

ABB LTD  
Form 20-F  
April 18, 2007

As filed with the Securities and Exchange Commission on April 18, 2007

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F**

- (REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR
- (ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2006  
OR
- (TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR
- (SHELL COMPANY 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>
American Depositary Shares, each representing one Registered Share	New York Stock Exchange
Registered Shares, par value CHF 2.50	New York Stock Exchange*

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: 2,187,756,317 Registered Shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

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

If this is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

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 checkmark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

\* 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.

---

TABLE OF CONTENTS

	<b>Page</b>
<u>PART I</u>	
<u>Item 1. Identity of Directors, Senior Management and Advisers</u>	4
<u>Item 2. Officer Statistics and Expected Timetable</u>	4
<u>Item 3. Key Information</u>	4
<u>Item 4. Information on the Company</u>	16
<u>Item 4A. Unresolved Staff Comments</u>	37
<u>Item 5. Operating and Financial Review and Prospects</u>	37
<u>Item 6. Directors, Senior Management and Employees</u>	97
<u>Item 7. Major Shareholders and Related Party Transactions</u>	109
<u>Item 8. Financial Information</u>	113
<u>Item 9. The Offer and Listing</u>	117
<u>Item 10. Additional Information</u>	118
<u>Item 11. Quantitative and Qualitative Disclosures About Market Risk</u>	132
<u>Item 12. Description of Securities Other than Equity Securities</u>	134
<u>PART II</u>	135
<u>Item 13. Defaults, Dividend Arrearages and Delinquencies</u>	135
<u>Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	135
<u>Item 15. Controls and Procedures</u>	135
<u>Item 15T. Controls and Procedures</u>	136
<u>Item 16A. Audit Committee Financial Expert</u>	136
<u>Item 16B. Code of Ethics</u>	136
<u>Item 16C. Principal Accountant Fees and Services</u>	136
<u>Item 16D. Exemptions from the Listing Standards for Audit Committees.</u>	137
<u>Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.</u>	137
<u>PART III</u>	138
<u>Item 17. Financial Statements</u>	138
<u>Item 18. Financial Statements</u>	138
<u>Item 19. Exhibits</u>	138

## 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 registered share of ABB Ltd) 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, 2006 and 2005 and for each of the three years in the period ended December 31, 2006 (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) 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) Indian rupee refers to the lawful currency of India; (vii) Chinese renminbi refers to the lawful currency of the People's Republic of China; and (ix) Brazilian Real or R\$ refers to the lawful currency of the Federative Republic of Brazil.

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 twelve o'clock 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 29, 2006, unless otherwise indicated. The twelve o'clock buying rate for Swiss francs on December 29, 2006 was \$1.00 = CHF 1.2195. The twelve o'clock buying rate for Swiss francs on April 17, 2007 was \$1.00 = CHF 1.2092.

## 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 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;

- 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 capital expenditures;
- statements in Item 5. Operating and Financial Review and Prospects regarding our management objectives, including our mid term outlook, as well as trends in results, prices, volumes, operations, margins and overall market trends; and
- statements in Item 8. Financial Information Legal Proceedings regarding the outcome of certain compliance matters under investigation.

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 our actual results of operations, financial condition and liquidity, and the development of the countries and 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 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:

- Our reputation and our ability to do business may be impaired by improper behavior by any of our employees or agents.
- Our business is affected by the global economic and political climate.
- Our operations in emerging markets expose us to risks associated with conditions in those markets.
- Undertaking long-term fixed price projects exposes our businesses to risk of loss should our actual costs exceed our estimated or budgeted costs.
- 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, interest rates or commodity prices on our earnings and cash flows.
- The weakening or unavailability of our intellectual property rights could adversely affect our business.
- 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.
- 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.
- We may encounter difficulty in managing our business due to the global nature of our operations.
- Increases in the costs of our raw materials may adversely affect our financial performance.



- 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.
- If we fail to make the payments required under the Modified Plan of Reorganization for Combustion Engineering or under the Plan of Reorganization for Lummus we could trigger an injunction default which would lead to the termination of the channeling injunction under the CE Plan or the Lummus Plan, respectively.
- If we are not able to comply with the covenants contained in our \$2 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.
- If we are unable to successfully adapt our internal controls over financial reporting to changes in circumstance, 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. Our consolidated financial statements as of and for each of the years ended December 31, 2006, 2005, 2004, 2003 and 2002 were audited by Ernst & Young AG, except for the 2004, 2003 and 2002 financial statements of Jorf Lasfar Energy Company, a corporation in which we have a 50 percent interest, and the 2002 consolidated financial statements of Swedish Export Credit Corporation, in which we had a 35 percent interest at December 31, 2002, which were audited by other independent auditors.

The Consolidated Financial Statements as of December 31, 2003 and 2002, and for the year ended December 31, 2002, have not been audited after the reclassifications of certain businesses between continuing operations and discontinued operations.



## INCOME STATEMENT DATA(1):

	Year ended December 31				
	2006	2005	2004	2003	2002
	(U.S. dollars in millions, except per share data)				
<b>Total revenues</b>	<b>24,412</b>	<b>22,012</b>	<b>20,149</b>	<b>19,814</b>	<b>18,902</b>
<b>Total cost of sales</b>	<b>(17,541 )</b>	<b>(16,405 )</b>	<b>(15,241 )</b>	<b>(15,362 )</b>	<b>(14,546 )</b>
<b>Gross profit</b>	<b>6,871</b>	<b>5,607</b>	<b>4,908</b>	<b>4,452</b>	<b>4,356</b>
Selling, general and administrative expenses	(4,434 )	(3,883 )	(3,777 )	(3,896 )	(4,062 )
Other income (expense), net(2)	149	54	(40 )	(200 )	(65 )
<b>Earnings before interest and taxes</b>	<b>2,586</b>	<b>1,778</b>	<b>1,091</b>	<b>356</b>	<b>229</b>
Interest and dividend income	151	157	151	140	184
Interest and other finance expense	(304 )	(403 )	(360 )	(542 )	(288 )
<b>Income (loss) from continuing operations before taxes and minority interest and cumulative effect of accounting change</b>	<b>2,433</b>	<b>1,532</b>	<b>882</b>	<b>(46 )</b>	<b>125</b>
Provision for taxes	(697 )	(490 )	(338 )	(237 )	(79 )
Minority interest	(179 )	(131 )	(102 )	(67 )	(111 )
<b>Income (loss) from continuing operations before cumulative effect of accounting change</b>	<b>1,557</b>	<b>911</b>	<b>442</b>	<b>(350 )</b>	<b>(65 )</b>
Loss from discontinued operations, net of tax(3)	(167 )	(171 )	(477 )	(429 )	(754 )
<b>Income (loss) before cumulative effect of accounting change(4)</b>	<b>1,390</b>	<b>740</b>	<b>(35 )</b>	<b>(779 )</b>	<b>(819 )</b>
Cumulative effect of accounting change, net of tax		(5 )			
<b>Net income (loss)</b>	<b>1,390</b>	<b>735</b>	<b>(35 )</b>	<b>(779 )</b>	<b>(819 )</b>
Basic earnings (loss) per share from continuing operations before cumulative effect of accounting change(5)	\$ 0.73	\$ 0.45	\$ 0.22	\$ (0.29 )	\$ (0.06 )
Loss from discontinued operations, net of tax	(0.08 )	(0.09 )	(0.24 )	(0.35 )	(0.68 )
Cumulative effect of accounting change, net of tax					
Basic earnings (loss) per share	\$ 0.65	\$ 0.36	\$ (0.02 )	\$ (0.64 )	\$ (0.74 )
Diluted earnings (loss) per share from continuing operations before cumulative effect of accounting change(5)	\$ 0.71	\$ 0.44	\$ 0.22	\$ (0.29 )	\$ (0.22 )
Loss from discontinued operations, net of tax	(0.08 )	(0.08 )	(0.24 )	(0.35 )	(0.64 )
Cumulative effect of accounting change, net of tax					
Diluted earnings (loss) per share	\$ 0.63	\$ 0.36	\$ (0.02 )	\$ (0.64 )	\$ (0.86 )
Weighted average number of shares outstanding:					
Basic	2,128	2,029	2,028	1,220	1,113
Diluted	2,248	2,138	2,029	1,220	1,166

**BALANCE SHEET DATA(1):**

	At December 31,				
	2006	2005	2004	2003	2002
	(U.S. dollars in millions)				
Cash and equivalents	4,262	3,221	3,666	4,773	2,519
Marketable securities and short-term investments	528	368	524	473	589
Total assets	25,142	22,276	24,677	30,401	29,522
Long-term debt	3,160	3,933	4,717	6,064	5,153
Total debt(6)	3,282	4,102	5,342	7,700	7,728
Capital stock and additional paid-in capital	4,514	3,121	3,083	3,067	2,027
Total stockholders' equity	6,038	3,483	2,824	2,917	931

**CASH FLOW DATA:**

	Year ended December 31,				
	2006	2005	2004	2003	2002
	(U.S. dollars in millions)				
Net cash provided by (used in) operating activities	\$ 1,939	\$ 1,012	\$ 902	\$ (152 )	\$
Net cash provided by (used in) investing activities	(694 )	(316 )	354	754	2,651
Net cash provided by (used in) financing activities	\$ (392 )	\$ (896 )	\$ (2,745 )	\$ 1,582	\$ (2,793 )

**OTHER FINANCIAL AND OPERATING DATA:**

	Year ended December 31,				
	2006	2005	2004	2003	2002
	(U.S. dollars in millions)				
Purchases of property, plant and equipment	\$ 532	\$ 454	\$ 482	\$ 547	\$ 598
Depreciation and amortization	565	588	633	585	610
Research and development	772	679	650	635	572
Order-related development(7)	\$ 840	\$ 735	\$ 727	\$ 886	\$ 719

(1) During 2006, Statement of Financial Accounting Standard No. 123 (revised 2004), *Share-Based Payment* (FAS 123R) and Statement of Financial Accounting Standard No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans - an amendment of FASB Statements No. 87, 88, 106 and 123(R)* (FAS 158) were adopted. For the impact of these standards, see Notes 20 and 21 to our Consolidated Financial Statements.

(2) During 2005, 2004, 2003, and 2002, we recorded restructuring charges and related asset write-downs of \$51 million, \$141 million, \$303 million, and \$240 million, respectively, in other income (expense), net, relating to a number of restructuring initiatives throughout the world. The reduction of a restructuring liability, due to a change in estimate, led to income of \$3 million in 2006. The restructuring costs incurred in 2002 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 2006, 2005, 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) Loss from discontinued operations, net of tax includes costs related to the Company's asbestos obligation of its U.S. subsidiary Combustion Engineering Inc., of approximately \$70 million, \$133 million, \$262 million, and \$142 million in 2006, 2005, 2004 and 2003 respectively. 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. For additional information, see Item 5. Operating and Financial Review and Prospects and Note 17 to the Consolidated Financial Statements. For additional information on discontinued operations, see Note 3 to the Consolidated Financial Statements.

(4) We accounted for the adoption of Interpretation 47 of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* (FIN 47) as a change in accounting principle in 2005. Based on our outstanding obligations we recognized the cumulative effect of the accounting change in 2005 in the Consolidated Income Statement.



(5) 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; outstanding options and shares conditionally granted under the Company's employee incentive plans; and shares issuable in relation to outstanding convertible bonds (see Notes 2, 14, 21 and 23 to the Consolidated Financial Statements).

(6) Total debt is equal to the sum of short-term debt and long-term debt.

(7) 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.

## **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, 2006, of the CHF 10,631 million of stockholders' equity recorded in the unconsolidated statutory financial statements of ABB Ltd prepared in accordance with Swiss law, CHF 5,469 million was attributable to the share capital, CHF 2,735 million was attributable to legal reserves, CHF 167 million was attributable to reserves for treasury shares, CHF 1,511 million was attributable to other reserves and CHF 749 million represents net income and retained earnings 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 and 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 depository, in accordance with the Amended and Restated Deposit Agreement dated May 7, 2001.

ABB Ltd did not pay any dividends with respect to the years ended December 31, 2002 through December 31, 2004. With respect to the year ended December 31, 2005 ABB Ltd paid a dividend in May 2006 of CHF 0.12 per share. With respect to the year ended December 31, 2006 ABB Ltd's board of directors has proposed a CHF 0.24 per share dividend which is subject to approval by its shareholders at the May 2007 Annual General Meeting.

## **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.*

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

Certain of our employees or agents have taken, and may in the future take, actions that violate or are alleged to violate the U.S. Foreign Corrupt Practices Act of 1977 (FCPA), legislation promulgated pursuant to the 1997 Organisation for Economic Co-operation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, applicable antitrust laws and other applicable laws or regulations. For more information regarding investigations of past actions taken by certain of our employees, see Item 8. Financial Information Legal Proceedings. Such actions have resulted, and in the future could result, in governmental investigations, enforcement actions and civil and criminal penalties, including monetary penalties or other sanctions. It is possible that any governmental investigation or enforcement action arising from these matters could conclude that a violation of applicable law has occurred and the consequences of any such investigation or enforcement action may have a material adverse effect on our business and results of operations. In addition, such actions, whether actual or alleged, 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.

***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 Products and Power Systems divisions are affected by the level of investments by utilities, and our other Process Automation, Automation Products, and Robotics divisions are 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.

In addition, we are subject to the risks that our business operations in or with certain countries, including those identified as state sponsors of terrorism, may be adversely effected by trade or economic sanctions or other restrictions imposed on these countries and that actual or potential investors that object to these business operations may adversely effect the price of our shares by disposing of or deciding not to purchase our shares.

***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 2006, approximately 38 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;
- foreign state takeovers of our facilities in these 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 most emerging market countries are less developed and less well-enforced than in industrialized countries. Therefore, our ability to protect our contractual and other legal rights in these countries could be limited. Consequently, our exposure to the conditions in or affecting emerging markets may adversely affect our business, financial condition, results of operations and liquidity.

***Undertaking long-term fixed price projects exposes our businesses to risk of loss should our actual costs exceed our estimated or budgeted costs.***

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 for projects 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 us to incur incremental expenses to remedy the problem;
- changes in the cost of components, materials or labor;
- difficulties in obtaining required governmental permits or approvals;
- project modifications which create 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 extended 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.

***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. 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.

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 were to weaken 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.

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, interest rates or commodity prices 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 our policy, 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.



As a resource-intensive operation, we are exposed to a variety of market and asset risks, including the effects of changes in commodity prices and interest rates. We monitor and manage these exposures as an integral part of our overall risk management program, which recognizes the unpredictability of markets and seeks to reduce the potentially adverse effects on our business. Nevertheless, changes in commodity prices and interest rates cannot always be predicted or hedged.

If we are unable to successfully manage the risk of changes in exchange rates, interest rates or commodity price fluctuations or if our hedging counterparties are unable to perform their obligations under our hedging agreements with them, then substantial changes in these rates and prices could have an adverse effect on our financial condition and results of operations.

***The weakening or unavailability of our intellectual property rights could adversely affect our business.***

The weakening or unavailability of our trademarks, trade dress, patents and other intellectual property rights could adversely affect our business. Our intellectual property rights are fundamental to all of our businesses. We generate, maintain, utilize and enforce a substantial portfolio of trademarks, trade dress, patents and other intellectual property rights. We use our intellectual property rights to protect the goodwill of our products, promote our product recognition, protect our proprietary technology and development activities, enhance our competitiveness and otherwise support our business goals and objectives. However, there can be no assurance that the steps we take to obtain, maintain and protect our intellectual property rights will be adequate. Our intellectual property rights may fail to provide us with significant competitive advantages, particularly in foreign jurisdictions that do not have, or do not enforce, strong intellectual property rights.

***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 and increased competition as a result of privatization (particularly for our power products and systems). For example, for a number of years power transmission and distribution providers throughout the world have been undergoing substantial 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 Robotics business include Fanuc Robotics, Inc, Kuka Robot Group and Yaskawa. 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 in the industries in which our business divisions operate 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 within 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.

***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 us incurring a 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. Based on the nature and application of many of the products we manufacture, a defect or alleged defect in one of these products could have serious consequences. For example:

- If the products produced by our Power Products and Power Systems divisions are defective, there is a risk of fires, explosions and power surges and significant damage to electricity generating, transmission and distribution facilities.
- If the products produced by our Automation Products and Process Automation divisions 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.

***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, 2006, employed approximately 108,000 people. As of December 31, 2006, approximately 56 percent of our employees were located in Europe, approximately 17 percent in the Americas, approximately 21 percent in Asia and approximately 6 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.

***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 have 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 volumes, revenues or 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. We rely on a single supplier or a small number of suppliers to provide us with some raw materials and components. If one of these suppliers were unable to provide us with a raw material or component we need, our ability to manufacture some of our products could be adversely affected until we are able to establish a new supply arrangement. 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 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.

***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 available, we believe remediation may take until 2013 at the Hematite site and until 2012 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 U.S. 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 \$4 million and \$9 million during 2006 and 2005, respectively. The provision balance was \$251 million and \$255 million at December 31, 2006 and 2005, 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.

***If we fail to make the payments required under the Modified Plan of Reorganization for Combustion Engineering (CE Plan) or under the Plan of Reorganization for Lummus (Lummus Plan) we could trigger an injunction default which would lead to the termination of the channeling injunction under the CE Plan or the Lummus Plan, respectively.***

Our Combustion Engineering, Inc. subsidiary ( CE ) had 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 had also been brought against our ABB Lummus Global Inc. subsidiary ( Lummus ) as well as against other entities. Since early 2003, we and our subsidiaries have been seeking to resolve our asbestos-related personal injury liabilities related to CE and Lummus. During 2006, the CE Plan and the Lummus Plan became effective.

On the effective date of each of the CE Plan and the Lummus Plan, the Bankruptcy Court issued injunctions, referred to as a channeling injunctions, pursuant to which all asbestos-related personal injury claims against ABB Ltd and certain entities in the ABB group (including CE and Lummus) arising out of CE's or Lummus' business operations will be settled or otherwise satisfied from the proceeds of trusts established for such purposes.

Under the CE Plan and the Lummus Plan, ABB Ltd and certain of its subsidiaries have payment obligations. Failure to satisfy those payment obligations could lead to an injunction default which would lead to the termination of the channeling injunctions under the respective plan. In such case, all claims which were previously subject to the injunction would need to be resolved through the tort system. This 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 \$2 billion credit facility, our financial position may be adversely affected.***

We are party to a five-year \$2 billion credit facility that became available in July 2005. It contains certain financial covenants in respect of minimum interest coverage and maximum net leverage. In April 2006, our corporate credit rating reached certain defined levels, therefore the minimum interest coverage covenant is no longer applicable. If we are unable to comply with the remaining financial covenant 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. If this were to occur, we may not be able to renegotiate or replace the facility on terms that are acceptable to us, if at all. At December 31, 2006 no amounts were drawn under this credit facility. 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 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 some contracts or our costs with respect to such contracts would be higher, which would reduce the profitability of the contracts. If we cannot obtain guarantees on commercially reasonable terms 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 \$744 million as of December 31, 2006. This maximum potential exposure, as required by Financial

Accounting Standards Board Interpretation No. 45 (FIN 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, 2006, 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, 2006. 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.

*If we are unable to successfully adapt our internal controls over financial reporting to changes in circumstance, 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 are required to include in this Annual Report on Form 20-F a report by our management regarding the effectiveness of our internal control over financial reporting. The report includes, among other things, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management.

If we are unable to conclude that our internal control over financial reporting is effective in any future period (or if our auditors disagree with us or are unable to express an opinion on the effectiveness of our internal controls), we could lose investor confidence in the accuracy and completeness of our financial reports, which may have an adverse effect on our stock price.

#### **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 listed on the SWX Swiss Exchange (traded on virt-x), the Stockholm Stock Exchange, and the New York Stock Exchange (in the form of American Depositary Shares).

### Organizational Structure

Our business is international in scope and we generate revenues in numerous currencies. We operate in approximately 100 countries, and have structured our global organization into four regions: Europe, the Americas, Asia and the Middle East and Africa (MEA). We are headquartered in Zurich, Switzerland.

We manage our business based on a divisional structure. In September 2005, we announced a change to our organizational structure by replacing two core divisions Power Technologies and Automation Technologies with a five-division structure effective as of January 1, 2006. As of December 31, 2006, our core businesses comprised five divisions: Power Products, Power Systems, Automation Products, Process Automation and Robotics.

In addition, certain of our operations that are not integral to our focus on power and automation technologies and that we are considering for sale, winding down or otherwise exiting but are not discontinued operations are classified as Non-core and Other activities. Effective January 1, 2006, our real estate business, which principally manages the use of our real estate assets and facilities, was reclassified from Corporate to Non-core and Other activities. Corporate comprises headquarters and stewardship, corporate research and development (R&D) and other activities.

The businesses discussed below and the results of operations for our operating divisions in this report are presented under the organizational structure that came into effect as of January 1, 2006. Accordingly, previous year performance has been restated to facilitate proper comparison with the results of 2006.

	Revenues			Percentage of Core division Revenues		
	Year ended December 31,		2004	Year ended December 31,		
	2006	2005		2006	2005	2004
	(U.S. dollars in millions)			(% )		
Power Products	7,422	6,307	5,621	29	27	27
Power Systems	4,544	4,085	3,744	18	18	18
Automation Products	6,837	5,897	5,385	27	26	26
Process Automation	5,448	4,996	4,635	21	22	22
Robotics	1,288	1,699	1,451	5	7	7
Core divisions	25,539	22,984	20,836	100	100	100
Corporate, Non-core and Other Activities and Eliminations	(1,127 )	(972 )	(687 )			
Total	24,412	22,012	20,149			

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**

### **Industry Background**

Our five divisions operate across two key industries, the power industry and the automation industry. Our Power Products and Power Systems divisions operate in the Power Industry. Our Automation Products, Process Automation and Robotics divisions operate in the Automation Industry.

#### ***Power Industry***

The power industry provides products and systems designed primarily to deliver electricity. Electricity is generated in power stations and is then fed into an electricity grid, from where it is transmitted and distributed to consumers. The portions of an electricity grid that operate at the highest voltages are transmission systems, while those that operate at lower voltages are distribution systems. Transmission systems link power generation sources to distribution systems and 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 (up to 800 kilovolts) for long-distance commercial 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.

Market drivers in the power industry today vary by region. In North America the focus is on replacing aged infrastructure which is being addressed by the U.S. Energy Policy Act of 2005. In Europe the focus is on increasing interconnections between countries to facilitate the market for energy trading. In the Middle East, investments in infrastructure are increasing due to high oil prices. In emerging markets, including parts of Asia, there is a need for electricity grid increases to cope with rising energy needs.

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 has increased. 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.
- Developing new power transmission systems to link power generation sources with distant load centers, as is the case for example in China, or to link neighboring power grids in order to optimize existing power generation capacity across borders.
- Developing energy trading systems.

#### ***Automation Industry***

The automation industry delivers products and systems designed 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 in the oil and gas, power, chemicals, minerals and pulp and paper industries. Product lines for this market include instrumentation, analytical measurement and control products and systems, as well as motors and drives.
- Factory automation refers to discrete operations that manufacture individual items such as those in automotive, packaging and consumer goods industries. Product lines for this market include robots and robot cells, motors, drives, and low voltage products for control and power applications.
- 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 for optimal management of the energy cost of buildings.

#### **Power Products Division**

##### ***Overview***

Our Power Products division serves electric, gas and water utilities, as well as industrial and commercial customers, with a broad range of products and services for power transmission and distribution. Direct sales account for a majority of the division's total product sales, and sales through external channel partners, such as wholesalers, distributors and original equipment manufacturers (OEMs), account for the remainder. Key technologies include high- and medium-voltage switchgear and apparatus, circuit breakers for various current and voltage levels, power and distribution transformers, and sensors and products to automate and control electrical and other utility networks. The division had approximately 30,000 employees and 100 manufacturing plants as of December 31, 2006 and generated \$7.4 billion of revenues in 2006.

### *The Power Products Division*

Our Power Products division manufactures three categories of products: High-voltage Products, Medium-voltage Products and Transformers. The division sells primarily to utilities, distributors, wholesalers, installers and original equipment manufacturers in the utilities and power generation industries. Some of the division's products are integrated into the offering of the Power Systems and Process Automation divisions or are sold through external channel partners such as engineering, procurement and construction firms.

The division manufactures distribution transformers (up to 72.5 kilovolts) for use in industrial facilities, commercial buildings and utility distribution networks to step down electrical voltage to the levels needed by end users. 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. We manufacture and sell a full range of distribution transformers 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, marine vessels and high-volume industrial plants.

We also design and manufacture power transformers (72.5 to 1000 kilovolts) for utility, transportation and industrial customers, as well as transformer components such as bushings and tap changers. Generator transformers are used in power generation when it is necessary to increase power voltage from a power plant for long-distance transmission. We produce traction transformers used in electric locomotives and we provide a wide range of transformer service and retrofit solutions for utilities and industry customers. The division also produces insulation material.

In the medium-voltage area, the division 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 OEMs. 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. In addition, a significant portion of its products are sold through external channel partners such as OEMs.

The Power Products division also provides high-voltage transmission equipment to power utilities that enables 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. We manufacture the principal components of power transmission systems (50 to 800 kilovolts), including air- and gas-insulated switchgear, capacitors, high-voltage circuit breakers, grounding switches and instrument transformers. The division also delivers 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.

### *Customers*

The Power Products 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.

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

The Power Products division sells its products individually and as parts of larger systems through our Power Systems division. Direct sales account for a majority of the division's total product sales, and sales through external channel partners, such as wholesalers, distributors and OEMs, account for the remainder. Because the Power Products and Power Systems divisions share many of the same customers and technologies, and are influenced by the same market drivers, the two divisions share a common sales force in most regions and countries.

### ***Competition***

On a global basis, the Power Products division's principal competitors are Siemens and Areva, and, in the medium-voltage market, Schneider. We also compete regionally with companies such as Cooper Industries, Eaton Corp, Crompton Greaves and BHEL.

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

Research and development expenses that were not order-related for the Power Products division amounted to approximately \$180 million and \$130 million for 2006 and 2005, respectively. The division's research and development activities in 2006 primarily related to streamlining product portfolios. 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.

Order related research and development expenses for the Power Products division amounted to approximately \$70 million and \$60 million during 2006 and 2005, respectively.

### ***Capital Expenditures***

The Power Products division's capital expenditures for property, plant and equipment were \$164 million in 2006, compared to \$119 million and \$107 million in 2005 and 2004, respectively. Principal investments in 2006 included investments to replace existing equipment, particularly in Sweden, China, Germany and the United States. Geographically, in 2006, Europe accounted for 56 percent of our capital expenditures, followed by 29 percent in Asia, 12 percent in the Americas and 3 percent in Middle East and Africa.

## **Power Systems Division**

### ***Overview***

Our Power Systems division serves electric, gas and water utilities, as well as industrial and commercial customers, with a broad range of systems and services for power generation, transmission and distribution. Key technologies include substations, high-voltage power converters, advanced cables for underground and undersea power transmission, and systems to automate and control power plants, electrical and other utility networks. The division had approximately 13,300 employees in 77 countries as of December 31, 2006 and generated \$4.5 billion of revenues in 2006.

### ***The Power Systems Division***

Our Power Systems division delivers systems in four areas: grid systems, network management, power generation, and substations. The division sells primarily to utilities, Engineering, Procurement and

Construction and power generation industries. Some of the Power Product division's products are integrated into the offering of the Power Systems and Process Automation divisions.

For grid systems, we provide power systems that are essential to grid reliability, including flexible alternating current transmission systems (FACTS) and we also sell high-voltage direct current (HVDC) systems. Critical components in these systems are power semiconductors and cables which are also manufactured by the Power Systems division.

We are a leading manufacturer of HVDC technology, which 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 line cables, 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 underground or submarine 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 FACTS devices 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 power semiconductor business develops and manufactures tailor-made components to maximize the performance of these systems. The Power Systems division supplies power semiconductor devices to other ABB businesses and to external customers in the power transmission and distribution, drives, and transportation markets.

Our cable business is specialized in sub-sea cable solutions and land-cables for bulk energy transfer over long distances.

Our network systems offering includes high-end supervisory control and data acquisition (SCADA) systems for 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. 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.

The division also 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.

In the area of power generation, the division offers complete system integration of instrumentation, control and electrical equipment for the power generation market. The services offered include combustion management, plant performance optimization, condition monitoring and asset management. We also offer turnkey water pumping stations including control systems.

Substations interconnect electricity grids operating on different voltage levels, sectionalize portions of the grid and 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.

We deliver 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, we sell 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.

This division offers services and support for management of existing power transmission and distribution assets, including both ABB products and those manufactured by third parties.

In addition, the Power Systems division offers a range of services aimed at reducing the in-house operational and maintenance requirements of utility customers. Our services range from contracts for spare parts management, support agreements and retrofits, to service, consulting and training. The Power Systems division also undertakes analyses of the design of new transmission and distribution systems as well as optimization that take into account technical, economic and environmental considerations.

### ***Customers***

The Power System 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 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.

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

The Power Systems division sells its systems primarily through a direct sales force of specialized sales engineering teams. Some sales are also handled through third-party channels, such as OEMs and system integrators. Because the Power Systems and Power Products divisions share many of the same customers and technologies, and are influenced by the same market drivers, the two divisions share a common sales force in most regions and countries.

### ***Competition***

On a global basis, the Power Systems division's principal competitors are Siemens and Areva. In the power generation area, the division's principal competitors are Areva, Emerson, GE, Invensys and Siemens.

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

In the Power Systems division, 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 Systems division amounted to approximately \$70 million and \$80 million during 2006 and 2005, respectively. Non-Order related research and development expenses for the Power Systems division amounted to approximately \$85 million and \$60 million during 2006 and 2005 respectively.

### ***Capital Expenditures***

The Power System division's capital expenditures for property, plant and equipment were \$43 million in 2006, compared to \$22 million and \$25 million in 2005 and 2004, respectively. Principal investments in 2006 included investments to replace existing equipment, particularly in Sweden, Germany, and Switzerland. Geographically, in 2006, Europe accounted for 74 percent of our capital expenditures, followed by 10 percent in Asia, 10 percent in the Americas and 6 percent in Middle East and Africa.

### **Automation Products Division**

#### ***Overview***

The Automation Products division provides products, with related services, that are used as components in machinery, switchboards, distribution panels, and building and automation systems. The Automation Products offering covers a wide range of products and services including low-voltage switchgear, breakers, switches, control products, DIN-rail components, enclosures, wiring accessories, instrumentation, drives, motors, generators, and power electronics systems. These products help customers to improve productivity, save energy and increase safety. Key applications include power distribution, protection and control, energy conversion, data acquisition and processing, and actuation. The majority of these applications are for industrial applications, with others provided for building construction, rail transportation, and utilities.

The Automation Products division is a global business that employs over 30,000 people worldwide and generated \$6.8 billion revenues in 2006 through sales activities in more than 100 countries. The division manufactures around 170,000 products and has more than 100 manufacturing sites in 50 countries. Each day, the division delivers around one million products.

A majority of the division's revenues comes from sales through distributors, wholesalers, machine builders and OEM's, system integrators, and panel builders, although a portion of the division's revenues come from direct sales to end-users.

#### ***The Automation Products Division***

The Automation Products division 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 division 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.

The process instrumentation products manufactured by this division interact with the Open Control System products from the Process Automation division 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 division form an important part of instrumentation and control systems. These devices measure chemical characteristics while process instrumentation products measure physical characteristics.

This division also provides 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 division also produces a range of power electronics products. These include 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 division 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 division 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 division manufactures synchronous motors for the most demanding applications and a full range of low and high-voltage induction motors.

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

Sales are made both through direct sales forces as well as through third-party channel partners, such as distributors, wholesalers, installers, machine builders and OEMs, system integrators, and panel builders. 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 products are sold through channel partners, with the remainder sold through the division's own direct sales channels.

### ***Competition***

The Automation Products division's principal competitors vary by product line but include Alstom, Baldor, Brush, Eaton, Emerson, Endress+Hauser, Legrand, Mitsubishi, Rockwell, Schneider, and Siemens.

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

Research and development expenses that were not order-related for the Automation Products division amounted to approximately \$184 million and \$171 million during 2006 and 2005, respectively. In addition, order related research and development expenses for the Automation Products division amounted approximately to \$47 million and \$46 million during 2006 and 2005, respectively.

An important focus of the division's research programs is the development of a range of global products that satisfies the need of global customers. Another focus of the division's R&D is on increasingly intelligent connected devices that enable both new functions, e.g., for diagnosis and maintenance, as well as easy integration into systems and industry solutions. Customer benefits and competitive differentiation targeted with this R&D include increases in safety, reliability, lower operating and maintenance costs, as well as reductions in environmental impact.

### ***Capital Expenditures***

The Automation Products division's capital expenditures for property, plant and equipment were \$157 million in 2006, compared to \$140 million and \$138 million in 2005 and in 2004, respectively. Principal

investments in 2006 were primarily related to ordinary course replacements of machinery and equipment mainly in Germany, Finland, Italy and China plus expansion investments in China, India and Estonia. Geographically, in 2006, Europe accounted for 81 percent of the capital expenditure, followed by 16 percent in Asia, 2 percent in the Americas and 1 percent in the Middle East and Africa.

## **Process Automation Division**

### *Overview*

The Process Automation division provides products, systems, and services for the automation and optimization of industrial processes. Our main offerings are process automation, plant electrification and quality control systems, analytical measurement devices, turbochargers and marine propulsion and control systems. Our key end markets are the oil and gas, pulp and paper, metals and minerals, chemicals and pharmaceuticals, turbocharging and marine industries. The division had approximately 24,500 employees as of December 31, 2006, and generated revenues of \$5.4 billion in 2006.

The Process Automation division offers its products both as separately sold devices and as part of a total automation system. Our technologies are marketed both through direct sales forces and third-party channels.

### *The Process Automation Division*

The Process Automation division offers integrated process control systems, plant electrification systems, information management systems and industry-specific application knowledge for a variety of industries, primarily pulp and paper, minerals and mining, metals, chemicals and pharmaceuticals, oil and gas, turbocharging, power and the marine industry. Some of the Automation Product and Power Product divisions products are integrated into the offering of the Process Automation division.

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 increase production efficiency, optimize their assets and reduce environmental waste.

This division emphasizes Open Control Systems, including batch control systems, supervisory control and data acquisition systems, and, to a lesser extent, programmable logic controls and remote terminal units.

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.

In December 2003, this division commercially released the System 800xA process automation platform. 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.

The division'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 solutions for applications including manufacturing, packaging, quality control and compliance with regulatory agencies.

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 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 help optimize these investments. Demand for our process automation services is increasing as our customers seek to increase productivity by improving the performance of existing assets.

### ***Customers***

The Process Automation division's end customers are primarily companies in the pulp and paper, minerals and mining, metals, chemicals and pharmaceuticals, oil and gas, turbocharging, power and the marine 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.

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

The Process Automation division uses a direct sales forces as well as third-party channel partners, such as distributors, system integrators and OEMs. For the division as a whole, the majority of revenues are derived through the division's own direct sales channels.

### ***Competition***

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

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

Research and development expenses that were not order-related for the Process Automation division amounted to approximately \$154 million and \$142 million during 2006 and 2005, respectively. In addition, order related research and development expenses for the Process Automation division amounted approximately to \$79 million and \$60 million during 2006 and 2005, respectively.

An important focus of the division's research programs is the commitment to the development of the System 800xA control platform and related 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 into existing platforms to provide better access to real-time information across the business enterprise. Another focus of the division's R&D is on increasingly intelligent connected devices that enable both new functions, e.g., for diagnosis and maintenance, as well as easy integration into systems and industry solutions. Customer values and competitive differentiation targeted with this R&D include increases in safety, reliability, lower operating and maintenance costs, as well as reductions in environmental impact.

### ***Capital Expenditures***

The Process Automation division's capital expenditures for property, plant and equipment were \$51 million in 2006, compared to \$31 million and \$28 million in 2005 and in 2004, respectively. Principal investments in 2006 were primarily related to a production facility in Finland and ordinary course purchases of machinery and equipment mainly in Switzerland, Algeria, China and Sweden. Geographically, in 2006, Europe accounted for 83 percent of the capital expenditure, followed by 9 percent in Asia, 6 percent in the Americas and 2 percent in the Middle East and Africa.

### **Robotics Division**

#### ***Overview***

Our Robotics division offers robot products, systems and service for the automotive and manufacturing industries. The division develops standardized manufacturing cells for machine tending, welding, cutting, painting and finishing and provides packaged systems to automobile manufacturers for press automation, paint process automation and power train assembly. The division also provides a full range of robotics services, from product maintenance to system design. The division had approximately 4,500 employees as of December 31, 2006 and generated \$1.3 billion of revenues in 2006. The Robotics division's manufacturing and research and development locations are organized globally, with major centers in China, the United States, Sweden, Norway and France.

#### ***The Robotics Division***

The Robotics division offers robot products, systems and service for the automotive manufacturers and their sub-suppliers as well as general manufacturing industries, to improve product quality, productivity and consistency in manufacturing applications. Robots are also used in inhospitable environments which may be hazardous to employee health and safety, such as cold rooms or painting chambers.

In the automotive industry, the division's products and systems are used in such areas as press shop, body shop, paint shop, power train assembly, trim and final assembly. General industry segments in which robotics solutions are used range from metal fabrication, foundry, plastics, glass and consumer goods to pharma and the electronics industry. Typical general industry applications include welding, material handling, painting, picking, packing and palletizing.

Shortened product life cycles and rapidly changing consumer preferences have brought new challenges to our robotics customers. They must be able to adapt their production lines to increasingly

frequent changes in product design. At the same time, they have to continuously deliver their products faster and at higher quality standards. Furthermore, constant price pressure requires them to decrease production costs by improving manufacturing processes. Robots and robotics systems continue to play a key role in our customers' ability to adapt to their rapidly-changing business environment.

Our services include design and project management, engineering, installation, training and life-cycle care of the complete production line. We also deliver products manufactured by other ABB divisions, such as the Power Technologies division, to maximize energy efficiency and provide a secure power supply for manufacturing lines.

### ***Customers***

The Robotics division's end customers are primarily companies in the automotive and manufacturing industries. We sell to these customers through direct sales forces as well as third-party channels, such as distributors, system integrators and OEMs.

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

Sales are made through both direct sales forces and third-party channel partners, such as distributors, system integrators and OEMs. The proportion of direct sales compared to channel partner sales varies among the different industries, product technologies and geographic markets. Sales from the systems and service businesses are made entirely through direct sales forces.

### ***Competition***

The Robotics division's principal competitors vary by product and system but major competitors include Fanuc, Kuka and Yaskawa as well as a growing base of small and medium sized system integrators.

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

Research and development expenses for the Robotics division in 2006 that were not order-related amounted to approximately \$60 million, or 5% of revenues, as compared with approximately \$65 million during 2005. The order related research and development amounted to approximately \$53 million during 2006, as compared with \$58 million during 2005.

### ***Capital Expenditures***

The Robotics division's capital expenditures for property, plant and equipment were \$15 million in 2006, compared to \$14 million and \$12 million in 2005 and in 2004, respectively. Geographically, in 2006, Europe accounted for 79 percent of the capital expenditure, followed by Asia with 16 percent, and the Americas with 5 percent.

## **DISCONTINUED OPERATIONS**

### **Overview**

The following businesses and costs are included in our Consolidated Financial Statements as discontinued operations at December 31, 2006, 2005 and 2004:

- Provisions and other expenses incurred in connection with asbestos-related claims. 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 17 to the Consolidated Financial Statements.
- Our Cable Business in Ireland, which was sold during 2006.

- The remaining building Systems business in Germany, formerly part of the Non-core and Other activities, was reclassified to discontinued operations during 2006 on the basis that management expects to complete the sale in 2007.
- Our Upstream Oil, Gas and Petrochemicals business, the sale of which 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. As of March 31, 2007, this business meets the accounting criteria required to be classified in discontinued operations.
- Our Power Lines businesses in Nigeria, Italy and Germany were sold in 2005. The operations in South Africa and Venezuela were sold in 2006. The remaining Power Lines businesses in Brazil and Mexico were reclassified to discontinued operations during 2005 and are expected to be sold in 2007.
- The Lease portfolio business in Finland was sold in November 2005
- Our Foundry and Control Valves businesses were sold in 2005.
- Our Reinsurance business, which was sold in April 2004.
- Legal, professional and other fees related to the above disposals.

See Notes 3 and 26 to the Consolidated Financial Statements for additional information.

#### **CAPITAL EXPENDITURES**

Total capital expenditures for property, plant and equipment including intangible assets amounted to \$532 million, \$454 million and \$482 million in 2006, 2005 and 2004, respectively. Capital expenditures in western Europe and North America were aimed primarily at improving the productivity of existing facilities, while investments in emerging markets focused on expanding new capacity to meet the demands of their rapid growth. Europe was the region with the largest amount of capital expenditures in 2006, reflecting the current geographic distribution of our production facilities. In addition, capital expenditures in emerging economies continue to grow faster than in other areas and, on a country basis, China had the largest amount of capital expenditure in 2006.

The carrying value of property, plant and equipment sold amounted to \$54 million, \$81 million and \$113 million in 2006, 2005 and 2004, respectively. A significant portion of total sales of property, plant and equipment in 2006 related to real estate properties, primarily in Switzerland and Germany. A significant portion of total sales of property, plant and equipment in 2005 related to real estate properties, primarily from The Netherlands, Sweden, Switzerland and France. A significant portion of the total sales of property, plant and equipment in 2004 related to sales of equipment particularly in Sweden, the United States, China and Germany.

Construction in progress for property, plant and equipment as of December 31, 2006, was \$173 million, mainly in Germany, Finland, China, Sweden and Switzerland. We intend to finance our expenditures for construction in progress internally. Construction in progress for property, plant and equipment as of December 31, 2005 was \$132 million, mainly in Germany, Sweden, the United States, Spain and China.

In 2007, we intend to increase our capital expenditures to an amount which is higher than our expected annual depreciation and amortization charge. We anticipate higher investments in the emerging markets of Asia and relatively lower capital spending in Europe.

## **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 units and key countries. The supply chain management network leverages the scale of the ABB Group to optimize the efficiency of our supply networks. Our eBusiness activities have expanded in recent years, to include procurement for materials and services in many of our production facilities. We made improvements in our collaboration with supplier partners through initiatives such as ASCC, our supplier portal, and eSMART, our business intelligence system.

The price of raw materials is volatile, and may vary, perhaps substantially, from year to year. For many commodities we purchase, including steel, copper and aluminum products and products derived from crude oil, continuing global economic growth, sustained high demand from China and other emerging economies and volatility in foreign exchange rates (particularly the U.S. dollar and the euro) led to significant increases in raw material costs and volatility for several commodities since 2003. While some increases will be offset through use of multi-year contracts and, in the case of copper and aluminum, through hedging, we expect prices for some commodities, in particular copper, to rise in future years.

Our costs for most of our electronic components, subassemblies and fabricated products remained stable or decreased slightly in 2006 compared to 2005. Increasing global demand for lead-free components may lead to periodic shortages of replacement components as manufacturers of these products shift their attention to the manufacture of new, lead-free components.

We hedge our exposure to commodity risk arising from changes in prices of raw materials. We manage copper and aluminum price risk using swap and forward contracts based on London Metal Exchange prices or on New York Mercantile Exchange prices 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. Certain 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 2006, 2005 and 2004, we invested \$772 million, \$679 million and \$650 million, respectively, or approximately 3.2 percent, 3.1 percent, and 3.2 percent of annual consolidated revenues, respectively, on research and development activities. We also had expenditures of \$840 million, \$726 million and \$723 million, respectively, or approximately 3.4 percent, 3.3 percent and 3.6 percent, respectively, of annual consolidated revenues in 2006, 2005 and 2004, 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; and
- 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, 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, 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 our 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, 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 over 14,000 patent applications and registrations, of which approximately 7,000 are pending applications. In 2006, we filed patent applications for more than 650 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.

#### **SUSTAINABILITY ACTIVITIES**

Sustainability management is one of our highest business priorities. We address sustainable 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;
- applying non-financial risk assessment to projects in which we are involved;
- sharing our latest technologies with emerging markets by, for example, helping customers in developing countries implement environmentally sound processes and technologies and providing environmental awareness training;

- 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;

33

---



- 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 at all our sites. We have implemented the ISO 14001 in 97 percent of our manufacturing facilities and service workshops (approximately 350 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 80 declarations have been produced for major product lines, some 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 2006, a total of 82 percent of our employees were covered by confirmed data gathered through ABB's formal environmental reporting system that is verified by an independent verification body. The parts of our business that are not yet covered by our reporting system, mainly sales offices in countries where we do not perform manufacturing, have very limited environmental exposure. A total of 4 accidents were reported in 2006, none of which had a material environmental impact.

For social performance, a total of 92 percent of employees are covered by confirmed data gathered through ABB's formal social reporting system that is verified by an independent verification body. The parts of our business that are not yet covered by our reporting system, mainly sales offices in countries where we do not perform manufacturing, have very limited social exposure.

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.

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. See Note 17 Commitments and contingencies to our Consolidated Financial Statements.

## **REGULATION**

Our operations are subject to numerous governmental laws and regulations including those governing antitrust and competition, the environment, securities transactions and disclosures, import and export of products, 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 FCPAs antibribery provisions with respect to our conduct around the world.

Our operations are also subject to the 1997 OECD 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, 2006, those countries which have adopted implementing legislation and have ratified the convention include the United States and several European nations in which we have significant operations.

We conduct business in certain countries known to experience governmental corruption. While we are committed to conducting business in a legal and ethical manner, our employees or agents have taken, and in the future may take, actions that violate the U.S. FCPA, legislation promulgated pursuant to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions or other laws or regulations. These actions have resulted and could result in monetary or other penalties against us and could damage our reputation and, therefore, our ability to do business. For more information, see Item 8. Financial Information Legal Proceedings.

35

---

**SIGNIFICANT SUBSIDIARIES**

ABB Ltd, Zurich, Switzerland is the ultimate parent company of the ABB Group, which is comprised of 329 consolidated operating and holding subsidiaries worldwide, as of March 31, 2007. In addition to ABB Ltd Zurich, the only other listed company in the ABB Group is ABB Ltd, India, which is listed on the Mumbai Stock Exchange, the National Stock Exchange and the Kolkata Stock Exchange in India.

The following table sets forth, as of March 31, 2007, the name, country of incorporation and ownership interest of ABB Ltd of its significant subsidiaries:

Company Name	Country	ABB Group Interest %
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 Technology SA, Abidjan	COTE D IVOIRE	99.00
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
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, Ladenburg	GERMANY	100.00
ABB Automation GmbH, Mannheim	GERMANY	100.00
ABB Beteiligungs- und Verwaltungsges. mbH, Mannheim	GERMANY	100.00
ABB Gebäudetechnik GmbH, 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 Limited, Bangalore	INDIA	52.11
ABB Ltd, Dublin	IRELAND	100.00
ABB Technologies Ltd., Tirat Carmel	ISRAEL	99.99
ABB Trasmisione & Distribuzione S.p.A., Milan	ITALY	100.00
ABB S.p.A., Milan	ITALY	100.00
ABB SACE S.p.A., Sesto S. Giovanni (MI)	ITALY	100.00
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
ABB Limited, Auckland	NEW ZEALAND	100.00
ABB Holding AS, Billingstad	NORWAY	100.00
Asea Brown Boveri S.A., Lima	PERU	88.12

Asea Brown Boveri Inc., Paranaque, Metro Manila	PHILIPPINES	100.00
ABB Sp. zo.o., Warsaw	POLAND	96.83
ABB S.G.P.S, S.A., Amadora	PORTUGAL	100.00
Asea Brown Boveri Ltd., Moscow	RUSSIAN FEDERATION	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, Västerås	SWEDEN	100.00
ABB Norden Holding AB, Stockholm	SWEDEN	100.00
ABB Asea Brown Boveri Ltd., Zurich	SWITZERLAND	100.00
ABB Schweiz AG, Baden	SWITZERLAND	100.00
ABB LIMITED, Bangkok	THAILAND	100.00
ABB Holding A.S., Istanbul	TURKEY	99.95
ABB Ltd., Kiev	UKRAINE	100.00
ABB Ltd., Warrington	UNITED KINGDOM	100.00
ABB Holdings Ltd., Warrington	UNITED KINGDOM	100.00
ABB Inc., Norwalk CT	UNITED STATES	100.00
ABB Holdings Inc., Norwalk	UNITED STATES	100.00
ABB Lummus Global Inc., Bloomfield, NJ	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, 2006, the ABB Group occupied real estate in approximately 100 countries throughout the world. 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, India 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 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 which may involve leasing property to third parties for an interim period.

The net book value of our property, plant and equipment as of December 31, 2006 was \$2,811 million, of which machinery and equipment represented \$1,272 million, land and buildings represented \$1,366 million and construction in progress of \$173 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 4A. Unresolved Staff Comments

Not applicable.

### 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*

## **MANAGEMENT OVERVIEW**

We continued our focus during 2006 on our core strengths: power and automation products, systems and services that increase grid reliability and industrial productivity and result in significant energy savings.

We have continued to benefit from our leadership in markets where demand for our power and automation technologies is robust, and also from the operational improvements we continue to make in our businesses. Our strategy continues to focus on business execution, cost and risk management and organic growth, which continue to enable improvements in operating performance with stronger financial results in our businesses.

Our goals for 2006 were centered around three areas: Strategy, Execution and People.

### **Strategy**

We believe our strategy in 2006 was sound. Our businesses supported both growth and profitability as a result of their leading market positions and competitive technologies. Furthermore, our global geographic scope has provided us with strong positions in the high-growth regions of Asia with particular focus on China and India and the Middle East, and we have continued to serve established, mature markets in Europe and North America where demand has also continued to grow.

### **Execution**

Execution continued to be our top priority. We have maintained in 2006 attractive organic growth through our range of technologies and superior service. We continued to drive our operating margins upward through cost control, productivity improvements and risk control in all of our divisions except for Robotics, where we incurred costs associated with improving the division's operational performance coupled with a downturn in the automotive industry. We achieved an EBIT margin of 10.6 percent in 2006, versus 8.1 percent in 2005. In addition, during 2006, the plans of reorganization for our Combustion Engineering and Lummus subsidiaries became effective to resolve our Asbestos obligations. Our execution framework has centered around our business processes, regular business and project reviews, a flat organizational structure and a focus on compliance.

### **People**

We continued during 2006 to build on our sound foundation as an attractive, dynamic global employer. We focused on retaining and recruiting quality people for our growth areas. Our professional development program has continued to center around values, leadership and business ethics, and our corporate culture has continued to be grounded in compliance to our policies and applicable laws. While we continue to deal with compliance issues we believe that our zero tolerance policy has improved the compliance culture.

### **Outlook**

The business environment for ABB in 2007 is expected to remain favorable. High demand for power transmission and distribution infrastructure is expected to continue in Asia, the Middle East and the Americas. Equipment replacement and improved network efficiency and reliability are forecast to be the drivers of higher demand in Europe and North America. Automation-related industrial investments are expected to continue in most sectors. Overall, automation-related demand growth is expected to be strongest in Asia and the Americas in 2007, with more modest growth in Europe. In view of the extraordinarily high order growth rates experienced in 2006, order growth is expected to moderate in 2007.

## APPLICATION OF CRITICAL ACCOUNTING POLICIES

### General

We prepare our Consolidated Financial Statements in accordance with United States generally accepted accounting principles (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, fixed assets, goodwill and other intangible assets; income tax related expenses and accruals; provisions for restructuring; gross profit margins on long-term construction-type contracts; pensions and other postretirement 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 significant estimates and assumptions that we use in preparing our Consolidated Financial Statements. These policies should be considered when reading our Consolidated Financial Statements.

### Revenues and cost of sales recognition

We recognize revenues when persuasive evidence of an arrangement exists to sell products and/or services, the price is fixed or determinable, collectibility is reasonably assured and upon transfer of title, including the risks and rewards of ownership, or upon the rendering of services. 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 amount of revenue recorded in certain periods, but would not change the total revenue recognized on the contract. Revenues from short-term or non-customer specific contracts to deliver products or services are recognized upon completion of the contract. Revenues from these contracts that contain customer acceptance provisions are deferred, in whole or in part, until customer acceptance occurs, or we have demonstrated the customer specified objective criteria are satisfied or the contractual acceptance provisions have lapsed.

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 different number of defaults will occur than originally estimated. As such, the amount of revenues recognized might exceed or fall below that which will be collected, resulting in a change in earnings in the future. The risk of deterioration 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 pursuant to Statement of Position 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*. 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, principally relating to future material, labor, 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 may 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 for us 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 estimated costs, current earnings and anticipated earnings. We recognize these changes in the period in which the changes in estimates 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.

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 in our products. 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. 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.

As a result of the above policies, judgment in the selection and application of revenue recognition methods must be made.

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

In accordance with our strategy, we have sold and plan to sell certain businesses that are not part of our core businesses. Statement of Financial Accounting Standards (SFAS) No. 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, when certain criteria are met. The purpose of SFAS 144 is to allow 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 results, net of taxes, of certain divestments and abandonments, to be classified as discontinued operations below income from continuing operations in our Consolidated Income Statements 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 Sheets.





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 affect our interpretation as to whether a business should be classified as a discontinued operation. Reclassification to or from discontinuing operations may have a material impact on our income from continuing operations and the individual components thereof.

In the Consolidated Statements 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 more detailed description of our discontinued operations, see *Discontinued operations* and Note 3 *Held for sale and discontinued operations* to our Consolidated Financial Statements.

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

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 SFAS No. 142, *Goodwill and Other Intangible Assets* (SFAS 142). 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 represent the reportable segments identified in Note 25 to our Consolidated Financial Statements. We use a discounted cash flow model to determine the fair value of reporting units. 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 record an impairment loss equal to the difference.

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.

Cash flow models used in evaluating impairments are dependent on a number of factors including estimates of future cash flows and other variables, and require that we 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. Further, discount rates used in the discounted cash flow model to calculate the fair value require the determination of variables such as the risk free rate and the equity market risk premium. 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. Additionally, we also consider our market capitalization on the date we perform the analysis.

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 postretirement benefits

As more fully described in Note 20 to our Consolidated Financial Statements, we operate pension plans that cover a large portion of our employees. We use actuarial valuations to determine our pension and postretirement 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 regularly and considered for adjustment annually based on changes in long-term, highly rated corporate bond yields. Decreases in the discount rates result in an increase in the projected benefit obligation and in pension costs.

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 for pension and other postretirement 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 benefit obligation to employees (PBO) and the fair value of the plan assets. While we comply with appropriate statutory funding requirements, as of December 31, 2006 and 2005, the unfunded balance of our pension plans were \$173 million and \$734 million. At December 31, 2006, in accordance with SFAS No. 158, *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans an amendment of FASB Statements No. 87, 88, 106 and 123(R)* (SFAS 158), we recorded in our Consolidated Balance Sheet a net liability of \$418 million in relation to pension and other post retirement benefits. As of December 31, 2005, prior to the adoption of SFAS 158, we recorded in our Consolidated Balance Sheet a net liability of \$438 million in relation to pension and other post retirement benefits. The accumulated other comprehensive loss, net of tax, includes \$629 million and \$214 million of pension and other postretirement benefit obligations at December 31, 2006 and 2005, respectively. Our other postretirement plan liabilities exceeded plan assets by \$245 million and \$270 million as of December 31, 2006 and 2005, respectively.

The expected return on plan assets is reviewed regularly and considered for adjustment annually 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 2006 by approximately \$42 million.

Holding all other assumptions constant, a 25 basis point decrease in the discount rate would have increased the PBO by \$264 million, while a 25 basis point increase in the discount rate would have decreased the PBO by \$254 million.

The determinations of pension expense and pension funding are based on a variety of rules and regulations. Changes in these rules and regulations could impact the calculation of pension plan liabilities and the valuation of pension plan assets. They may also result in higher pension costs, additional financial statement disclosure and accelerate and increase the need to fund our pension plans. There are currently a number of legislative proposals being considered that, if enacted, would change the current rules. Most of these proposals would accelerate the pension funding as compared to the funding under existing rules.

We have multiple non-pension postretirement 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 2007, then gradually declining to 4.97 percent per annum in 2014, 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 Statements 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 as 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. We provide for tax contingencies, including potential tax audits, on the basis of the technical merits of the contingency, including applicable tax law, OECD guidelines and our best estimates of the facts and circumstances. 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 our income tax provisions and accruals.

Accounting for tax contingencies requires that an estimated loss from a contingency 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 operating companies, 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 consolidations or the cost or equity methods, which could have a material impact on our Consolidated Financial Statements.

Additionally, pursuant to Financial Accounting Standards Board (FASB) Interpretation No. 46, *Consolidation of Variable Interest Entities an interpretation of ARB No. 51* (FIN 46) and revised Interpretation No. 46 (FIN 46(R)), we consolidate our interest in variable interest entities (VIEs) when we are considered 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. 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 the Section below entitled "Contingencies and retained liabilities" and in Note 17 to our Consolidated Financial Statements, we are subject to proceedings, lawsuits and other claims and inquiries related to asbestos, environmental, labor, product, regulatory 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 a provision for a contingency of any type may change in the future due to new developments in the particular matter, including changes in the 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. 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 various lines within the Consolidated Income Statements depending on the nature of the charges. Employee termination costs are generally recorded in cost of sales or selling, general and administrative expenses, depending on the function of the employee. Asset impairments and sublease shortfall costs are recorded in other income (expense), net, in the Consolidated Income Statements.

## NEW ACCOUNTING PRONOUNCEMENTS

In June 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* (FIN 48). Among other things, FIN 48 requires applying a two step approach to recognizing and measuring uncertain tax positions accounted for in accordance with SFAS No. 109, *Accounting for Income Taxes* (SFAS 109). The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50 percent likely to be realized upon ultimate settlement. This new guidance will be effective for us on January 1, 2007. We expect the transition effects to consist of reclassification of certain income tax-related liabilities in our Consolidated Balance Sheets. We expect a reclassification of approximately \$350 million to \$450 million primarily between certain current and non-current liabilities, and an immaterial adjustment to opening retained earnings. As required by FIN 48, prior periods will not be restated.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements and eliminates inconsistencies in guidance found in various prior accounting pronouncements. SFAS 157 provides a single definition for fair value that is to be applied consistently for all accounting applications, and also generally describes and prioritizes according to reliability the methods and inputs used in valuations. SFAS 157 will be effective for us on January 1, 2008. We are currently evaluating and assessing the impact of adopting SFAS 157 on our Consolidated Financial Statements.

In June 2006, the FASB ratified Emerging Issues Task Force (EITF) Issue No. 06-3, *How Taxes Collected from Customers and Remitted to Governmental Authorities Should Be Presented in the Income Statement (That Is, Gross Versus Net Presentation)* (EITF 06-3). EITF 06-3 allows companies to present in their income statement any taxes assessed by a governmental authority that are directly imposed on revenue-producing transactions between a seller and a customer, such as sales, use, value-added and some

excise taxes, on either a gross (included in revenues and costs) or a net (excluded from revenues) basis. EITF 06-3 will be effective for us in interim periods and fiscal years beginning after December 15, 2006. We present these transactions on a net basis and intend to continue this presentation in the future, therefore we do not expect the adoption of EITF 06-3 will have any impact on our Consolidated Financial Statements.

## **ACQUISITIONS, INVESTMENTS AND DIVESTITURES**

### **Acquisitions and investments**

During 2006, 2005 and 2004, we invested \$3 million, \$27 million and \$24 million, respectively, in new businesses, joint ventures or affiliated companies.

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

In 2006, 2005 and 2004, we received (paid) cash, net of cash disposed, from sales of businesses, joint ventures and affiliated companies of \$27 million, \$(97) million and \$1,182 million, respectively. In relation to these transactions, we recognized gains in 2006, 2005 and 2004 within other income (expense), net, of \$3 million, \$21 million and \$52 million, respectively. We also recognized losses related to the sale of operations in 2006, 2005, and 2004 within loss from discontinued operations, net of tax, of \$83 million, \$16 million and \$63 million, respectively.

#### **Divestitures in 2006**

In December 2006, we sold our Cable business in Ireland. The Cable business in Ireland had revenues of \$95 million, \$76 million, and \$79 million for the years ended December 31, 2006, 2005 and 2004, respectively. Net losses reported for 2006, 2005 and 2004 were \$48 million, \$15 million and \$24 million, respectively and were recorded in losses from discontinued operations, net of tax. The majority of the \$48 million loss reported in 2006 related to the sale of the business.

In 2006, we sold our Power Lines businesses in Venezuela and South Africa and we expect to complete the sale of our remaining Power Lines business in Brazil and Mexico in 2007. The Power Lines businesses in Venezuela and South Africa had revenues of \$8 million, \$18 million, and \$29 million and net income (loss) of (\$1) million, \$0 million and \$1 million for the years ended December 31, 2006, 2005 and 2004, respectively. The businesses in Brazil and Mexico had revenues of \$80 million, \$84 million and \$50 million and net income (loss) of (\$4) million, \$3 million and \$2 million for the years ended December 31, 2006, 2005 and 2004, respectively. Net income (loss) reported in each year was recorded in loss from discontinued operations, net of tax.

#### **Divestitures in 2005**

In November 2005, we completed the sale of our remaining Structured Finance business by divesting our Lease portfolio business in Finland. At the time of sale, the Lease portfolio business held lease and loan financial receivables of approximately \$300 million and was the last remaining major entity of our Structured Finance business. In 2005, we recorded a loss of \$28 million in loss from discontinued operations, net of tax, principally related to the loss on the sale of the business.

In 2005, we sold our Control Valves business in Japan. The Control Valves business had revenues of \$26 million and \$31 million as well as net income of \$15 million and \$3 million recorded in discontinued operations in 2005 and 2004, respectively. The net income recorded in 2005 includes \$14 million related to the gain on the sale of our Control Valves business, recorded in loss from discontinued operations, net of tax.

In 2005, we completed the sale of our Foundry business. The Foundry business had revenues of \$41 million in both 2005 and 2004, and net losses of \$1 million and \$17 million recorded in discontinued operations, net of tax in 2005 and 2004, respectively.

In 2005, we completed the sale of our Power Lines businesses in Nigeria, Italy and Germany. These businesses had revenues of \$27 million and \$117 million and net losses of \$12 million and \$75 million in 2005 and 2004 respectively, recorded in loss from discontinued operations, net of tax.

In 2005, we also sold our equity interest in the Termobahia power project in Brazil for \$46 million, and recorded a loss in other income (expense), net, of \$4 million in 2005 related to this investment.

#### **Divestitures in 2004**

In 2004, we sold our Upstream Oil, Gas and Petrochemicals business for an initial sales price of \$925 million. Net cash proceeds from the sale were approximately \$800 million, reflecting the initial sales price of \$925 million adjusted for unfunded pension liabilities and changes in net working capital. The Upstream Oil, Gas and Petrochemicals business had revenues of \$855 million and net losses of \$70 million in 2004.

In 2004, we completed the sale of our Reinsurance business, net cash proceeds of approximately \$280 million. The Reinsurance business recorded losses totaling \$41 million in loss from discontinued operations, net of tax, and revenues of \$139 million in 2004.

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

In addition, in 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 2004, we also sold a business in Sweden for \$11 million, resulting in a gain on disposal of \$7 million, before tax, in other income (expense), net. Revenues and net income from this business and investments were not significant in 2004.

#### **Other divestitures**

During 2006, 2005 and 2004, we sold several operating units and investments, excluding the divestments disclosed above, for total proceeds of \$9 million, \$24 million and \$39 million, respectively, and recognized net gains on disposal of \$3 million, \$25 million and \$13 million, respectively, which are included in other income (expense), net. Revenues and net income from these businesses and investments were not significant in 2006, 2005 and 2004.

**EXCHANGE RATES**

We report our financial results in U.S. dollars (USD). 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-USD denominated results of operations, assets and liabilities to USD in our Consolidated Financial Statements. Balance sheet items are translated to USD using year-end currency exchange rates. Income statement and cash flow items are translated to USD using the average currency exchange rate over the relevant period.

Increases and decreases in the value of the USD 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 stockholders' equity, as has been the case during the period from 2004 through 2006.

While we operate globally and report our financial results in USD, because of the location of our significant operations and because our headquarters are in Switzerland, exchange rate movements between the USD and both the euro (EUR) and the Swiss franc (CHF) are of particular importance to us.

The exchange rates between the USD and the EUR and the USD and the CHF as of December 31, 2006, 2005, and 2004, were as follows.

Exchange rates into \$	2006	2005	2004
EUR 1.00	1.32	1.18	1.37
CHF 1.00	0.82	0.76	0.88

The average exchange rates between the USD and the EUR and the USD and the CHF for the years ended December 31, 2006, 2005 and 2004, were as follows.

Exchange rates into \$	2006	2005	2004
EUR 1.00	1.25	1.25	1.25
CHF 1.00	0.80	0.81	0.81

When we incur expenses that are not denominated in the same currency as the related revenues, foreign exchange rate fluctuations could 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 2006, approximately 87 percent of our consolidated revenues were reported in currencies other than USD. The following percentages of our consolidated revenues were reported in the following currencies:

- Euro, approximately 31 percent,
- Chinese renminbi, approximately 8 percent,





- Swedish krona, approximately 7 percent,
- Swiss franc, approximately 5 percent and
- Indian rupee, approximately 4 percent.

In 2006, approximately 86 percent of our consolidated cost of sales and selling, general and administrative expenses were reported in currencies other than USD. The following percentages of our consolidated cost of sales and selling, general and administrative expenses were reported in the following currencies:

- Euro, approximately 31 percent,
- Chinese renminbi, approximately 7 percent,
- Swedish krona, approximately 6 percent,
- Swiss franc, approximately 4 percent and
- Indian rupee, approximately 4 percent.

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

The results of operations and financial position of many of our non-United States subsidiaries are reported in the currencies of the countries in which those subsidiaries reside. We call these currencies local currencies. Local currency financial information is then translated into USD 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 USD). 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 in local currencies as compared to our results of operations in USD 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 to other companies' financial measures that have the same or a similar title. We strongly encourage 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 the payment terms. The reported value of an order corresponds to the undiscounted value of revenues that we expect to recognize following 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 the 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 and returns of delivered goods.

The undiscounted value of revenues we expect to generate from our orders at any point in time is represented by our order backlog. Approximately 15 percent of the value of total orders we recorded in 2006 were large orders, which we define as orders from third parties involving at least \$15 million of products or services. Approximately 75 percent of the large orders of 2006 were recorded by our Power Systems and Process Automation divisions. Non-core and Other activities account for 16 percent of total large orders in 2006, representing the orders received by our Oil, Gas and Petrochemicals business. The Power Products, Automation Products and Robotics divisions account for the remainder of the total large orders during 2006. The remaining portion of total orders recorded in 2006 was base orders, which we define as orders from third parties for less than \$15 million of products or services.

The level of orders fluctuates from year to year. Arrangements included in any particular order can be complex and unique to that 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 orders generally, cannot be used to accurately predict future revenues or operating performance. Orders that have been 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 primarily based on orders received, revenues, earnings before interest and taxes (EBIT), and EBIT as a percentage of revenues (EBIT margin). The orders, revenues and EBIT of our divisions include interdivisional transactions. In 2006 and 2005, over 90 percent of our core divisions' orders and revenues were from third-party customers. EBIT is the amount resulting from the subtraction of our cost of sales, selling, general and administrative expenses and other income (expense), net, from our revenues.

**ANALYSIS OF RESULTS OF OPERATIONS**

Our results from operations were as follows:

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions, except per share data)		
Orders	28,401	23,194	21,185
Order backlog(1)	16,953	11,956	12,167
Revenues	24,412	22,012	20,149
Cost of sales	(17,541 )	(16,405 )	(15,241 )
Gross profit	6,871	5,607	4,908
Selling, general and administrative expenses	(4,434 )	(3,883 )	(3,777 )
Other income (expense), net	149	54	(40 )
EBIT	2,586	1,778	1,091
Net interest and other finance expense	(153 )	(246 )	(209 )
Provision for income taxes	(697 )	(490 )	(338 )
Minority interest	(179 )	(131 )	(102 )
Income from continuing operations before cumulative effect of accounting change	1,557	911	442
Loss from discontinued operations, net of tax	(167 )	(171 )	(477 )
Cumulative effect of accounting change, net of tax		(5 )	
Net income (loss)	1,390	735	(35 )
Basic earnings (loss) per share:			
Income from continuing operations before cumulative effect of accounting change	0.73	0.45	0.22
Net income (loss)	0.65	0.36	(0.02 )
Diluted earnings (loss) per share:			
Income from continuing operations before cumulative effect of accounting change	0.71	0.44	0.22
Net income (loss)	0.63	0.36	(0.02 )

(1) as of December 31

A more detailed discussion of the orders, revenues, and EBIT for our individual divisions and other businesses follows in the sections below entitled Power Products , Power Systems , Automation Products , Process Automation , Robotics , Non-core and Other activities , Corporate Discontinued operations .

**Orders**

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions, except per share data)		
Power Products	8,743	6,879	5,888
Power Systems	5,733	4,468	4,108
Automation Products	7,706	6,210	5,487
Process Automation	6,550	5,400	4,695
Robotics	1,240	1,496	1,544
Core divisions	29,972	24,453	21,722
Non-core and Other activities	1,551	1,059	1,723
Oil, Gas and Petrochemicals	1,184	697	1,216
Other Non-core activities	367	362	507
Corporate/Other and inter-division eliminations	(3,122 )	(2,318 )	(2,260 )
Total	28,401	23,194	21,185

Our orders in 2006 increased by 22 percent (22 percent in local currencies) to \$28,401 million. All core divisions, except Robotics, reported growth in the range of 21 percent to 28 percent in both USD and in local currencies. Our Power Systems division benefited from increasing customer investments in power grid expansion and refurbishment, reporting strong order growth as it successfully pursued a number of large substation projects. Order growth in our Process Automation division was recorded across the board in the oil and gas, marine, minerals, pulp and paper and turbochargers businesses. Our Power Products division reported significant growth, especially in the transformers business. Orders in our Automation Products division benefited from increasing demand from industrial end-customers, OEMs and system integrators in the industrial markets. In our Power Products and Automation Products divisions, volume growth was also driven by price increases to offset higher raw material costs. Orders in our Robotics division further decreased reflecting a continued slowdown in the automotive market. The increase of orders in Non-core and Other activities was the result of large orders received by our Oil, Gas and Petrochemicals business.

In 2005, our orders grew by 9 percent (9 percent in local currencies) and our Power Products, Power Systems, Automation Products, and Process Automation divisions all reported significant increases in their respective orders. We started to experience a slowdown of business in the automotive sector in 2005, resulting in lower orders received as compared to 2004 for our Robotics division. Orders in Non-core and Other activities in 2005 decreased by 39 percent (38 percent in local currencies). This was mainly due to changes in the bidding policy in our Oil, Gas, and Petrochemicals business in order to reduce the number of projects performed under long-term fixed price contracts and to increase the number of projects providing for the reimbursement of expenses as incurred.

Large orders in 2006 increased by 77 percent (75 percent in local currencies) to \$4,326 million, compared to the 7 percent (7 percent in local currencies) decrease reported in 2005. The relative share of large orders compared to the total orders increased from 11 percent in 2005 to 15 percent in 2006.

We determine the geographic distribution of our orders based on the location of the customer, which may be different from the ultimate destination of the products' end use. The geographic distribution of our consolidated orders in 2006, 2005 and 2004 was approximately as follows:

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions)		
Europe	12,547	10,545	10,607
The Americas	5,183	4,443	3,742
Asia	6,998	5,773	4,979
Middle East and Africa	3,673	2,433	1,857
Total	28,401	23,194	21,185

In 2006, orders from Europe increased by 19 percent (18 percent in local currencies) as utilities customers in this region continued to invest in power grid upgrades and interconnection to increase the efficiency and reliability of their networks. In particular, we experienced significant increases in Russia, Germany, Italy, Sweden and Norway. Orders from the Americas increased by 17 percent (15 percent in local currencies), as demand for refurbishing aging power equipment and upgrades in the industrial sector to achieve energy efficiency continued, particularly in Canada and the United States. The order development in South America increased by 10 percent (5 percent in local currencies) mainly driven by higher demand in Argentina and Chile. Orders from Asia increased by 21 percent (21 percent in local currencies) as our business in this region continued to benefit from the rapid pace of development especially in China and India, where investment in new infrastructure increased to support their economic growth. Orders from MEA increased by 51 percent (52 percent in local currencies) due to growing demand fueled by the need for power infrastructure to support growth in the oil and gas sector. We experienced generally strong demand from industrial customers in all regions which was driven by the need to improve efficiency in the face of high energy and raw material prices, and was supported by the current strength in the global economy.

Orders in 2005 from Europe were unchanged in both reporting and local currencies as compared to 2004, as moderate growth in western Europe offset a decrease in eastern Europe, caused mainly by a reduction in large projects. Orders from the Americas grew 19 percent (16 percent in local currencies), driven by strong demand for power infrastructure and automation products in South America. Growth in orders from the Americas was also supported by demand in North America, specifically in the United States for power systems and equipment. Orders in Asia increased 16 percent (14 percent in local currencies), reflecting investments in power and industry infrastructure, predominantly in India. Orders from MEA rose 31 percent (31 percent in local currencies), primarily as a result of several large orders for power infrastructure projects.

**Order backlog**

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions)		
Power Products	4,947	3,499	3,192
Power Systems	5,627	4,085	4,283
Automation Products	2,439	1,417	1,200
Process Automation	3,991	2,647	2,585
Robotics	441	506	723
Core divisions	17,445	12,154	11,983
Non-core and Other activities	1,046	802	1,336
Oil, Gas and Petrochemicals	1,022	774	1,251
Other Non-core activities	24	28	85
Corporate/Other and inter-division eliminations	(1,538 )	(1,000 )	(1,152 )
Total	16,953	11,956	12,167

As a result of the strong growth in orders received, order backlog at the end of 2006 increased by \$4,997 million, or 42 percent (33 percent in local currencies) to \$16,953 million, despite higher revenue growth. Growth in the order backlog was further supported by an increased volume of large orders with long delivery schedules, particularly in our Power Systems division, Process Automation division and the Oil, Gas and Petrochemicals business.

The order backlog in 2005 decreased by \$211 million, or 2 percent (increased 8 percent in local currencies), to \$11,956 million. The order backlog in our core divisions increased by 1 percent (11 percent in local currencies) which was more than offset by a 40 percent decline (34 percent in local currencies) in the order backlog in our Non-core and Other activities mainly due to lower orders in our Oil, Gas and Petrochemicals business.

**Revenues**

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions)		
Power Products	7,422	6,307	5,621
Power Systems	4,544	4,085	3,744
Automation Products	6,837	5,897	5,385
Process Automation	5,448	4,996	4,635
Robotics	1,288	1,699	1,451
Core divisions	25,539	22,984	20,836
Non-core and Other activities	1,369	1,348	1,668
Oil, Gas and Petrochemicals	988	933	1,079
Other Non-core activities	381	415	589
Corporate/Other and inter-division eliminations	(2,496 )	(2,320 )	(2,355 )
Total	24,412	22,012	20,149

Revenues in 2006 increased by \$2,400 million or 11 percent (10 percent in local currencies), to \$24,412 million. Revenues in Power Products and Automation Products increased by 18 percent (16 percent in local currencies) and 16 percent (15 percent in local currencies), respectively, as a result of increased order intake, higher capacity utilization to execute the increasing volume of orders received and price increases to compensate for the higher cost of raw materials. The execution of system orders, particularly large orders from the order backlog at the beginning of the year and those received in the first half of 2006, contributed to revenue growth in the Power Systems and Process Automation divisions, which recorded

growth of 11 percent (10 percent in local currencies) and 9 percent (8 percent in local currencies), respectively, in 2006. The slowdown in the automotive market during 2005 and 2006 was reflected in our Robotics division revenues, which declined by 24 percent (25 percent in local currencies). Non-core and Other activities reported slightly higher revenues resulting from large projects in the Oil, Gas and Petrochemicals business.

In 2005, revenues increased by \$1,863 million, or 9 percent (8 percent in local currencies), to \$22,012 million from \$20,149 million in 2004. Also in 2005, revenue growth reflected a higher level of execution of orders from the order backlog and from new orders received during 2005 in most of our core divisions. The revenue decrease in Non-core and Other activities was primarily due to lower order volume in the Oil, Gas, and Petrochemicals business following changes in its bidding policies to refrain from long-term fixed-price contracts.

We determine the geographic distribution of our revenues based on the location of the customer, which may be different from the ultimate destination of the products end use. The geographic distribution of our consolidated revenues over the three year period ending December 31, was approximately as follows:

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions)		
Europe	11,435	10,709	10,289
The Americas	4,526	4,231	3,557
Asia	6,103	5,127	4,261
Middle East and Africa	2,348	1,945	2,042
Total	24,412	22,012	20,149

Revenues in Europe increased by 7 percent (6 percent in local currencies) in 2006. In particular we experienced significant increases in revenues in Russia, Germany, Italy, Sweden and Norway. However, as a result of the rapid growth in other regions, the relative share of orders from the European market decreased to 47 percent of our total orders in 2006, compared to 49 percent in 2005. Revenues from Asia, which increased by 19 percent (18 percent in local currencies), derived mainly from China and India, and accounted for 25 percent of total revenues, compared to 23 percent a year earlier. Revenues in the Americas increased by 7 percent (5 percent in local currencies), and by the end of 2006 represented 18 percent of the total group revenues, compared to 19 percent in the previous year. Revenues from MEA accounted for a 10 percent share of total group revenues, compared to 9 percent in 2005, which represented an increase of 21 percent compared to 2004.

Revenues in Europe increased by 4 percent (4 percent in local currencies) in 2005 compared to 2004. The increased revenues from our core divisions in this region more than offset a reduction in revenues from our Non-core and Other activities. Revenues from the Americas increased by 19 percent in 2005 (16 percent in local currencies) compared to 2004. The increase in 2005 primarily resulted from the execution of large projects in Mexico, Canada, Brazil and the United States. Revenues from Asia increased 20 percent (18 percent in local currencies) in 2005, as a result of market growth in China, India, Australia and South Korea. Revenues from MEA decreased 5 percent in 2005 (6 percent in local currencies) relative to 2004, following a lower volume of orders received during 2004.

#### Cost of sales

Cost of sales increased by \$1,136 million, or 7 percent (6 percent in local currencies), to \$17,541 million in 2006, after an increase in 2005 of \$1,164 million, or 8 percent (7 percent in local currencies), primarily due to increased volume of revenues and purchase price increases in some raw materials.

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, employee severance expenses as well as order-related development expenses incurred in connection with projects for which corresponding revenues were recognized.

Order-related development expenses are recorded in cost of sales, and amounted to \$840 million, \$726 million and \$723 million in 2006, 2005 and 2004, respectively. Order-related development expenses are initially recorded in inventories as work-in-progress, and are reflected in cost of sales at the time revenue is recognized.

The overall gross profit margin continued to increase, from 24.4 percent in 2004, to 25.5 percent in 2005 to 28.1 percent in 2006. Aside from higher capacity utilization from increasing volumes, margin improvements were attributable to internal process improvement programs initiated in the last few years. Higher productivity levels, savings from supply chain management, and improved project execution, including strict monitoring of risks, were the main factors contributing to the margin improvements in 2006 and 2005.

### Selling, general and administrative expenses

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

	Year ended December 31,					
	2006		2005		2004	
	(U.S. dollars in millions)					
Selling expenses	(2,238 )		(2,076 )		(1,863 )	
Selling expenses as a percentage of orders received	7.9 %		9.0 %		8.8 %	
General and administrative expenses	(2,196 )		(1,807 )		(1,914 )	
General and administrative expenses as a percentage of revenues	9.0 %		8.2 %		9.5 %	
Total selling, general and administrative expenses	(4,434 )		(3,883 )		(3,777 )	
Total selling, general and administrative expenses as a percentage of the average orders received and revenues	16.8 %		17.2 %		18.3 %	

Selling, general and administrative expenses increased by \$551 million or 14 percent (13 percent in local currencies) to \$4,434 million in 2006, from \$3,883 million in 2005. In 2005, selling, general and administrative expenses increased by \$106 million, or 3 percent (2 percent in local currencies), to \$3,883 million from \$3,777 million in 2004.

Selling expenses in 2006 increased by \$162 million to \$2,238 million from \$2,076 million in 2005. In 2005, selling expenses increased by \$213 million, from \$1,863 million reported in 2004. Higher selling expenses in the last two years reflected increased selling activities in line with the growing market demand, especially in high growth markets in Asia. Special sales programs and selling costs associated with new joint ventures, especially in the emerging markets, have further contributed to the increase in selling expenses. Expressed as a percentage of orders received, selling expenses decreased by 1.1 percentage points in 2006, relative to 2005 after increasing by 0.2 percent in 2005 compared to 2004.

General and administrative expenses increased by \$389 million to \$2,196 million in 2006, after decreasing by \$107 million to \$1,807 million in 2005 from \$1,914 million in 2004. General and administrative expenses included non-order related R&D which increased 14 percent in 2006, relative to 2005 after increasing 4 percent in 2005 compared to 2004. Expressed as a percentage of revenues, the total general and administrative expenses increased by 0.8 percent in 2006, compared to 2005 after decreasing by 1.3 percent in 2005 relative to 2004. Increased development activities, primarily in our Power Systems and Power Products divisions and costs incurred to implement incremental internal control measures to comply with the provisions of the Sarbanes Oxley Act of 2002, were the main drivers for the increase in the general and administrative expenses. In 2004, an increase in the general and administrative expenses in the



core divisions was more than offset by a reduction in expenses in Non-core and Other activities and Corporate driven by a lower level of business activity and lower corporate costs.

Total selling, general and administrative expenses, which are related to both orders received and revenues, expressed as a percentage of the average of orders received and revenues, decreased in 2006 by 0.4 percent to 16.8 percent from 17.2 percent in 2005 which was lower than the 18.3 percent recorded in 2004 signifying the improvements in the overall relative cost levels compared to the business volumes.

#### Other income (expense), net

	Year ended December 31,		
	2006	2005	2004
	(U.S dollars.in millions)		
Restructuring expenses	3	(51 )	(141 )
Capital gains, net	75	62	80
Asset write-downs	(12 )	(58 )	(93 )
Income from licenses, equity accounted companies and other	83	101	114
Total	149	54	(40 )

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.

Restructuring costs are recorded in various lines within the Consolidated Income Statements depending on the nature of the charges. The reduction of a restructuring liability, due to a change in estimate, led to income of \$3 million reported as restructuring expenses in other income (expense), net in 2006. Restructuring expenses in 2005 included \$18 million in our Automation Products division, \$6 million in our Robotics division, \$11 million in our Power Products division, primarily related to factory closings and streamlining operations in Europe, and \$16 million in Non-core and Other activities, mainly in real estate. We implemented major restructuring programs in previous periods focused on increasing productivity and streamlining operations, particularly in Non-core and Other activities to help prepare the businesses for divestment. Restructuring expenses recorded in 2004 were primarily from the execution of these restructuring programs.

In 2006 and 2005, respectively, the capital gains, net, included approximately \$65 million and \$45 million of gains from the sale of land and buildings in Europe. Capital gains, net, in 2005 also included \$18 million in gains on the sale of shares and participations in our Equity Ventures business and other transactions. 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.

Asset write-downs in 2006 included the impairment of long-lived assets of \$8 million, primarily in Europe, and a few minor write-downs on loans and investments. In 2005, asset write-downs amounted to \$36 million on long-lived assets, mainly in Europe, and \$22 million on loans and investments, primarily in our Equity Ventures business. Asset write-downs in 2004 included charges of \$93 million in respect of goodwill, an e-business investment, property, plant and equipment and notes receivable in our Power Products division.

License income in 2006 was \$3 million, most of which came from Turbocharger licensing to third parties in Asia. In 2005 and 2004, license income was \$9 million and \$24 million, respectively, primarily reflecting income from liquid crystal display licenses. The reduction in license income in 2005 and 2006 reflects the expiration of certain license agreements.

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

Income from equity accounted companies mainly represented our share of net income from our equity investments. In 2006, these consisted primarily of \$67 million from Jorf Lasfar Energy Company, Casablanca (power project in Morocco, Africa) and relatively smaller amounts of income from various other equity accounted companies in India and in the United States.

Income from equity accounted companies was \$109 million and \$87 million in 2005 and 2004, respectively, which included income of \$62 million and \$68 million in 2005 and 2004, respectively, from our investment in Jorf Lasfar, and income of \$23 million in 2005 from our investment in a power project in Neyveli, India.

### Earnings before interest and taxes

Our EBIT over the three year period was as follows:

	Year ended December 31,		
	2006	2005	2004
	(U.S. dollars in millions)		
Power Products	961	616	514
Power Systems	279	187	119
Automation Products	1,053	822	673
Process Automation	541	398	271
Robotics	1	91	