized software	\$ 818	\$ (537)	\$ 281	\$ 804	\$ (454)	\$ 350
Other	595	(383)	212	586	(335)	251
<b>Total</b>	<b>\$ 1,413</b>	<b>\$ (920)</b>	<b>\$ 493</b>	<b>\$ 1,390</b>	<b>\$ (789)</b>	<b>\$ 601</b>

Amortization expense of intangible assets for 2004 and 2003 amounted to \$212 million and \$177 million, respectively.

Amortization expense of intangible assets is estimated to be as follows:(1)

2005	\$ 138
2006	\$ 123
2007	\$ 114
2008	\$ 76
2009	\$ 18
Thereafter	\$ 13

- (1) The estimated amortization expense is calculated as if no future expenditures would be made.

In 2004 and 2003, the Company did not identify any intangible assets not subject to amortization with the exception of \$11 million and \$2 million, respectively, related to an intangible pension asset (see Note 21).

Other intangible assets primarily include intangibles created through acquisitions, such as trademarks and patents.

For the years ended December 31, 2004 and 2003, the Company acquired intangible assets of \$75 million (\$65 million of software and \$10 million of other intangible assets) and \$92 million (\$85 million of software and \$7 million of other intangible assets), respectively. For items capitalized in 2004 and 2003, amortization expense is calculated using a weighted-average life of 4 years for capitalized software and of 5 years for other intangible assets.

The Company recorded impairment charges to intangible assets of \$3 million, \$11 million and \$25 million, in 2004, 2003 and 2002, respectively, related to software developed for internal use. These charges are included in other income (expense), net, in the Consolidated Income Statements.

**Note 14 Equity accounted companies**

The Company recorded earnings of \$87 million, \$96 million and \$220 million in 2004, 2003 and 2002, respectively, in investments and other, and other income (expense), net, representing the Company's share of the pre-tax earnings of investees accounted for under the equity method of accounting. The Company has recorded, at December 31, 2004, and 2003, \$596 million and \$642 million, respectively, in investments and other, representing the Company's investment in these equity investees. Significant companies accounted for using the equity method of accounting included: Jorf Lasfar Energy Company S.C.A. (JLEC), Morocco (the Company owns 50 percent) and Swedish Export Credit Corporation (SECC), Sweden (the Company owned 35.4 percent). In June 2003, the Company sold its entire interest in SECC to the Government of Sweden.

	Investment balance 2004	Investment balance 2003	The Company's share of the pre-tax earnings of equity-accounted investees		
			2004	2003	2002
JLEC	\$ 356	\$ 372	\$ 68	\$ 62	\$ 73
SECC				13	125
Other(1)	240	270	19	21	22
<b>Total</b>	<b>\$ 596</b>	<b>\$ 642</b>	<b>\$ 87</b>	<b>\$ 96</b>	<b>\$ 220</b>
Less: Current income tax expense			(8)	(7)	(49)
<b>The Company's share of earnings of equity-accounted investees</b>			<b>\$ 79</b>	<b>\$ 89</b>	<b>\$ 171</b>

(1)

Encompasses additional investments, none of which are individually significant

As reflected in its audited financial statements, SECC's total net income for the year ended December 31, 2002, was \$254 million.

The following table represents selected financial information for JLEC and not the Company's share in this equity accounted company.

	2004	2003	2002
Total current assets	\$ 316	\$ 281	\$ 239
Total non-current assets	\$ 1,147	\$ 1,162	\$ 1,124
Total current liabilities	\$ 274	\$ 317	\$ 262
Total non-current liabilities	\$ 572	\$ 613	\$ 622
Total shareholders' equity	\$ 617	\$ 513	\$ 479
Revenues	\$ 462	\$ 369	\$ 364
Income before taxes	\$ 133	\$ 122	\$ 143
Net income	\$ 125	\$ 120	\$ 132

As security for repayment by JLEC of certain of its loans, the Company, JLEC and the other 50 percent shareholder in JLEC have entered into various pledge agreements with several banks and

other secured parties. The Company has pledged all of its shares, claims, rights and interest in JLEC in accordance with the pledge agreements. Such security shall continue in effect until the repayment in full of all outstanding principal and interest and other fees, which is scheduled to occur in February 2013.

The Company has entered into other similar pledge agreements for certain other equity accounted for companies. The Company has also granted lines of credit and has committed to provide additional capital for certain equity accounted companies. At December 31, 2004, the total unused lines of credit amounted to \$78 million and the capital commitments amounted to \$24 million.

The Company's 2004 Consolidated Financial Statements include the following aggregate amounts related to transactions with equity accounted investees and other related parties, including related party transactions that are recorded in loss from discontinued operations, net of tax, and assets and liabilities held for sale and in discontinued operations:

	<u>2004</u>	<u>2003</u>
Revenues	\$ 57	\$ 99
Receivables	\$ 11	\$ 105
Other current assets	\$ 13	\$ 23
Financing receivables, non-current	\$ 45	\$ 22
Payables	\$ 1	\$ 6
Other current liabilities	\$ 1	\$ 4
Short-term borrowings	\$ 18	\$ 32
Non-current liabilities	\$ 4	\$ 2
Long-term borrowings	\$	\$ 48

**Note 15 Borrowings**

The Company's total borrowings at December 31, 2004 and 2003, were \$5,534 million and \$7,934 million, respectively.

**Short-term borrowings**

The Company's short-term borrowings consist of the following:

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
Other short-term borrowings (weighted-average interest rate of 6.6% and 3.7%)	\$ 184	\$ 293
Current portion of long-term borrowings (weighted-average interest rate of 3.9% and 4.9%)	449	1,351
<b>Total</b>	<b>\$ 633</b>	<b>\$ 1,644</b>

## Edgar Filing: ABB LTD - Form 20-F

Other short-term borrowings primarily represent short-term loans from various banks.

On November 17, 2003, the Company entered into an unsecured syndicated \$1.0 billion three-year revolving credit facility, which became available in December 2003 after the fulfillment of certain conditions, including the repayment and cancellation of the previous facility and the raising of a specified minimum level of gross proceeds from the rights issue (see Note 23) and from the euro denominated bonds issued in November 2003.

In November 2004, the facility was amended. The amendments included a reduction in the level of commitment fees and the removal of restrictions on the Company to redeem early capital market instruments, such as bonds, having a maturity date beyond that of the facility.

No amount was drawn under the facility at December 31, 2004 and 2003. The interest costs of borrowings under the facility are LIBOR (or EURIBOR in the case of drawings in euro) plus 0.8 percent to 2.25 percent, depending on the Company's senior unsecured long-term debt rating. Commitment fees are paid on the unused portion of the facility and a utilization fee is payable when borrowings are equal to or greater than 33 percent of the facility; the level of these fees is linked to the ratings of the Company's senior unsecured long-term debt.

The facility contains certain financial covenants in respect of minimum interest coverage, maximum net leverage and a minimum level of consolidated net worth. The Company is required to meet these covenants on a quarterly basis. Should the Company's senior unsecured long-term debt ratings reach certain defined levels, these covenants will only have to be calculated at June and December of each year. The facility also contains provisions for the mandatory prepayment and cancellation of the facility upon a change of control of the Company.

The facility imposes restrictions on the amount of third party indebtedness in subsidiaries other than in the obligors under the facility, subject to certain exceptions. The facility also contains certain other undertakings including limitations on disposals of assets, restrictions on mergers and acquisitions and negative pledges.

The facility contains cross-default clauses whereby an event of default would occur if the Company were to default on indebtedness, as defined in the facility, at or above a specified threshold.

### **Long-term borrowings**

The Company utilizes a variety of derivative products to modify the characteristics of its long-term borrowings. The Company uses interest rate swaps to effectively convert certain fixed-rate long-term borrowings into floating rate obligations. For certain non-U.S. dollar denominated borrowings, the Company utilizes cross-currency swaps to effectively convert the borrowings into U.S. dollar obligations. As required by SFAS 133, borrowings designated as being hedged by fair value hedges are stated at their fair values.

Edgar Filing: ABB LTD - Form 20-F

The following table summarizes the Company's long-term borrowings considering the effect of interest rate and currency swaps. Consequently, a fixed rate borrowing subject to a fixed-to-floating interest rate swap is included as a floating rate borrowing in the table below:

	December 31, 2004			December 31, 2003		
	Balance	Nominal rate	Effective rate	Balance	Nominal rate	Effective rate
Floating rate	\$ 1,950	8.2%	5.8%	\$ 4,241	5.9%	3.2%
Fixed rate	1,625	5.1%	5.5%	1,754	5.8%	5.8%
Convertible bonds	1,775	4.1%	4.1%	1,646	4.1%	4.1%
	<b>5,350</b>			<b>7,641</b>		
Current portion of long-term borrowings	(449)	3.9%	1.6%	(1,351)	4.9%	1.8%
<b>Total</b>	<b>\$ 4,901</b>			<b>\$ 6,290</b>		

At December 31, 2004, maturities of long-term borrowings were as follows:

Due in 2005	\$ 449
Due in 2006	92
Due in 2007	948
Due in 2008	986
Due in 2009	868
Thereafter	2,007
<b>Total</b>	<b>\$ 5,350</b>

#### Bond repurchases

During the first six months of 2004, through open market repurchases, the Company repurchased a portion of its public bonds with a total equivalent face value of \$458 million. These repurchases included 107 million euro (approximately \$131 million) of the 475 million euro 5.125 percent bonds due 2006, and 26,500 million Japanese yen (approximately \$243 million) of the 50,000 million Japanese yen 0.5 percent bonds due 2005. The 26,500 million Japanese yen bonds and the 107 million euro bonds were subsequently cancelled at the end of July 2004 and mid-September 2004, respectively. During the second half of 2004, a further 6,075 million Japanese yen 0.5 percent bonds (approximately \$55 million) were repurchased on the open market and were not cancelled. As a result of the repurchases of these Japanese yen bonds, the total principal amount outstanding at December 31, 2004, was 17,425 million Japanese yen (approximately \$171 million), which is included in floating rate borrowings in the table of long-term borrowings above. The open market repurchases resulted in a gain on extinguishments of debt of approximately \$6 million. During 2003, the Company repurchased outstanding bonds with a face value of \$94 million and recorded an insignificant gain on extinguishments of debt in connection with the repurchases.

On July 29, 2004, the Company announced tender offers to repurchase all of the outstanding 300 million euro 5.375 percent bonds due 2005 and 475 million euro 5.125 percent bonds due 2006, being approximately 275 million euro and approximately 368 million euro, respectively. In conjunction with the tender offers, the Company convened bondholders' meetings to vote on amendments to these bonds to allow the Company to call and redeem those bonds that were not tendered under the respective tender offer. Bonds validly tendered and accepted under the tender offers were settled on September 14, 2004. On September 9, 2004, bondholders approved the resolutions, which gave the Company the option to redeem the outstanding instruments. The Company exercised its option to redeem early the remaining outstanding 2005 and 2006 bonds that were not tendered and set the redemption date as September 29, 2004. The open market repurchases, combined with the tender offers and calls, resulted in a decrease in total borrowings during 2004 of \$1,330 million. At December 31, 2003, the bonds tendered and called in 2004 were included as floating rate borrowings in the table of long-term borrowings above.

#### **Bond issuances**

The Company did not issue any bonds during 2004.

In November 2003, the Company issued bonds of an aggregate principal amount of 650 million euro, or approximately \$769 million at issuance, due 2011. These bonds pay interest semi-annually in arrears at a fixed annual rate of 6.5 percent and are included as fixed rate borrowings in the table of long-term borrowings above. In the event of a change of control of the Company, the terms of the bonds require the Company to offer to repurchase the bonds at 101 percent of the principal amount thereof, plus any accrued interest.

In September 2003, the Company issued convertible unsubordinated bonds of an aggregate principal amount of 1,000 million Swiss francs, or approximately \$722 million at issuance, due 2010. The bonds pay interest annually in arrears at a fixed annual rate of 3.5 percent. On issuance, each 5,000 Swiss francs of principal amount of bonds was convertible into 418.41004 fully paid ordinary shares of the Company at an initial conversion price of 11.95 Swiss francs. The conversion price is subject to adjustment provisions to protect against dilution or change in control. As a result of the decision at the extraordinary general meeting of shareholders on November 20, 2003, to increase the share capital of the Company by issuing a further 840,006,602 shares, the conversion price and conversion ratio of the bonds were adjusted to 9.53 Swiss francs and 524.65897 shares respectively, effective December 12, 2003, representing a total of 104,931,794 shares if the bonds were fully converted.

The bonds are convertible at the option of the bondholder at any time from October 21, 2003 up to and including the tenth business day prior to September 10, 2010. The Company may at any time on or after September 10, 2007 redeem the outstanding bonds at par plus accrued interest if, for a certain number of days during a specified period of time, the official closing price of the Company's ordinary shares on the relevant exchange has been at least 150 percent of the conversion price. In addition, at any time prior to maturity, the Company can redeem the outstanding bonds at par plus accrued interest, if at least 85 percent in aggregate of the principal amount of bonds originally issued have been redeemed, converted or purchased and cancelled. The Company has the option to redeem the bonds when due in cash, ordinary shares or any combination thereof.

In May 2002, the Company issued \$968 million aggregate principal amount of convertible unsubordinated bonds due 2007. The bonds pay interest semi-annually in arrears at a fixed annual rate of 4.625 percent. The bonds were initially convertible into 84,940,935 fully paid ordinary shares of the Company at an initial conversion price of 18.48 Swiss francs (converted into U.S. dollars at a fixed conversion rate of 1.6216 Swiss francs per U.S. dollar). The conversion price is subject to adjustment provisions to protect against dilution or change in control. As a result of the rights issue and resulting increase in the share capital of the Company, the conversion price of the bonds was adjusted, effective November 21, 2003, to 14.64 Swiss francs (converted into U.S. dollars at the fixed exchange rate of 1.6216 Swiss francs per U.S. dollar), representing a total of 107,220,546 shares if the bonds were fully converted. As a result of an amendment to the bonds in May 2004, described below, the conversion price of the bonds was amended to \$9.03, representing a total of 107,198,228 shares if the bonds were fully converted.

The \$968 million bonds are convertible at the option of the bondholder at any time from June 26, 2002 up to and including May 2, 2007. The Company may, at any time on or after May 16, 2005, redeem the outstanding bonds at par plus accrued interest if (1) for a certain number of days during a specified period of time, the official closing price of the Company's American Depositary Shares on the New York Stock Exchange exceeds 170 percent of the conversion price, or (2) at least 85 percent in aggregate principal amount of bonds originally issued have been exchanged, redeemed or purchased and cancelled. The Company has the option to redeem the bonds when due, in cash, American Depositary Shares or any combination thereof.

Under SFAS 133, a component of these convertible bonds had to be accounted for as an embedded derivative as the shares to be issued upon conversion were denominated in Swiss francs, while the bonds are denominated in U.S. dollars. A portion of the issuance proceeds was deemed to relate to the value of the derivative on issuance and subsequent changes in value of the derivative were recorded through earnings and as an adjustment to the carrying value of the bonds. The allocation of a portion of the proceeds to the derivative created a discount on issuance, which was being amortized to earnings over the life of the bonds. On May 28, 2004, bondholders voted in favor of the Company's proposed amendment to the terms of the bonds whereby, if the bonds are converted, the Company will deliver U.S. dollar-denominated American Depositary Shares rather than Swiss franc-denominated ordinary shares. The conversion price was set at \$9.03. As a result of the amendment, the Company was no longer required to account for a portion of the bonds as a derivative. Consequently, on May 28, 2004, the value of the derivative was fixed and the amount previously accounted for separately as an embedded derivative was considered to be a component of the carrying value of the bonds at that date. This carrying value is being accreted to the \$968 million par value of the bonds as an expense in interest and other finance expense over the remaining life of the bonds.

As to the embedded derivative, the Company recorded an expense of \$16 million from the increase in fair value of the derivative from January 1, 2004, up to the date of the bond amendment, related among other factors, to the increase in the Company's share price since December 31, 2003. When added to the accretion of the discount on the bonds for 2004 of \$36 million, this resulted in aggregate expense of \$52 million in 2004, reflected in interest and other finance expense and a corresponding increase in borrowings when compared to December 31, 2003. As a result of an increase in fair value of the derivative (related among other factors, to the increase in the Company's share



price since December 31, 2002), combined with the accretion of the discount on issuance, there was a charge to interest and other finance expense of \$84 million in 2003, and a corresponding increase in long-term borrowings at December 31, 2003, when compared to December 31, 2002. Through December 31, 2002, primarily as a result of the decline in the Company's share price since issuance of the bonds, the Company recorded a gain from the change in fair value of the derivative, partially offset by amortization of effective discount, resulting in a net decrease to interest and other finance expense of \$215 million.

In May 2002, the Company issued bonds due in 2009 with an aggregate principal amount of 200 million pounds sterling, or approximately \$292 million at the time of issuance, which pay interest semi-annually in arrears at 10 percent per annum. The Company also issued in May 2002 bonds due in 2008 with an aggregate principal amount of 500 million euro, or approximately \$466 million at the time of issuance, which pay interest annually in arrears at 9.5 percent per annum.

The 200 million pounds sterling bonds and the 500 million euro bonds contain certain clauses linking the interest paid on the bonds to the credit rating assigned to the bonds. If the rating assigned to these bonds by both Moody's and Standard & Poor's remains at or above Baa3 and BBB-, respectively, then the interest rate on the bonds remains at the level at issuance, that is 10 percent and 9.5 percent for the sterling and euro bonds, respectively. If the rating assigned by either Moody's or Standard & Poor's decreases below Baa3 or BBB-, respectively, then the annual interest rate on the bonds increases by 1.5 percent per annum to 11.5 percent and 11 percent for the sterling and euro bonds, respectively. If after such a rating decrease, the rating assigned by both Moody's and Standard & Poor's returns to a level at or above Baa3 and BBB-, respectively, then the interest rates on the bonds return to the interest level at issuance. As a result of the downgrade of the Company's long-term credit rating by Moody's to Ba2 on October 31, 2002, this step-up clause in interest was triggered on both bonds. The increase in interest costs is effective for interest periods beginning after the payment of the coupon accruing at the date of the downgrade.

In line with the Company's policy of reducing its interest and currency exposure, a cross-currency swap has been used to modify the characteristics of the 200 million pounds sterling bonds and an interest rate swap has been used to modify the 500 million euro bonds. After considering the impact of the cross-currency and interest rate swaps, the 200 million pounds sterling bonds effectively became a floating rate U.S. dollar obligation, while the 500 million euro bonds became a floating rate euro obligation. In both cases, the floating rate resets every three months. Accordingly, both the 200 million pounds sterling bonds and the 500 million euro bonds are included as "floating rate" in the table of long-term borrowings above.

In September 1999, the Company issued bonds of an aggregate principal amount of 500 million Swiss francs, or approximately \$334 million at issuance, due 2009. These bonds pay interest annually in arrears at a fixed annual rate of 3.75 percent and are included in fixed rate borrowings in the table of long-term borrowings above.

Almost all of the Company's publicly traded bonds contain cross-default clauses which would allow the bondholders to demand repayment if the Company were to default on any borrowing at or above a specified threshold.

In addition to the publicly issued bonds described above, included in long-term borrowings at December 31, 2004 and 2003, are private placements, lease obligations, bank borrowings of subsidiaries, obligations in the Company's remaining Structured Finance business and other long-term borrowings.

**Note 16 Accrued liabilities and other**

Accrued liabilities and other consists of the following:

	December 31,	
	2004	2003
Asbestos and related costs (see Note 18)	\$ 1,023	\$ 815
Contract related reserves	460	531
Provisions for restructuring	169	276
Provisions for warranties and contract penalties	741	580
Derivatives	324	180
Employee benefit costs	77	112
Taxes payable	369	434
Deferred taxes	200	188
Accrued personnel costs	750	723
Interest	177	306
Advances from customers	931	729
Other liabilities	1,215	1,083
<b>Total</b>	<b>\$ 6,436</b>	<b>\$ 5,957</b>

Advance from customers in 2003 have been reclassified from other liabilities to conform with the current year's presentation.

**Note 17 Leases****Lease obligations**

The Company's lease obligations primarily relate to real estate and office equipment. In the normal course of business, management expects most leases to be renewed or replaced by other leases. Minimum rent expense under operating leases included in the income from continuing operations was \$371 million, \$392 million and \$340 million in 2004, 2003 and 2002, respectively. The sub-lease income received by the Company was \$33 million, \$18 million and \$14 million in 2004, 2003 and 2002, respectively.

At December 31, 2004, future net minimum lease payments for operating leases having initial or remaining non-cancelable lease terms in excess of one year consist of the following:

2005	\$ 347
2006	299
2007	237
2008	206
2009	183
Thereafter	652
	<b>1,924</b>
Sublease income	(128)
<b>Total</b>	<b>\$ 1,796</b>

**Investments in leases**

The Company retained some leasing assets including investments in sales-type leases, leveraged leases and direct financing leases that are included in financing receivables (see Note 11), subsequent to the divestment of most of its Structured Finance business to GE in November 2002 (see Note 3).

The Company's non-current investments in direct financing, sales-type and leveraged leases, including \$37 million and \$54 million in 2004 and 2003, respectively, of net investments in an aircraft leasing portfolio, reported by a VIE in Sweden (see Note 8), consist of the following:

	<b>December 31,</b>	
	<b>2004</b>	<b>2003</b>
Minimum lease payments receivable	\$ 388	\$ 464
Unearned income	(54)	(64)
	<b>334</b>	<b>400</b>
Leveraged leases	64	61
	<b>398</b>	<b>461</b>
Current portion	(36)	(36)
<b>Total</b>	<b>\$ 362</b>	<b>\$ 425</b>

At December 31, 2004, minimum lease payments under direct financing and sales-type leases are scheduled to be received as follows:

2005	\$ 45
2006	23
2007	22
2008	50
2009	18
Thereafter	230
<b>Total</b>	<b>\$ 388</b>

**Note 18 Commitments and contingencies****Earnings overstatement in an Italian subsidiary**

During the second quarter of 2004, the Company received information regarding earnings overstatements by the medium-voltage business unit of the Company's Power Technologies division (the "PT-MV BAU") in Italy. An investigation performed by the Company, with the assistance of outside counsel and forensic accountants, has shown that from the first quarter of 1998 through the first quarter of 2004, the PT-MV BAU overstated its earnings before interest and taxes and net income through the early recognition of certain revenue from incomplete projects, improper capitalization of costs on certain projects, unrecorded liabilities and borrowings, and other improper journal entries.

The cumulative effect of these overstatements on the Company's earnings before interest and taxes and net income was approximately \$70 million and \$87 million, respectively, from the first quarter of 1998 through the end of 2003. The negative impact on income tax expense results from the inability to claim tax benefits under Italian tax law for adjustments made to improperly filed tax returns for the years 1998 through 2002, as well as a reassessment of the realizability of the Company's deferred tax assets due to a cumulative loss position after the adjustment for the overstatements. The Company restated its financial statements for all prior periods as a result of these overstatements. The restated presentation forms the basis for the 2004 financial statements before reclassifications as described in Note 3. The impact of the restatement in 2003 and 2002 was to increase net loss by \$12 million and \$36 million, respectively. The cumulative impact on stockholders' equity as a result of the restatement was \$106 million at December 31, 2004.

The Company has undertaken measures, including termination of employment, with respect to the personnel involved in the earnings overstatement to address the matters identified by the Company's investigation. Additional remedial measures may be considered by the Company in light of this investigation. In addition, the Company's investigation revealed that certain employees of ABB Power Technologies S.p.A. participated in arranging improper payments to an employee of an Italian power generation company in order to obtain a contract. The Company has reported this matter to the Italian Public Prosecutor's Office, which is conducting its own investigation, as well as to the United States Securities and Exchange Commission. The Company cannot be certain as to the outcome of the Italian Public Prosecutor's Office investigation. The Company has terminated employees determined to be involved in arranging such improper payments.

#### **Gas Insulated Switchgear business**

In May 2004, the Company announced that it had undertaken an internal investigation which uncovered that certain of its employees together with employees of other companies active in the gas insulated switchgear business were involved in anti-competitive practices. The Company has reported promptly such practices to the appropriate authorities including the European Commission. The Company has received an amnesty decision from the European Commission and is cooperating with it in the investigation that the European Commission has launched.

#### **Vetco Gray**

During 2003 and 2002 the Company undertook an investigation of potentially improper business conduct within the Company's Oil, Gas and Petrochemical business which the Company had voluntarily disclosed to the U.S. Department of Justice and the U.S. Securities and Exchange Commission. The investigation uncovered a limited number of improper payments in certain countries in the Company's Upstream business.

ABB Vetco Gray Inc. and ABB Vetco Gray UK Ltd., two of the Company's subsidiaries that were sold in 2004 as part of the Upstream business pleaded guilty in July 2004 to violation of the Foreign Corrupt Practices Act (FCPA) and paid an aggregate fine to the U.S. Department of Justice totaling \$10.5 million. In addition, in July 2004, the Company agreed with the United States Securities and Exchange Commission to resolve civil charges relating to the FCPA, including the payment of

\$5.9 million to disgorge allegedly unlawful profits and to retain an independent consultant to review the Company's FCPA compliance policies and procedures.

### **IBM Outsourcing Agreement**

In 2003, the Company entered into a 10-year global framework agreement with International Business Machines Corporation (IBM) to outsource the Company's information systems infrastructure services to IBM. This global framework agreement forms the basis for country agreements entered into between the Company and IBM in 15 countries in which the Company operates as well as Company headquarters. Pursuant to these agreements, the Company's information technology (IT) personnel were transferred and certain IT equipment was sold to IBM. Costs associated with the transfer of employees have been recognized in 2003 and were not significant. The IT equipment was sold to IBM at its net book value resulting in no gain or loss on disposal.

Pursuant to the global framework agreement, the Company is permitted to terminate an individual country agreement, upon providing to IBM three months' notice. Upon termination, charges which are within standard commercial terms are payable to IBM. Such termination charges decline over the term of the global framework agreement and are based on the preceding 12-month period's costs and the number of years remaining on the agreement.

The global framework agreement also includes an obligation for IBM to lease new personal computers and other IT equipment to the Company as older equipment is retired. The Company accounts for these items as capital leases or operating leases based on the terms of the leases.

Further, pursuant to the global framework agreement, IBM will receive monthly payments from the Company's subsidiaries in the respective countries related to information systems infrastructure services. Expected annual costs during the 10-year term of the global framework agreement approximate \$223 million based on the current level of usage of the services.

While the above agreement was negotiated and transacted at arms-length between IBM and the Company, it should be noted that Jürgen Dormann, the Company's Chairman, was a member of the Board of Directors of IBM until April 29, 2003, and has been elected again to the Board of Directors of IBM effective February 22, 2005, and Hans-Ulrich Märki, a director on the Company's Board of Directors, is chairman and general manager of IBM Europe/Middle East/Africa.

### **Contingencies general**

The Company is subject to various legal proceedings and claims that have arisen in the ordinary course of business that have not been finally adjudicated. It is not possible at this time for the Company to predict with any certainty the outcome of such litigation. However, except as stated below, management is of the opinion, based upon information presently available and on advice of external counsel, that it is unlikely that any such liability, to the extent not provided for through insurance or otherwise, would have a material adverse effect on the Company's financial position, results of operations or cash flows.

**Contingencies environmental**

The Company is a participant in several legal and regulatory actions, which result from various U.S. and other federal, state and local environmental protection legislation as well as agreements with third parties. While the Company cannot estimate the impact of future regulations affecting these actions, management believes that the ultimate resolution of these matters will not have a material impact on the Company's financial position, results of operations or cash flows.

Provisions are recorded when it is probable that losses will result from these actions and the amounts of losses can be reasonably estimated. Estimated losses for environmental remediation obligations are not discounted to their present value. In respect to these matters, the Company may be able to recover a portion of the costs from insurers or other third parties. Receivables are recorded when it is probable that recoveries will be collected.

**Guarantees general**

Certain guarantees issued or modified after December 31, 2002 are accounted for in accordance with Financial Accounting Standards Board Interpretation No. 45 (FIN 45), *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*. Upon issuance or modification of certain guarantees, a liability, equal to the fair value of the guarantee, is recorded.

The following table provides quantitative data regarding the Company's third-party guarantees. The maximum potential payments represent a "worst-case scenario," and do not reflect the Company's expected results.

The carrying amount of liabilities recorded in the Consolidated Balance Sheets reflects the Company's best estimate of future payments it may incur as part of fulfilling its guarantee obligations.

	December 31, 2004		December 31, 2003	
	Maximum potential payments	Carrying amount of liabilities	Maximum potential payments	Carrying amount of liabilities
Third-party performance guarantees	\$ 1,525	\$ 2	\$ 1,200	\$
Financial guarantees	253	1	207	
Indemnification guarantees	198	16		
Total	\$ 1,976	\$ 19	\$ 1,407	\$

**Guarantees third-party performance**

Performance guarantees represent obligations where the Company guarantees the performance of a third party's product or service according to the terms of a contract. Such guarantees may include guarantees that a project will be completed within a specified time. If the third party does not fulfill the obligation, the Company will compensate the guaranteed party in cash or in kind. Performance guarantees include surety bonds, advance payment guarantees, and performance standby letters of credit.

The Company retained obligations for guarantees related to the Power Generation business contributed in mid-1999 to the former ABB ALSTOM POWER NV joint venture. The guarantees primarily consist of performance guarantees, advance payment guarantees and other miscellaneous guarantees under certain contracts such as indemnification for personal injuries and property damages, taxes, and compliance with labor laws, environmental laws and patents. The guarantees are related to projects which are expected to be completed by 2015 but in some cases have no definite expiration. In May 2000, the Company sold its interest in the ABB ALSTOM POWER NV joint venture to ALSTOM SA (ALSTOM). As a result, ALSTOM and its subsidiaries have primary responsibility for performing the obligations that are the subject of the guarantees. Further, ALSTOM, the parent company, and ALSTOM POWER NV, formerly ABB ALSTOM POWER NV, have undertaken jointly and severally to fully indemnify and hold harmless the Company against any claims arising under such guarantees. Management's best estimate of the total maximum potential exposure of quantifiable guarantees issued by the Company on behalf of its former Power Generation business is approximately \$875 million and \$1,200 million at December 31, 2004 and 2003, respectively. The Company has not experienced any losses related to guarantees issued on behalf of the former Power Generation business.

The Company retained obligations for guarantees related to the Upstream business sold in July 2004. The guarantees primarily consist of third-party performance guarantees, advance payment guarantees and other miscellaneous guarantees. The guarantees have maturity dates ranging from one to five years. The maximum amount payable under the guarantees is approximately \$650 million at December 31, 2004. The Company has the ability to recover potential payments under these guarantees through certain backstop guarantees. The maximum potential recovery under these backstop guarantees is approximately \$146 million at December 31, 2004.

#### **Guarantees financial**

Financial guarantees represent irrevocable assurances that the Company will make payment to a beneficiary in the event that a third party fails to fulfill its financial obligations and the beneficiary under the guarantee incurs a loss due to that failure.

At December 31, 2004 and 2003, the Company had \$253 million and \$207 million, respectively, of financial guarantees outstanding. Of those amounts, \$123 million and \$189 million, respectively, were issued on behalf of companies in which the Company currently has or formerly had an equity interest. The guarantees have original maturity dates ranging from one to thirteen years. Also included in the \$253 million of financial guarantees is approximately \$101 million related to the Upstream business sold in July 2004. These guarantees have original maturity dates ranging from one to six years and in some cases have no time-related expiry as they are contingent on future events.

#### **Guarantees indemnification**

The Company delivered to the purchasers of the Upstream business and Reinsurance business guarantees related to assets and liabilities divested in 2004. The maximum liability at December 31, 2004, of approximately \$49 million and \$149 million, relating to the Upstream business and Reinsurance business, respectively, will reduce over time, pursuant to the agreements. The fair values of these guarantees are not material.

The Company has indemnified certain purchasers of divested businesses for potential claims arising from the operations of the divested businesses. Such indemnifications have not been fair valued to the extent they were issued prior to the effective date of FIN 45. Additionally, to the extent the maximum loss related to such indemnifications could not be calculated, no amounts have been included under maximum potential payments in the table above. Indemnifications for which maximum losses could not be calculated include indemnifications for legal claims.

#### Product and order related contingencies

The Company calculates its provision for product warranties based on historical claims experience and specific review of certain contracts. The provision for warranties and contract penalties in Note 16 includes penalties resulting from delays in contract fulfillment, which is not included in the amounts below.

Reconciliation of the provision for warranties, including guarantees of product performance is as follows:

	<u>2004</u>	<u>2003</u>
Balance at the beginning of year	\$ 513	\$ 349
Claims paid in cash or in kind	(72)	(37)
Net increase to provision for changes in estimates, warranties issued and warranties expired	178	162
Exchange rate differences	58	39
	<u>          </u>	<u>          </u>
<b>Balance at the end of year</b>	<b>\$ 677</b>	<b>\$ 513</b>
	<u>          </u>	<u>          </u>

#### Asbestos liability

##### *Summary*

The Company's Combustion Engineering subsidiary has been a co-defendant in a large number of lawsuits claiming damage for personal injury resulting from exposure to asbestos. A smaller number of claims have also been brought against two other subsidiaries, ABB Lummus Global Inc. ("Lummus") (which is part of the Company's Oil, Gas and Petrochemicals business and was formerly a subsidiary of Combustion Engineering) and Basic Incorporated ("Basic") (which was a subsidiary of Combustion Engineering and of Asea Brown Boveri Inc. ("Asea Brown Boveri") and is now a subsidiary of ABB Holdings Inc. ("Holdings") following the merger in December 2004 of Asea Brown Boveri into Holdings), as well as against other entities of the Company. In late 2002, taking into consideration the growing number and cost of asbestos-related claims, Combustion Engineering and the Company determined that Combustion Engineering's asbestos-related liability should be resolved through a comprehensive settlement that included a plan of reorganization for Combustion Engineering under Chapter 11 of the U.S. Bankruptcy Code.

In November 2002, Combustion Engineering and the representatives of various asbestos claimants entered into a Master Settlement Agreement which settled the value of approximately 154,000 open asbestos-related claims against Combustion Engineering. Under that agreement, Combustion



Engineering established and funded a trust (the "CE Settlement Trust") to provide for partial payment on such settled claims.

In January 2003, Combustion Engineering reached agreement with various creditors (including representatives of the asbestos claimants who participated in the Master Settlement Agreement and a representative of future claimants) on the terms of a proposed "Pre-Packaged Plan of Reorganization for Combustion Engineering" under Chapter 11 of the U.S. Bankruptcy Code (as amended through June 4, 2003, the "CE Plan"). The CE Plan provided for a "channeling injunction" to be issued, under which asbestos-related claims related to the operations of Combustion Engineering, Lummus and Basic could only be brought against a trust (separate from the CE Settlement Trust established under the Master Settlement Agreement) to be established and funded by Combustion Engineering, ABB Ltd and other entities of the Company. This channeling injunction was intended to free Combustion Engineering, ABB Ltd and its affiliates, as well as certain former direct or indirect owners, joint venture partners and affiliates of Combustion Engineering, including ALSTOM and ABB ALSTOM POWER NV, from further liability for such claims.

The CE Plan was filed with the U.S. Bankruptcy Court on February 17, 2003, and confirmed by the District Court on August 8, 2003. However on December 2, 2004, the Court of Appeals for the Third Circuit effectively reversed the District Court's confirmation order. The Court of Appeals remanded the CE Plan to the District Court for a determination of whether, in light of the pre-petition payments made by Combustion Engineering to the CE Settlement Trust under the Master Settlement Agreement and the fact that claimants who received partial payments of their claims under the Master Settlement Agreement participated in the approval of the plan, the treatment of asbestos-related personal injury claims against Combustion Engineering under the CE Plan was consistent with the requirements of the Bankruptcy Code. Combustion Engineering and the Company have been reviewing the Court of Appeals' decision and considering various options to resolve the asbestos-related liability of Combustion Engineering, Lummus and Basic.

In March 2005, following extensive discussions with certain representatives of various parties, including the Creditors Committee and the Future Claimants Representatives appointed in the Combustion Engineering case, the Company reached an agreement on certain "settlement points" for modifying the CE Plan with a view to bringing it into conformity with the Court of Appeals' decision and for providing a mechanism for resolving finally Lummus' potential asbestos liability. The settlement points contemplate that the modified plan will continue to reflect the CE Plan's fundamental approach of channeling asbestos-related claims against Combustion Engineering to a trust funded in part by other entities of the Company. The settlement points provide for the Company to make an additional contribution of approximately \$232 million to pay present and future asbestos claimants of Combustion Engineering and Lummus. In addition, the settlement points provide that the Company will pay directly or indirectly up to \$8 million in respect of certain approved legal fees in the Chapter 11 case of Combustion Engineering. The settlement points contemplate that the modified CE Plan will become effective under the Bankruptcy Code concurrently with a separate Chapter 11 plan of reorganization for Lummus. The parties are now working to reach agreement on other issues relating to, and details of, the proposed modified plan and related proceedings involving Lummus and to prepare the related documentation. Each of the proposed plans will require approval of creditors and be subject to court review.

One of the holdings of the Court of Appeals was that the asbestos-related claims against Basic that are not related to Combustion Engineering's operations could not be "channeled" to the proposed trust under the CE Plan. The proposed plans do not address Basic, and the Company expects that Basic's asbestos-related liabilities will have to be resolved through its own bankruptcy or similar U.S. state court liquidation proceeding, or through the tort system.

### ***Background***

When the Company sold its 50 percent interest in the former ABB ALSTOM POWER NV joint venture to ALSTOM in May 2000, it retained ownership of Combustion Engineering, a subsidiary that had conducted part of its former power generation business and that now owns commercial real estate that it leases to third parties. Combustion Engineering is a co-defendant, together with other third parties, in numerous lawsuits in the United States in which the plaintiffs claim damages for personal injury arising from exposure to asbestos in equipment or materials that Combustion Engineering allegedly supplied or was responsible for, primarily during the early 1970s and before.

From 1989 through February 17, 2003 (the date that Combustion Engineering filed for Chapter 11 as described below), approximately 438,000 asbestos-related claims were filed against Combustion Engineering. On February 17, 2003, there were approximately 164,000 asbestos related personal injury claims pending against Combustion Engineering. There were approximately 138,000 such claims pending against Combustion Engineering on December 31, 2002, and approximately 94,000 such claims were pending on December 31, 2001. Of the approximately 164,000 claims that were pending on February 17, 2003, approximately 154,000 are claims by asbestos claimants who participated in the Master Settlement Agreement. Approximately 29,000 new claims were made in the period from January 1, 2003, to February 17, 2003 (all but 111 of which agreed to participate in the Master Settlement Agreement). Approximately 34,500 claims were resolved in 2002 and approximately 27,000 claims were resolved in 2001.

Other entities of the Company have sometimes been named as defendants in asbestos-related claims, including Lummus and Basic. At December 31, 2004 and 2003, there were approximately 11,000 claims pending against Lummus and 4,300 and 4,200 claims, respectively, pending against Basic.

Additionally, at December 31, 2004 and 2003, there were approximately 12,400 and 8,700 asbestos-related claims pending against entities of the Company other than Combustion Engineering, Lummus and Basic. These claims are unrelated to Combustion Engineering and will not be resolved in the Combustion Engineering bankruptcy case. Of the 12,400 claims outstanding at December 31, 2004, approximately 3,660 are claims that were brought in the state of Mississippi in the United States, in 7 cases that include multiple plaintiffs and hundreds of co-defendants and make no specific allegations of any relationship between any entity of the Company and the plaintiffs. Approximately 4,240 of such claims have been brought in the state of Ohio in the United States by claimants represented by a single law firm in cases that typically name 50 to 60 co-defendants and do not allege any specific linkage between the plaintiffs and any entity of the Company. Approximately 2,700 such claims are pending in the state of West Virginia in the United States. The remaining such claims are pending in various jurisdictions. The Company generally seeks dismissals from claims where there is no apparent linkage between the plaintiffs and any entity of the Company. To date, resolving claims against the Company's

entities other than Combustion Engineering, Lummus and Basic has not had a material impact on the Company's consolidated financial position, results of operations or cash flows.

*Negotiations with representatives of asbestos claimants and pre-packaged Chapter 11 filing*

During 2001 and 2002, Combustion Engineering experienced a significant increase in the level of new claims and higher total and per-claim settlement costs as compared to prior years. In October 2002, Combustion Engineering and the Company determined that it was likely that the expected asbestos-related costs of Combustion Engineering would exceed the value of its assets (\$812 million at September 30, 2002 and \$828 million at December 31, 2002) if its historical settlement patterns continued into the future. In October 2002, Combustion Engineering and the Company determined to resolve the asbestos-related liability of Combustion Engineering and its affiliates by reorganizing Combustion Engineering under Chapter 11, the principal business reorganization chapter of the U.S. Bankruptcy Code. Combustion Engineering and the Company determined to structure the Chapter 11 reorganization as a "pre-packaged plan," in which Combustion Engineering would solicit votes from asbestos claimants to approve the plan before the Chapter 11 case was filed with the Bankruptcy Court.

Beginning in October 2002, Combustion Engineering and the Company conducted extensive negotiations with representatives of certain asbestos claimants with respect to a pre-packaged plan. On November 22, 2002, Combustion Engineering and the asbestos claimants' representatives entered into a Master Settlement Agreement for settling open asbestos-related personal injury claims that had been filed against Combustion Engineering prior to November 15, 2002. Combustion Engineering also agreed, pursuant to the Master Settlement Agreement, to form and fund the CE Settlement Trust to administer and pay the asbestos-related personal injury claims settled under the Master Settlement Agreement. Under the terms of the Master Settlement Agreement, eligible claimants who met all criteria to qualify for payment were entitled to receive a percentage of the value of their claim from the CE Settlement Trust and retain a claim against Combustion Engineering for the unpaid balance (the "stub claim"). The Master Settlement Agreement divides claims into three categories based on the status of the claim at November 14, 2002, the status of the documentation relating to the claim and whether or not the documentation establishes a valid claim eligible for settlement and payment by Combustion Engineering. The Master Settlement Agreement was supplemented in January 2003 to clarify the rights of certain claimants whose right to participate in a particular payment category was disputed. The Master Settlement Agreement, as supplemented, settles the value of and provides for the partial payment on approximately 154,000 open asbestos-related personal injury claims that had been lodged against Combustion Engineering.

The Master Settlement Agreement, as supplemented, provided that the CE Settlement Trust was to be funded by:

cash contributions from Combustion Engineering in the amount of \$5 million;

cash contributions from ABB Inc., a subsidiary of ABB Ltd, in the amount of \$30 million;

a promissory note from Combustion Engineering in the principal amount of approximately \$101 million (guaranteed by Asea Brown Boveri, now merged into Holdings); and

an assignment by Combustion Engineering of the \$311 million unpaid balance of principal and interest due to Combustion Engineering from Asea Brown Boveri, now merged into Holdings, under a loan agreement dated May 12, 2000 (guaranteed by ABB Ltd).

Approximately 154,000 eligible claimants have entered into the Master Settlement Agreement or adoption agreements with Combustion Engineering and the CE Settlement Trust and have received partial payment on their claims.

***Pre-packaged plan of reorganization***

On January 17, 2003, the Company announced that Combustion Engineering and the Company had reached an agreement on a proposed Pre-Packaged Plan of Reorganization for Combustion Engineering under Chapter 11 of the U.S. Bankruptcy Code. The agreement was reached with representatives of certain asbestos claimants with existing asbestos-related personal injury claims against Combustion Engineering (encompassing both claimants who had lodged claims prior to November 15, 2002, and claimants who had filed claims on or after that date and were not eligible to participate in the Master Settlement Agreement) and with the proposed representative of persons who may be entitled to bring asbestos-related personal injury claims in the future.

As proposed, the CE Plan provided for the creation of the Asbestos PI Trust, an independent trust separate and distinct from the CE Settlement Trust, and addressed Asbestos PI Trust Claims, which consist of present and future asbestos-related personal injury claims (including the stub claims of claimants who previously settled pursuant to the Master Settlement Agreement) that arise directly or indirectly from any act, omission, products, or operations of Combustion Engineering, Lummus or Basic. The CE Plan provided that, if it were to become effective, a channeling injunction would be issued under Section 105 of the U.S. Bankruptcy Code pursuant to which the Asbestos PI Trust Claims against ABB Ltd and certain of its affiliates (including Combustion Engineering, Lummus and Basic) would be channeled to the Asbestos PI Trust. The effect of the channeling injunction contemplated by the CE Plan would be that the sole recourse of a holder of an Asbestos PI Trust Claim would be to the Asbestos PI Trust and such holder would be barred from asserting such a claim against ABB Ltd and the affiliates covered by the injunction (including Combustion Engineering and, under the CE Plan as proposed, Lummus and Basic).

As proposed, the CE Plan provided that on its effective date, the Asbestos PI Trust would be funded with the following:

a \$20 million 5 percent term note (the "CE Convertible Note") with a maximum term of ten years from the effective date of the CE Plan, to be issued by Combustion Engineering and secured by its Windsor, Connecticut, real estate and real estate leases (under certain specified contingencies, the Asbestos PI Trust may have the right to convert the term note into ownership of 80 percent of the voting securities of the reorganized Combustion Engineering);

excess cash held by Combustion Engineering on the effective date of the CE Plan (the "Excess CE Cash");

a non-interest bearing promissory note (the "ABB Promissory Note") to be issued by ABB Inc. and ABB Ltd, and guaranteed by certain ABB Ltd subsidiaries, in an aggregate amount of up to

## Edgar Filing: ABB LTD - Form 20-F

\$350 million payable in installments (including two \$25 million payments contingent upon ABB Ltd generating an earning before interest and taxes margin of 12 percent in 2007 and 2008);

a non-interest bearing promissory note to be issued on behalf of Lummus (the "Lummus Note") in the amount of \$28 million payable in relatively equal annual installments over 12 years;

a non-interest bearing promissory note (the "Basic Note") to be issued on behalf of Basic in the aggregate amount of \$10 million payable in relatively equal annual installments over 12 years;

30,298,913 shares of ABB Ltd (the "CE Settlement Shares"), which had a fair value of \$170 million, \$154 million and \$86 million at December 31, 2004, 2003 and 2002, respectively; and

an assignment by Combustion Engineering, Lummus, and Basic to the Asbestos PI Trust of any proceeds under certain insurance policies. As of December 31, 2004, aggregate unexhausted product liability limits under such policies were approximately \$200 million for Combustion Engineering, approximately \$43 million for Lummus and approximately \$28 million for Basic, although amounts ultimately recovered by the Asbestos PI Trust under these policies may be substantially different from the policy limits. In addition, Combustion Engineering would assign to the Asbestos PI Trust scheduled payments under certain of its insurance settlement agreements (\$78 million at December 31, 2004). (The proceeds and payments to be assigned are together referred to as "Certain Insurance Amounts".)

In addition, the CE Plan as proposed provided that if Lummus is sold within 18 months after the CE Plan's effective date, ABB Inc. would contribute \$5 million to the CE Settlement Trust and \$5 million to the Asbestos PI Trust (together, these payments are referred to as the "Lummus Sale Payments"). If the CE Settlement Trust has ceased to exist at that time, both \$5 million payments would be made to the Asbestos PI Trust, but in no event would this contribution exceed the net proceeds from the sale of Lummus.

Upon the effective date under the CE Plan, ABB Inc. would indemnify the Combustion Engineering estate against up to \$5 million of liability on account of certain contingent claims held by certain indemnified insurers. Further, on the effective date, Asea Brown Boveri (now merged into Holdings) would provide for the benefit of Combustion Engineering a nuclear and environmental indemnity with regard to obligations arising out of Combustion Engineering's Windsor, Connecticut, site. The two indemnities described in this paragraph are referred to as the "Related Indemnities".

### *Judicial review process*

The solicitation of votes to approve the CE Plan began on January 19, 2003. Combustion Engineering filed for Chapter 11 in the U.S. Bankruptcy Court in Delaware on February 17, 2003, based on the terms previously negotiated in connection with the CE Plan. On June 23, 2003, the Bankruptcy Court issued its Order Approving the Disclosure Statement but Recommending Withholding of Confirmation of the Plan of Reorganization for Combustion Engineering for Ten Days (the "Initial Ruling") and related findings of fact. The Initial Ruling approved the disclosure statement that was the document used as the basis for soliciting approval of the CE Plan from asbestos claimants

and verified the voting results that approved the CE Plan and indicated that the Bankruptcy Court would recommend that the CE Plan be confirmed if Combustion Engineering and the Company could establish to the court's satisfaction certain specified information. The Company then submitted the additional information for the court's consideration.

On July 10, 2003, the Bankruptcy Court issued a Supplemental and Amendatory Order Making Additional Findings and Recommending Confirmation of Plan of Reorganization (the "Supplemental Ruling"). The Supplemental Ruling recommended to the U.S. District Court, among other things, that the CE Plan be confirmed.

Following the issuance of the Supplemental Ruling, interested parties had a period during which they could appeal the Initial Ruling and the Supplemental Ruling. This appeal period expired on July 24, 2003. A number of interested parties, including a small number of asbestos claimants and certain insurance companies which historically have provided insurance coverage to Combustion Engineering, Lummus and Basic filed appeals based on various objections to the CE Plan. The District Court held a hearing on July 31, 2003, with respect to the appeals and entered its confirmation order on August 8, 2003.

Various parties appealed the District Court's confirmation order to The United States Court of Appeals for the Third Circuit, which granted a motion for expedition of appeals and ordered that all briefs were to be filed by October 7, 2003. On June 3, 2004, the Court of Appeals held a hearing with respect to the appeals of the confirmation order of the District Court. On December 2, 2004, the Court of Appeals issued its decision (the "Third Circuit Decision").

The effect of the Third Circuit Decision was to reverse the District Court's confirmation order in respect of the CE Plan. The Third Circuit Decision focused on three issues raised by the appealing parties which relate to the ultimate terms of the CE Plan: (i) whether the Bankruptcy Court had "related to" jurisdiction over the claims against the non-debtors, Lummus and Basic, that do not arise from any products or operations of Combustion Engineering (the "non-derivative claims"); (ii) whether the non-debtors, Lummus and Basic, could avail themselves of the protection of the channeling injunction by invoking Section 105 of the Bankruptcy Code and contributing assets to the Asbestos PI Trust; and (iii) whether the two-trust structure and use of stub claims in the voting process comply with the Bankruptcy Code. The Court of Appeals held that there were insufficient factual findings to support "related-to" jurisdiction and that Section 105 of the Bankruptcy Code could not be employed to extend the channeling injunction to the non-derivative claims against nondebtors, such as Lummus and Basic. With regard to the two-trust structure, the Court of Appeals remanded the CE Plan to the District Court to determine whether creditors received fair treatment in light of the pre-petition payments made to the CE Settlement Trust participants and the use of stub claims in the voting process. Among other things, the Court of Appeals instructed the lower courts to consider whether payments under the CE Settlement Trust constituted voidable preferences that were inconsistent with the fair distribution scheme of the Bankruptcy Code.

On December 15, 2004, Combustion Engineering filed a petition seeking a rehearing en banc by the Court of Appeals. Specifically, Combustion Engineering and its immediate parent, Asea Brown Boveri, now merged into Holdings, challenged the holding in the Third Circuit Decision that the Bankruptcy and District Courts did not have "related to" jurisdiction over the non-derivative claims

against Lummus and Basic and that Section 105 of the Bankruptcy Code could not be used to extend the channeling injunction to such claims. On January 19, 2005, the Court of Appeals denied the petition for rehearing en banc.

Notwithstanding the Third Circuit Decision, the Master Settlement Agreement, which settles the amount of and provides for partial payment on approximately 154,000 asbestos-related claims, remains effective. Early in the Combustion Engineering bankruptcy case, an asbestos claimant commenced an action against the trustee of the CE Settlement Trust and individuals who had received distributions from such trust, asserting that further distributions by the CE Settlement Trust should be enjoined because the transaction that created the CE Settlement Trust was a voidable preference. The Bankruptcy Court ruled that it would not dismiss that action for lack of standing. On October 22, 2004, the trustee of the CE Settlement Trust moved to dismiss the complaint in that action. This matter is pending and no decision has been rendered by the Court.

Following the Third Circuit Decision, the lower courts assumed jurisdiction over further confirmation proceedings in respect of the CE Plan. On January 27, 2005, the Bankruptcy Court authorized the Future Claimants Representative and the Creditors Committee to file any available bankruptcy-related and similar claims against third parties, including preference claims against certain claimants that did not participate in the CE Settlement Trust, and any potential bankruptcy related claims against the Company. The Bankruptcy Court further stated that if Combustion Engineering and the Company cannot agree on modifications to the CE Plan with the Future Claimants Representatives and Creditors Committee, and the representative of Combustion Engineering claimants who opposed the confirmation order, the Bankruptcy Court would appoint an independent representative to prosecute all of the foregoing preference claims and bankruptcy related claims asserted against the Company. The Company also entered into a tolling agreement to extend the time period within which bankruptcy related claims against it could be brought.

Since February 17, 2003, a stay and preliminary injunction have barred the commencement and prosecution of certain asbestos-related claims against Combustion Engineering, Lummus, Basic, certain other entities of the Company and certain other parties, including parties indemnified by the Company. The barred claims include, among others, claims arising from asbestos exposure caused by Combustion Engineering, Lummus or Basic and claims alleging fraudulent conveyance, successor liability and veil piercing. The Company does not know the number or nature of claims that would now be pending against the protected entities if those legal measures had not been in place.

#### ***Modified CE Plan***

In March 2005, following extensive discussions with certain representatives of various claimants, the Creditors Committee and the Future Claimants Representative, the Company reached an agreement on certain "settlement points" for modifying the CE Plan with a view to bringing it into conformity with the Third Circuit Decision and for providing a mechanism for resolving finally Lummus' potential asbestos liability.

## Edgar Filing: ABB LTD - Form 20-F

The settlement points contemplate the following elements for finally resolving both Combustion Engineering's and Lummus' potential asbestos liability:

The modified plan for Combustion Engineering (the "Modified CE Plan") would continue to reflect the CE Plan's fundamental approach of channeling claims against Combustion Engineering to a trust funded, in part, by other entities of the Company.

Confirmation and effectiveness of the Modified CE Plan would be obtained concurrently with a Chapter 11 Plan for Lummus (the "Lummus Plan"), acceptances to which would be obtained from voting Lummus asbestos claimants prior to Lummus commencing a Chapter 11 case.

The Company would contribute to the Asbestos PI Trust the CE Convertible Note, the ABB Promissory Note, the Excess CE Cash and the CE Settlement Shares and would provide the Related Indemnities and assign the Certain Insurance Amounts, as contemplated by the CE Plan, subject to any modifications that may be agreed.

The Company would make an additional contribution (the "Additional Contribution") of \$232 million. The Additional Contribution will be used as follows: (i) up to \$28 million will be used to fund payment of all current and future asbestos claims against Lummus by a trust created under §524(g) of the Bankruptcy Code pursuant to the Lummus Plan; and (ii) the remaining amount will be used to provide additional funding under the Modified CE Plan to pay CE's asbestos creditors through the Asbestos PI Trust. Under the Modified CE Plan, the Lummus Sale Payments would not be required and the Lummus Note would be replaced by contributions to a separate Lummus §524(g) trust as discussed below.

Lummus has retained a person to act as a representative for future Lummus asbestos personal injury claimants (the "Lummus FCR"). The parties to the settlement points have agreed that the Lummus FCR will have determined by April 15, 2005, the appropriate funding to pay in full all current and future Lummus asbestos claims. In the event the Lummus FCR concludes that such amount exceeds \$28 million, the Company will increase the amount of its contributions for the benefit of such Lummus claims by the amount in excess of \$28 million, up to an additional \$5 million. If the Lummus FCR concludes that such amount exceeds \$33 million, the Company will have the option to terminate the settlement with no further obligations under the settlement points.

The Company will directly or indirectly pay up to \$8 million in respect of certain approved legal fees in the Chapter 11 case of Combustion Engineering.

The Modified CE Plan would provide for a settlement of all pending preference claims and related claims, including any claims against the Company, its affiliates, and the officers of the Company and the affiliates, directors and employees, being asserted in the CE case.

The scope of the channeling injunction to be issued under the Modified CE Plan would be the same as under the CE Plan, except that non-derivative claims against Basic would not be subject to the injunction.

Basic would not be addressed in the Modified CE Plan and would therefore not contribute the Basic Note.



The Modified CE Plan would also involve certain other adjustments, including certain changes in the relative amounts to be paid by the CE Asbestos PI Trust to different categories of claimants and changes in the administration of the trust.

In a status conference on April 5, 2005, the Bankruptcy Court instructed the Company to submit the documentation relating to the Modified CE Plan and the Lummus Plan to the Bankruptcy Court within 60 days. The Company and various other interested parties are now working to reach agreement on open issues, details relating to the Modified CE Plan and the Lummus Plan and the form and substance of the operative documents and related Bankruptcy Court motions and other pleadings. The Company cannot be certain when those negotiations will be concluded or on what terms the parties will resolve outstanding issues. The Modified CE Plan and the Lummus Plan will become effective only if different classes of their respective creditors vote in favor of the respective plans. The Modified CE Plan and the Lummus Plan will be subject to the approval of the Bankruptcy and District Courts, as well as to further judicial review if appeals are made. While the Company believes that the Modified CE Plan and the Lummus Plan are consistent with the Third Circuit Decision and other applicable laws and precedents, it cannot be certain whether the courts will approve the plans, nor can it predict whether the plans will receive the needed creditor votes.

The Company does not know whether any plan of reorganization for Combustion Engineering or Lummus will ultimately be confirmed or whether asbestos-related liabilities of any other entities of the Company would be resolved by any such plan. If for any reason a Chapter 11 plan relating to Combustion Engineering is not eventually confirmed, Combustion Engineering could be required to enter a Chapter 7 proceeding. If for any reason a Chapter 11 plan relating to Lummus is not eventually confirmed, the Company expects that Lummus' asbestos-related liabilities will have to be resolved through the tort system.

Because the Third Circuit Decision held that non-derivative claims cannot be subject to the CE Plan's proposed channeling injunction, Basic will not be included in the Modified CE Plan. The Company expects that Basic's asbestos-related liabilities will have to be resolved through its own bankruptcy or similar U.S. state court liquidation proceeding or through the tort system.

If any entities of the Company are not included in the protection offered by the channeling injunction entered pursuant to any Combustion Engineering plan that is confirmed, such entities could be required to resolve in the tort system, or otherwise, current and future asbestos-related claims that are asserted against such entities. Such events would be subject to numerous uncertainties, risk and expense.

If U.S. federal legislation addressing asbestos personal injury claims is passed, which is speculative at this time, such legislation may affect the amount that will be required to resolve the asbestos-related claims against entities of the Company.

***Effect on the Company's financial position***

*Expenses.* The Company recorded expenses related to asbestos of \$262 million, \$142 million and \$395 million in loss from discontinued operations, net of tax, and \$1 million, \$3 million and \$25 million in income from continuing operations, net of tax, for 2004, 2003 and 2002, respectively. Loss from discontinued operations, net of tax, for 2004 reflects a charge of \$232 million taken in connection with

the agreement the Company reached in March 2005 on the basic terms of the Modified CE Plan, \$17 million resulting from the mark-to-market adjustment relating to the CE Settlement Shares, a credit of \$6 million resulting from adjustment of the provision for the estimated liability of Basic as described below, and other costs of \$19 million. Loss from discontinued operations, net of tax, for 2003 includes a charge of \$68 million, net of tax, resulting from the mark-to-market adjustment relating to the CE Settlement Shares, a provision of \$41 million, representing the present value of the first two \$25 million payments under the ABB Promissory Note, which were previously considered contingent, as well as \$33 million of other costs. The 2002 amount reflected the Company's estimate of incremental total costs to be incurred based upon the terms of the CE Plan.

*Cash Payments.* Cash payments, before insurance recoveries, related to Combustion Engineering's asbestos-related claims were \$56 million (including \$49 million contributed to the CE Settlement Trust, described above), \$391 million (including \$365 million contributed to the CE Settlement Trust), and \$236 million (including \$30 million contributed into the CE Settlement Trust), in 2004, 2003 and 2002, respectively. Administration and defense costs were \$10 million, \$36 million and \$32 million in 2004, 2003 and 2002, respectively.

Cash payments related to asbestos-related claims against Lummus and Basic made through December 31, 2004 were approximately \$3 million and \$3 million, respectively. Cash payments to resolve asbestos-related claims against entities other than Combustion Engineering, Lummus and Basic have been immaterial to date, totaling less than \$1 million in the aggregate. The Company has not maintained a reserve for the claims pending against entities other than Combustion Engineering, Lummus and Basic.

*Provisions.* At December 31, 2004, 2003 and 2002, the Company recorded total provisions on a consolidated basis of \$1,023 million, \$815 million and \$1,095 million in respect of asbestos-related claims and defense costs related to Combustion Engineering, Lummus and Basic. The Company's provisions in continuing operations for asbestos-related liabilities at December 31, 2003 and 2002, now include \$2 million and \$4 million, respectively, previously classified in liabilities held for sale and in discontinued operations. Based upon the expected implementation of the Modified CE Plan and the Lummus Plan, the Company recorded provisions of \$985 million and \$33 million, respectively, at December 31, 2004, in accrued liabilities and other. If the Modified CE Plan and Lummus Plan become effective, certain amounts will be reclassified as of the effective date to other long-term liabilities based on the timing of the future cash payments to the Asbestos PI Trust or any similar trust created under the Lummus Plan. Future earnings will be affected by mark-to-market adjustments relating to the CE Settlement Shares through the effective date of the Plan, as well as contingent payments when they become probable of payment. The provisions at December 31, 2003 and 2002, were based on the Company's obligations under the CE Plan and assumed that the CE Plan would be confirmed and become effective as proposed.

In light of the decision of the Court of Appeals, the Company has made a separate provision at December 31, 2004, with respect to Basic in accordance with Financial Accounting Standards Board Statement No. 5, *Accounting for Contingencies*, and Financial Accounting Standards Board Interpretation No. 14, *Reasonable Estimation of the Amount of a Loss: an interpretation of FASB Statement No. 5*. With respect to Basic, the Company has established a provision of \$5 million relating

to its asbestos-related liabilities based on analysis of historical claims statistics and related settlement costs and a projection of such claims activity over the next several years.

Management believes that it is probable that the full amount of the relevant provisions will be required to settle the respective asbestos-related liabilities of Combustion Engineering, Lummus and Basic. The Company may incur liability greater than the existing provisions, whether in connection with a modified plan of bankruptcy or otherwise, but management does not believe that the amount of any such incremental liability can be reasonably estimated or that there is a better estimate of these liabilities than the amounts that are provided for.

The Company's provisions in respect of asbestos-related claims include, as stated above, amounts for each of Combustion Engineering, Lummus and Basic. The assets of Combustion Engineering include amounts receivable of approximately \$221 million, \$232 million and \$241 million at December 31, 2004, 2003 and 2002, respectively, for probable insurance recoveries, which were established with respect to asbestos-related claims.

The ultimate outcome of the Company's efforts to resolve the asbestos-related personal injury claims against Combustion Engineering and other entities of the Company (including any such claims against third parties indemnified by entities of the Company) remains uncertain. The related costs may be higher than the Company's provisions reflect and could have a material adverse impact on its consolidated financial position, results of operations and cash flows. In the event the Modified CE Plan or Lummus Plan do not become effective, the ultimate cost for the resolution of asbestos-related personal injury claims against Combustion Engineering and Lummus may be significantly higher and could have a material adverse impact on the Company's consolidated financial position, results of operations and cash flows.

#### *Contingencies related to former Nuclear Technology business*

The Company retained liabilities for certain specific environmental remediation costs at two sites in the U.S. that were operated by its Nuclear Technology business, which was sold to British Nuclear Fuels PLC (BNFL) in April 2000. Pursuant to the sale agreement with BNFL, the Company has retained all of the environmental liabilities associated with its Combustion Engineering subsidiary's Windsor, Connecticut facility and a portion of the environmental liabilities associated with its ABB C-E Nuclear Power Inc. subsidiary's Hematite, Missouri facility. The primary environmental liabilities associated with these sites relate to the costs of remediating radiological and chemical contamination at these facilities. Such costs are not payable until a facility is taken out of use and generally are incurred over a number of years. Although it is difficult to predict with accuracy the amount of time it may take to remediate radiological contamination upon decommissioning, based on information that BNFL has made publicly available, the Company believes that it may take until 2013 to remediate the Hematite site. With respect to the Windsor site, the Company believes the remediation may take until 2010. At the Windsor site, a significant portion of the contamination is related to activities that were formerly conducted by or for the U.S. government. The Company believes that a significant portion of the remediation costs will be covered by the U.S. government under the U.S. government's Formerly Utilized Sites Remedial Action Program. The Company has estimated the total contingent liability in a range of loss from \$266 million to \$447 million on an undiscounted basis. The Company has recorded in other liabilities a reserve of \$266 million, net of payments from inception of \$34 million, at

Edgar Filing: ABB LTD - Form 20-F

December 31, 2004. Payments for remediation were \$10 million, \$6 million and \$12 million during 2004, 2003 and 2002, respectively. The Company does not expect the majority of the remaining costs to be paid during 2005.

**Note 19 Taxes**

Provision for taxes consists of the following:

	Year ended December 31,		
	2004	2003	2002
Current taxes on income	\$ 333	\$ 217	\$ 255
Deferred taxes	(22)	28	(174)
<b>Tax expense from continuing operations</b>	<b>311</b>	<b>245</b>	<b>81</b>
Tax expense from discontinued operations	41	42	91

The weighted-average tax rate is the tax rate that results from applying each subsidiary's statutory income tax rate to the income from continuing operations before taxes and minority interest. The Company operates in countries that have differing tax laws and rates. Consequently, the consolidated weighted-average effective rate will vary from year to year according to the source of earnings or losses by country.

	Year ended December 31,		
	2004	2003	2002
<b>Reconciliation of taxes:</b>			
Income (loss) from continuing operations before taxes and minority interest	\$ 861	\$ (60)	\$ 66
Weighted-average tax rate	38.8%	(13.3)%	40.9%
<b>Taxes at weighted-average tax rate</b>	<b>334</b>	<b>8</b>	<b>27</b>
Items taxed at rates other than the weighted-average tax rate	(36)	15	(126)
Changes in valuation allowance	107	266	167
Changes in enacted tax rates	(18)	4	1
Other, net	(76)	(48)	12
<b>Tax expense from continuing operations</b>	<b>\$ 311</b>	<b>\$ 245</b>	<b>\$ 81</b>
<b>Effective tax rate for the year</b>	<b>36.1%</b>	<b>(408.3)%</b>	<b>122.7%</b>

In 2003, items taxed at rates other than the weighted-average tax rate included the tax effect of an \$84 million expense comprising the change in fair value of the embedded derivative contained in the Company's \$968 million convertible bonds combined with the continued amortization of the discount on issuance of these bonds (see Note 15), partially offset by earnings recognized in relation to certain of the Company's equity accounted investments. In 2002, items taxed at rates other than the weighted-average tax rate included a \$215 million gain, reflecting the change in fair value of the embedded derivative contained in the Company's \$968 million convertible bonds, partially offset by amortization of the discount on issuance of these bonds, as well as earnings recognized in relation to certain of the Company's equity accounted investments.

The reconciliation of taxes for 2004, 2003 and 2002 included changes in the valuation allowance recorded in certain jurisdictions in respect of deferred tax assets that were recognized for net operating losses incurred in those jurisdictions. The change in valuation allowance was required as the Company determined it was more likely than not that such deferred tax assets would no longer be realized. In 2004, the change in valuation allowance is predominately related to the Company's operations in certain countries including Canada and France. In 2003, the change in valuation allowance included an allowance of approximately \$258 million on deferred tax assets as a result of the Company's determination that it was more likely than not that such deferred tax assets would no longer be realized within the Company's remaining Oil, Gas and Petrochemicals business. In 2002, the change in valuation allowance included an allowance of \$17 million on deferred tax assets as a result of the overstatement within the Company's Power Technologies division in Italy (see Note 18). The change in valuation allowance in 2002 also included an allowance of approximately \$33 million on deferred tax assets as a result of the Company's determination that it was more likely than not that such deferred tax assets would no longer be realized within the Company's remaining Oil, Gas and Petrochemicals business.

In 2004 and 2003, the reconciling item "Other, net" included a benefit of approximately \$39 million and approximately \$56 million, respectively, relating to the favorable resolution of certain prior year tax matters, including the release of a \$38 million tax provision related to a tax case ruled in favor of the Company in 2003. Furthermore, 2004 included the one-time benefit of approximately \$45 million from the losses of a post divestment reorganization and 2003 included the expense of approximately \$16 million related to a tax claim filed in Central Europe. Additionally, in 2003 and 2002, "Other, net" included \$5 million and \$7 million, respectively, related to expenses that are no longer deductible under the Italian tax law as a result of the overstatement within the Company's Power Technologies division in Italy.

In 2003, the loss from continuing operations before taxes and minority interest of \$60 million included an \$84 million expense comprising the change in fair value of the embedded derivative contained in the Company's \$968 million convertible bonds combined with the continued amortization of the discount on issuance of these bonds. Furthermore, the tax expense from continuing operations included the release of a \$38 million tax provision related to a tax case ruled in favor of the Company, offset by expense of approximately \$16 million related to a tax claim filed in Central Europe. In addition, the tax expense from continuing operations included a valuation allowance of approximately \$258 million on deferred tax assets as a result of the determination that it was more likely than not that such deferred tax assets would no longer be realized within the Company's remaining Oil, Gas and Petrochemicals business. The effective tax rate applicable to income from continuing operations excluding the tax effect of these items would be 37.5 percent.

In 2002, the tax expense from continuing operations included an allowance of approximately \$33 million on deferred tax assets as a result of the determination that it was more likely than not that such deferred tax assets would no longer be realized within the Company's remaining Oil, Gas and Petrochemicals business as well as an allowance of \$17 million on deferred tax assets and \$7 million related to non-deductible expenses under Italian tax law both as a result of the overstatement within the Company's Power Technologies division in Italy. The effective tax rate applicable to income from continuing operations excluding the tax effect of these items would have been 36.4 percent.

Edgar Filing: ABB LTD - Form 20-F

Deferred income tax assets and liabilities consist of the following:

	December 31,	
	2004	2003
<b>Deferred tax liabilities:</b>		
Financing receivables	\$ (236)	\$ (244)
Property, plant and equipment	(290)	(464)
Pension and other accrued liabilities	(479)	(371)
Other	(148)	(131)
<b>Total deferred tax liability</b>	<b>(1,153)</b>	<b>(1,210)</b>
<b>Deferred tax assets:</b>		
Investments and other	36	20
Property, plant and equipment	77	172
Pension and other accrued liabilities	833	692
Unused tax losses and credits	1,694	1,713
Other	553	444
<b>Total deferred tax asset</b>	<b>3,193</b>	<b>3,041</b>
Valuation allowance	(2,017)	(1,872)
<b>Deferred tax asset, net of valuation allowance</b>	<b>1,176</b>	<b>1,169</b>
<b>Net deferred tax asset (liability)</b>	<b>\$ 23</b>	<b>\$ (41)</b>

Deferred tax assets and deferred tax liabilities are allocated between current and non-current as follows:

	December 31,			
	2004		2003	
	Current	Non-current	Current	Non-current
Deferred tax liability	\$ (200)	\$ (953)	\$ (188)	\$ (1,022)
Deferred tax asset, net of valuation allowance	670	506	579	590
<b>Net deferred tax asset (liability)</b>	<b>\$ 470</b>	<b>\$ (447)</b>	<b>\$ 391</b>	<b>\$ (432)</b>

The non-current deferred tax asset, net of valuation allowance, is included in investments and other.

Certain entities have deferred tax assets related to net operating loss carry-forwards and other items. Because recognition of these assets is uncertain, valuation allowances of \$2,017 million and \$1,872 million have been established at December 31, 2004 and 2003, respectively.

At December 31, 2004, net operating loss carry-forwards of \$4,291 million and tax credits of \$141 million are available to reduce future taxes of certain subsidiaries, of which \$2,241 million loss carry-forwards and \$92 million tax credits expire in varying amounts through 2024 and the remainder

does not expire. These carry-forwards are predominantly related to the Company's U.S. and German operations.

The provision for tax contingencies was approximately \$295 million and \$300 million at December 31, 2004 and 2003, respectively. A significant part of these provisions has been accrued for pending court cases in Northern Europe relating to certain sale and leaseback transactions.

The Company had no income tax expense impact from the repatriation provision of the American Jobs Creation Act of 2004 regarding the one-time dividend tax rate reduction.

**Note 20 Other liabilities**

The Company's other liabilities amount to \$1,083 million and \$1,077 million at December 31, 2004 and 2003, respectively.

Other liabilities include non-current provisions of \$439 million and \$441 million, deferred income of \$143 million and \$158 million and non-current derivative liabilities of \$53 million and \$40 million at December 31, 2004 and 2003, respectively. Included in non-current provisions are amounts accrued for the Company's estimated environmental remediation costs related to its former Nuclear Technology business (see Note 18) of \$266 million and \$276 million at December 31, 2004 and 2003, respectively.

The Company entered into tax-advantaged leasing transactions with U.S. investors prior to 1999. Prepaid rents that have been received on these transactions are \$314 million and \$312 million at December 31, 2004 and 2003, respectively, and have been recorded as deposit liabilities. Net gains on these transactions are being recognized over the lease terms.

**Note 21 Employee benefits**

The Company operates several pension plans, including defined benefit, defined contribution and termination indemnity plans, in accordance with local regulations and practices. These plans cover the majority of the Company's employees and provide benefits to employees in the event of death, disability, retirement or termination of employment. Certain of these plans are multi-employer plans. The Company also operates postretirement benefit plans in certain countries.

Some of these plans require employees to make contributions and enable employees to earn matching or other contributions from the Company. The funding policies of the Company's plans are consistent with the local government and tax requirements. The Company has several pension plans that are not required to be funded pursuant to local government and tax requirements.

The Company uses a December 31 measurement date for its plans.

**Obligations and funded status**

The following tables set forth the change in benefit obligations, the change in plan assets and the funded status recognized in the Consolidated Financial Statements at December 31, 2004 and 2003, for the Company's benefit plans:

	Pension benefits		Other benefits	
	2004	2003	2004	2003
Benefit obligation at the beginning of year	\$ 7,721	\$ 7,250	\$ 397	\$ 444
Service cost	190	204	3	3
Interest cost	375	369	23	26
Contributions from plan participants	46	50	10	7
Benefit payments	(523)	(528)	(39)	(38)
Benefit obligations of businesses acquired	38			
Benefit obligations of businesses disposed	(118)	(131)		
Actuarial (gain) loss	366	(371)	(23)	42
Plan amendments and other	(14)	(16)	(3)	(88)
Exchange rate differences	632	894	1	1
<b>Benefit obligation at the end of year</b>	<b>8,713</b>	<b>7,721</b>	<b>369</b>	<b>397</b>
Fair value of plan assets at the beginning of year	6,041	5,319		
Actual return on plan assets	476	407		
Contributions from employer	753	309	29	31
Contributions from plan participants	46	50	10	7
Benefit payments	(523)	(528)	(39)	(38)
Plan assets of businesses acquired	34			
Plan assets of businesses disposed	(92)	(127)		
Plan amendments and other	(8)			
Exchange rate differences	535	611		
<b>Fair value of plan assets at the end of year</b>	<b>7,262</b>	<b>6,041</b>		
<b>Unfunded amount</b>	<b>1,451</b>	<b>1,680</b>	<b>369</b>	<b>397</b>
Unrecognized transition liability			(11)	(14)
Unrecognized actuarial loss	(1,019)	(782)	(141)	(174)
Unrecognized prior service cost	(22)	(38)	16	15
<b>Net amount recognized</b>	<b>\$ 410</b>	<b>\$ 860</b>	<b>\$ 233</b>	<b>\$ 224</b>

In May 2003, the Emerging Issues Task Force of the Financial Accounting Standards Board reached a consensus on Emerging Issues Task Force No. 03-4 (EITF 03-4), *Determining the Classification and Benefit Attribution Method for a "Cash Balance" Pension Plan*. EITF 03-4 clarifies that a cash balance plan, as defined by the guidance, should be accounted for as a defined benefit plan using the traditional unit credit attribution method. The Company adopted EITF 03-4 in May 2003. As a result, the Company accounts for certain of its plans in Switzerland as cash balance plans in accordance with EITF 03-4. The adoption of EITF 03-4 resulted in an actuarial gain of \$406 million during 2003.



Edgar Filing: ABB LTD - Form 20-F

The following amounts have been recognized in the Company's Consolidated Balance Sheet at December 31, 2004 and 2003:

	Pension benefits		Other benefits	
	2004	2003	2004	2003
Prepaid pension cost	\$ (536)	\$ (569)	\$	\$
Accrued pension cost	1,272	1,613	233	224
Intangible assets	(11)	(2)		
Accumulated other comprehensive loss	(315)	(182)		
<b>Net amount recognized</b>	<b>\$ 410</b>	<b>\$ 860</b>	<b>\$ 233</b>	<b>\$ 224</b>

Included in the \$1,551 million of pension and other employee benefits at December 31, 2004, are \$46 million of long-term employee-related obligations not accounted for under Statement of Financial Accounting Standards No. 87 (SFAS 87), *Employers' Accounting for Pensions* or Statement of Financial Accounting Standards No. 106 (SFAS 106), *Employers' Accounting for Postretirement Benefits Other Than Pensions*. Additionally, accrued liabilities and other (see Note 16), contains an accrual of \$77 million and \$112 million at December 31, 2004 and 2003, respectively, for short-term employee benefits that do not meet the criteria of SFAS 87 or SFAS 106.

The pension and other employee benefits liability reported in the Consolidated Balance Sheets includes \$326 million and \$216 million at December 31, 2004 and 2003, respectively, to record a minimum pension liability. The \$216 million of minimum pension liability at December 31, 2003, included liabilities related to discontinued operations of \$32 million.

The accumulated benefit obligation (ABO) for all defined benefit pension plans was \$8,228 million and \$7,414 million at December 31, 2004 and 2003, respectively.

The projected benefit obligation (PBO) and fair value of plan assets for pension plans with benefit obligations in excess of plan assets were:

	December 31,					
	2004			2003		
	PBO	Assets	Difference	PBO	Assets	Difference
PBO exceeds assets	\$ 8,294	\$ 6,810	\$ 1,484	\$ 4,432	\$ 2,624	\$ 1,808
Assets exceed PBO	419	452	(33)	3,289	3,417	(128)
<b>Total</b>	<b>\$ 8,713</b>	<b>\$ 7,262</b>	<b>\$ 1,451</b>	<b>\$ 7,721</b>	<b>\$ 6,041</b>	<b>\$ 1,680</b>

Edgar Filing: ABB LTD - Form 20-F

The accumulated benefit obligation and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets were:

	December 31,					
	2004			2003		
	PBO	Assets	Difference	PBO	Assets	Difference
ABO exceeds assets	\$ 5,008	\$ 3,910	\$ 1,098	\$ 2,233	\$ 667	\$ 1,566
Assets exceed ABO	3,220	3,352	(132)	5,181	5,374	(193)
<b>Total</b>	<b>\$ 8,228</b>	<b>\$ 7,262</b>	<b>\$ 966</b>	<b>\$ 7,414</b>	<b>\$ 6,041</b>	<b>\$ 1,373</b>

**Components of net periodic benefit cost**

For the years ended December 31, 2004, 2003 and 2002, net periodic benefit cost consists of the following:

	Pension benefits			Other benefits		
	2004	2003	2002	2004	2003	2002
Service cost	\$ 190	\$ 204	\$ 193	\$ 3	\$ 3	\$ 6
Interest cost	375	369	328	23	26	30
Expected return on plan assets	(330)	(325)	(292)			
Amortization transition liability	5	1	13	2	6	7
Amortization prior service cost	4	9	15	(2)		
Amortization of net actuarial loss	37	45	23	9	9	6
Other	4	8	9	2		
<b>Net periodic benefit cost</b>	<b>\$ 285</b>	<b>\$ 311</b>	<b>\$ 289</b>	<b>\$ 37</b>	<b>\$ 44</b>	<b>\$ 49</b>

**Assumptions**

The following weighted-average assumptions were used to determine benefit obligations at December 31, 2004 and 2003:

	Pension benefits		Other benefits	
	2004	2003	2004	2003
Discount rate	4.60%	5.00%	5.75%	6.25%
Rate of compensation increase	2.23%	2.31%		

The following weighted-average assumptions were used to determine net periodic benefit cost for years ended December 31, 2004, 2003 and 2002:

	Pension benefits			Other benefits		
	2004	2003	2002	2004	2003	2002
Discount rate	4.97%	5.10%	5.10%	6.25%	6.74%	7.24%
Expected long-term return on plan assets	5.57%	6.06%	6.21%			
Rate of compensation increase	2.28%	3.07%	3.07%			

## Edgar Filing: ABB LTD - Form 20-F

The expected long-term rate of return on assets assumption is derived from the current and projected asset allocation, the current and projected types of investments in each asset category and the long-term historical returns for each investment type.

The Company has multiple non-pension postretirement benefit plans. The Company's health care plans are generally contributory with participants' contributions adjusted annually.

	2004	2003
Health care cost trend rate assumed for next year	11.76%	11.81%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	6.24%	5.96%
Year that the rate reaches the ultimate trend rate	2013	2013

Assumed health care cost trends have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects at December 31, 2004:

	1-percentage- point increase	1-percentage- point decrease
Effect on total of service and interest cost	\$ 2	\$ (1)
Effect on postretirement benefit obligation	\$ 25	\$ (22)

As of July 1, 2004, the Company adopted Financial Accounting Standards Board Staff Position (FSP) No. FAS 106-2, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (which superceded FAS FSP No. 106-1). This FSP provides authoritative guidance on the accounting for the U.S. subsidy and other provisions of the Medicare Prescription Drug, Improvement and Modernization Act of 2003. The effects of these provisions resulted in a reduction of \$24 million in ABO with an offset to unrecognized net actuarial loss in other benefits. The U.S. government will begin making the subsidy payments for employers in 2006. The effect of the Act on the foreign net periodic benefit costs at December 31, 2004, is \$2 million.

### Plan assets

The Company's pension plan weighted-average asset allocations at December 31, 2004 and 2003, and approximate target allocation at December 31, 2004, is as follows:

	Plan assets		Target allocation
	2004	2003	2004
Asset category:			
Equity securities	33%	37%	30%
Debt securities	54%	49%	51%
Real estate	9%	10%	12%
Other	4%	4%	7%
	100%	100%	100%

## Edgar Filing: ABB LTD - Form 20-F

The pension plan assets are invested in accordance with statutory regulations, pension plan rules, and recommendations of the pension fund trustees. The investment allocation strategy is expected to remain consistent with historical averages.

At December 31, 2004 and 2003, plan assets included approximately \$5 million (approximately 1 million shares), of the Company's capital stock.

### Contributions

During 2004, the Company made a non-cash contribution of \$549 million of available-for-sale debt securities to certain of the Company's pension plans in Germany.

The Company expects to contribute approximately \$150 million to its pension plans and \$29 million to its other postretirement benefit plans in 2005.

The Company also maintains several defined contribution plans. The expense for these plans was \$71 million, \$86 million and \$90 million in 2004, 2003 and 2002, respectively. The Company also contributed \$74 million, \$80 million and \$74 million to multi-employer plans in 2004, 2003 and 2002, respectively.

### Estimated future benefit payments

The following table reflects the total pension benefits expected to be paid from the plans or from the Company's assets, including both the Company's share of the benefit cost and the participants' share of the cost, which is funded by participant contributions. Additionally, the Medicare subsidies column represents payments estimated to be received from the U.S. government as part of the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

	Other postretirement benefits		
	Pension benefits	Benefit payments	Medicare subsidies
2005	\$ 495	\$ 29	\$
2006	509	30	(2)
2007	529	31	(2)
2008	545	30	(2)
2009	565	30	(2)
Years 2010 - 2014	2,980	152	(11)

F-71

**Note 22 Employee incentive plans**

**Management incentive plan**

The Company maintains a management incentive plan under which it offers stock warrants and warrant appreciation rights (WARs) to key employees for no consideration.

Warrants granted under this plan allow participants to purchase shares of the Company at predetermined prices. Participants may sell the warrants rather than exercise the right to purchase shares. Equivalent warrants are listed on the SWX Swiss Exchange (virt-x), which facilitates valuation and transferability of warrants granted under this plan.

Each WAR gives the participant the right to receive, in cash, the market price of a warrant on the date of exercise of the WAR. The WARs are non-transferable.

Participants may exercise or sell warrants and exercise WARs after the vesting period, which is three years from the date of grant. Vesting restrictions can be waived in certain circumstances such as death or disability. All warrants and WARs expire six years from the date of grant. As the primary trading market for shares of ABB Ltd is the SWX Swiss Exchange (virt-x), the exercise prices of warrants and the trading prices of equivalent warrants listed on the SWX Swiss Exchange (virt-x) are denominated in Swiss francs. Accordingly, exercise prices are presented below in Swiss francs. Fair values have been presented in U.S. dollars based upon exchange rates in effect as of the applicable period.

***Warrants***

The Company accounts for the warrants using the intrinsic value method of APB 25 as permitted by SFAS 123. All warrants were issued with exercise prices greater than the market prices of the stock on the dates of grant. Accordingly, the Company records no compensation expense related to the warrants, except in circumstances when a participant ceased to be employed by a consolidated subsidiary, such as after a divestment by the Company. In accordance with Financial Accounting Standards Board Interpretation No. 44, *Accounting for Certain Transactions Involving Stock Compensation*, the Company records compensation expense based on the fair value of warrants retained by participants on the date their employment ceased, with an offset to additional paid in capital. The impact of such expense is not material.

## Edgar Filing: ABB LTD - Form 20-F

Presented below is a summary of warrant activity for the years shown:

	Number of warrants	Number of shares(1)	Weighted-average exercise Price (Swiss francs)(2)
Outstanding at January 1, 2002	76,496,150	25,240,463	26.55
Forfeited	(8,105,090)	(2,043,264)	24.03
<b>Outstanding at December 31, 2002</b>	<b>68,391,060</b>	<b>23,197,199</b>	<b>26.77</b>
Granted(3)	27,254,250	5,450,850	7.00
Forfeited	(1,435,000)	(361,758)	19.66
<b>Outstanding at December 31, 2003</b>	<b>94,210,310</b>	<b>28,286,291</b>	23.05
Granted(4)	14,475,000	2,895,000	7.50
Forfeited	(3,000,000)	(661,864)	9.94
Expired	(10,538,000)	(8,612,664)	22.17
<b>Outstanding at December 31, 2004</b>	<b>95,147,310</b>	<b>21,906,763</b>	<b>21.74</b>
Exercisable at December 31, 2002	29,751,060	13,456,203	25.71
Exercisable at December 31, 2003	49,381,060	18,404,851	30.11
<b>Exercisable at December 31, 2004</b>	<b>55,230,560</b>	<b>13,923,413</b>	<b>30.08</b>

- (1) All warrants granted prior to 1999 require the exercise of 100 warrants for 81.73 registered shares of ABB Ltd. Warrants granted in 1999, 2000 and 2001 require the exercise of 100 warrants for 25.21 registered shares of ABB Ltd. No warrants were granted in 2002. Warrants granted in 2003 and 2004 required the exercise of five warrants for one registered share of ABB Ltd. Information presented reflects the number of registered shares of ABB Ltd that warrant holders can receive upon exercise.
- (2) Information presented reflects the exercise price per registered share of ABB Ltd.
- (3) The aggregate fair value at date of grant of warrants issued in 2003 was \$12 million, assuming a zero percent dividend yield, expected volatility of 44 percent, risk-free interest rate of 2.41 percent, and an expected life of six years.
- (4) The aggregate fair value at date of grant of warrants issued in 2004 was \$4 million, assuming dividend yield of 1.53 percent, expected volatility of 28.5 percent, risk-free interest rate of 1.98 percent, and an expected life of six years.

## Edgar Filing: ABB LTD - Form 20-F

Presented below is a summary of warrants outstanding at December 31, 2004.

Exercise price (in Swiss francs)(1)	Number of warrants	Number of shares(2)	Weighted-average remaining life
29.75	4,648,060	1,171,758	0.4 years
32.73	14,565,000	3,671,781	0.9 years
42.05	19,630,000	4,948,648	1.4 years
13.49	16,387,500	4,131,226	2.9 years
7.00	25,441,750	5,088,350	4.9 years
7.50	14,475,000	2,895,000	5.9 years

(1) Information presented reflects the exercise price per registered share of ABB Ltd.

(2) Information presented reflects the number of registered shares of ABB Ltd that warrant holders can receive upon exercise of warrants.

### **WARs**

As each WAR gives the holder the right to receive cash equal to the market price of a warrant on date of exercise, the Company is required by APB 25 to record a liability based upon the fair value of outstanding WARs at each period end, amortized on a straight-line basis over the three-year vesting period. In selling, general and administrative expenses, the Company recorded income of \$4 million for 2004, expense of \$1 million for 2003 and income of \$14 million for 2002, respectively, as a result of changes in the fair value of the outstanding WARs and the vested portion. To hedge its exposure to fluctuations in fair value of outstanding WARs, the Company purchases cash-settled call options, which entitle the Company to receive amounts equivalent to its obligations under the outstanding WARs. In accordance with EITF 00-19 the cash-settled call options have been recorded as assets measured at fair value (see Note 5), with subsequent changes in fair value recorded through earnings as an offset to the compensation expense recorded in connection with the WARs. During 2004, 2003 and 2002, the Company recognized expense of \$15 million, \$9 million and \$26 million, respectively, in interest and other finance expense, related to the cash-settled call options.

The aggregate fair value of outstanding WARs was \$14 million and \$17 million at December 31, 2004 and 2003, respectively. Fair value of WARs was determined based upon the trading price of equivalent warrants listed on the SWX Swiss Exchange (virt-x).

## Edgar Filing: ABB LTD - Form 20-F

Presented below is a summary of WAR activity for the years shown.

	<b>Number of WARs outstanding</b>
<b>Outstanding at January 1, 2002</b>	<b>103,553,070</b>
Exercised	(1,455,080)
Forfeited	(3,803,750)
	<b>98,294,240</b>
<b>Outstanding at December 31, 2002</b>	<b>98,294,240</b>
Granted	21,287,000
Exercised	(2,052,500)
Forfeited	(1,850,000)
	<b>115,678,740</b>
<b>Outstanding at December 31, 2003</b>	<b>115,678,740</b>
Granted	30,490,000
Exercised	(3,481,220)
Forfeited	(2,600,000)
Expired	(7,895,000)
	<b>132,192,520</b>
<b>Outstanding at December 31, 2004</b>	<b>132,192,520</b>

At December 31, 2004 and 2003, 81,590,520 and 57,619,240 of the WARs were exercisable, respectively. The aggregate fair value at date of grant of WARs issued in 2004 and 2003 was \$8 million and \$9 million, respectively. No WARs were granted in 2002.

### Employee Share Acquisition Plan

To incentivize employees, the Company granted stock options under an Employee Share Acquisition Plan (ESAP Plan) in November 2004. In the initial launch of the ESAP Plan, employees in eleven countries, including the United States, were invited to participate. The ESAP Plan is an employee stock option plan with a savings feature. Employees save over a twelve-month savings period, by way of monthly salary deductions. The maximum monthly savings amount is the lower of 10 percent of gross monthly salary or the local currency equivalent of 750 Swiss francs. At the end of the savings period, employees choose whether to exercise their stock options using their savings plus interest to buy ABB Ltd shares (American Depositary Shares (ADS) in the case of employees in the United States each ADS representing one registered share of the Company) at the exercise price set at the grant date, or have their savings returned with interest. The savings are accumulated in a bank account held by a third party trustee on behalf of the participants and earn interest.

The maximum number of shares that each employee can purchase has been determined based on the exercise price and the aggregate savings for the twelve-month period, increased by 10 percent to allow for currency fluctuations. If, at the exercise date, the balance of savings plus interest exceeds the maximum amount of cash the employee must pay to fully exercise his stock options, the excess funds will be returned to the employee. If the balance of savings and interest is insufficient to permit the employee to fully exercise his stock options, the employee has the choice but not the obligation, to make an additional payment so that the employee may fully exercise his stock options.



If an employee ceases to be employed by the Company, the accumulated savings as of the date of cessation of employment will be returned to the employee and the employee's right to exercise his stock options will be forfeited. Employees can withdraw from the ESAP Plan at any time during the savings period and will be entitled to a refund of their accumulated savings.

The exercise price per share and ADS of 6.95 Swiss francs and \$5.90, respectively, was determined using the respective closing price of the ABB Ltd share on SWX Swiss Exchange (virt-x) and ADS on the New York Stock Exchange on November 9, 2004, the grant date. The Company granted stock options, such that, if fully exercised, the Company would issue 7,548,360 registered shares (including shares represented by ADS). The aggregate fair value of the awards at date of grant was \$5 million, assuming a zero percent dividend yield, expected volatility of 28.25 percent, a risk-free interest rate of 0.97 percent and a life of one year from grant date. Forfeitures since grant date have been insignificant.

The Company accounts for awards under the ESAP Plan using the intrinsic value method of APB 25. The awards were issued with an exercise price equal to the market price of the stock on grant date. Accordingly, the intrinsic value as of grant date was zero and the Company has recorded no compensation expense related to the ESAP Plan.

### **Performance Incentive Share Plan**

In December 2004, the Company introduced a Performance Incentive Share Plan (Performance Plan) for members of its Executive Committee (EC Members). EC Members did not participate in the management incentive plan in 2004.

The Performance Plan involves annual conditional grants of ABB Ltd shares (or ADSs where deemed appropriate by the Nomination and Compensation Committee). The number of shares conditionally granted is dependent upon the base salary of the EC Member. The actual number of shares that the participants will receive free of charge at a future date is dependent on 1) the performance of ABB Ltd shares during a defined period (Evaluation Period) compared to those of a selected peer group of publicly-listed multinational companies and 2) the term of service of the respective EC Member in that capacity during the Evaluation Period. The actual number of shares received after the Evaluation Period cannot exceed 100 percent of the conditional grant.

The Evaluation Period of the initial launch was defined as the period from March 15, 2004, to March 15, 2006. The reference price of 7.68 Swiss francs for the purpose of comparison with the peers was calculated as the average of the closing prices of the ABB Ltd share on SWX Swiss Exchange (virt-x) over the 20 trading days preceding March 15, 2004.

The performance of the Company compared to its peers over the Evaluation Period will be measured as the sum, in percentage terms, of the average percentage price development of the ABB share price over the Evaluation Period and an average annual dividend yield percentage (the Company's Performance).

In order for shares to vest, the Company's Performance over the Evaluation Period must be positive and equal to or better than half of the defined peers. The actual number of shares to be delivered will be dependent on the Company's ranking in comparison with the defined peers. The full

amount of the conditional grant will vest when the Company's Performance is better than three-quarters of the defined peers.

If an EC Member gives notice of resignation or, under certain circumstances is given notice of termination, and the vesting period has not expired, then the right to shares is forfeited. In the event of death or disability during the vesting period, the conditional grant size for that participant is reduced pro rata based on the remaining vesting period. An evaluation of the Company's Performance for the Evaluation Period up to the date of death or disability is made to establish the number of shares that vest. If a Performance Plan participant ceases to be an EC Member for reasons other than described above, the conditional grant size is reduced pro rata based on the portion of the vesting period remaining when the participant ceases to be an EC Member. In respect of a Performance Plan grant for which the vesting period has not expired, the Nomination and Compensation Committee can invite a new EC Member to receive a conditional grant, adjusted to reflect the shorter service period.

In 2004, 443,430 shares were conditionally granted to EC Members. In January 2005, a further 59,001 shares were conditionally granted under the 2004 launch to a new EC Member.

The Company accounts for awards under the Performance Plan using the intrinsic value method of APB 25. As the shares that vest are awarded free of charge, the intrinsic value of the award is equivalent to the market price of the stock. Since the actual number of shares that participants will ultimately receive is not determinable until March 15, 2006, the Performance Plan is deemed to be a variable plan in accordance with APB 25. Changes in the fair value of the Company's stock and actual number of shares that vest up to July 1, 2005, date of adoption of SFAS 123R, will result in a change in the intrinsic value and amount of the awards and a corresponding change to compensation expense over the vesting period. The amount of compensation expense for 2004 was insignificant. The aggregate fair value of the 2004 awards at grant date, assuming vesting of the maximum award in March 2006, was approximately \$2 million.

**Note 23 Stockholders' equity**

In March 2003, the Company sold 80 million treasury shares in two transactions for approximately \$156 million.

At the Company's annual general meeting held on May 16, 2003, the Company's shareholders approved amendments to its articles of incorporation providing for an increase in authorized share capital and an increase in contingent share capital. The amendments include the creation of 250 million Swiss francs in authorized share capital, replacing the 100 million Swiss francs in authorized share capital that expired in June 2001. This entitled the Company's Board of Directors to issue up to 100 million new ABB Ltd shares, including approximately 30 million CE Settlement Shares (see Note 18). The amendments also included an increase of contingent capital from 200 million Swiss francs to 750 million Swiss francs, allowing the issuance of up to a further 300 million new ABB Ltd shares which may be used primarily for the exercise of conversion rights granted in connection with issuance of bonds and other financial market instruments and for the issuance of new shares to employees.

In October 2003, the Company announced a three-component capital-strengthening program, comprised of a share capital increase, a credit facility agreement and a bond issuance. As part of this

program, in November 2003, an extraordinary shareholders' meeting resolved to increase the Company's share capital by approximately 840 million shares through a rights issue. In December 2003, the Company completed the 7-for-10 rights offering for the 840 million new registered shares at an offer price of 4 Swiss francs per share resulting in a net increase of capital stock and additional paid in capital of approximately \$2.5 billion.

In December 2003, the Company issued 30,298,913 CE Settlement Shares out of its authorized capital for purposes of fulfilling the Company's obligations under a pre-packaged plan of reorganization under Chapter 11 of the U.S. Bankruptcy Code of Combustion Engineering. In accordance with its then current articles of incorporation, the pre-emptive rights of the shareholders were excluded and allocated to a Company subsidiary, which subscribed for these shares and holds them until they will be contributed to the Asbestos PI Trust or any similar trust, once a plan of reorganization of Combustion Engineering is declared effective.

At December 31, 2004, the Company had 2,440,016,034 authorized shares. Of these, 2,070,314,947 shares are registered and issued, including 30,298,913 CE Settlement Shares that are reserved for use in connection with a pre-packaged plan of reorganization of Combustion Engineering. As these shares are presently held by one of the Company's subsidiaries and carry no participation rights, these shares are not treated as outstanding for the purposes of the Company's Consolidated Financial Statements. The CE Settlement Shares will only become outstanding and carry participation rights once a plan of reorganization for Combustion Engineering becomes effective and the shares have been contributed to the Asbestos PI Trust or any similar trust created under such a plan. Should a plan ultimately not become effective, the CE Settlement Shares reserved for such use would be cancelled by the Company.

At December 31, 2004, including the securities issued under the employee incentive plans and call options sold to a bank at fair value during 2001, 2003 and 2004, the Company had outstanding obligations to deliver 62 million shares at exercise prices ranging from 6.95 to 42.05 Swiss francs. These financial instruments expire in periods ranging from June 2005 to December 2010 and were recorded as equity instruments in accordance with EITF 00-19. Also, at December 31, 2004, the Company had obligations to deliver approximately 107 million shares at a conversion price of \$9.03 as a result of the issuance of convertible debt in May 2002 and to deliver approximately 105 million shares at a conversion price of 9.53 Swiss francs as a result of the issuance of convertible debt in September 2003. In addition, at December 31, 2004, the Company had outstanding contingent obligations to deliver up to a maximum of 0.5 million shares free of charge to EC Members under the Performance Plan (see Note 22).

Dividends are payable to the Company's stockholders based on the requirements of Swiss law, ABB Ltd's Articles of Incorporation, and stockholders' equity as reflected in the unconsolidated financial statements of ABB Ltd prepared in compliance with Swiss law. At December 31, 2004, of the 8,911 million Swiss francs stockholders' equity reflected in such unconsolidated financial statements, 5,176 million Swiss francs is share capital, 2,191 million Swiss francs is restricted, 1,533 million Swiss francs is unrestricted and 11 million Swiss francs is available for distribution.

**Note 24 Earnings per share**

Basic earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year. Diluted earnings (loss) per share is calculated by dividing income (loss) by the weighted-average number of shares outstanding during the year, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise: outstanding written call options, if dilutive; the securities issued under the Company's employee incentive plans, if dilutive; and shares issuable in relation to outstanding convertible bonds, if dilutive. The shares issuable in relation to the warrants and options outstanding in connection with the Company's employee incentive plans were excluded from the computation of diluted earnings per share in 2003 and 2002 as their inclusion would have been antidilutive. In 2004, only the shares issuable in relation to the warrants and options outstanding in connection with the Company's December 2003 launch under the management incentive plan were included in the computation of diluted earnings (loss) per share as the inclusion of potential shares from the warrants and options of other launches under the employee incentive plans would have been antidilutive. In 2002, the shares issuable in relation to the \$968 million convertible bonds were included in the computation of diluted earnings per share for the period they were outstanding. In 2004 and 2003, the shares issuable in relation to the convertible bonds were excluded from the calculation of diluted earnings per share as their inclusion would have been antidilutive.

	<b>Year ended December 31,</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
<b>Basic earnings (loss) per share:</b>			
Income (loss) from continuing operations	\$ 448	\$ (371)	\$ (126)
Loss from discontinued operations, net of tax	(483)	(408)	(693)
<b>Net loss</b>	<b>\$ (35)</b>	<b>\$ (779)</b>	<b>\$ (819)</b>
Weighted-average number of shares outstanding (in millions)	2,028	1,220	1,113
<b>Earnings (loss) per share:</b>			
Income (loss) from continuing operations	\$ 0.22	\$ (0.30)	\$ (0.11)
Loss from discontinued operations, net of tax	(0.24)	(0.34)	(0.63)
<b>Net loss</b>	<b>\$ (0.02)</b>	<b>\$ (0.64)</b>	<b>\$ (0.74)</b>

F-79

	Year ended December 31,		
	2004	2003	2002
<b>Diluted earnings (loss) per share:</b>			
Income (loss) from continuing operations	\$ 448	\$ (371)	\$ (126)
Effect of dilution:			
Convertible bonds, net of tax			(187)
<b>Income (loss) from continuing operations, adjusted</b>	<b>448</b>	<b>(371)</b>	<b>(313)</b>
Loss from discontinued operations, net of tax	(483)	(408)	(693)
<b>Net loss, adjusted</b>	<b>\$ (35)</b>	<b>\$ (779)</b>	<b>\$ (1,006)</b>
Weighted-average number of shares outstanding (in millions)	2,028	1,220	1,113
Dilutive potential shares:			
Warrants and options	1		
Convertible bonds			53
<b>Diluted weighted-average number of shares outstanding (in millions)</b>	<b>2,029</b>	<b>1,220</b>	<b>1,166</b>
Earnings (loss) per share:			
Income (loss) from continuing operations, adjusted	\$ 0.22	\$ (0.30)	\$ (0.27)
Loss from discontinued operations, net of tax	(0.24)	(0.34)	(0.59)
<b>Net loss, adjusted</b>	<b>\$ (0.02)</b>	<b>\$ (0.64)</b>	<b>\$ (0.86)</b>

**Note 25 Restructuring charges****2001 Program**

In July 2001, the Company announced and initiated a restructuring program (2001 Program) in an effort to improve productivity, reduce cost base, simplify product lines, reduce multiple location activities and perform other downsizing in response to weakening markets and consolidation of major customers in certain industries. The 2001 Program was substantially completed at September 30, 2002.

Restructuring charges relating to workforce reductions, lease terminations and other exit costs associated with the 2001 Program are included in other income (expense), net. Termination benefits were paid to approximately 100, 2,270 and 4,000 employees in 2004, 2003 and 2002, respectively. Workforce reductions include production, managerial and administrative employees. Changes in management's original estimate of the amounts accrued for workforce reductions, lease terminations and other exit costs have been included in other income (expense), net.

As a result of the 2001 Program, certain assets, inventories and property, plant and equipment were identified as impaired or that would no longer be used in continuing operations. The Company recorded a charge of \$18 million in 2002 to write down these assets to fair value and such costs were included in cost of sales and other income (expense), net.

**Step change program**

In October 2002, the Company announced the Step change program. The goals of the Step change program were to increase competitiveness of the Company's core businesses (see Note 26), reduce

overhead costs and streamline operations by approximately \$1 billion on an annual basis by 2005. At June 30, 2004, the Step change program was substantially complete.

Restructuring charges relating to workforce reductions, lease terminations and other exit costs associated with the Step change program are included in other income (expense), net. Termination benefits were paid to approximately 950, 1,500 and 200 employees in 2004, 2003 and 2002, respectively. Workforce reductions include production, managerial and administrative employees. Changes in management's original estimate of the amounts accrued for workforce reductions, lease terminations and other exit costs were included in other income (expense), net.

As a result of the Step change program, certain assets, inventories and property, plant and equipment were identified as impaired or will no longer be used in continuing operations. The Company recorded \$0 million, \$3 million and \$2 million in 2004, 2003 and 2002, respectively, to write down these assets to their fair value and such costs were included in cost of sales and other income (expense), net.

#### **Other**

Certain restructuring programs were initiated primarily during 2003 at specified locations not included in the Step change program. The goals of these programs are to increase efficiencies by reducing headcount and streamlining operations. These programs are expected to increase productivity of the non-core businesses (see Note 26). Anticipated savings will be recognized through the strategic divestment of these operations.

Restructuring charges related to workforce reductions, lease terminations and other exit costs associated with these other programs are included in other income (expense), net. Termination benefits were paid to approximately 1,290 and 1,300 employees in 2004 and 2003, respectively. Workforce reductions include production, managerial and administrative employees. Changes in management's original estimate of the amounts accrued for workforce reductions, lease terminations and other exit costs have been included in other income (expense), net.

As a result of these restructuring programs, certain assets, inventories and property, plant and equipment have been identified as impaired or will no longer be used in continuing operations. The Company recorded \$5 million and \$11 million in 2004 and 2003, respectively, to write down these assets to fair value and such costs are included in cost of sales and other income (expense), net.

Restructuring liabilities consist of the following:

	2001 Program		Step Change		Other		Total
	Workforce reductions	Lease terminations and other exit costs	Workforce reductions	Lease terminations and other exit costs	Workforce reductions	Lease terminations and other exit costs	
<b>Balance at January 1, 2002</b>	\$ 78	\$ 39	\$	\$	\$ 20	\$ 12	\$ 149
Restructuring expense	168	40	51	26			285
Cash paid	(156)	(29)	(13)	(1)			(199)
Exchange rate differences	20	5					25
Changes in estimate	(16)	(5)			(9)		(30)
<b>Balance at December 31, 2002</b>	<b>94</b>	<b>50</b>	<b>38</b>	<b>25</b>	<b>11</b>	<b>12</b>	<b>230</b>
Restructuring expense			181	56	110	25	372
Cash paid	(99)	(10)	(143)	(48)	(43)	(12)	(355)
Exchange rate differences	14	9	24	4	7	3	61
Changes in estimate		(22)	(4)		(6)		(32)
<b>Balance at December 31, 2003</b>	<b>9</b>	<b>27</b>	<b>96</b>	<b>37</b>	<b>79</b>	<b>28</b>	<b>276</b>
Restructuring expense			42	17	98	31	188
Cash paid	(9)	(9)	(137)	(18)	(103)	(16)	(292)
Exchange rate differences		2	6	3	5	4	20
Changes in estimate		(6)	(7)		(5)	(5)	(23)
<b>Balance at December 31, 2004</b>	<b>\$</b>	<b>\$ 14</b>	<b>\$</b>	<b>\$ 39</b>	<b>\$ 74</b>	<b>\$ 42</b>	<b>\$ 169</b>

**Cumulative**

The cumulative amounts at December 31, 2004, for each plan are given below:

	2001 Program	Step change	Other	Total
Restructuring charge for workforce reduction	\$ 282	\$ 274	\$ 228	\$ 784
Restructuring charge for lease terminations and other	111	99	68	278
Changes in estimate	(49)	(11)	(25)	(85)
<b>Total restructuring charges</b>	<b>\$ 344</b>	<b>\$ 362</b>	<b>\$ 271</b>	<b>\$ 977</b>

**Segment information**

Restructuring charges by segment consist of the following:

	Year ended December 31,		
	2004	2003	2002
Power Technologies	\$ 51	\$ 61	\$ 57
Automation Technologies	72	139	126
Non-core activities:			
Oil, Gas and Petrochemicals	20	20	
Equity Ventures			
Structured Finance			
Building Systems	11	43	22
New Ventures	1	1	2
Other Non-core activities		47	15
Total Non-core activities	32	111	39
Corporate/Other	10	29	33
<b>Total restructuring charges</b>	<b>\$ 165</b>	<b>\$ 340</b>	<b>\$ 255</b>

**Note 26 Segment and geographic data**

Effective January 1, 2003, in order to streamline the Company's structure and improve operational performance, the Company put into place two divisions: Power Technologies, which combined the former Power Technology Products and Utilities divisions and employed approximately 40,400 people at December 31, 2004; and Automation Technologies, which combined the former Automation Technology Products and Industries divisions and employed approximately 54,600 people at December 31, 2004. The remaining operations of the Company are grouped in Non-core activities. Effective January 1, 2004, the Group Processes activities, previously in the Non-core activities division, were integrated into the core divisions and the Substations Automation business was integrated into the Power Technologies division from the Automation Technologies division. All periods presented have been restated to reflect the new organizational structure of the Company.

The Power Technologies division produces transformers, switchgear, breakers, capacitors, cables and other products and technologies for high- and medium-voltage applications. It serves electric, gas, and water utilities as well as industrial and commercial customers, with a broad range of products, systems and services for power transmission, distribution and power plant automation. The division's principal customers are electric, gas and water utilities, owners and operators of power transmission systems, utilities that own or operate networks and owners and operators of power generating plants. Other customers include gas transmission companies, local distribution companies and multi-utilities, which are involved in the transmission or distribution of more than one commodity. The division also serves industrial and commercial customers, such as operators of large commercial buildings and heavy industrial plants.

The Automation Technologies division provides products, systems, software and services for the automation and optimization of industrial and commercial processes. Key technologies include



## Edgar Filing: ABB LTD - Form 20-F

measurement and control, instrumentation, process analysis, drives and motors, power electronics, robots, and low voltage products. These technologies are sold to customers of the automotive, cement, chemical, distribution, electronics, food and beverage, life sciences, marine, metals, mining, paper, petroleum, printing and telecommunications industries with application-specific power and automation technology.

Non-core activities include the following:

The Company's remaining Oil, Gas and Petrochemicals business;

The Company's remaining Equity Ventures business;

The Company's remaining Structured Finance business;

The Company's remaining Building Systems business;

The Company's New Ventures business area;

The Company's Customer Service, Logistic Systems, and Semiconductors business areas.

The remaining Oil, Gas and Petrochemicals business primarily consists of a full service engineering company which, in addition to having expertise in engineering, procurement and construction projects, also licenses process technologies in the refining, chemical, petrochemical and polymer fields.

The Building Systems business area designs, builds and maintains complete installations for industrial, infrastructure and commercial facilities, integrating products manufactured by the Power Technologies and Automation Technologies divisions, as well as those from third-party suppliers.

Corporate/Other includes Headquarters, Central Research and Development, Real Estate, Group Treasury Operations and the Financial Advisory business.

The Company evaluates performance of its segments based on earnings before interest and taxes, which excludes interest and dividend income, interest and other finance expense, provision for taxes, minority interest, and loss from discontinued operations, net of tax. In accordance with Statement of Financial Accounting Standards No. 131, *Disclosures about Segments of an Enterprise and Related Information*, the Company presents division revenues, depreciation and amortization, earnings before interest and taxes, net operating assets and capital expenditures, all of which have been restated to reflect the changes to the Company's internal structure, including the effect of inter-division transactions. The Company accounts for inter-division sales and transfers as if the sales and transfers were to third parties, at current market prices.

Edgar Filing: ABB LTD - Form 20-F

The following tables summarize information for each segment:

2004	Revenues	Depreciation and amortization	Earnings (loss) before interest and taxes	Net operating assets(1)	Capital expenditures(2)
Power Technologies	\$ 8,755	\$ 214	\$ 610	\$ 2,728	\$ 137
Automation Technologies	11,030	292	1,027	3,754	186
Non-core activities:					
Oil, Gas and Petrochemicals	1,079	26	(4)	363	1
Equity Ventures(3)	7	6	69	1,161	10
Structured Finance	6	1	(14)	524	
Building Systems	508	3	(70)		1
New Ventures	49	4	(5)	99	10
Other Non-core activities	44	1	(22)	9	1
Total Non-core activities	1,693	41	(46)	2,156	23
Corporate/Other	887	84	(507)	1,901	54
Inter-division elimination	(1,644)			(917)	
<b>Consolidated</b>	<b>\$ 20,721</b>	<b>\$ 631</b>	<b>\$ 1,084</b>	<b>\$ 9,622</b>	<b>\$ 400</b>
2003	Revenues	Depreciation and amortization	Earnings(loss) before interest and taxes	Net operating assets(4)	Capital expenditures(2)
Power Technologies	\$ 7,598	\$ 183	\$ 595	\$ 2,568	\$ 120
Automation Technologies	9,628	253	738	3,868	154
Non-core activities:					
Oil, Gas and Petrochemicals	1,895		(296)	276	5
Equity Ventures(3)	26	5	76	1,151	46
Structured Finance	48	1	(65)	643	
Building Systems	1,829	9	(104)	9	3
New Ventures	53	5	(21)	195	11
Other Non-core activities	471	53	(57)	(226)	6
Total Non-core activities	4,322	73	(467)	2,048	71
Corporate/Other	905	68	(486)	2,513	57
Inter-division elimination	(2,026)		(23)	(1,140)	
<b>Consolidated</b>	<b>\$ 20,427</b>	<b>\$ 577</b>	<b>\$ 357</b>	<b>\$ 9,857</b>	<b>\$ 402</b>

Edgar Filing: ABB LTD - Form 20-F

2002	Revenues	Depreciation and amortization	Earnings (loss) before interest and taxes	Net operating assets	Capital expenditures(2)
Power Technologies	\$ 6,814	\$ 168	\$ 451	\$ 2,266	\$ 116
Automation Technologies	8,201	199	495	3,554	130
Non-core activities:					
Oil, Gas and Petrochemicals	2,321	16	(142)	152	5
Equity Ventures(3)	19		43	1,062	
Structured Finance	66	1	96	1,165	2
Building Systems	2,375	11	(113)	68	9
New Ventures	50	11	(37)	144	14
Other Non-core activities	783	75	(157)	(178)	20
Total Non-core activities	5,614	114	(310)	2,413	50
Corporate/Other	1,014	78	(363)	2,361	144
Inter-division elimination	(2,171)		(74)	(724)	
<b>Consolidated</b>	<b>\$ 19,472</b>	<b>\$ 559</b>	<b>\$ 199</b>	<b>\$ 9,870</b>	<b>\$ 440</b>

- (1) Net operating assets at December 31, 2004, are calculated based upon total assets of \$24,677 million excluding cash and equivalents of \$3,676 million, marketable securities and short-term investments of \$524 million, current loans receivable of \$17 million, tax assets of \$1,256 million, assets held for sale and in discontinued operations of \$155 million, prepaid pension and other employee benefits of \$549 million and other assets of \$89 million, less total liabilities of \$21,556 million excluding borrowings of \$5,534 million, tax liabilities of \$1,522 million, provisions of \$3,326 million, pension and employee related liabilities of \$1,628 million, liabilities held for sale and in discontinued operations of \$290 million and certain other liabilities of \$467 million.
- (2) Capital expenditures reflect purchases of tangible fixed assets.
- (3) Includes the Company's investment in Jorf Lasfar Energy Company S.C.A. (see Note 14).
- (4) Net operating assets at December 31, 2003, are calculated based upon total assets of \$30,401 million excluding cash and equivalents of \$4,783 million, marketable securities and short-term investments of \$473 million, current loans receivable of \$23 million, tax assets of \$1,327 million, assets held for sale and in discontinued operations of \$4,981 million, prepaid pension and other employee benefits of \$564 million and other assets of \$143 million, less total liabilities of \$27,199 million excluding borrowings of \$7,934 million, tax liabilities of \$1,644 million, provisions of \$3,021 million, pension and employee related liabilities of \$1,902 million, liabilities held for sale and in discontinued operations of \$3,990 million and certain other liabilities of \$458 million.

**Geographic information**

	Revenues Year ended December 31,				
	2004	2003	2002	2004	2003
Europe	\$ 10,764	\$ 10,963	\$ 10,461	\$ 2,288	\$ 2,159
The Americas	3,624	3,900	4,177	272	297
Asia	4,296	3,519	2,860	299	281
Middle East and Africa	2,037	2,045	1,974	122	121
	<b>\$ 20,721</b>	<b>\$ 20,427</b>	<b>\$ 19,472</b>	<b>\$ 2,981</b>	<b>\$ 2,858</b>

Revenues have been reflected in the regions based on the location of the customer. The United States generated approximately 11 percent, 12 percent and 14 percent of the Company's total revenues in 2004, 2003 and 2002 respectively. Germany generated approximately 11 percent of the Company's total revenues in 2004, 2003 and 2002 respectively. More than 95 percent of the Company's total revenues were generated outside Switzerland in 2004, 2003 and 2002. Long-lived assets represent property, plant and equipment, net, and are shown by location of the assets. Switzerland and Germany represented approximately 22 percent and 15 percent, respectively, of the Company's long-lived assets at both December 31, 2004 and 2003, respectively.

The Company does not segregate revenues derived from transactions with external customers for each type or group of products and services. Accordingly, it is not practicable for the Company to present revenues from external customers by product and service type.

Management estimates that approximately 63 percent of the Company's employees are subject to collective bargaining agreements in various countries. These agreements are subject to various regulatory requirements and are renegotiated on a regular basis in the normal course of business.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and  
Stockholders of ABB Ltd:

We have audited the consolidated financial statements of ABB Ltd as of December 31, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, and have issued our report thereon dated April 6, 2005 (included elsewhere in this report on Form 20-F). Our audits also included the financial statement schedule listed in Item 18(h) of this report on Form 20-F. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this financial statement schedule based on our audits. We did not audit the financial statements of Jorf Lasfar Energy Company, a corporation in which the Company has a 50% interest, (the Company's equity in Jorf Lasfar Energy Company's net income is stated at \$63 million in 2004, \$60 million in 2003 and \$66 million in 2002) and we did not audit the 2002 consolidated financial statements of Swedish Export Credit Corporation, a corporation in which the Company had a 35% interest, (the Company's equity in Swedish Export Credit Corporation's consolidated net income is stated at \$89 million in 2002). Those statements were audited by other auditors whose reports have been furnished to us. Our opinion, insofar as it relates to amounts included for those companies and their subsidiaries, is based solely on the reports of the other auditors.

In our opinion, based on our audits and reports of other auditors, the financial statement schedule referred to above, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ ERNST & YOUNG AG

Zurich, Switzerland

April 6, 2005

S-1

---

**Schedule II Valuation and Qualifying Accounts**

Description	Balance at the beginning of year	Additions	Deductions(1)	Balance at the end of year
(U.S dollars in millions)				
Accounts Receivable allowance for doubtful accounts:				
Year ending December 31,				
2004	245	150	78	317
2003	212	129	96	245
2002	221	125	134	212

(1) Includes foreign currency translation adjustments.

QuickLinks

TABLE OF CONTENTS

INTRODUCTION

FINANCIAL AND OTHER INFORMATION

FORWARD-LOOKING STATEMENTS

PART I

SELECTED FINANCIAL DATA

DIVIDENDS AND DIVIDEND POLICY

RISK FACTORS

INTRODUCTION

BUSINESS DIVISIONS

DISCONTINUED OPERATIONS

CAPITAL EXPENDITURES

SUPPLIES AND RAW MATERIALS

RESEARCH AND DEVELOPMENT

PATENTS AND TRADEMARKS

ENVIRONMENTAL ACTIVITIES

REGULATION

SIGNIFICANT SUBSIDIARIES

DESCRIPTION OF PROPERTY

Item 5. Operating and Financial Review and Prospects

MANAGEMENT OVERVIEW

APPLICATION OF CRITICAL ACCOUNTING POLICIES

NEW ACCOUNTING PRONOUNCEMENTS

RESTRUCTURING EXPENSES

ACQUISITIONS, INVESTMENTS AND DIVESTITURES

EXCHANGE RATES

ORDERS

PERFORMANCE MEASURES

RESTATEMENT

DIFFERENCES FROM PRELIMINARY EARNINGS ANNOUNCEMENT

ANALYSIS OF RESULTS OF OPERATIONS

POWER TECHNOLOGIES

AUTOMATION TECHNOLOGIES

NON-CORE ACTIVITIES

DISCONTINUED OPERATIONS

LIQUIDITY AND CAPITAL RESOURCES

FINANCIAL POSITION

DISCLOSURES ABOUT CONTRACTUAL OBLIGATIONS AND COMMITMENTS

OFF-BALANCE SHEET ARRANGEMENTS

ENVIRONMENTAL LIABILITIES

ASBESTOS LIABILITIES

Item 6. Directors, Senior Management and Employees

BOARD OF DIRECTORS

SENIOR MANAGEMENT

CORPORATE GOVERNANCE

COMPENSATION

SHARE OWNERSHIP

EMPLOYEES

MAJOR SHAREHOLDERS

RELATED PARTY TRANSACTIONS

Item 8. Financial Information

CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

LEGAL PROCEEDINGS

DIVIDENDS AND DIVIDEND POLICY

SIGNIFICANT CHANGES

MARKETS

TRADING HISTORY

THE SWX SWISS EXCHANGE AND VIRT-X

THE SWEDISH SECURITIES MARKET

DESCRIPTION OF SHARE CAPITAL AND ARTICLES OF INCORPORATION

MATERIAL CONTRACTS

EXCHANGE CONTROLS

TAXATION

DOCUMENTS ON DISPLAY

PART II

PART III

SIGNATURES

ABB Ltd Index to Consolidated Financial Statements and Schedules

Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

ABB Ltd Consolidated Income Statements for the years ended December 31, 2004, 2003 and 2002

ABB Ltd Consolidated Balance Sheets at December 31, 2004 and 2003

ABB Ltd Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002

ABB Ltd Notes to the Consolidated Financial Statements (U.S. dollar amounts in millions, except per share amounts)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Schedule II Valuation and Qualifying Accounts