

ABB LTD  
Form 20-F  
March 05, 2015

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As filed with the Securities and Exchange Commission on March 5, 2015

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 20-F**

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

**OR**

ý **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended December 31, 2014**

**OR**

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

**OR**

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

**Commission file number: 001-16429**

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**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)

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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 1.03	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: 2,314,743,264 Registered Shares (including treasury 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

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 check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, 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.

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**INTRODUCTION**

ABB Ltd is a corporation organized under the laws of Switzerland. In this Annual Report, "the ABB Group," "ABB," the "Company," "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 Annual 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**

The Consolidated Financial Statements of ABB Ltd, including the notes thereto, as of December 31, 2014 and 2013, and for each of the years in the three-year period ended December 31, 2014 (our Consolidated Financial Statements) have been prepared in accordance with United States generally accepted accounting principles (U.S. GAAP). ABB Ltd has separately prepared its statutory unconsolidated financial statements in accordance with the Swiss Code of Obligations.

In this Annual Report: (i) "\$," "U.S. dollar" and "USD" refer to the lawful currency of the United States of America; (ii) "CHF" and "Swiss franc" refer to the lawful currency of Switzerland; (iii) "EUR" and "euro" refer to the lawful currency of the participating member states of the European Economic and Monetary Union (Eurozone); (iv) "SEK" and "Swedish krona" refer to the lawful currency of Sweden; (v) "Chinese renminbi" refers to the lawful currency of the People's Republic of China; (vi) "AED" refers to the lawful currency of the United Arab Emirates; (vii) "AUD" and "Australian dollar" refer to the lawful currency of Australia; (viii) "Canadian dollar" refers to the lawful currency of Canada; and (ix) "INR" and "Indian Rupee" refer to the lawful currency of India.

Except as otherwise stated, all monetary amounts in this Annual 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 31, 2014, unless otherwise indicated. The twelve o'clock buying rate for Swiss francs on December 31, 2014, was \$1.00 = CHF 0.9934. The twelve o'clock buying rate for Swiss francs on February 27, 2015, was \$1.00 = CHF 0.9513.

**FORWARD-LOOKING STATEMENTS**

This Annual Report includes forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "intends," "may," "will," or "should" or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual 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 industries 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,

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statements in "Item 3. Key Information Risk Factors,"

statements in "Item 4. Information on the Company" regarding the timing of intended 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 legal and compliance matters.

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 Annual 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 Annual 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 Annual Report and include, without limitation, the following:

Our business is exposed to risks associated with the volatile global economic environment and political conditions.

Illegal behavior by any of our employees or agents could have a material adverse impact on our consolidated operating results, cash flows, and financial position as well as on our reputation and our ability to do business.

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

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

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

Our multi-national 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.

Increases in costs or limitation of supplies of raw materials may adversely affect our financial performance.

An inability to protect our intellectual property rights could adversely affect our business.

Many of our contracts contain performance obligations that require innovative design capabilities, are technologically complex, require state-of-the-art manufacturing expertise or are dependent upon factors not wholly within our control. Failure to meet these obligations could adversely affect our profitability and future prospects.

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

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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.

If we are unable to obtain performance and other guarantees from financial institutions, we may be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher.

Examinations by tax authorities and changes in tax regulations could result in lower earnings and cash flows.

If we are unable to attract and retain qualified management and personnel then our business may be adversely affected.

Anticipated benefits of existing and potential future mergers, acquisitions, joint ventures or strategic alliances may not be realized.

We could be affected by future laws or regulations enacted to address climate change concerns as well as the physical effects of climate change.

Increased information technology (IT) security threats and more sophisticated cyber-attacks could pose a risk to our systems, networks, products, solutions and services.

We urge you to read the sections of this Annual 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 Annual 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 Annual Report.

**PART I**

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

Not applicable

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

Not applicable

**Item 3. Key Information**





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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 Annual 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, 2014, 2013, 2012, 2011 and 2010, were audited by Ernst & Young AG.

**INCOME STATEMENT DATA:**

(\$ in millions, except per share data in \$)	2014	2013	2012	2011	2010
<b>Total revenues</b>	<b>39,830</b>	<b>41,848</b>	<b>39,336</b>	<b>37,990</b>	<b>31,589</b>
<b>Total cost of sales</b>	<b>(28,615)</b>	<b>(29,856)</b>	<b>(27,958)</b>	<b>(26,556)</b>	<b>(22,060)</b>
<b>Gross profit</b>	<b>11,215</b>	<b>11,992</b>	<b>11,378</b>	<b>11,434</b>	<b>9,529</b>
Selling, general and administrative expenses	(6,067)	(6,094)	(5,756)	(5,373)	(4,615)
Non-order related research and development expenses	(1,499)	(1,470)	(1,464)	(1,371)	(1,082)
Other income (expense), net	529	(41)	(100)	(23)	(14)
<b>Income from operations</b>	<b>4,178</b>	<b>4,387</b>	<b>4,058</b>	<b>4,667</b>	<b>3,818</b>
Interest and dividend income	80	69	73	90	95
Interest and other finance expense	(362)	(390)	(293)	(207)	(173)
<b>Income from continuing operations before taxes</b>	<b>3,896</b>	<b>4,066</b>	<b>3,838</b>	<b>4,550</b>	<b>3,740</b>
Provision for taxes	(1,202)	(1,122)	(1,030)	(1,244)	(1,018)
<b>Income from continuing operations, net of tax</b>	<b>2,694</b>	<b>2,944</b>	<b>2,808</b>	<b>3,306</b>	<b>2,722</b>
Income (loss) from discontinued operations, net of tax	24	(37)	4	9	10
<b>Net income</b>	<b>2,718</b>	<b>2,907</b>	<b>2,812</b>	<b>3,315</b>	<b>2,732</b>
Net income attributable to noncontrolling interests	(124)	(120)	(108)	(147)	(171)
<b>Net income attributable to ABB</b>	<b>2,594</b>	<b>2,787</b>	<b>2,704</b>	<b>3,168</b>	<b>2,561</b>
<i>Amounts attributable to ABB shareholders:</i>					
Income from continuing operations, net of tax	2,570	2,824	2,700	3,159	2,551
Net income	2,594	2,787	2,704	3,168	2,561
<i>Basic earnings per share attributable to ABB shareholders:</i>					
Income from continuing operations, net of tax	1.12	1.23	1.18	1.38	1.12
Net income	1.13	1.21	1.18	1.38	1.12
<i>Diluted earnings per share attributable to ABB shareholders:</i>					
Income from continuing operations, net of tax	1.12	1.23	1.18	1.38	1.11
Net income	1.13	1.21	1.18	1.38	1.12
<i>Weighted-average number of shares outstanding (in millions) used to compute:</i>					
Basic earnings per share attributable to ABB shareholders	2,288	2,297	2,293	2,288	2,287
Diluted earnings per share attributable to ABB shareholders	2,295	2,305	2,295	2,291	2,291

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(\$ in millions)	December 31,				
	2014	2013	2012	2011	2010
Cash and equivalents	5,443	6,021	6,875	4,819	5,897
Marketable securities and short-term investments	1,325	464	1,606	948	2,713
Total assets	44,878	48,064	49,070	39,648	36,295
Long-term debt (excluding current maturities of long-term debt)	7,338	7,570	7,534	3,231	1,139
Total debt <sup>(1)</sup>	7,691	8,023	10,071	3,996	2,182
Capital stock and additional paid-in capital	1,777	1,750	1,691	1,621	1,454
Total stockholders' equity (including noncontrolling interests)	16,815	19,208	17,446	16,336	15,458

**CASH FLOW DATA:**

(\$ in millions)	2014	2013	2012	2011	2010
Net cash provided by operating activities	3,845	3,653	3,779	3,612	4,197
Net cash used in investing activities	(1,121)	(717)	(5,575)	(3,253)	(2,747)
Net cash provided by (used in) financing activities	(3,024)	(3,856)	3,762	(1,208)	(2,530)

(1) Total debt is equal to the sum of short-term debt (including current maturities of long-term debt) and long-term debt.

**DIVIDENDS AND DIVIDEND POLICY**

Payment of dividends is subject to general business conditions, ABB's current and expected financial condition and performance and other relevant factors including growth opportunities. ABB's current dividend policy is to pay a steadily rising, sustainable annual dividend over time.

The unconsolidated statutory financial statements of ABB Ltd are prepared in accordance with Swiss law. Based on these financial statements, dividends may be paid only if ABB Ltd has sufficient distributable profits from previous years or sufficient free reserves to allow the distribution of a dividend. As a holding company, ABB Ltd's main sources of income are dividend and interest from its subsidiaries.

At December 31, 2014, of the CHF 9,651 million total stockholders' equity recorded in ABB Ltd's unconsolidated statutory financial statements, CHF 2,384 million represented share capital, CHF 8,446 million was attributable to reserves and a reduction in equity of CHF 1,179 million represented own shares (treasury stock). CHF 6,790 million of the legal reserves are unrestricted and available for distribution.

With respect to the years ended December 31, 2010, 2011, 2012 and 2013, ABB Ltd paid a dividend of CHF 0.60 (USD 0.69) per share, CHF 0.65 (USD 0.69) per share, CHF 0.68 (USD 0.71) per share, and CHF 0.70 (USD 0.79) per share, respectively. The USD amounts for each of the foregoing dividend payments made in CHF have been translated using the average rates of the month in which the dividends were paid.

With respect to the year ended December 31, 2014, ABB Ltd's Board of Directors has proposed to distribute a total of CHF 0.72 per share to shareholders, comprising of a dividend of CHF 0.55 paid out of ABB Ltd's capital contribution reserves and a distribution of CHF 0.17 by way of a nominal value reduction (reduction in the par value of each share by CHF 0.17 from CHF 1.03 to CHF 0.86). These distributions are subject to approval by shareholders at ABB Ltd's 2015 Annual General Meeting (AGM).

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For further information on dividends and dividend policy see "Item 6. Directors, Senior Management and Employees Shareholders' participation Shareholders' dividend rights".

**RISK FACTORS**

*You should carefully consider all of the information set forth in this Annual 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 business is exposed to risks associated with the volatile global economic environment and political conditions.***

Adverse changes in economic or political conditions as well as concerns about global health pandemics, terrorist activities and the longevity of the euro, both inside and outside the U.S., could have a material adverse effect on our business, financial condition, results of operations and liquidity. Economic volatility and financial market disruptions may adversely impact the demand for our products and services. These and other factors may prevent our customers and suppliers from obtaining the financing required to pursue their business activities as planned, which may force them to modify, delay or cancel plans to purchase or supply our products or services. In addition, if our customers do not generate sufficient revenue, or fail to obtain access to the capital markets, they may not be able to pay, or may delay payment of, the amounts they owe us. Customers with liquidity issues may lead to additional bad debt expense for us, which may adversely affect our results of operations and cash flows. We are also subject to the risk that the counterparties to our credit agreements and hedging transactions may go bankrupt if they suffer catastrophic demand on their liquidity that prevents them from fulfilling their contractual obligations to us.

Apart from effects relating to the financial crisis and the global economic slowdown that it entailed, our business environment is influenced by numerous other economic or political uncertainties which will 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 and automation divisions are affected by the level of investments in the markets that we serve, principally utilities, industry and transport and infrastructure. At various times during the last several years, we also have experienced, and may experience in the future, gross margin declines in certain businesses, reflecting the effect of items such as competitive pricing pressures, inventory write-downs, charges associated with the cancellation of planned expansion, increases in pension and postretirement benefit expenses, and increases in component and manufacturing costs resulting from higher labor and material costs borne by our manufacturers and suppliers that, as a result of competitive pricing pressures or other factors, we are unable to pass on to our customers. Economic downturns also may lead to restructuring actions and associated expenses. Uncertainty about future economic conditions makes it difficult for us to forecast operating results and to make decisions about future investments.

In addition, we are subject to the risks that our business operations in or with certain countries may be adversely affected 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 affect the price of our shares by disposing of, or deciding not to, purchase our shares. These countries may from time to time include countries that are identified by the United States as state sponsors of terrorism. In 2014, our total revenues from business with countries identified by the U.S. government as state sponsors of terrorism represented a very small percentage of our total revenues. Based on the

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amount of revenues and other relevant quantitative and qualitative factors, we have determined that our business in 2014 with countries identified by the U.S. government as state sponsors of terrorism was not material.

***Illegal behavior by any of our employees or agents could have a material adverse impact on our consolidated operating results, cash flows, and financial position as well as on our reputation and our ability to do business.***

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, civil and criminal penalties, including monetary penalties and other sanctions, and civil litigation. It is possible that any governmental investigation or enforcement action arising from such 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 impact on our consolidated operating results, cash flows and financial position. 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 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 operations in emerging markets expose us to risks associated with conditions in those markets.***

A significant amount of our operations is conducted in the emerging markets in South America, Asia, and the Middle East and Africa. In 2014, approximately 45 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 geographic markets,

political or social instability, such as the recent political unrest in Russia and Ukraine, which could make our customers less willing to make cross-border investments in such regions and could complicate 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 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,

significant fluctuations in interest rates and currency exchange rates,

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

the ability to obtain financing and/or insurance coverage from export credit agencies, and

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

Additionally, political and social instability resulting from increased violence in certain countries in which we do business has raised concerns about the safety of our personnel. These concerns may hinder our ability to send personnel abroad and to hire and retain local personnel. Such concerns may require us to increase security for personnel traveling to such facilities or to conduct more operations from our other facilities rather than from facilities located in such countries, which may negatively impact our operations and result in higher costs and inefficiencies.

In addition, the legal and regulatory systems of many 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 or turnkey 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 the post-completion warranty obligations. These risks include 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 that create unanticipated costs,

delays caused by force majeure or local weather and geological conditions, including natural disasters,

customer delays,

shortages of construction equipment,

changes in law or government policy,

supply bottlenecks, especially of key components, and

suppliers', subcontractors' or consortium partners' failure to perform.

These risks are exacerbated if the duration of the project is extended because then there is an increased risk that the circumstances upon which we originally bid and quoted a price change in a manner that increases our costs. In addition, we sometimes bear the risk of delays caused by unexpected conditions or events. Our project contracts often make us subject to penalties if we cannot

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complete portions of the project in accordance with agreed-upon time limits and guaranteed performance levels.

*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 markets in particular with respect to 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, as power transmission and distribution providers throughout the world have been undergoing substantial privatization, their need has increased 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.

All of our primary 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. We are also facing increased competition from low cost competitors in emerging markets, which may give rise to increased pressure to reduce our prices. 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.

*Our multi-national 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. The global financial crisis has led to increased volatility in exchange rates, which makes it harder to predict exchange rates and perform accurate financial planning. 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 can fluctuate substantially, which could have 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 or sourcing costs are incurred. In this case, if after the parties agree on a price, the value of the currency in which the

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price is to be paid were to weaken relative to the currency in which we incur manufacturing or sourcing 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 currency translation risk as described above.

Currency exchange rate fluctuations in those currencies in which we incur our principal manufacturing expenses or sourcing costs 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 currency exposures by entering into offsetting transactions with third-party financial institutions. Given 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. As part of our effort to manage these exposures, we may enter into commodity price and interest rate hedging arrangements. 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 prices or if our hedging counterparties are unable to perform their obligations under our hedging agreements with them, then changes in these rates and prices could have an adverse effect on our financial condition and results of operations.

***Increases in costs or limitation of supplies of 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 due to changes in supply and demand and a variety of additional factors beyond our control, such as global political and economic conditions. Historically, prices 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 and components, which could limit our ability to manufacture products on a timely basis and could harm our profitability. For some raw materials and components, we rely on a single supplier or a small number of suppliers. 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, we might have obligations under our performance guarantees and our sales and profitability could be materially adversely affected.



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***An inability to protect our 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 globally. Intellectual property protection is subject to applicable laws in various local jurisdictions where interpretations and protections vary or can be unpredictable and costly to enforce. 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. The weakening of protection of our trademarks, trade dress, patents and other intellectual property rights could adversely affect our business.

***Many of our contracts contain performance obligations that require innovative design capabilities, are technologically complex, require state-of-the-art manufacturing expertise or are dependent upon factors not wholly within our control. Failure to meet these obligations could adversely affect our profitability and future prospects.***

We design, develop and manufacture technologically advanced and innovative products and services applied by our customers in a variety of environments. Problems and delays in our development or delivery of products or services as a result of issues with respect to design, technology, licensing and patent rights, labor, learning curve assumptions or materials and components could prevent us from achieving contractual requirements.

In addition, our products cannot be tested and proven in all situations and are otherwise subject to unforeseen problems. Examples of unforeseen problems that could negatively affect revenue and profitability include premature failure of products that cannot be accessed for repair or replacement, problems with quality, country of origin, delivery of subcontractor components or services and unplanned degradation of product performance. Among the factors that may affect revenue and profits could be unforeseen costs and expenses not covered by insurance or indemnification from the customer, diversion of management focus in responding to unforeseen problems, loss of follow-on work, and, in the case of certain contracts, repayment to the customer of contract cost and fee payments we previously received as well as potential damages, which may significantly exceed the contract price.

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

Competitors in the industries in which we 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 and 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 that business. Additionally, as our customers become larger and more concentrated, they could exert pricing pressure on all suppliers, including us. 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.

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***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, polyvinylchloride (PVC) resin to manufacture PVC cable and chloroparaffin as a flame retardant. We have manufactured and sold, and we are using in some of our factories, certain types of transformers and capacitors containing polychlorinated biphenyls (PCBs). 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 or 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. 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 technology divisions are defective, there is a risk of fires, explosions and power surges, and significant damage to electricity generating, transmission and distribution facilities as well as electrical shock causing injury or death.

If the products produced by our automation technology divisions are defective, our customers could suffer significant damage to facilities and equipment that rely on these products and systems to properly monitor and control their manufacturing processes. Additionally, people could be exposed to electrical shock and/or other harm causing injury or death.

If any of the products produced by us contain hazardous substances then there is a risk that such products or substances could cause injury or death.

If any protective products produced by us were to fail to function properly, there is a risk that such failure could cause injury or death.

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.

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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. Furthermore, if we were required or we otherwise determined to make a product recall, the costs could be significant.

***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, 2014, employed about 140,000 people. As of December 31, 2014, approximately 45 percent of our employees were located in Europe, approximately 26 percent in Asia, approximately 23 percent in the Americas 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 manage successfully 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.

***If we are unable to obtain performance and other guarantees from financial institutions, we may be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher.***

In the normal course of our business and in accordance with industry practice, we provide a number of guarantees including bid-bonds, advance payment guarantees and performance guarantees, 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 large projects in our power and automation businesses.

Some customers require that performance guarantees be issued by a financial institution. In considering whether to issue a guarantee on our behalf, financial institutions consider our credit ratings. In addition, the global financial crisis has made it more difficult and expensive to obtain these guarantees. If, in the future, we cannot obtain such a guarantee from a financial institution on commercially reasonable terms or at all, we could be prevented from bidding on, or obtaining, some contracts, or our costs with respect to such contracts could be higher, which would reduce the profitability of the contracts. If we cannot obtain guarantees on commercially reasonable terms or at all from financial institutions in the future, there could be a material impact on our business, financial condition, results of operations or liquidity.

***Examinations by tax authorities and changes in tax regulations could result in lower earnings and cash flows.***

We operate in approximately 100 countries and therefore are subject to different tax regulations. Changes in tax law could result in higher tax expense and payments. Furthermore, this could materially impact our tax receivables and liabilities as well as deferred tax assets and deferred tax liabilities. In addition, the uncertainty of tax environment in some regions could limit our ability to enforce our rights. As a globally operating organization, we conduct business in countries subject to complex tax rules, which may be interpreted in different ways. Future interpretations or developments of tax regimes may affect our tax liability, return on investments and business operations. We are regularly examined by tax authorities in various jurisdictions.

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***If we are unable to attract and retain qualified management and personnel then our business may be adversely affected.***

Our success depends in part on our continued ability to hire, assimilate and retain highly qualified personnel, particularly our senior management team and key employees. Competition for highly qualified management and technical personnel remains intense in the industries and regions in which we operate. If we are unable to attract and retain members of our senior management team and key employees this could have an adverse effect on our business.

***Anticipated benefits of existing and potential future mergers, acquisitions, joint ventures or strategic alliances may not be realized.***

As part of our overall strategy, we may, from time to time, acquire businesses or interests in businesses, including noncontrolling interests, or form joint ventures or create strategic alliances. Whether we realize the anticipated benefits from these transactions depends, in part, upon the integration between the businesses involved, the performance and development of the underlying products, capabilities or technologies, our correct assessment of assumed liabilities and the management of the operations in question. Accordingly, our financial results could be adversely affected by unanticipated performance and liability issues, transaction-related charges, amortization related to intangibles, charges for impairment of long-term assets and partner performance. Although we believe that we have established appropriate and adequate procedures and processes to identify and mitigate these risks, there is no assurance that these transactions will be successful.

***We could be affected by future laws or regulations enacted to address climate change concerns as well as the physical effects of climate change.***

Although we do not believe existing or pending laws and regulations intended to address climate change concerns will materially adversely affect our current business or operations, such laws and regulations could materially affect us in the future. We may need to incur additional costs to comply with these laws and regulations. We could also be affected indirectly by increased prices for goods or services provided to us by companies that are directly affected by these laws and regulations and pass their increased costs through to their customers. At this time, we cannot estimate what impact such costs may have on our business, results of operations or financial condition. We could also be affected by the physical consequences of climate change itself, although we cannot estimate what impact those consequences might have on our business or operations.

***Increased information technology (IT) security threats and more sophisticated cyber-attacks could pose a risk to our systems, networks, products, solutions and services.***

We have observed a global increase in IT security threats and more sophisticated cyber-attacks, both in general and against us, which pose a risk to the security of systems and networks and the confidentiality, availability and integrity of data stored and transmitted on those systems and networks. While we attempt to mitigate these risks through a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems such as firewalls and virus scanners, our systems, networks, products, solutions and services remain potentially vulnerable to attacks. Similarly, we have observed a continued increase in attacks generally against industrial control systems as well as against our customers and the systems we supplied to them, which pose a risk to the security of those systems and networks. Depending on their nature and scope, such attacks could potentially lead to the compromising of confidential information, improper use of our systems and networks, or those we supplied to our customers, manipulation and destruction of data, defective products, production downtimes and supply shortages, which in turn could adversely affect our reputation, competitiveness and results of operations.

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**Item 4. Information on the Company**

**INTRODUCTION**

**About ABB**

We are a global leader in power and automation technologies that improve the performance and lower the environmental impact of our customers in the utility, industry and transportation & infrastructure sectors. We provide a broad range of products, systems, solutions and services that are designed to boost productivity, increase power reliability and enhance energy efficiency. We operate in roughly 100 countries and employ about 140,000 people.

**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 and 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 the 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 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. ABB Ltd shares are currently listed on the SIX Swiss Exchange, the NASDAQ OMX Stockholm 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 across 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, with five divisions: Discrete Automation and Motion, Low Voltage Products, Process Automation, Power Products, and Power Systems. For a breakdown of our consolidated revenues (i) by operating division and (ii) 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 12040 Regency Parkway, Suite 200, Cary, North Carolina 27518.

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**BUSINESS DIVISIONS**

**Industry background**

As a global leader in power and automation, we serve utilities, industry, and transport and infrastructure customers through our five divisions. The markets and our divisions are discussed in more detail below. Revenue figures presented in this Business Divisions section are before interdivisional eliminations.

*Utilities Market*

We serve the utilities market with products, systems and services designed primarily to deliver electricity. Electricity is generated in power stations of various types, including thermal, wind, solar and hydro plants and is then fed into an electricity grid through which it is transmitted and distributed to consumers. Transmission systems link power generation sources to distribution systems, often over long distances. Distribution systems then branch out over shorter distances to carry electricity to end users. These electricity networks incorporate sophisticated devices to transmit electricity, control and monitor the power flow and ensure efficiency, reliability, quality and safety.

The primary demand driver in the utilities market is the growing need for reliable electricity supplies to support economic growth and address global environmental challenges. This is also driving increased demand for renewable energy and high-efficiency power systems and equipment. As new power sources and loads are added, there is a need for grids and power networks to become more flexible, reliable and smarter. Power quality, stability and security of supply become key priorities. Additional drivers vary by region. Capacity addition across the power value chain is the key market driver in emerging markets, mainly in Asia, the Middle East, South America and Africa. In North America, the focus is on upgrading and replacing aging infrastructure, improving grid reliability and enabling smarter power networks. In Europe, the focus is on upgrading the power infrastructure, integrating renewable energy sources such as wind power, and building interconnections to allow more efficient use of power.

*Industry Market*

We serve the industry market with a wide variety of automation products, systems and services designed primarily to increase industrial productivity and energy efficiency, deliver more reliable and efficient electrical power to industrial end users, and improved process and product quality in industrial and manufacturing processes. We serve industrial customers who mainly use process or discrete manufacturing processes. Process automation refers to measurement, control, electrification and other applications used in processes where the main objective is continuous production, such as in the oil and gas, power, chemicals, mining, metals, and pulp and paper industries. Discrete automation refers to operations that manufacture individual items, such as automotive, consumer electronics and food and beverage. In addition, we offer power solutions to ensure that electricity is delivered within the plant safely, with low losses and at optimal quality and reliability levels.

The primary demand drivers in the industry market include the need by our customers to reduce energy and raw material costs, improve product and process quality, increase process and manufacturing safety, lower their environmental impacts and improve the management of large assets such as manufacturing plants. There are additional regional demand drivers. In North America, for example, the emergence of shale gas and shale oil as economically viable fuel sources and feedstock for the petrochemical industry is creating more demand both for oil and gas processing as well as encouraging general industrial investments to take advantage of lower energy input costs. Development of the largely untapped natural resources base in Africa combined with the ambitions of many African countries to expand economic growth through industrial diversification is another regional demand driver in our industry market. A further example is the shift in policy in China to promote more

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efficient and cleaner industrial production, which increases demand for our industrial automation solutions.

*Transport and Infrastructure Market*

We serve the transport and infrastructure market with products, systems and services designed primarily to increase energy efficiency, thereby reducing our customers' operating costs and environmental impact. Our primary transport markets are the marine, rail and electrical vehicle markets. Our solutions ensure that electrical power is delivered and used efficiently in, for example, liquefied natural gas vessels, offshore oil and gas production vessels, cruise ships, conventional and high-speed electrical locomotives, electrically-powered urban transit systems and electric cars and buses. Our infrastructure market includes the building industry, especially building automation where we offer products and applications aimed at improving the energy efficiency of buildings through automated control of indoor climate, lighting and security. Data centers that require large amounts of electrical power delivered at extremely high reliability levels is another important infrastructure market.

The primary demand drivers in the transport and infrastructure market are increasing urbanization, the need for increased energy efficiency to reduce costs and lower environmental impacts, the rise in demand for electrically-powered forms of transportation, and the need for reliable and high-quality power delivery to commercial buildings.

**Discrete Automation and Motion Division**

*Overview*

The Discrete Automation and Motion division offers a wide range of products and services including variable-speed drives, motion control solutions, motors, generators, power electronics systems, rectifiers, power quality and power protection products, mechanical power transmission of rotating equipment, traction converters, solar inverters, wind turbine converters, electric vehicle charging infrastructure, programmable logic controllers (PLCs), and industrial robots. These products help customers to improve productivity, quality, and energy efficiency, and generate energy. Key applications include energy conversion, data processing, actuation, automation, standardized manufacturing cells for applications such as machine tending, welding, cutting, painting, finishing, picking, packing and palletizing, and engineered systems for the automotive industry. The majority of these applications are for industrial applications including discrete manufacturing, process automation and hybrid or batch manufacturing, with others provided for infrastructure and buildings, transportation, and utilities. The division also provides a full range of life-cycle services, from product and system maintenance to application design, including energy efficiency appraisals, preventive maintenance and remote monitoring services.

Revenues are generated both from direct sales to end users as well as from indirect sales through distributors, machine builders and OEMs (original equipment manufacturers), system integrators, and panel builders.

The Discrete Automation and Motion division had approximately 31,100 employees as of December 31, 2014, and generated \$10.1 billion of revenues in 2014.

*Products and Services*

The Discrete Automation and Motion division provides low-voltage and medium-voltage drive products and systems for industrial, commercial and residential applications. Drives provide speed, torque and motion control for equipment such as fans, pumps, compressors, conveyors, centrifuges, mixers, hoists, cranes, extruders, printing and textile machines. They are used in industries such as building automation, marine, power, transportation, food and beverage, metals, mining, and oil and gas.

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The division also produces a range of power conversion products. These include static excitation and synchronizing systems that provide stability for power stations, uninterruptible power supply modular systems, as well as high power rectifiers that convert alternating current (AC) power to direct current (DC) power for very high-amperage applications such as furnaces in aluminum smelters. The division also manufactures solar inverters, wind turbine converters and converters for power protection. Rail traction converters, DC wayside power solutions and a range of solutions for the charging of electric vehicles are also part of the division's portfolio.

Discrete Automation and Motion supplies a comprehensive range of electrical motors and generators, including high-efficiency motors that conform to leading environmental and Minimum Energy Performance Standards (MEPS). Efficiency is an important selection criterion for customers, because electric motors account for nearly two-thirds of the electricity consumed by industrial plants. The Discrete Automation and Motion division manufactures synchronous motors for the most demanding applications and a full range of low- and high-voltage induction motors, for both IEC (International Electrotechnical Commission) and NEMA (National Electrical Manufacturers Association) standards.

The Discrete Automation and Motion division offers robots, controllers and software systems and services for the automotive manufacturers and their sub-suppliers as well as for general manufacturing industries, to improve product quality, productivity and consistency in manufacturing processes. Robots are also used in activities or environments which may be hazardous to employee health and safety, such as repetitive lifting, dusty, hot or cold rooms, or painting booths. In the automotive industry, the robot 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, food and beverage, chemicals and pharmaceuticals to consumer electronics, solar and wood. Typical general industry applications include welding, material handling, painting, picking, packing and palletizing.

The division also offers services that complement its products, including design and project management, engineering, installation, training and life-cycle care, energy efficiency appraisals and preventive maintenance.

*Customers*

The Discrete Automation and Motion division serves a wide range of customers. Customers include machinery manufacturers, process industries such as pulp and paper, oil and gas, and metals and mining companies, hybrid and batch manufacturers such as food and beverage companies, rail equipment manufacturers, discrete manufacturing companies such as '3C' (computer, communication and consumer electronic), utilities and renewable energy suppliers, particularly in the wind and solar sectors, as well as customers in the automotive industry and electric vehicle charging networks.

*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.

*Competition*

The Discrete Automation and Motion division's principal competitors vary by product line but include Alstom, Fanuc Robotics, Kuka Robot Group, Rockwell Automation, Schneider, Siemens, Yaskawa, SMA and WEG Industries.



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*Capital Expenditures*

The Discrete Automation and Motion division's capital expenditures for property, plant and equipment totaled \$192 million in 2014, compared to \$214 million and \$197 million in 2013 and in 2012, respectively. Principal investments in 2014 were primarily related to equipment replacement and upgrades. Geographically, in 2014, Europe represented 43 percent of the capital expenditures, followed by the Americas (35 percent), Asia (19 percent) and MEA (3 percent).

**Low Voltage Products Division**

*Overview*

The Low Voltage Products division helps customers to improve productivity, use energy efficiently and increase safety. The division offers a wide range of products and systems, with related services, that provide protection, control and measurement for electrical installations, enclosures, switchboards, electronics and electromechanical devices for industrial machines and plants. The main applications are in industry, building, infrastructure, rail and sustainable transportation, renewable energies and e-mobility applications.

The Low Voltage Products division had approximately 29,900 employees as of December 31, 2014, and generated \$7.5 billion of revenues in 2014.

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

*Products and Services*

The Low Voltage Products division offering covers a wide range of products and services including low-voltage switchgears, breakers, switches, control products, DIN-rail components, automation and distribution enclosures, wiring accessories and installation material for many kinds of applications.

The division offers solutions for restoring service rapidly in case of a fault and providing optimum protection of the electrical installation and people using such installation. The product offering ranges from miniature circuit breakers to high-capacity molded-case and air circuit breakers, and includes safety switches used for power distribution in factories and buildings, fuse gear systems for short circuit and overload protection as well as cabling and connection components.

The Low Voltage Products division also offers terminal blocks and printed circuit board connectors used by panel builders and OEMs to produce standard distribution and control panels as well as specialized applications in industries such as traction, energy, maritime, explosive atmospheres and electronics. In addition, the division offers a range of contactors, soft starters, starters, proximity sensors, safety products for industrial protection, limit switches and manual motor starters, along with electronic relays and overload relays.

The division provides smart home and intelligent building control systems, also known as KNX protocol, a complete system for all energy-reducing building application areas such as lighting and shutters, heating, ventilation, cooling and security. In addition, the division's IEC and NEMA compliant switchgear technology integrates intelligent motor and feeder control solutions to enhance protection, digital control, condition monitoring and plant-wide data access by process control systems, electrical control systems and other plant computers.

The Low Voltage Products division has also developed a range of products for new markets, such as those used by electric vehicles (e-mobility) and in photovoltaic, solar and wind applications. These include circuit breakers, energy meters, switch-disconnectors, residual current-operated circuit breakers, interface relays and other products designed for outdoor installation.

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The division also supplies a wide range of electrical components including conduits, boxes, covers, fittings, connectors, fasteners, wiring ducts, terminals, cable trays, struts, grounding, insulation, switchgear, metal framing, earthing & lightning protection and industrial lighting products for various types of application.

*Customers*

The Low Voltage Products division serves a wide range of customers, including residential and commercial building contractors, process industries, rail equipment manufacturers, manufacturing companies, utilities and renewable energy suppliers, particularly in the wind and solar sectors.

*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.

*Competition*

The Low Voltage Products division's principal competitors vary by product line but include Eaton Corporation, Legrand, Mitsubishi, Schneider, Siemens, Leviton and Rittal.

*Capital Expenditures*

The Low Voltage Products division's capital expenditures for property, plant and equipment totaled \$184 million in 2014, compared to \$204 million and \$208 million in 2013 and 2012, respectively. Investments in 2014 primarily related to equipment replacement and upgrades in recently acquired businesses. Geographically, in 2014, Europe represented 48 percent of the capital expenditures, followed by the Americas (34 percent), Asia (16 percent) and MEA (2 percent).

**Process Automation Division**

*Overview*

The Process Automation division is a leading provider of fully-engineered solutions, products and services for process control, safety, instrumentation, plant electrification and energy management for the key process industry sectors of chemical, oil and gas, marine, mining, minerals, metals, cement, and pulp and paper. Each industry has certain unique business drivers, yet all share common requirements for operational productivity, safety, energy efficiency, minimized risk and environment compliance. The Process Automation division's core competencies are the applications of automation and electrification technologies to address these generic requirements and are tailored to the characteristics of each of its key industries. Additionally, this business has a number of industry-specific services and anchor products (e.g. gearless mill drives, mine hoists, Azipods, turbochargers) that differentiate the business from its competitors. These products make ABB more relevant to its customers in these industries and represent significant components of a larger automation and electrification scope. The division is organized around industry systems, product businesses and life cycle services. The division had approximately 23,100 employees as of December 31, 2014, and generated revenues of \$7.9 billion in 2014.

The Process Automation division offering is made available as separately sold products or as part of a total electrification, instrumentation and/or automation system. The division's technologies are sold both through direct sales forces and third-party channels.

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*Products and Services*

The Process Automation division offers standalone products, engineered systems and services for process control and measurement, safety, plant electrification, information management, assets management and industry-specific applications for a variety of industries, primarily pulp and paper, metals, minerals and mining, chemical, oil and gas, marine, pharmaceuticals and the power industry. Some of the Discrete Automation and Motion, Power Systems, Power Products and Low Voltage Products divisions' products are integrated into the process control and electrification systems offered by the Process Automation division.

Our automation systems are used in applications such as continuous and batch control, asset optimization, energy management and safety. They are the hubs that link instrumentation, measurement devices and systems for control and supervision of industrial processes 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.

A key element of this division's product offering is its System 800xA process automation platform. This product 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 approximately the past 25 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, 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 also offers a full line of instrumentation and analytical products to analyze, measure and record industrial and power processes.

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, cement and mining 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 solutions for onshore and offshore production and exploration, refining, and petrochemical processes, and oil and gas transportation and distribution. In the pharmaceuticals and fine chemicals areas, we offer applications to support manufacturing, packaging, quality control and compliance with regulatory agencies.

In the marine industry, 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 and automation systems for marine power generation, power distribution and diesel electric propulsion, as well as turbochargers to improve efficiency for diesel and gasoline engines.

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We also offer a complete range of lifecycle services across all of our customer segments to help customers optimize their assets. Demand for our process automation services is increasing as our customers seek to increase productivity by improving the performance of existing equipment.

*Customers*

The Process Automation division's end customers are primarily companies in the oil and gas, minerals and mining, metals, pulp and paper, chemicals and pharmaceuticals, and the marine industries. Customers for this division are looking for complete instrumentation, automation and electrification solutions which demonstrate value mainly in the areas of lower capital costs, increased plant availability, lower lifecycle costs and reduced project costs.

*Sales and Marketing*

The Process Automation division uses a direct sales force 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. Competitors include Emerson, Honeywell, Metso Automation, Rockwell Automation, Schneider, Siemens, Voith, and Yokogawa Electric Corporation.

*Capital Expenditures*

The Process Automation division's capital expenditures for property, plant and equipment totaled \$49 million in 2014, compared to \$68 million and \$91 million in 2013 and 2012, respectively. Principal investments in 2014 were in the measurement products and turbocharging businesses. Geographically, in 2014, Europe represented 66 percent of the capital expenditures, followed by the Americas (16 percent), Asia (14 percent) and MEA (4 percent).

**Power Products Division**

*Overview*

The Power Products division primarily serves electric, gas and water utilities as well as industrial and commercial customers, with a vast portfolio of products and services across a wide voltage range to facilitate power generation, transmission and distribution. Direct sales account for a significant part of the division's total revenues, and external channel partners, such as wholesalers, distributors and OEMs, account for the rest. Key technologies include high- and medium-voltage switchgear, circuit breakers for a range of current ratings and voltage levels, power, distribution, traction and other special transformers, as well as products to help control and protect electrical networks. The division had approximately 35,400 employees as of December 31, 2014, and generated \$10.3 billion of revenues in 2014.

*Products and Services*

The Power Products division manufactures products that can be placed in three broad categories: high-voltage products, medium-voltage products and transformers. The division sells directly to end customers and also through channels such as distributors, wholesalers, installers and OEMs. Some of the division's products are also integrated into the turnkey offerings of systems divisions such as Power Systems and Process Automation or sold through engineering, procurement and construction (EPC) firms.

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The high-voltage products business supplies high-voltage equipment, ranging from 50 to 1,200 kilovolts, mainly to power transmission utilities and also serves industrial customers. This equipment primarily enables the transmission grid to operate more reliably and efficiently with minimum environmental impact. As part of its portfolio, this business designs and manufactures a range of air-, gas-insulated and hybrid switchgear, generator circuit breakers, capacitors, high-voltage circuit breakers, surge arresters, instrument transformers, cable accessories and a variety of high-voltage components. This is supported by a range of service solutions to support the products throughout their life cycle.

The medium-voltage business offers products and services that largely serve the power distribution sector, often providing the link between high-voltage transmission systems and low-voltage users. Medium-voltage products help utility and industrial customers to improve power quality and control, reduce outage time and enhance operational reliability and efficiency. This business reaches customers directly and through channels such as distributors and OEMs. Its comprehensive offering includes medium-voltage equipment (1 to 50 kilovolts), indoor and outdoor circuit breakers, reclosers, fuses, contactors, relays, instrument transformers, sensors, motor control centers, ring main units for primary and secondary distribution, as well as a range of air- and gas-insulated switchgear. It also produces indoor and outdoor modular systems and other solutions to facilitate efficient and reliable power distribution.

The transformers business of the division designs and manufactures power transformers (72.5 to 1,200 kilovolts) for utility and industrial customers that help to step up or step down voltage levels and include special applications such as high voltage direct current (HVDC) transformers or phase shifters. This business also supplies transformer components and insulation material, such as bushings and tap changers. It also manufactures a wide range of distribution transformers (up to 72.5 kilovolts) for use in the power distribution sector, industrial facilities and commercial buildings. These transformers are designed to step down electrical voltage bringing it to consumption levels. They can be oil- or dry-type and, although oil-type transformers are more commonly used, demand for dry-type transformers is growing because they minimize fire hazards and are well-suited for applications such as office buildings, windmills, offshore drilling platforms, marine vessels and large industrial plants. Another part of the offering includes traction transformers for use in electric locomotives, special application transformers, as well as a wide range of service and retrofit solutions for utilities and industry customers.

*Customers*

The Power Products division serves electric utilities, owners and operators of power generating plants and power transmission and distribution networks. It also serves industries across the spectrum. Customers include electric, gas, water and other utilities, as well as industrial and commercial customers.

*Sales and Marketing*

The Power Products division sells its products individually and as part of wider solutions through our systems divisions. Direct sales account for a significant part of the division's business and the rest are sold through external channel partners, such as wholesalers, distributors, system integrators, EPCs and OEMs. As the Power Products and Power Systems divisions share many of the same customers and technologies and are influenced by similar market drivers, they also have a common front-end sales organization to maximize market synergies and coverage across countries, regions, and sectors for the entire power portfolio.

*Competition*

On a global basis, the main competitors for the Power Products division are Siemens, Alstom and Schneider. The division also faces global competition in some product categories from competitors in

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emerging markets. It also competes in specific geographies with companies such as Eaton Corporation, Hyundai, Hyosung, Crompton Greaves, Larsen & Toubro and Bharat Heavy Electricals.

*Capital Expenditures*

The Power Products division's capital expenditures for property, plant and equipment totaled \$220 million in 2014, compared to \$252 million and \$259 million in 2013 and 2012, respectively. Principal investments in 2014 related to upgrades and expansion of existing facilities in Sweden, China, United States, Germany and Czech Republic as well as a new factory in Saudi Arabia. Geographically, in 2014, Europe represented 58 percent of the division's capital expenditures, followed by the Americas (19 percent), Asia (17 percent) and MEA (6 percent).

**Power Systems Division**

*Overview*

The Power Systems division serves public and private utilities, as well as industrial and commercial customers with solutions for power and water plants, grid integration and automation as well as a complete range of systems and services for the generation, transmission and distribution of electricity. Turnkey solutions include power plant electrification and automation, bulk power transmission, substations and network management. The division had approximately 18,900 employees as of December 31, 2014, and generated \$7.0 billion of revenues in 2014.

*Products and Services*

The Power Systems division delivers solutions through four businesses: Power Generation, Grid Systems, Substations and Network Management. The scope of work in a typical turnkey contract includes design, system engineering, supply, installation, commissioning and testing of the system. As part of the business model, the Power Systems division integrates products from both the Power Products division and external suppliers, adding value through design, engineering and project management to deliver turnkey solutions.

The Power Generation business is a leading provider of integrated power and automation solutions for all types of power generation plants, including coal, gas, combined-cycle, waste-to-energy and a range of renewables including hydro, solar, wind and biomass. With an extensive offering that includes electrical balance of plant as well as instrumentation and control systems, ABB technologies help optimize performance, improve reliability, enhance efficiency and minimize environmental impact throughout the plant life cycle. The business also serves the water industry, including applications such as pumping stations and desalination plants.

As part of the Grid Systems business, ABB provides a comprehensive offering of AC and DC transmission systems, which help customers to reduce transmission losses, maximize efficiency and improve grid reliability. ABB pioneered HVDC technology nearly 60 years ago. HVDC technology is designed to reliably and efficiently transmit electrical power over long distances via overhead lines and underground or submarine cables with minimum losses. HVDC is also widely used for grid interconnections. HVDC Light®, a more compact form of ABB's classic HVDC technology, is ideal for linking offshore installations, such as wind farms or oil and gas platforms, to mainland grids and for interconnections, often via subsea links. The environmental benefits of HVDC Light®, include neutral electromagnetic fields, oil-free cables and compact converter stations.

ABB also offers a comprehensive range of land and submarine cables through its Grid Systems business, as well as accessories and services for a range of applications from medium- to high-voltage AC and DC systems. The portfolio includes high-performance XLPE (cross-linked polyethylene) insulated cables for high efficiency transmission systems at voltages up to 525 kilovolts. When it comes

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to transmission grid solutions, ABB manufactures its own power semiconductors, which is a key enabler for HVDC, flexible alternating current transmission systems (FACTS) and other technologies, serving a range of sectors including transportation and wind.

Substations are key installations in the power grid that facilitate the efficient transmission and distribution of electricity with minimal environmental impact. They perform the vital function of monitoring and controlling power flows, feeding power from generating stations into the grid and providing the link between transmission and distribution networks as well as end consumers. ABB has successfully delivered air- and gas-insulated substations in all kinds of environments, from deserts and mountains to offshore rigs and crowded city centers. ABB's substation offering spans a range of voltage levels up to 1,100 kilovolts, serving utility, industry and commercial customers as well as sectors such as railways, urban transportation and renewables.

FACTS technologies are also part of the Substations business offering. FACTS solutions help improve power quality and can significantly increase the capacity of existing AC transmission systems, by as much as 50 percent, while maintaining and improving system reliability. FACTS technologies also boost transmission efficiency, relieve bottlenecks and can be used for the safe integration of intermittent power sources, such as wind and solar, into the grid. By enhancing the capacity of existing transmission infrastructure, FACTS solutions can alleviate the need for capital investment, reducing the time, cost and environmental impact associated with the construction of new generating facilities and transmission lines. By improving efficiency, FACTS technologies help to deliver more power to consumers, reducing the need for more electricity generation, and improving power supply and quality. ABB is a global leader in the growing field of FACTS, and has delivered more than 800 such installations across the world.

ABB's Network Management business offers solutions to help manage power networks. The offering covers network management and utility communications solutions to monitor, control, operate and protect power systems. These solutions are designed to ensure the reliability of electricity supplies and enable real-time management of power plants, transmission grids, distribution networks and energy trading markets. The portfolio includes control and protection systems for power generation, transmission and distribution, supervisory control and data acquisition (SCADA) systems, as well as software solutions for central electricity markets and mixed utilities (electricity, district heating, gas and water). It also encompasses the substation automation offering, compliant with IEC 61850, the open communication standard, which provides a common framework for substation control and protection and facilitates interoperability across devices and systems. The Network Management portfolio also covers wireless and fixed communication systems for power, water and gas utilities. It includes 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.

Network management systems are key smart-grid enablers by providing automated power systems to incorporate and manage centralized and distributed power generation, intermittent sources of renewable energy, real-time pricing and load-management data. The Ventyx and Mincom acquisitions have made ABB a global leader in enterprise software and services for essential industries such as energy, mining, public infrastructure and transportation. These solutions bridge the gap between information technologies (IT) and operational technologies (OT), enabling clients to make faster, better-informed decisions in both daily operations and long-term planning strategies. Some of the world's largest private and public enterprises rely on such solutions to minimize risk, enhance operational and financial performance and execute the right strategies for the future.

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The Power Systems division also has a global footprint and installed base that helps drive the service business. The offering includes a range of services aimed at optimizing operations and reducing maintenance requirements across the value chain. These services range from support agreements and retrofits to spare parts, asset health, management, data analytics and training. The division also undertakes consulting activities such as energy efficiency studies for power plants and grids, analyses and design of new transmission and distribution systems as well as asset optimization based on technical, regulatory, economic and environmental considerations.

*Customers*

The Power Systems division's principal customers include public and private power generation utilities and companies, transmission and distribution utilities, owners and operators as well as industrial and commercial customers. Other customers include gas and water utilities including multi-utilities, which are involved in the transmission or distribution of more than one commodity.

*Sales and Marketing*

The Power Systems division promotes its offering primarily through a direct sales force of specialized sales engineering teams. Some sales are also handled through third-party channels, such as EPC firms, OEMs and system integrators. As the Power Products and Power Systems divisions share many of the same customers and technologies, and are influenced by similar market drivers, they also have a common front-end sales organization that helps maximize market synergies across countries and regions.

*Competition*

On a global basis, the Power Systems division faces competition mainly from Siemens and Alstom. Emerson, General Electric, Prysmian and Nexans are additional competitors in parts of the business. The division also sees emerging competitors in specific regions. The breadth of its portfolio, technology and innovation, a global footprint and a vast installed base, enable the division to maintain its leading position in the power sector.

*Capital Expenditures*

The Power Systems division's capital expenditures for property, plant and equipment totaled \$92 million in 2014, compared to \$101 million and \$194 million in 2013 and 2012, respectively. Principal investments in 2014 were related to capacity expansion as well as the replacement of existing equipment, particularly in Sweden. Geographically, in 2014, Europe represented 81 percent of the capital expenditures, followed by the Americas (10 percent), Asia (7 percent) and MEA (2 percent).

**Corporate and Other**

Corporate and Other includes headquarters, central research and development, our real estate activities, Group Treasury Operations and other minor business activities.

Corporate headquarters and stewardship activities include the operations of our corporate headquarters in Zurich, Switzerland, as well as corporate-related activities in various countries. These activities cover staff functions with group-wide responsibilities, such as accounting and financial reporting, corporate finance and taxes, planning and controlling, internal audit, legal and integrity, compliance, risk management and insurance, corporate communications, information systems, investor relations and human resources.

Corporate research and development primarily covers our research activities, as our development activities are organized under the five business divisions. We have two global research laboratories, one



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focused on power technologies and the other focused on automation technologies, which both work on technologies relevant to the future of our five business divisions. Each laboratory works on new and emerging technologies and collaborates with universities and other external partners to support our divisions in advancing relevant technologies and in developing cross-divisional technology platforms. We have corporate research centers in seven countries (the U.S., Sweden, Switzerland, Poland, China, Germany and India).

Corporate and Other had approximately 2,000 employees at December 31, 2014.

**CAPITAL EXPENDITURES**

Total capital expenditures for property, plant and equipment and intangible assets (excluding intangibles acquired through business combinations) amounted to \$1,026 million, \$1,106 million and \$1,293 million in 2014, 2013 and 2012, respectively. In 2014 and 2013, capital expenditures were 21 percent and 16 percent lower, respectively, than depreciation and amortization while in 2012 capital expenditures exceeded total depreciation and amortization expenses. This change, commencing in 2013, is due partly to a reduction in capital expenditures but also due to an increase in depreciation and amortization (including amortization of intangible assets acquired in acquisitions).

Capital expenditures in 2014 remained at a significant level in mature markets, reflecting the geographic distribution of our existing production facilities. Capital expenditures in Europe and North America in 2014 were driven primarily by upgrades and maintenance of existing production facilities, mainly in Sweden, the U.S., Germany and Switzerland. Capital expenditures in emerging markets were lower in 2014 compared to 2013, with expenditures being highest in China, Saudi Arabia, the Czech Republic and Poland. Capital expenditures in emerging markets were made primarily to increase production capacity by investment in new or expanded facilities. The share of emerging markets capital expenditures as a percentage of total capital expenditures in 2014, 2013 and 2012 was 29 percent, 33 percent and 31 percent, respectively.

At December 31, 2014, construction in progress for property, plant and equipment was \$653 million, mainly in Sweden, the U.S., Switzerland, Saudi Arabia and China, while at December 31, 2013 and 2012, construction in progress for property, plant and equipment was \$645 million and \$627 million, respectively, mainly in Sweden, the U.S., Switzerland, Germany and Brazil.

Our capital expenditures relate primarily to property, plant and equipment. For 2015, we estimate the expenditures for property, plant and equipment will be higher than our annual depreciation charge.

**SUPPLIES AND RAW MATERIALS**

We purchase a variety of raw materials and products which contain raw materials for use in our production and project execution processes. The primary materials used in our products, by weight, are copper, aluminum, carbon steel, mineral oil and various plastics. We also purchase a wide variety of fabricated products and electronic components. We operate a worldwide supply chain management network with employees dedicated to this function in our businesses and key countries. Our supply chain management network consists of a number of teams, each focusing on different product categories. These category teams, on global, divisional and/or regional level, take advantage of opportunities to leverage the scale of ABB and to optimize the efficiency of our supply networks, in a sustainable manner.

Our supply chain management organization's activities have continued to expand in recent years, to:

pool and leverage procurement of materials and services,

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provide transparency of ABB's global spending through a comprehensive performance and reporting system linked to all of our enterprise resource planning (ERP) systems,

strengthen ABB's supply chain network by implementing an effective product category management structure and extensive competency-based training, and

monitor and develop our supply base to ensure sustainability, both in terms of materials and processes used.

We buy many categories of products which contain steel, copper, aluminum, crude oil and other commodities. Continuing global economic growth in many emerging economies, coupled with the volatility in foreign currency exchange rates, has led to significant fluctuations in these raw material costs over the last few years. While we expect global commodity prices to remain highly volatile, some market volatility will be offset through the use of long-term contracts and global sourcing.

We seek to mitigate the majority of our exposure to commodity price risk by entering into hedges. For example, we manage copper and aluminum price risk using principally swap contracts based on prices for these commodities quoted on leading exchanges. ABB's hedging policy is designed to safeguard margins by minimizing price volatility and providing a stable cost base during order execution. 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 (through price escalation clauses).

Overall, during 2014 supply chain management personnel in our businesses, and in the countries in which we operate, along with the global category teams, continued to focus on value chain optimization efforts in all areas, while maintaining and improving quality and delivery performance.

In August 2012, the United States Securities and Exchange Commission (SEC) issued its final rules regarding "Conflict Minerals", as required by section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. We initiated conflict minerals processes in 2013 and we continue to work with our suppliers and customers, to enable us to comply with the rules and disclosure obligations. Further information on ABB's Conflict Minerals policy and supplier requirements can be found under "Material Compliance" at [new.abb.com/about/supplying](http://new.abb.com/about/supplying)

## **PATENTS AND TRADEMARKS**

As a technology-driven company, we believe that intellectual property rights are crucial to protect the assets of our business. Over the past ten years, we have substantially increased the number of first patent filings, and we intend to continue our aggressive approach to seeking patent protection. Currently, we have more than 25,500 patent applications and registrations, of which more than 8,000 are pending applications. In addition to these patents, we have more than 3,000 utility model and design applications and registrations, of which approximately 500 are pending applications. In 2014, we filed about 1,000 patent, utility model and design applications for approximately 1,600 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 our intellectual property rights to safeguard the reputation associated with the ABB technology and brand. While these intellectual property rights are fundamental to all of our businesses, there is no dependency of the business on any single patent, utility model or design application.

## **SUSTAINABILITY ACTIVITIES**

Sustainability management is one of our highest business priorities. We seek to address sustainability issues in all our business operations in order to improve our social, safety and

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environmental performance continuously, and to enhance the quality of life in the communities and countries where we operate.

Our social and environmental efforts include:

regularly implementing sustainability objectives covering all relevant parts of our operations,

joining initiatives that foster economic, environmental, social and educational development, and strengthen observance of human rights in business practice,

making positive contributions in the communities where we operate so they welcome us and consider ABB a good neighbor, 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 key business decision-making processes, and to projects,

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 and safety training to our business partners,

ensuring that our operations and processes comply with applicable environmental and health and safety standards and social legislation. Specifically, every operating unit must implement an environmental management system that seeks to continuously improve its environmental performance and a health and safety management system that similarly seeks to continuously improve health and safety performance,

ensuring that our social, health and safety and environmental policies are communicated and implemented,

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

ensuring that suppliers have sustainability policies and systems that are comparable with our own, and

continuing our program to decontaminate sites that were polluted by historical manufacturing processes.

To manage environmental aspects of our own operations, we have implemented environmental management systems according to the ISO 14001 standard at our manufacturing and service sites. For non-manufacturing sites we have implemented an adapted environmental management system in order to ensure management of environmental aspects and continual improvement of performance. Globally, we have achieved external certification for environmental management systems at 390 sites and offices.

We have Environmental Product Declarations to communicate the environmental performance of our core products. These describe the significant 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. Approximately 80 declarations for major product lines are published on our Web site ([www.abb.com](http://www.abb.com)), some of which have been externally certified by agencies such as DNV (Det Norske Veritas) of Norway and the RINA Management System Certification Society in Italy.



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In 2014, approximately 93 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 operations of companies acquired during 2014 are not yet covered by our environmental reporting. We expect that this reporting will be implemented in 2015. The remaining parts of our business that are not yet covered by our environmental reporting system, mainly sales, have very limited environmental exposure. A total of 10 environmental incidents were reported in 2014, none of which had a material environmental impact.

In 2014, approximately 98 percent of employees were covered by confirmed data gathered through ABB's formal social reporting system that is verified by an independent verification body. The operations of companies acquired during 2014 are not yet covered by our social reporting. We expect that this reporting will be implemented in 2015. The remaining parts of our business that are not yet covered by our social reporting system, mainly sales offices in countries where we do not perform manufacturing, have very limited social exposure.

**REGULATION**

Our operations are subject to numerous governmental laws and regulations including those governing antitrust and competition, corruption, 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 FCPA's anti-bribery 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. The convention obliges signatories to adopt national legislation that makes it a crime to bribe foreign public officials. Those countries which have adopted implementing legislation and have ratified the convention include the U.S. 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, antitrust laws 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."

The U.S. Iran Threat Reduction and Syria Human Rights Act of 2012 requires U.S. listed companies to disclose information relating to certain transactions with Iran. In December 2012, ABB completed or exited all of its then remaining business in Iran. This concluded a process which started with ABB's decision in November 2007 to wind down its business in that country.

**ORGANIZATIONAL STRUCTURE**

See "Item 6. Directors, Senior Management and Employees Group structure and shareholders Group structure" for a list of ABB's significant subsidiaries.

**DESCRIPTION OF PROPERTY**

As of December 31, 2014, we occupy real estate in around 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 the U.S., China, Sweden, Italy, Germany, Finland, Switzerland, India, Canada and Poland. We also own or lease other

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properties, including office buildings, warehouses, research and development facilities and sales offices in many countries. We own substantially 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 at December 31, 2014, was \$5,652 million, of which machinery and equipment represented \$2,553 million, land and buildings represented \$2,446 million and construction in progress represented \$653 million. We believe that our current facilities are in good condition and are adequate to meet the requirements of our present and foreseeable future operations.

**Item 4A. Unresolved Staff Comments**

Not applicable

**Item 5. Operating and Financial Review and Prospects**

**MANAGEMENT OVERVIEW**

During 2014, we continued to deliver power and automation solutions that help our utility, industry, and transport and infrastructure customers meet the challenges and opportunities of a rapidly-changing world. These include significant shifts in the electricity value chain, such as the growth in renewable power generation. Wind and solar power sources are often located far from the centers of power consumption, and they often increase the number of feed-in points into a grid, creating instability and increased grid complexity. Our high-efficiency power transmission and intelligent grid solutions help utilities address these challenges. For example, we won large orders for HVDC power transmission in the United Kingdom and Canada that will link remote renewable energy sources to existing grids. An ABB substation using compact gas-insulated switchgear will integrate power from a solar park in Dubai into the local grid. We also signed a partnership agreement with wind power company Vestas to deliver affordable and clean wind-diesel micro-grid power systems to remote communities in Africa.

Among the new opportunities facing our industrial customers is the possibility to interconnect people, processes, equipment and services, sometimes referred to as "Industry 4.0" or "the Internet of Things". This trend is having profound impacts on many of our key end markets, such as oil and gas, mining, discrete automation and building automation, where the ability to monitor and control assets and processes in real time and across large geographic spaces is opening new opportunities to increase industrial productivity, reduce environmental impacts and improve the quality of work life for people. In 2014, we won an order from Brazilian mining company Vale to install electrical and automation systems at an iron ore mine to support their development of a sustainable "mine of the future" with truckless transport systems powered through intelligent digital substations. We were also awarded a large contract from Statoil of Norway for telecommunications systems used to remotely monitor and control offshore oil and gas platforms. We also continued to roll out internet-based remote monitoring, preventive maintenance and service solutions for robotics applications, power equipment diagnostics and the control of underground mining ventilation using mobile devices.

Market conditions were mixed in 2014.

Utility customers remained cautious in their capital expenditures in the face of macroeconomic and policy uncertainties, especially in Europe. Nevertheless, several large power transmission projects were awarded during the year and many utilities continued to invest in their power distribution activities.

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Industrial demand varied by sector. Many industry customers took a more cautious approach to large capital expenditures in light of ongoing macroeconomic uncertainties. However, operational spending to maintain and improve the performance of existing assets remained generally stable. Demand from the oil and gas sector remained steady as continuing high oil prices supported customer investments through most of the year. The oil price declines seen late in the year resulted in some uncertainty around short-term capital investment trends, however. Mining and metals demand remained at low levels, mainly the result of overcapacity in the industry. General industry customers continued to invest in automation solutions to improve efficiency and productivity.

In the transport and infrastructure sectors, marine demand for specialty vessels continued to grow, mainly the result of demand for oil and gas-related vessels, such as offshore production vessels and liquefied natural gas ships. There was also a steady demand for high efficiency electrical rail equipment.

In this mixed environment, we combined our broad geographic and business scope with the successful execution of profitable growth initiatives across the company to increase orders received in every division except Low Voltage Products, where the disposal of businesses offset order increases in most of the division's other businesses. The Discrete Automation and Motion division achieved a record level of orders, more than \$10 billion, partly the result of growth initiatives to sell packaged industrial solutions that combine, for example, robots, motors and drives for packaging applications in general industry. The Process Automation division tapped growth opportunities in the marine, upstream oil and gas and pulp and paper sectors, which more than offset lower demand in mining. Low Voltage Products orders were supported by increased penetration of the U.S. market through the distribution channels of the Thomas & Betts acquisition it completed in 2012.

In 2014, we maintained the profitability of our Power Products division, despite the continued challenging market environment, through successful cost savings and productivity improvements as well as our ability to be more selective in the orders we take, thanks to our broad product and geographic scope. Our Power Systems division experienced continuing project execution issues which impacted profitability in 2014. We therefore launched a "step change" program to reduce the risk profile of the business and secure higher and more consistent returns. Under the program, we decided to discontinue our future participation in EPC projects in the solar power generation sector. We are also changing our business model in the offshore wind power sector to reduce execution risks and we are adjusting capacity in the business to reflect this repositioning. We continue to focus the ongoing business on projects with lower risk profiles and greater pull-through of our higher value-added content. Our strong positions in fast-growing emerging markets and selected mature markets, our flexible global production base and technological leadership, as well as the operational improvements we continue to make in our businesses, also supported our business in 2014.

Foremost among these improvements was the successful reduction of costs to adapt to changing demand. Savings in 2014 amounted to more than \$1 billion and were principally achieved by making better use of global sourcing opportunities and eliminating operational and process inefficiencies. We expanded our cost savings efforts in 2014 to take greater account of improvement opportunities in white-collar productivity, such as streamlining back-office and sales-support activities.

**Next Level strategy 2015-2020**

In September 2014, ABB laid the foundations to take the company to the next level, with a new strategy aimed at accelerating sustainable value creation to deliver attractive shareholder returns. The Next Level strategy is designed to build on ABB's strong position in attractive markets. The strategy builds on the three focus areas of profitable growth, relentless execution and business-led collaboration.

To achieve the next level, ABB is targeting profitable growth by shifting its center of gravity through strengthening competitiveness, higher organic growth and lowering risk. We intend to drive

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organic growth through the PIE concept (penetration, innovation, expansion), further increase competitiveness in areas such as technology, service and software, and reduce intrinsic business risks by, for example, aligning business models more closely with our core competencies. Organic growth will be complemented by incremental strategic acquisitions and partnerships.

Our second strategic focus area is relentless execution. We have been successful in executing our programs to reduce costs and improve customer service. We intend to broaden those efforts by developing a leading operating model across ABB, starting with the areas of white-collar productivity, net working capital management, and quality. For 2015, the completion of the Power Systems "step change" program will remain a high priority. Major Group-wide change management will be implemented through 1,000-day programs that drive and coordinate change across all businesses and regions. The strategic objectives and targets have been explicitly linked to a new performance management and compensation model.

Our third focus area is aimed at simplifying how the organization works together and at achieving a more market-focused organization. To achieve this, as of January 1, 2015, we have streamlined our regional organization reducing the number of regions from eight to three with regional management on the Executive Committee to bring us closer to the market. At the same time, roles and responsibilities have been clarified including giving global business lines undiluted responsibility for their businesses and processes put in place to strengthen cross-business collaboration.

The Next Level strategy includes the following financial targets: ABB expects to grow operational earnings per share at a 10-15 percent compound annual growth rate and deliver attractive cash return on invested capital in the mid-teens over the period 2015-2020. It targets to grow revenues on a like-for-like basis on average 4-7 percent per year over six years, faster than forecasted GDP and market growth. Over the same time period, ABB plans to steadily increase its profitability, measured in Operational EBITA, within a bandwidth of 11-16 percent while targeting an average free cash flow conversion rate above 90 percent. The new financial targets took effect on January 1, 2015.

We have changed our profitability targets from Operational EBITDA to Operational EBITA. This new measure includes depreciation expense as well as amortization charges that are not related to intangibles recorded in acquisitions which were previously excluded under the Operational EBITDA measure. This change ensures that the costs of capital expenditures invested to drive organic growth will be reflected in the profitability measure on which our businesses are evaluated.

**Outlook**

The long-term demand outlook in our three major customer sectors utilities, industry, and transport and infrastructure remains clearly positive. Key drivers are the big shift in the electricity value chain, industrial productivity improvements and Industry 4.0, as well as rapid urbanization and the need for energy efficiency in transport and infrastructure.

We are well-positioned to tap these opportunities for long-term profitable growth, with our strong market presence, broad geographic and business scope, technology leadership and financial strength.

In the short term, macroeconomic and geopolitical developments are signaling a mixed picture with increased uncertainty. Some macroeconomic signs in the U.S. remain positive and growth in China is expected to continue. At the same time, the market remains impacted by slow growth in Europe and geopolitical tensions in various parts of the world.

**Oil prices and foreign exchange effects**

Current oil prices will influence customer operating and capital expenditures along the oil and gas value chain, and influence spending by many other of our customer segments and government spending in different ways. Government spending on energy subsidies may be reallocated to other infrastructure



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development and certain customer segments will benefit from lower energy costs. However, the current oil price will have a dampening effect on the oil and gas value chain, mainly in the upstream sector.

Currency volatility has increased over the last 12 months, including the weakening of the Euro against the U.S. dollar and Swiss franc. Changes in foreign exchange rates have two effects on our financial results, translational and structural. Translational impacts result from converting local-currency financial information from ABB companies around the world into U.S. dollars at average exchange rates for the purpose of reporting results in U.S. dollars. If exchange rates stay around the current levels, we expect a negative translation effect in 2015.

Structural effects are related to the export of products and services from one currency zone into another. Our well-balanced local operations (including sourcing) in all key markets mean these structural effects have a limited impact. Further, our policy to actively hedge all significant foreign exchange exposures means these effects are largely mitigated in the short to medium term.

## **APPLICATION OF CRITICAL ACCOUNTING POLICIES**

### **General**

We prepare our Consolidated Financial Statements in accordance with U.S. GAAP and present these in U.S. dollars unless otherwise stated.

The preparation of our financial statements requires us to make assumptions and estimates 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: gross profit margins on long-term construction-type contracts; costs of product guarantees and warranties; provisions for bad debts; recoverability of inventories, investments, fixed assets, goodwill and other intangible assets; the fair values of assets and liabilities assumed in business combinations; income tax expenses and provisions related to uncertain tax positions; pensions and other postretirement benefit assumptions; and legal and other contingencies. Where appropriate, 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 our estimates and assumptions.

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 require us to make difficult and subjective judgments, often as a result of the need to make estimates regarding matters that are inherently uncertain. These policies should be considered when reading our Consolidated Financial Statements.

### **Revenue recognition**

We generally recognize revenues for the sale of goods when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable, and collectability is reasonably assured. With regards to the sale of products, delivery is not considered to have occurred, and therefore no revenues are recognized, until the customer has taken title to the products and assumed the risks and rewards of ownership of the products specified in the purchase order or sales agreement. Generally, the transfer of title and risks and rewards of ownership are governed by the contractually-defined shipping terms. We use various International Commercial shipping terms (as promulgated by the International Chamber of Commerce) such as Ex Works (EXW), Free Carrier (FCA) and Delivered Duty Paid (DDP). Subsequent to delivery of the products, we generally have no further contractual performance obligations that would preclude revenue recognition.

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Revenues under long-term construction-type contracts are generally recognized using the percentage-of-completion method of accounting. We use the cost-to-cost method to measure progress towards completion on contracts. Under this method, progress of contracts is measured by actual costs incurred in relation to management's best estimate of total estimated costs, which are reviewed and updated routinely for contracts in progress. The cumulative effect of any change in estimate is recorded in the period in which the change in estimate is determined.

The percentage-of-completion method of accounting involves the use of assumptions and projections, principally relating to future material, labor and project-related overhead costs. As a consequence, there is a risk that total contract costs will exceed those we originally estimated and the margin will decrease or the long-term construction-type contract may become unprofitable. This risk increases if the duration of a contract increases 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 us to incur additional costs to remedy,

changes in the cost of components, materials or labor,

difficulties in obtaining required governmental permits or approvals,

project modifications creating unanticipated costs,

suppliers' or subcontractors' failure to perform, 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 of each project. 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.

Short-term construction-type contracts, or long-term construction-type contracts for which reasonably dependable estimates cannot be made or for which inherent hazards make estimates difficult, are accounted for under the completed-contract method. Revenues under the completed-contract method are recognized upon substantial completion that is: acceptance by the customer, compliance with performance specifications demonstrated in a factory acceptance test or similar event.

For non construction-type contracts that contain customer acceptance provisions, revenue is deferred until customer acceptance occurs or we have demonstrated the customer-specified objective criteria have been met or the contractual acceptance period has lapsed.

Revenues from service transactions are recognized as services are performed. For long-term service contracts, revenues are recognized on a straight-line basis over the term of the contract or, if the performance pattern is other than straight-line, as the services are provided. Service revenues reflect revenues earned from our activities in providing services to customers primarily subsequent to the sale and delivery of a product or complete system. Such revenues consist of maintenance-type contracts, field service activities that include personnel and accompanying spare parts, and installation and commissioning of products as a stand-alone service or as part of a service contract.

Revenues for software license fees are recognized when persuasive evidence of a non-cancelable license agreement exists, delivery has occurred, the license fee is fixed or determinable, and collection is probable. In software arrangements that include rights to multiple software products and/or services,

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the total arrangement fee is allocated using the residual method, under which revenue is allocated to the undelivered elements based on vendor-specific objective evidence (VSOE) of fair value of such undelivered elements and the residual amounts of revenue are allocated to the delivered elements. Elements included in multiple element arrangements may consist of software licenses, maintenance (which includes customer support services and unspecified upgrades), hosting, and consulting services. VSOE is based on the price generally charged when an element is sold separately or, in the case of an element not yet sold separately, the price established by authorized management, if it is probable that the price, once established, will not change once the element is sold separately. If VSOE does not exist for an undelivered element, the total arrangement fee will be recognized as revenue over the life of the contract or upon delivery of the undelivered element.

We offer multiple element arrangements to meet our customers' needs. These arrangements may involve the delivery of multiple products and/or performance of services (such as installation and training) and the delivery and/or performance may occur at different points in time or over different periods of time. Deliverables of such multiple element arrangements are evaluated to determine the unit of accounting and if certain criteria are met, we allocate revenues to each unit of accounting based on its relative selling price. A hierarchy of selling prices is used to determine the selling price of each specific deliverable that includes VSOE (if available), third-party evidence (if VSOE is not available), or estimated selling price if neither of the first two is available. The estimated selling price reflects our best estimate of what the selling prices of elements would be if the elements were sold on a stand-alone basis. Revenue is allocated between the elements of an arrangement consideration at the inception of the arrangement. Such arrangements generally include industry-specific performance and termination provisions, such as in the event of substantial delays or non-delivery.

Revenues are reported net of customer rebates and similar incentives. Taxes assessed by a governmental authority that are directly imposed on revenue-producing transactions between us and our customers, such as sales, use, value-added and some excise taxes, are excluded from revenues.

These revenue recognition methods require the collectability 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 actual defaults will vary in number and amount from those originally estimated. As such, the amount of revenues recognized might exceed or fall below the amount 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, economic or political trends.

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

**Contingencies**

As more fully described in "Item 8. Financial Information - Legal Proceedings" and in "Note 15 Commitments and contingencies" to our Consolidated Financial Statements, we are subject to proceedings, litigation or threatened litigation and other claims and inquiries related to environmental, labor, product, regulatory, tax (other than income tax) 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 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.

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We record provisions for our contingent obligations when it is probable that a loss will be incurred and the amount can be reasonably estimated. Any such provision is generally recognized on an undiscounted basis using our best estimate of the amount of loss or at the lower end of an estimated range when a single best estimate is not determinable. In some cases, we may be able to recover a portion of the costs relating to these obligations from insurers or other third parties; however, we record such amounts only when it is probable that they will be collected.

We provide for anticipated costs for warranties when we recognize revenues on the related products or contracts. Warranty costs include calculated costs arising from imperfections in design, material and workmanship in our products. We generally make individual assessments on contracts with risks resulting from order-specific conditions or guarantees and assessments on an overall, statistical basis for similar products sold in larger quantities. 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.

We may have legal obligations to perform environmental clean-up activities related to land and buildings as a result of the normal operations of our business. In some cases, the timing or the method of settlement, or both are conditional upon a future event that may or may not be within our control, but the underlying obligation itself is unconditional and certain. We recognize a provision for these obligations when it is probable that a liability for the clean-up activity has been incurred and a reasonable estimate of its fair value can be made. In some cases, we may be able to recover a portion of the costs expected to be incurred to settle these matters. An asset is recorded when it is probable that we will collect such amounts. Provisions for environmental obligations are not discounted to their present value when the timing of payments cannot be reasonably estimated.

**Pension and other postretirement benefits**

As more fully described in "Note 17 Employee benefits" to our Consolidated Financial Statements, we have a number of defined benefit pension and other postretirement plans and recognize an asset for a plan's overfunded status or a liability for a plan's underfunded status in our Consolidated Balance Sheets. We measure such a plan's assets and obligations that determine its funded status as of the end of the year.

Significant differences between assumptions and actual experience, or significant changes in assumptions, may materially affect the pension obligations. The effects of actual results differing from assumptions and the changing of assumptions are included in net actuarial loss within "Accumulated other comprehensive loss".

We recognize actuarial gains and losses gradually over time. Any cumulative unrecognized actuarial gain or loss that exceeds 10 percent of the greater of the present value of the projected benefit obligation (PBO) and the fair value of plan assets is recognized in earnings over the expected average remaining working lives of the employees participating in the plan, or the expected average remaining lifetime of the inactive plan participants if the plan is comprised of all or almost all inactive participants. Otherwise, the actuarial gain or loss is not recognized in the Consolidated Income Statements.

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, mortality rates and expected return on plan assets. Under U.S. GAAP, we are required to consider current market conditions in making these assumptions. In particular, the discount rates are reviewed annually based on changes in long-term, highly-rated corporate bond yields. Decreases in the discount rates result in an increase in the PBO and in pension costs. Conversely, an increase in the discount rates results in a decrease in the PBO and in pension costs. The mortality assumptions are reviewed annually

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by management. Decreases in mortality rates result in an increase in the PBO and in pension costs. Conversely, an increase in mortality rates results in a decrease in the PBO and in pension costs.

Holding all other assumptions constant, a 0.25 percentage-point decrease in the discount rate would have increased the PBO related to our defined benefit pension plans by \$456 million, while a 0.25 percentage-point increase in the discount rate would have decreased the PBO related to our defined benefit pension plans by \$431 million.

The expected return on plan assets is reviewed regularly and considered for adjustment annually based upon the target 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. Holding all other assumptions constant, an increase or decrease of 0.25 percentage-points in the expected long-term rate of asset return would have decreased or increased, respectively, the net periodic benefit cost in 2014 by \$27 million.

The funded status, which can increase or decrease based on the performance of the financial markets or changes in our assumptions, does not represent a mandatory short-term cash obligation. Instead, the funded status of a defined benefit pension plan is the difference between the PBO and the fair value of the plan assets. At December 31, 2014, our defined benefit pension plans were \$1,890 million underfunded compared to an underfunding of \$1,133 million at December 31, 2013. Our other postretirement plans were underfunded by \$245 million and \$236 million at December 31, 2014 and 2013, respectively.

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 to be 8 percent per annum for 2015, gradually declining to 5 percent per annum by 2028 and to remain at that level thereafter.

**Income taxes**

In preparing our Consolidated Financial Statements, we are required to estimate income taxes in each of the jurisdictions in which we operate. Tax expense from continuing operations is reconciled from the weighted-average global tax rate (rather than from the Swiss domestic statutory tax rate) as the parent company of the ABB Group, ABB Ltd, is domiciled in Switzerland. Income which has been generated in jurisdictions outside of Switzerland (hereafter "foreign jurisdictions") and has already been subject to corporate income tax in those foreign jurisdictions is, to a large extent, tax exempt in Switzerland. Therefore, generally no or only limited Swiss income tax has to be provided for on the repatriated earnings of foreign subsidiaries. There is no requirement in Switzerland for a parent company of a group to file a tax return of the group determining domestic and foreign pre-tax income and as our consolidated income from continuing operations is predominantly earned outside of Switzerland, corporate income tax in foreign jurisdictions largely determines our global weighted-average tax rate.

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. Deferred tax assets and liabilities 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 more likely than not 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 "Income (loss) from discontinued operations, net of tax". Unforeseen changes in tax rates

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and tax laws, as well as differences in the projected taxable income as compared to the actual taxable income, may affect these estimates.

Certain countries levy withholding taxes, dividend distribution taxes or additional corporate income taxes (hereafter "withholding taxes") on dividend distributions. Such taxes cannot always be fully reclaimed by the shareholder, although they have to be declared and withheld by the subsidiary. Switzerland has concluded double taxation treaties with many countries in which we operate. These treaties either eliminate or reduce such withholding taxes on dividend distributions. It is our policy to distribute retained earnings of subsidiaries, insofar as such earnings are not permanently reinvested or no other reasons exist that would prevent the subsidiary from distributing them. No deferred tax liability is set up, if retained earnings are considered as permanently reinvested, and used for financing current operations as well as business growth through working capital and capital expenditure in those countries.

We operate in numerous tax jurisdictions and, as a result, are regularly subject to audit by tax authorities. We provide for tax contingencies whenever it is deemed more likely than not that a tax asset has been impaired or a tax liability has been incurred for events such as tax claims or changes in tax laws. Contingency provisions are recorded based on the technical merits of our filing position, considering the applicable tax laws and Organisation for Economic Co-operation and Development (OECD) guidelines and are based on our evaluations of the facts and circumstances as of the end of each reporting period. Changes in the facts and circumstances could result in a material change to the tax accruals. 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.

An estimated loss from a tax contingency must be accrued as a charge to income if it is more likely than not that a tax asset has been impaired or a tax liability has been incurred and the amount of the loss can be reasonably estimated. We apply a two-step approach to recognize and measure uncertainty in income taxes. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that 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 of being realized upon ultimate settlement. The required amount of provisions for contingencies of any type may change in the future due to new developments.

**Business combinations**

The amount of goodwill initially recognized in a business combination is based on the excess of the purchase price of the acquired company over the fair value of the assets acquired and liabilities assumed. The determination of these fair values requires us to make significant estimates and assumptions. For instance, when assumptions with respect to the timing and amount of future revenues and expenses associated with an asset are used to determine its fair value, but the actual timing and amount differ materially, the asset could become impaired. In some cases, particularly for large acquisitions, we may engage independent third-party appraisal firms to assist in determining the fair values.

Critical estimates in valuing certain intangible assets include but are not limited to: future expected cash flows of the acquired business, brand awareness, customer retention, technology obsolescence and discount rates.

In addition, uncertain tax positions and tax-related valuation allowances assumed in connection with a business combination are initially estimated at the acquisition date. We reevaluate these items quarterly, based upon facts and circumstances that existed at the acquisition date with any adjustments to our preliminary estimates being recorded to goodwill provided that we are within the twelve-month

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measurement period. Subsequent to the measurement period or our final determination of the tax allowance's or contingency's estimated value, whichever comes first, changes to these uncertain tax positions and tax-related valuation allowances will affect our provision for income taxes in our Consolidated Income Statements and could have a material impact on our results of operations and financial position. The fair values assigned to the intangible assets acquired are described in "Note 3 Acquisitions and business divestments" as well as "Note 11 Goodwill and other intangible assets", to our Consolidated Financial Statements.

**Goodwill and other intangible assets**

We review goodwill for impairment annually as of October 1, or more frequently if events or circumstances indicate the carrying value may not be recoverable. We use either a qualitative or quantitative assessment method for each reporting unit. The qualitative assessment involves determining, based on an evaluation of qualitative factors, whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, based on this qualitative assessment, it is determined to be more likely than not that the reporting unit's fair value is less than its carrying value, the two-step quantitative impairment test is performed. If we elect not to perform the qualitative assessment for a reporting unit, then we perform the two-step impairment test.

Our reporting units are the same as our business divisions for Discrete Automation and Motion, Low Voltage Products, Power Products and Power Systems. For the Process Automation division, we determined the reporting units to be one level below the division, as the different products produced or services provided by this division do not share sufficiently similar economic characteristics to permit testing of goodwill on a total division level.

When performing the qualitative assessment, we first determine, for a reporting unit, factors which would affect the fair value of the reporting unit including: (i) macroeconomic conditions related to the business, (ii) industry and market trends, and (iii) the overall future financial performance and future opportunities in the markets in which the business operates. We then consider how these factors would impact the most recent quantitative analysis of the reporting unit's fair value. Key assumptions in determining the value of the reporting unit include the projected level of business operations, the weighted-average cost of capital, the income tax rate and the terminal growth rate.

If, after performing the qualitative assessment, we conclude that events or circumstances have occurred which would indicate that it is more likely than not that the fair value of the reporting unit is less than its carrying value, or if we have elected not to perform a qualitative assessment, the two-step quantitative impairment test is performed. In the first step, we calculate the fair value of the reporting unit (using an income approach whereby the fair value is calculated based on the present value of future cash flows applying a discount rate that represents our weighted-average cost of capital) and compare it to the reporting unit's carrying value. Where 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. However, if the carrying value of the net assets assigned to the reporting unit is equal to or exceeds the reporting unit's fair value, we would perform the second step of the impairment test. In the second step, we would 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 were to exceed its implied fair value, then we would record an impairment loss equal to the difference. Any goodwill impairment losses would be recorded as a separate line item in the income statement in continuing operations, unless related to a discontinued operation, in which case the losses would be recorded in "Income (loss) from discontinued operations, net of tax".

In 2014, we performed the two-step quantitative impairment test for all of our reporting units to reflect new assumptions and forecasts resulting from our newly-developed strategic plan for the period 2015 to 2020. The quantitative test concluded that the estimated fair values for each of our reporting

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units exceeded their respective carrying values by at least 60 percent and as no reporting unit had a zero or negative carrying value, we concluded that none of the reporting units was "at risk" of failing the goodwill impairment test. Consequently, the second step of the impairment test was not performed.

The projected future cash flows used in the fair value calculation are based on approved business plans for the reporting units which cover a period of six years plus a calculated terminal value. The projected future cash flows require significant judgments and estimates involving variables such as future sales volumes, sales prices, awards of large orders, production and other operating costs, capital expenditures, net working capital requirements and other economic factors. The after-tax weighted-average cost of capital, currently 9 percent, is based on variables such as the risk-free rate derived from the yield of 10-year U.S. treasury bonds, as well as an ABB-specific risk premium. The terminal value growth rate is assumed to be 1 percent. The mid-term tax rate used in the test is currently 27 percent. We base our fair value estimates on assumptions we believe to be reasonable, but which are inherently uncertain. Consequently, actual future results may differ from those estimates.

We assess the reasonableness of the fair value calculations of our reporting units by reconciling the sum of the fair values for all our reporting units to our total market capitalization. The assumptions used in the fair value calculation are challenged each year (through the use of sensitivity analysis) to determine the impact on the fair value of the reporting units. Our sensitivity analysis in 2014 showed that, holding all other assumptions constant, a 1 percentage-point increase in the discount rate would have reduced the calculated fair value by approximately 11.6 percent, while a 1 percentage-point decrease in the terminal value growth rate would have reduced the calculated fair value by approximately 7.3 percent.

In 2013, we performed a qualitative assessment for all of our reporting units except for Power Systems where we elected to perform a quantitative test. Based on the qualitative assessments performed in 2013 and 2012 (when the qualitative assessment covered all our reporting units), we determined that it was not more likely than not that the fair value was below the carrying value for these reporting units, and as a result, concluded that it was not necessary to perform the two-step quantitative impairment test.

The quantitative test for Power Systems was undertaken in response to the low order intake in 2013. The calculated fair value of the Power Systems reporting unit on October 1, 2013, exceeded the reporting unit's carrying value by more than 50 percent and as the carrying value was not zero or negative, we concluded that Power Systems was not "at risk" of failing the goodwill impairment test. Consequently, the second step of the impairment test was not performed.

The projected future cash flows used in the fair value calculation for Power Systems in 2013, were based on an approved business plan for the reporting unit which covered a period of four years plus a calculated terminal value. The projected future cash flows required significant estimates and judgments involving variables such as future sales volumes, sales prices, awards of large orders, production and other operating costs, capital expenditures, net working capital requirements and other economic factors. The after-tax weighted-average cost of capital used (9 percent) was based on variables such as the risk-free rate derived from the yield of 10-year U.S. treasury bonds, as well as an ABB-specific risk premium. The terminal value growth rate was assumed to be 1 percent. The mid-term tax rate used in the test was 27 percent.

Intangible assets are reviewed for recoverability upon the occurrence of certain triggering events (such as a decision to divest a business or projected losses of an entity) or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We record impairment charges in "Other income (expense), net", in our Consolidated Income Statements, unless they relate to a discontinued operation, in which case the charges are recorded in "Income (loss) from discontinued operations, net of tax".



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**NEW ACCOUNTING PRONOUNCEMENTS**

For a description of accounting changes and recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our Consolidated Financial Statements, see "Note 2 Significant accounting policies" to our Consolidated Financial Statements.

**RESEARCH AND DEVELOPMENT**

Each year, we invest significantly in research and development. Our research and development focuses on developing and commercializing the technologies of our businesses that are of strategic importance to our future growth. In 2014, 2013 and 2012, we invested \$1,499 million, \$1,470 million and \$1,464 million, respectively, or approximately 3.8 percent, 3.5 percent and 3.7 percent, respectively, of our annual consolidated revenues on research and development activities. We also had expenditures of \$310 million, \$274 million and \$282 million, respectively, or approximately 0.8 percent, 0.7 percent and 0.7 percent, respectively, of our annual consolidated revenues in 2014, 2013 and 2012, 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 process 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 platforms for technology applications in our automation and power businesses in our research and development laboratories, 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: (i) to monitor and develop emerging technologies and create an innovative, sustainable technology base for ABB, (ii) to develop technology platforms that enable efficient product design for our power and automation customers, and (iii) to create the next generation of power and automation products and systems that we believe will be the engines of profitable growth.

Universities are 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 numerous university partnerships in the U.S., Europe and Asia, including long-term, strategic relationships with the Carnegie Mellon University, Massachusetts Institute of Technology, North Carolina State University, ETH Zurich, EPFL Lausanne, University of Zurich, Chalmers Technical University Gothenburg, Royal Institute of Technology (KTH) Stockholm, TU Dresden, TU Delft, 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.

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**ACQUISITIONS AND DIVESTMENTS**

**Acquisitions**

During 2014, 2013 and 2012, ABB paid \$58 million, \$897 million and \$3,643 million to purchase six, seven and nine businesses, respectively. The amounts exclude changes in cost- and equity-accounted companies.

There were no significant acquisitions in 2014 or 2013; the largest acquisition during this two-year period was Power-One, acquired in July 2013.

The principal acquisition in 2012 was Thomas & Betts, which was acquired in May 2012. Thomas & Betts designs, manufactures and markets components used to manage the connection, distribution, transmission and reliability of electrical power in industrial, construction and utility applications. The complementary combination of Thomas & Betts' electrical components and ABB's low-voltage protection, control and measurement products creates a broader low-voltage portfolio (in our Low Voltage Products division) that can be distributed through Thomas & Betts' network of more than 6,000 distributor locations and wholesalers in North America, and through ABB's well-established distribution channels in Europe and Asia.

**Divestments**

During 2014, ABB divested several businesses which were primarily its Full Service business, the Meyer Steel Structures business of Thomas & Betts, the heating, ventilation and air conditioning (HVAC) business of Thomas & Betts and the Power Solutions business of Power-One. Total cash proceeds from all business divestments during 2014 amounted to \$1,090 million, net of transaction costs and cash disposed.

There were no significant divestments in 2013 and 2012.

For more information on our divestments, see "Note 3 Acquisitions and business divestments" to our Consolidated Financial Statements.

**EXCHANGE RATES**

We report our financial results in U.S. dollars. Due to our global operations, a significant amount of our revenues, expenses, assets and liabilities are denominated in other currencies. As a consequence, movements in exchange rates between currencies may affect: (i) our profitability, (ii) the comparability of our results between periods, and (iii) the reported carrying value of our assets and liabilities.

We 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 relevant monthly average currency exchange rate.

Increases and decreases in the value of the USD against other currencies will affect the reported results of operations in our Consolidated Income Statements and the value of certain of our assets and liabilities in our Consolidated Balance Sheets, even if our results of operations or the value of those assets and liabilities have not changed in their original currency. As foreign exchange rates impact 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.

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While we operate globally and report our financial results in USD, exchange rate movements between the USD and both the EUR and the CHF are of particular importance to us due to (i) the location of our significant operations and (ii) our corporate headquarters being in Switzerland.

The exchange rates between the USD and the EUR and the USD and the CHF at December 31, 2014, 2013 and 2012, were as follows:

Exchange rates into \$	2014	2013	2012
EUR 1.00	1.22	1.38	1.32
CHF 1.00	1.01	1.12	1.09

The average exchange rates between the USD and the EUR and the USD and the CHF for the years ended December 31, 2014, 2013 and 2012, were as follows:

Exchange rates into \$	2014	2013	2012
EUR 1.00	1.33	1.33	1.29
CHF 1.00	1.09	1.08	1.07

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 transaction risk of our operations.

In 2014, approximately 81 percent of our consolidated revenues were reported in currencies other than the USD. The following percentages of consolidated revenues were reported in the following currencies:

Euro, approximately 20 percent,

Chinese renminbi, approximately 11 percent, and

Swedish krona, approximately 5 percent.

In 2014, approximately 79 percent of our cost of sales and selling, general and administrative expenses were reported in currencies other than the USD. The following percentages of consolidated cost of sales and selling, general and administrative expenses were reported in the following currencies:

Euro, approximately 19 percent,

Chinese renminbi, approximately 10 percent,

Swedish krona, approximately 5 percent, and

Canadian dollar, approximately 5 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 subsidiaries outside of the United States are reported in the currencies of the countries in which those subsidiaries are located. We refer to these currencies as "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, income from operations and other measures as reported in USD (as well as in local currencies). 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



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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, provide a more complete understanding of factors and trends affecting the business. As 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 encourage investors to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure.

## **ORDERS**

Our policy is to book and report an order when a binding contractual agreement has been concluded with a 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 and cancellations of orders.

The undiscounted value of revenues we expect to generate from our orders at any point in time is represented by our order backlog. Approximately 16 percent of the value of total orders we recorded in 2014 were "large orders," which we define as orders from third parties involving a value of at least \$15 million for products or services. Approximately 43 percent of the total value of large orders in 2014 were recorded by our Power Systems division and approximately 35 percent in our Process Automation division. The other divisions accounted for the remainder of the total large orders recorded during 2014. The remaining portion of total orders recorded in 2014 was "base orders," which we define as orders from third parties with a value of less than \$15 million for products or services.

The level of orders fluctuates from year to year. 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. Consequently, 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 and Operational EBITDA.

Operational EBITDA represents income from operations excluding depreciation and amortization, restructuring and restructuring-related expenses, gains and losses on sale of businesses, acquisition-related expenses and certain non-operational items, as well as foreign exchange/commodity timing differences in income from operations consisting of: (i) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (ii) realized gains and losses on derivatives

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where the underlying hedged transaction has not yet been realized, and (iii) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities).

From 2015, performance of our divisions will be primarily based on orders received, revenues and Operational EBITA.

Operational EBITA represents income from operations excluding amortization of intangibles acquired in business combinations, restructuring and restructuring-related expenses, gains and losses on sale of businesses, acquisition-related expenses and certain non-operational items, as well as foreign exchange/commodity timing differences in income from operations consisting of: (i) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (ii) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (iii) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities).

See "Note 23 Operating segment and geographic data" to our Consolidated Financial Statements for a reconciliation of the total consolidated Operational EBITDA to income from continuing operations before taxes.

**ANALYSIS OF RESULTS OF OPERATIONS**

Our consolidated results from operations were as follows:

<b>(\$ in millions, except per share data in \$)</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Orders	41,515	38,896	40,232
Order backlog at December 31,	24,900	26,046	29,298
Revenues	39,830	41,848	39,336
Cost of sales	(28,615)	(29,856)	(27,958)
<b>Gross profit</b>	<b>11,215</b>	<b>11,992</b>	<b>11,378</b>
Selling, general and administrative expenses	(6,067)	(6,094)	(5,756)
Non-order related research and development expenses	(1,499)	(1,470)	(1,464)
Other income (expense), net	529	(41)	(100)
<b>Income from operations</b>	<b>4,178</b>	<b>4,387</b>	<b>4,058</b>
Net interest and other finance expense	(282)	(321)	(220)
Provision for taxes	(1,202)	(1,122)	(1,030)
<b>Income from continuing operations, net of tax</b>	<b>2,694</b>	<b>2,944</b>	<b>2,808</b>
Income (loss) from discontinued operations, net of tax	24	(37)	4