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The Annual General Meeting of ASSA ABLOY AB

will be held at Ingenjörsvetenskapsakademien,
'Wallenbergsalen', Grev Turegatan 16, Stockholm,
at 3 p.m. on Wednesday May 3 2000.

Notice of attendance

at the Annual General Meeting

Shareholders wishing to attend the Meeting must:

- be recorded in the register of shareholders kept by Värdepapperscentralen VPC AB (Swedish Central Securities Depository and Clearing Organisation), no later than April 20* 2000 and:
- give notice of attendance to ASSA ABLOY AB, Box 70340, 107 23 Stockholm, tel. +46 8 50648500 by 4 p.m. on April 25 2000. Notification must include the shareholder's name, personal identity number (registration number), address and telephone number as well as information regarding the number of shares held.

Any shareholders whose shares are nominee-registered must also, in order to be entitled to take part in the Meeting, request a temporary entry in the register of shareholders kept by VPC. Shareholders must notify the nominee about this well before April 20* 2000, when this entry must have been effected.

*The formal date is April 23 2000. However, due to holidays, the actual printout of the register takes place on April 20 2000.

Financial information from ASSA ABLOY will be published as follows:

Interim reports:

January 1 – March 31: May 3 2000

January 1 – June 30: August 10 2000

January 1 – September 30: November 13 2000

Year-end report for 2000: February 7 2001

Annual report for 2000: March 2001

Annual reports and other reports may
be ordered from:

ASSA ABLOY AB, P.O. Box 70340,

SE-107 23 Stockholm, Sweden

Tel: +46 8 506 485 00. Fax: +46 8 506 485 85

www.assaabloy.se

The year 1999 in brief:

Continued strong growth in sales and earnings

| **Sales** amounted to SEK 10,277 M (8,582), an increase of 20 percent.

| **Organic growth** in comparable units in local currency amounted to 5 percent (6).

| **Income before tax** increased by 31 percent to SEK 981 M (748).

| **Earnings per share** increased by 26 percent to SEK 2.25 (1.78).

| **Operating cash flow** amounted to SEK 1,218 M (1,028), an increase of 18 percent.

| **Cash earnings per share** (CEPS) increased by 15 percent to SEK 4.38 (3.80).

| **Coordination and transfer of know-how** between units, facilitated through the benchmarking process, is providing the foundation for improved earnings and cash flow.

| **During the year** 11 companies were acquired, two in Sweden, two in France and one each in Australia, Canada, Denmark, Finland, Germany, Israel and Spain. The major acquisitions are:

- Lockwood, the leading lock manufacturer in Australia.
- effeff in Germany, the world's leading manufacturer of electric strikes.
- Mul-T-Lock, Israel's leading manufacturer of locks and high-security cylinders.

| **ASSA ABLOY** completed a share issue in July where SEK 1,985 M was raised, with a subscription rate of 99.8 percent.

ASSA ABLOY: growth profile

Stable organic growth

- | Trend towards higher security.
- | After-market sales more than half the volume.
- | Electromechanical products
 - cross sales – new markets.

Increasing margins

- | Improvements in each unit
 - benchmarking
 - transfer of know-how

Cash flow even stronger

- | Work flow and balance sheet rationalization.
- | Goodwill amortization.

Consolidation opportunities

– focus on earnings per share (EPS)

- | Fragmented industry – harmonization and R&D requirements lead to consolidation.
- | Strong cash flow funds acquisitions.

The President and CEO, Carl-Henric Svanberg:

Creating Group strength step by step

1999 was yet another eventful and important year for the ASSA ABLOY Group. Sales increased by 20 percent to SEK 10,277 M, income before taxes increased by 31 percent to SEK 981 M and earnings per share increased by 26 percent to SEK 2.25. Operating cash flow, a good measure of the strength of operations, amounted to SEK 1,218 M. Organic growth was good after a weak first quarter, and for the year in total amounted to 5 percent.

We have made 11 acquisitions, strengthening us in various areas. The acquisition of effeff in Germany has given us a world-leading position in electromechanical locking. Lockwood has provided us with a leading position in Australia and South East Asia.

Our strategy remains intact, i.e. to develop products and concepts focusing on the lock business in order to offer our customers continuously improved solutions to their security problems. This process of development is carried out in close cooperation with end-users and other decision makers in the market. In addition to our end customers, the police, the fire service and insurance companies are important partners in discussing requirements and creating products and systems that work properly in all situations.

Our business is based on stable organic growth that during the year amounted to five percent for the Group. The year started weakly but ended stronger. The first quarter appeared rather weak partly because of the comparison with the very strong start of 1998. It was also affected by a decrease in sales to Russia and VingCard's decreased sales in Asia due to a drop in new construction.

In addition, we continue to strengthen our position through acquisitions in different parts of the world, sharing knowledge and improving operations locally. We exploit synergies through common R&D and production of more global products, not least in the area of electromechanics, and through cross sales within the Group. In addition to the growth created in national operations, there are good growth opportunities for Group companies to expand their product portfolios by adding other Group products in their countries.

One of the year's most important events is the acquisition of effeff. Electromechanical locking is used for door control of access control systems of various kinds. With effeff manufacturing electric strikes, Abloy manufacturing motorized locks and Securitron producing magnetic locks, the Group now has a leading position in all areas of electromechanical locking. The growth rate for these products is closely tied to the growth of the access control business and is considerably higher than for more traditional lock products.

In Australia, Lockwood has developed better than expected since being acquired. The management has quickly taken advantage of experience and products in the other ASSA ABLOY companies, and we expect to reach our goal – of a four to five percent margin increase within four years – earlier than expected.

We continue to increase our margins through intensive benchmarking and the exploitation of synergies. Operating cash flow exceeds income before taxes for the sixth year in a row thanks to continuous focus on work flows and capital employed.

Looking at our various operations, the Finnish companies ended the year strongly. The year started weak since Finland in

particular was affected by the decreasing Russian sales, both directly and indirectly via Finnish entrepreneurs. However, a stronger home market combined with success on other export markets, particularly in the area of electromechanics, has contributed to an increase in sales during the year. The rate of increase towards the end of the year exceeded 20 percent.

The Scandinavian countries developed well. The Swedish and Danish units show stable growth and increasing margins. A new range of door closers has been successfully launched in Sweden. Two distributors have been acquired: Sloth & Co. in Denmark and AKI Låsgrossisten in Sweden. Both acquisitions give us the opportunity to approach our customers even more closely and to increase our quality of service. TrioVing of Norway had a weaker start in 1999, but sales picked up during the autumn as the Norwegian economy improved. The need for high-security locks is evident and the TrioVing Twin high-security cylinder, launched in 1998, already constitutes more than 25 percent of all new cylinder sales. Continued rationalizations during the year have proved successful and contribute to an increased profitability.

Our German company IKON shows stable development, and an increase in demand toward the end of the year was noticeable. A number of new products are about to be launched and growth is expected to increase this year. The acquisition of effeff has clearly improved our position. Both sales and earnings are improving better than expected. The integration work is going well including the coordination of various marketing and sales activities.

The French operation continues to develop well. The phase-out of non-profitable products has contributed to improved



margins but has consequently had a negative effect on sales. Our position has strengthened substantially through the acquisitions of Stremler, France's leading manufacturer of locks for aluminum and glass doors, and Fichet, the leading manufacturer of high-security cylinders.

The American units continue to show good growth and we estimate that we are gradually gaining market share. Rationalization is continuing and margins are increasing as a result. Securitron, manufacturer of magnetic locks, shows particularly good growth. In Canada, we have strengthened our position through organic growth as well as a few smaller acquisitions, and we achieved total sales of SEK 267 M. In Mexico, Scovill shows good development after a downturn in 1998 due to the turbulence in Latin America.

Growth in the new markets has been good and amounts to 26 percent. Poland, for example, has nearly doubled its sales. In Asia, Lockwood and ASSA ABLOY have merged to create the leading sales force in South East Asia. Sales in the region amount to SEK 200 M and China shows particularly good growth, with sales increased from SEK 8 M to SEK 25 M. We expect this growth to continue.

Finally, VingCard has had a mixed year. Sales in Europe are growing strongly as are Latin America and the marine segment, albeit from a low level. USA is experiencing a temporary slowdown after the last few years' extensive upgrading of hotel security, and Asia shows a clear downturn. The business in Asia is driven by new construction and there is presently an over-capacity in the hotel market as a

result of the crisis.

Apart from the important work of developing each individual market, a number of projects are in progress with the aim of developing our Group strength. Our Product Council is responsible for coordinating development within the electromechanical area that is quickly gaining in importance. Demands on security are continuously rising, but at the same time the lock products must be user-friendly enough to ensure proper use and to make emergency exiting easy. These three requirements of security, user-friendliness and safe emergency exiting are to some degree conflicting. Electronics and electromechanics create opportunities for more efficient solutions. Although the technology is the same throughout the world, it must be adjusted to local demands by cooperating closely with the customers. A good – and gratifying – example is that we have been entrusted by the US Department of Defense with the task of upgrading the lock security in the Pentagon.

Purchasing in the European and US companies is coordinated by the Purchasing Council and savings are substantial. Another important area is the development of IT solutions for interfaces with customers and suppliers. Here we can learn from each other's successes and mistakes and also create common solutions. Within the production itself, however, we believe in simpler IT systems and often manual solutions.

All in all, the locks business offers good opportunities for continued growth. The need for security is constantly increasing, and the business is currently experiencing a consolidation that creates further acquisition opportunities. All companies in the Group still have much to learn from each other and there is room for further improvement of margins. We therefore look forward to a continued exciting development for the Group.


Stockholm, February 2000
Carl-Henric Svanberg

Group development:

Statements of income

	1999 EUR M ¹⁾	1999 SEK M	1998 SEK M	1997 SEK M
Sales	1,171	10,277	8,582	6,968
Cost of goods sold	-716	-6,282	-5,463	-4,496
Gross income	455	3,995	3,119	2,472
Selling and administrative expenses	-298	-2,612	-2,018	-1,662
Operating income before goodwill amortization				
goodwill amortization	157	1,383	1,101	810
Goodwill amortization	-21	-189	-138	-103
Operating income	136	1,194	963	707
Net financial items	-26	-230	-228	-179
Share in earnings of associated companies	2	17	13	9
Income before tax	112	981	748	537
Tax	-32	-280	-212	-183
Minority interests	-2	-14	-10	-2
Net income	78	687	526	352

Sales by organizational unit ³⁾

	1999 EUR M ¹⁾	1999 SEK M	1998 SEK M	1997 SEK M
Scandinavia	202	1,777	1,701	1,660
Finland	102	898	811	744
Germany	71	621	583	533
France	179	1,576	1,504	844
United Kingdom	31	270	266	236
United States	424	3,721	2,916	2,402
Australia	68	590	-	-
New Markets	45	398	186	68
Hotel locks, VingCard/Timelox	110	965	952	794
Elimination for internal sales	-61	-539	-337	-313
Total	1,171	10,277	8,582	6,968

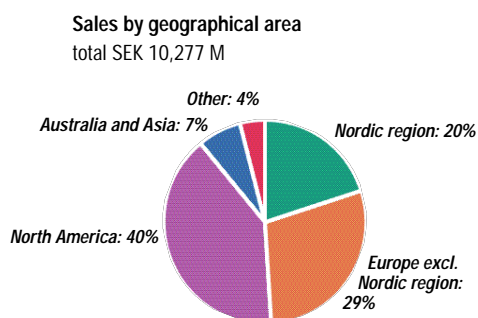
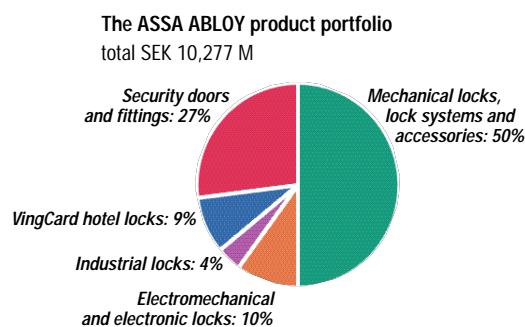
3) Including exports from each market.

Capital employed and financing

	1999 EUR M ²⁾	1999 SEK M	1998 SEK M	1997 SEK M
Capital employed	1,006	8,602	6,984	5,783
- of which goodwill	380	3,246	2,524	1,835
Net debt	351	2,998	4,237	3,442
Minority interests	31	267	32	24
Shareholders' equity	624	5,337	2,715	2,317

1) 1 EUR = 8.78 SEK.

2) 1 EUR = 8.55 SEK.



Sales by country ⁴⁾

	1999 EUR M ¹⁾	1999 SEK M	1998 SEK M	1997 SEK M
United States	437	3,835	3,198	2,652
France	162	1,419	1,309	735
Sweden	84	741	658	627
Australia	64	563	30	35
Finland	62	540	505	471
Germany	60	528	528	475
Norway	54	476	489	514
United Kingdom	39	340	316	273
Denmark	37	329	308	287
Canada	30	267	171	122
Czech Rep.	18	159	155	57
Belgium	17	147	134	95
Asia (excl. China, Hong Kong and Japan)	13	113	63	93
Spain	11	100	48	39
The Netherlands	10	89	80	68
Italy	8	68	52	40
China and Hong Kong	7	62	78	62
Poland	5	43	26	17
Africa	5	40	58	39
Middle East	5	40	38	34
Switzerland	4	36	35	28
Baltic countries	4	34	36	29
Japan	3	25	13	24
Russia	2	15	31	27
Other countries	30	268	223	125
Total	1,171	10,277	8,582	6,968

4) Sales to customers in each country.

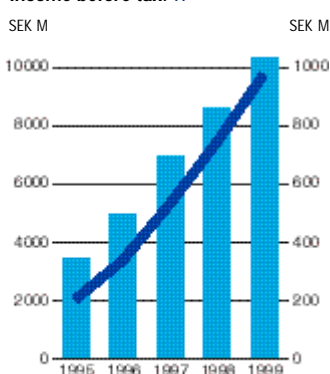
Key data

	1999	1998	1997	1996	1995
Sales, SEK M	10,277	8,582	6,968	4,958	3,457
Organic growth, %	5	6	8	8	8
Gross margin (EBITDA), %	18.1	18.5	16.8	14.6	12.6
Operating margin before goodwill amortization (EBITA), %	13.5	12.8	11.6	10.4	7.5
Operating margin (EBIT), %	11.6	11.2	10.1	9.3	7.2
Income before tax, SEK M	981	748	537	345	213
Profit margin (EBT), %	9.5	8.7	7.7	7.0	6.2
Operating cash flow, SEK M	1,218	1,028	796	481	411
Net capital expenditure, SEK M	391	316	260	163	187
Depreciation and amortization, SEK M	667	623	461	265	184
Total assets, SEK M	11,289	9,219	7,692	4,684	2,470
Shareholders' equity, SEK M	5,337	2,715	2,317	1,408	928
Net debt, SEK M	2,998	4,237	3,442	2,085	659
Capital employed, SEK M	8,602	6,984	5,783	3,503	1,596
Equity ratio, %	49.6	29.8	30.4	30.3	37.9
Interest coverage ratio, times	5.3	4.4	4.1	3.8	5.9
Net debt / equity ratio, times	0.56	1.56	1.49	1.48	0.71
Return on shareholders' equity, %	16.1	19.0	17.2	20.2	15.8
Return on capital employed before goodwill amortization, %	28.5	26.4	25.2	25.9	16.1
Return on capital employed, %	15.5	15.2	15.3	18.3	14.9
Earnings per share after tax and full conversion, SEK ¹⁾	2.25	1.78	1.24	0.94	0.57
Cash earnings per share after tax and full conversion, SEK ¹⁾	4.38	3.80	2.76	1.83	1.23
Shareholders' equity per share after full conversion, SEK ¹⁾	17.38	10.07	8.75	5.47	4.43
Number of shares, thousands	314,409	284,304	282,928	257,244	214,368
Number of shares after full conversion, thousands	324,200	295,448	295,448	265,396	221,684
Average number of employees	12,654	10,545	8,088	6,317	4,274

1) Comparative figures are adjusted for dilution related to new rights issue, with the adjustment factor 0.9784, and for the split

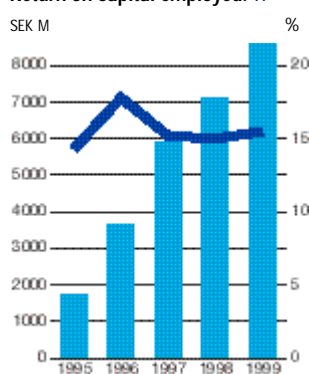
Sales: n

Income before tax: n



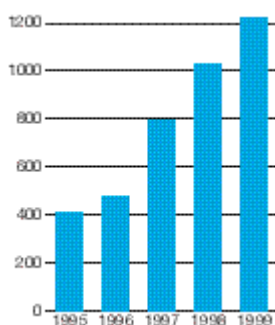
Capital employed: n

Return on capital employed: n



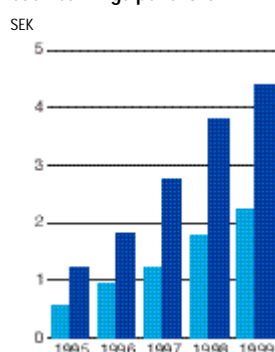
Operating cash flow

SEK M



Earnings per share: n

Cash earnings per share: n



Definitions

Organic growth: Change in sales for comparable units in local currency and adjusted for acquisitions.

Gross margin: Operating income before depreciation and amortization as a percentage of sales.

Operating margin before goodwill amortization:

Operating income before goodwill amortization as a percentage of sales.

Operating margin: Operating income as a percentage of sales.

Profit margin: Income before tax as a percentage of sales.

Operating cash flow: Based on the consolidated cash flow statement.

Net capital expenditure: Purchase of tangible fixed assets reduced by sale of tangible fixed assets.

Depreciation and amortization: Depreciation / amortization of tangible and intangible fixed assets.

Net debt: Interest-bearing liabilities less interest-bearing assets.

Capital employed: Total assets reduced by interest-bearing assets and non-interest-bearing liabilities including deferred tax liability.

Equity ratio: Shareholders' equity including minority interests as a percentage of total assets.

Interest coverage ratio: Income before tax plus interest net in relation to interest net.

Return on shareholders' equity:

Net income plus interest expense after tax regarding convertible debenture loan in relation to average shareholders' equity after full conversion.

Return on capital employed before goodwill

amortization: Income before tax plus interest net and goodwill amortization in relation to average capital employed excluding goodwill.

Return on capital employed: Income before tax plus interest net in relation to average capital employed.

Earnings per share after tax and full conversion:

Net income plus interest expenses after tax regarding convertible debenture loan in relation to weighted average number of shares after full conversion.

Cash earnings per share after tax and full

conversion: Net income plus interest expenses after tax regarding convertible debenture loan, plus depreciation, amortization and minority interests, minus share in earnings of associated companies and adjusted for change in deferred tax in relation to weighted average number of shares after full conversion.

Shareholders' equity per share after full

conversion: Shareholders' equity plus convertible debenture loan in relation to number of shares after full conversion.

The ASSA ABLOY share:

ASSA ABLOY AB has been listed on the Stockholm Stock Exchange since November 8 1994. In October 1995, the share was moved to the A list. The price of the ASSA ABLOY share rose by 58 percent in 1999. During the same period, the Stockholm Stock Exchange's general index rose by 66 percent. The closing price at year-end was SEK 119.5, corresponding to a market capitalization of SEK 37,572 M. Including all shares due for conversion, it is estimated that the market capitalization was SEK 38,742 M. The number of shareholders at year-end was approximately 12,400. Insti-

tutional investors, excluding the main shareholders, represent about 50 percent of the capital. Non-Swedish investors, including Metra Oyj Abp, account for 57 percent of the capital.

During the year, a total of 79 million shares were traded, corresponding to an average of approximately 314,461 shares for each trading day and corresponding to 25 percent of the shares outstanding.

Share capital

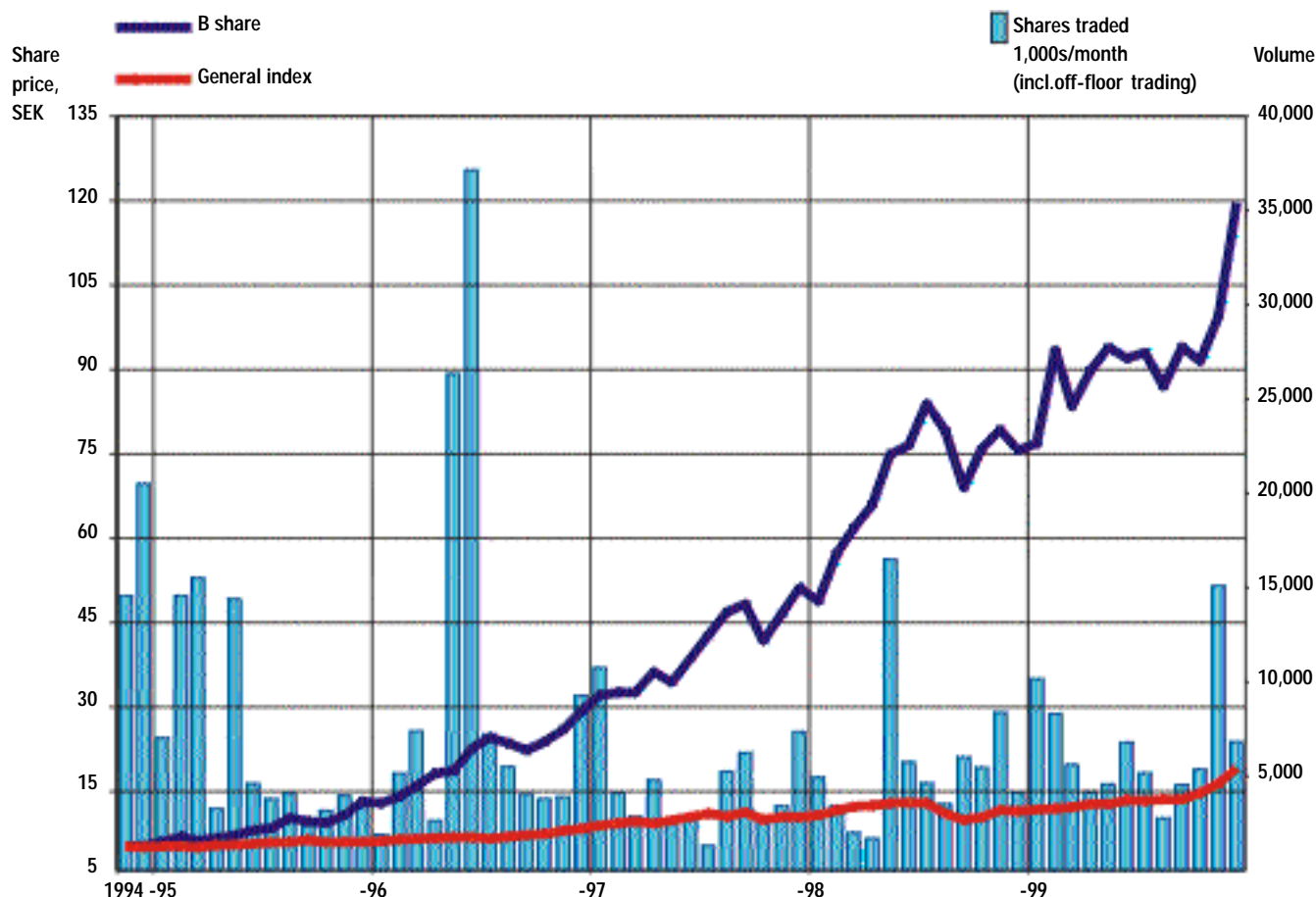
ASSA ABLOY's share capital at year-end amounted to SEK 314,408,642, distributed among 18,437,812 Series A shares and

295,970,830 Series B shares. All shares have a par value of SEK 1.00 and provide the holders with equal rights to the Company's assets and earnings. Each Series A share entitles a holder to 10 votes, while Series B shares provide one vote.

Convertible debentures for personnel

In 1995, convertible debentures were offered to employees in the ASSA ABLOY Group. About 400 employees participated in the first issue in 1995. The debenture loan amounted to SEK 75,004,375 and extends from June 29 1995, to June 30

ASSA ABLOY AB's share trend



2000. Conversion into Series B shares is in progress and rights may be exercised in the period from July 1 1998 to June 15 2000. During 1999, a request for the conversion of debt instruments with a par value of SEK 14,030,663 was submitted. The Swedish Patent and Registration Office has registered 700,334 of these shares. The exercise price is SEK 8.70. On full conversion there will be a total of 319,998,167 shares.

A second convertible debenture loan was issued during 1997. A total of 1,400 employees participated in this issue. This debenture loan amounts to SEK 250,000,000 and extends from December 8 1997 to December 2 2002. Conversion may be exercised for Series B shares from December 1 2000 to November 15 2002. The exercise price is SEK 59.50. On full conversion an additional 4,201,681 shares will be created.

Dividend and dividend policy

The Board of Directors and President propose that SEK 0.75 per share be paid as a dividend to shareholders for the 1999 financial year, corresponding to a direct return on the Series B share price at December 31 1999 of 0.6 percent. The aim is that, in the long term, the dividend should correspond to approximately one-third of ASSA ABLOY's average earnings after standard tax, but always taking into account ASSA ABLOY's long-term financial requirements.

Data per share¹⁾

SEK/share	1999	1998	1997	1996	1995	1994
Earnings after 28% standard tax	2.27	1.79	1.36	0.95	0.60	0.21
Earnings after full tax method	2.25	1.78	1.24	0.94	0.57	–
Dividend	0.75 ²⁾	0.61	0.44	0.30	0.22	–
Dividend, % ³⁾	33.0	34.1	32.2	31.6	36.7	–
Direct yield, % ⁴⁾	0.6	0.8	0.8	1.0	1.6	–
Share price at end of period	119.50	75.65	51.24	29.28	13.24	5.34
Highest share price	140.00	92.73	52.95	28.97	15.16	5.76
Lowest share price	73.21	48.07	28.69	12.38	5.23	4.48
Shareholders' equity	17.38	10.07	8.75	5.47	4.43	3.11
Number of shares (1000s) ⁵⁾	324,200	295,448	295,448	265,396	221,684	214,368

1) Adjusted for new issues.

2) Proposed dividend.

3) Dividend as percentage of earnings per share after 28% standard tax.

4) Dividend as percentage of the share price at the end of the period.

5) After full conversion.

Share capital

Year	Transaction	A shares	C shares	B shares	Share capital *SEK
1989			20,000		2,000,000
1994	100:1 split			2,000,000	2,000,000
1994	Bonus issue				
1994	Non-cash issue	1,746,005	1,428,550	50,417,555	53,592,110
1996	New share issue	2,095,206	1,714,260	60,501,066	64,310,532
1996	Conversion of C shares into A shares	3,809,466		60,501,066	64,310,532
1997	New share issue	4,190,412		66,541,706	70,732,118
1998	Converted debentures			343,865	71,075,983
1999	Converted debentures before split			293,991	71,369,974
1999	Bonus issue				
1999	Split 4:1	16,761,648		268,718,248	285,479,896
1999	New share issue	18,437,812		295,564,487	314,002,299
1999	Converted debentures after split and new rights issue			406,343	314,408,642
2000	Unconverted debentures			5,589,525	319,998,167
2002	Unconverted debentures			4,201,681	324,199,848

* SEK 1 per share – balanced number of shares.

Ownership structure

Data is based on the share register as of Dec.30 1999

Owner	A shares	B shares	Capital %	Voting rights %
Metra Oyj Abp	10,140,794	57,183,029	21.4	33.0
Säkl	6,845,018	880,000	2.5	14.4
Melker Schörling + family and companies	1,452,000	11,281,818	4.1	5.4
Janus Capital Corp.		26,782,738	8.5	5.6
Investment AB Latour		23,512,000	7.5	4.9
SPP		11,115,555	3.5	2.3
Roburs unit trusts		10,496,360	3.3	2.2
Nordbankens unit trusts		9,985,040	3.2	2.1
SEB unit trusts		8,276,150	2.6	1.7
SEB group of companies *		5,839,690	1.9	1.2
Other shareholders with more than 50,000 shares		114,333,889	36.3	23.8
Shareholders with 501-50,000 shares		14,852,572	4.7	3.1
Shareholders with up to 500 shares		1,431,989	0.5	0.3
Total number	18,437,812	295,970,830	100.0	100.0

* Within the SEB group of companies, SEB-Trygg Insurance holds 5,209,890 shares and SEB-stiftelsen 589,500 shares.

ASSA ABLOY and the lock industry:

A traditional and growing market

ASSA ABLOY is the largest lock company in the world, with projected sales exceeding SEK 13 billion in 2000. ASSA ABLOY's share of the still fragmented world market is 7-9 percent. The Group has its origins in the Nordic countries and holds market-leading positions there. The Group also has strong positions in continental Europe and North America. A market-leading position was also achieved in Australia and South East Asia through the acquisition of Lockwood in 1999. The Group has considerably strengthened its position in the area of electromechanical locking through the acquisition of effeff in Germany. Within the electromechanical area ASSA ABLOY holds a world-leading position in hotel security through its subsidiaries VingCard and Timelox.

Product segments where the Group is active are:

- | Mechanical locks, lock systems and accessories (including construction locking)
- | Electromechanical and electronic locks
- | Security doors and fittings (including door and window hardware)
- | Industrial locks (including automobile locks)
- | Hotel locks

ASSA ABLOY was created as a result of the spin-off of Assa to Securitas AB's shareholders in November 1994. Abloy was subsequently acquired from the Finnish company Metra Oy Ab through a new issue of shares. As a result Metra Oy Ab became the largest shareholder in ASSA ABLOY AB.

Market

The global lock market is fragmented and comprises many small and medium-size companies. Many of these have extremely strong positions in their local markets, with long histories and strong brands. This primarily applies to markets in Europe and North America. On the whole, established standards and strong local brands do not exist in other parts of the world. There are only a few multinational players, and their joint share of the world market is relatively small. It is estimated that total lock market sales are approximately SEK 150 to 200 billion, depending on how the market is defined.

Strong local brand names and standards, long product lives and the large number of installed locks make the lock market highly stable. Other factors are customized solutions, brand loyalty and manufacturers' proximity to national distributors and customers. In consequence, the retrofit market accounts for more than



50 percent of sales, which reduces dependence on cyclical new construction activities.

In general the present market conditions and distribution patterns are stable. However, Do-It-Yourself (DIY) retailers are gaining ground, especially in the residential segment. The growth of these modern means of distribution is fastest in new markets where traditional distribution has not been developed to the same extent.

E-commerce opens up new and exciting opportunities for more efficient business-to-business relationships based on interactive specification tools and order handling. It is also possible that direct distribution to residential customers through Internet sales may develop, although the wide range of products available, the security aspect and insurance requirements as well as the frequent need for skilled installation may limit the opportunities for growth.



The Pentagon in Washington, headquarters of the US Department of Defense, is undergoing a major overhaul and upgrade that will take some seven years to complete. ASSA Inc. has won the contract to supply the security needs of this prestigious building, which will require over 200,000 maximum high-security cylinders.

Competitive situation

The lock industry is fragmented globally but is in many countries well consolidated locally, with a limited number of competitors – often family-owned – in each market. In recent years, a structural transformation has been initiated in which larger corporate groups are formed. This transformation is partly driven by the growing proportion of global products and technologies, particularly in the electromechanical area. However, the large installed base and the long product lifetime create a need for continued supply and support of these local products and therefore put limits on the globalization process.

The major international players include Ingersoll Rand, a diversified US corporation that owns well-known brands like Schlage in the United States and Newman Tonks in the UK. Ingersoll Rand's lock division has annual sales of approximately SEK 9 billion. Williams Holdings, a diversified British corporation, owns the Yale and Chubb brands and has large operations in the UK and the US. Its lock division has sales of approximately SEK 6 billion. Other major players are Black & Decker (USA), whose lock division – including the Kwickset brand in the USA and Dom in Germany – has sales of SEK 6 billion, and the Swiss security hardware company KABA, which has annual sales of SEK 3 billion.

In addition there are a number of local players with strong positions. There are also strong players within individual product segments: for example, Ilco Unican of Canada is a world leader in key blanks. The hotel lock segment is unique in that standards and products are global. Williams Holdings, through its subsidiary Tesa, plays an important role in this segment.

Growth factors

| Trend towards higher security

The need to protect information and property is increasing throughout modern society. Many people feel insecure in an increasingly anonymous society and perceive criminality as a substantial threat. Today's high-tech society is also more vulnerable to breakdowns, and the need to safeguard vital information is becoming ever more important. As a result, the demand for better lock products is growing steadily in applications ranging from simple balcony doors to the protection of computer rooms. By continuously developing and marketing products that meet these needs, ASSA ABLOY is establishing a basis for stable, long-term organic growth 2-3 percent higher than the compounded GDP growth for applicable countries.

| Electromechanical locking products

Rising demands on security increase both the number of security products used and their security level. These security considerations may run counter to needs for

safe, fast evacuation of buildings and for convenience. The resulting demands for more sophisticated functions are increasingly being met by electromechanical and electronic means, and sales of electromechanical products are growing significantly faster than the lock market as a whole. Since development costs are typically higher than for traditional lock products, a critical mass of sales is essential, and the size of a company becomes an important competitive advantage. While electromechanical solutions are of a universal nature, successful selling also requires adaptation to local lock dimensions and standards and integration with other mechanical locking systems.

| New markets

In many new markets, such as Asia, eastern Europe, the Middle East and Latin America, an increasing proportion of the population enjoys a high standard of living, and hence the need for security has increased. These groups are now demanding lock products that are more advanced than those manufactured locally.

Strategy and financial objectives:

A multi-domestic organization with cross-learning between countries

Our products and markets

Focus on the lock segment

ASSA ABLOY's strategy is focused on locks and lock-related products in order to achieve maximum efficiency in the development of markets, products and production. Because all companies within the Group work in the same industry, there is an environment for successful transfer of knowledge and for benchmarking between the various units within the Group. The best performance can always be transferred directly to another unit to produce a genuine increase in know-how at all levels in the organization.

Focus on the trend towards higher security

ASSA ABLOY's product development takes place in close cooperation with insurance companies, police and fire departments, end-users and other important decision-makers. We also make comprehensive efforts to inform and train important target groups such as retailers, architects and security officers about the Group's products and security solutions. As the DIY distribution channel gains importance in the residential segment, opportunities are developing for the Group to present its security solutions more directly to the end-user.

Our management model

Multi-domestic

ASSA ABLOY is a world leader in the lock business, but closeness to local customers in each country and experience of local requirements, business arrangements and distribution patterns are still the basic prerequisites for success in the lock

industry. Accordingly, responsibility is clearly decentralized to a single manager in each country. Each country constitutes a natural building block in the Group's operations.

The hotel lock market is by its nature much more global, forming in effect a single market. VingCard is therefore organized separately from the Group's national lock companies so as to respond effectively to the opportunities and threats of the international hotel market.

Executive management structure

All Country Managers are members of the Group management team. The management team's most experienced managers – the Group Vice Presidents – are each responsible for a number of countries and help to ensure that ASSA ABLOY's management model and methods are applied consistently throughout the Group.

Internal efficiency through benchmarking and cross-learning

A continuous improvement process

The Group endeavors to achieve a flexible 'horizontal' organization, with clear responsibilities and active internal benchmarking and cross-learning between the different companies.

In ASSA ABLOY it is a basic assumption that "profit drives growth". Profitable organizations tend to grow, whereas non-profitable organizations seldom reach profitability by adding volume.

In the benchmarking process all operating units are compared each month on cost levels, margins, critical balance sheet figures and growth. The benchmarking

report is distributed to the units so that managers can see their relative performance. Since every manager has a natural ambition to improve performance and strive for excellence, the benchmarking tool is the driver behind ASSA ABLOY's continuous improvement.

All Country Managers meet on a regular basis and compare their operations. Despite differences in profitability between individual units, the basic attitude is that even the best operations have a great deal to learn from the others. Managers at other levels also meet to share experience and transfer know-how.

Building on Group strengths

Significant rationalization and improved efficiency have resulted from the continuous benchmarking, cross-learning and transfers of know-how described above, and these are responsible for a high proportion of the improvement in earnings achieved in both established and recently acquired units.

In market sectors exposed to serious international competition – representing approximately one third of the Group's products – there is an active coordination of development and production to achieve economies of scale. The Group Product Council plays an instrumental role in coordinating technical development at the various units, including the management of joint projects.

Group procurement of raw materials, components and finished products is coordinated by the Group Purchasing Council. Substantial savings are steadily being achieved and a joint supplier database is being developed to further

enhance this process.

A Group Treasury Department is located in Geneva to promote efficient financing and management of financial transactions and to minimize financial risk exposure.

Wider participation in ownership

ASSA ABLOY wants employees and executives to participate in the company to the greatest possible extent. Approximately 1,700 of the Group's 13,000 employees hold shares and convertible debentures amounting to approximately eight percent of the shares when fully diluted. Group executives have substantial shareholdings.

Group information

In a rapidly growing Group, there is a great need for a regular flow of information. The Group newspaper ASSA ABLOY NEWS is published in nine languages and plays an important role in communicating the Group's strategy and development. ASSA ABLOY NEWS also presents success stories from various companies throughout the Group and introduces newly acquired companies.

Our expansion strategy

Organic growth

ASSA ABLOY's ability to generate organic growth on a continuing basis is critical to the Group's long-term success. We achieve this by means of intensive development efforts in both mature and new markets.

In mature markets where ASSA ABLOY is already established, organic growth depends to a large extent on successful product and market development that meets the increasing need for higher-security products. In addition, all Group companies are involved in cross-selling projects, i.e. adding products from other Group companies to their product portfolios. These cross-selling projects represent significant growth opportunities for the Group.

In new markets where there are no strong local players or brand names, new Group companies are established. Products for these markets must often be based on different standards from those applying in Europe and the United States.

ASSA ABLOY enjoys a strategic advantage as a result of its comprehensive product range.

In all markets, Internet and e-commerce solutions are increasingly important tools in improving distribution efficiency by speeding information transfer between manufacturer and customer.

As the DIY distribution channel becomes more important in mature as well as new markets, ASSA ABLOY is increasing its efforts to provide solutions that fit this means of distribution.

Acquisitions in mature markets

Brand names, existing installations, and local standards and traditions are significant barriers to entering mature markets. As a result, acquisitions of leading companies in such markets are a crucial part of ASSA ABLOY's strategy. The Group's strong cash flow helps to finance this type of expansion. In principle, the aim when making acquisitions is that the company concerned should contribute to growth in

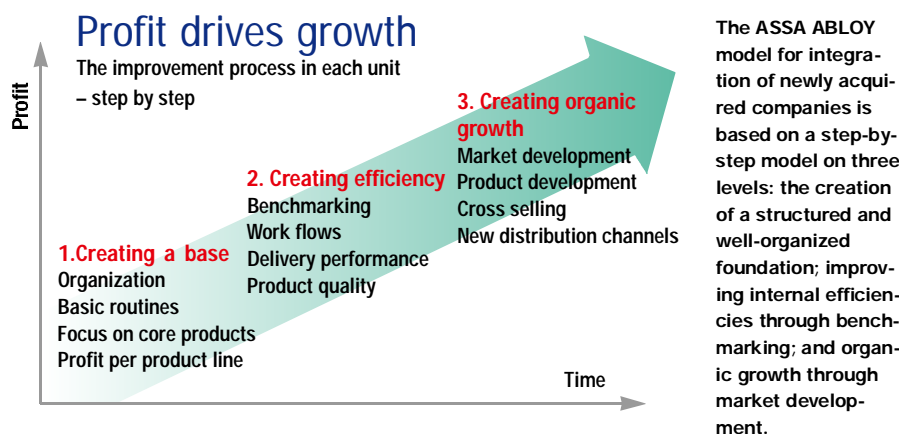
Group earnings per share in the year after the acquisition.

Financial goals

The strategy described above is designed to continue the achievement of a satisfactory earnings trend, with a focus on earnings per share.

ASSA ABLOY's financial goal is to achieve a return of more than 20 percent on capital employed. This goal was set when the Group was formed in 1994. The goal is increasing automatically because of the goodwill added through the acquisitions made. The return in 1999 was 15.5 percent. Most of the improvement required is expected to be achieved through higher margins, although there are possibilities of further reductions in the capital employed in the business.

An equity/assets ratio of 25 percent is considered sufficient, taking into account the relative stability of the lock market and the Group's strong cash flow.



In May 1999, CFO's and controllers from all ASSA ABLOY companies gathered for a two-day conference in Gimo, Sweden.

Management philosophy:



Management meetings, with representation from most parts of the world, are held each year. Focus is put on learning each other's products and identifying and exploiting the many new opportunities for cross sales.

“High ethical standards, with an emphasis on setting a good example”

ASSA ABLOY's management approach is characterized by a spirit of trust and positive thinking. Management is responsible for creating an atmosphere that encourages employees to make the most of their individual skills for the benefit of the whole company. To realize this, our management philosophy is based on the four cornerstones of realism, vision, courage and ethics.

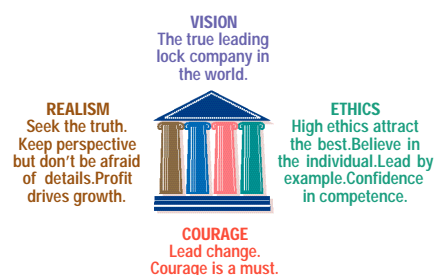
Realism means that decisions, actions and leadership should always stem from a thorough knowledge of every sector of the lock business. While it is essential for a manager to maintain an overview of the business, the answers to many important questions often lie in the details.

Vision is a driving force in each operation. It must be based on a realistic view of the market. This comes from solid experience. ASSA ABLOY's vision is to become the world's true leading lock company. To achieve this, we must continue to set standards of excellence for others to follow.

Courage and energy are essential criteria for success in today's fast-changing world. Courage develops and thrives naturally when it is based on sound knowledge and clear vision.

Ethics are the lifeblood of any company. They are reflected in the attitudes and the actions of every employee. Good ethics are a prerequisite to trust, creativity, ambition and commitment. Maintaining high ethical standards, with an emphasis on

setting a good example, is essential to the Group's ability to recruit and retain the best employees. And high standards are of particular importance in the security business where trust is an integral part of the products we offer to our customers.



Valuable exchange of experiences

Our continued success and growth depend on the skills and commitment of every employee and every manager. For this reason, skill enhancement, job rotation and training programs are conducted continuously at all levels within the Group. Our sharp focus on the lock market and active benchmarking establish a good framework for a valuable exchange of ideas and experiences among ASSA ABLOY employees from all over the world. As part of this activity, the Group conducts an annual 'ASSA ABLOY Management Program' in which some 25 employees, chosen from throughout the Group, have an opportunity to hone their leadership skills on a selection of real-life case studies, under the supervision of senior management. To date, more than 100 managers have participated in this program.

Many other management training programs are conducted at a local level. For example, Abloy in Finland has run a training program for senior employees since

1994. 100 employees have now taken part in Abloy's AVEK program, which consists of three 2-3 day seminars that lay emphasis on business strategy, leadership, and communicative and social skills. In France, the Human Resources departments of the various ASSA ABLOY companies actively exchange ideas about training and communication, with an agreed objective that all employees should spend at least three days a year on training. In the United States, Curries and Graham have formed a partnership with 13 other businesses in Mason City, Iowa, and the local Community College. The variety of topics offered by the College allows each of the 50 Curries and Graham managers that take part each year to develop a personal training program to suit their individual needs. During 1999 Curries and Graham have also conducted a 3-month in-house program for their 75 shop-floor supervisors, directed at giving them the tools they need to manage people effectively and to retain good employees.

Since the Group was first established,

participation in ownership has been an important means of encouraging commitment and motivation among employees and management and thereby promoting the company's long-term growth.

To ensure a regular flow of up-to-date information to all 13,000 of our employees throughout the world, a regular internal newspaper ASSA ABLOY NEWS, is published four times a year in nine languages.

Every second year ASSA ABLOY arranges a '100 Meeting' at which its 100 most senior executives exchange experience and ideas and review and agree the Group's visions, objectives and strategies. The last '100 Meeting' was held in June 1998 and the next will be during 2000. In 1999 a number of smaller management meetings more like work sessions were held, with representation from most parts of the world. Following the Group's rapid growth, these were designed to promote the learning of each other's products and to identify and exploit the many new opportunities for cross sales.



The ASSA ABLOY Management Program is one of several training activities within the Group. Each year 25 employees have an opportunity to hone their leadership skills on a selection of real-life case studies. This session is at Medeco, USA.

Environmental management and quality:

Customers benefit from continuous improvements and higher efficiency



Assa provides a complete allergy-adapted package for door security which the construction company Skanska has recently used when building new allergy-friendly houses in Sweden.

In 1996, it was decided in principle that all Group companies should seek to become certified in accordance with the ISO 14001 Environmental Management Standard. Since environmental issues are closely linked to general efficiency in the use of materials, they can contribute direct economic benefits. Good environmental management is also in line with most people's wishes, including those of employees. Finally, it is an area increasingly appreciated – and monitored – by customers.

Environmental management involves daily efforts and affects all areas of the company, including the selection of materials used in products, the way materials are utilized, the disposal of residual mate-

rials and waste, and the cleaning and re-use of chemicals. It also influences the choice of packaging materials and the methods used to distribute products. The long life of lock products means that they already have less impact on the environment than many other products, since they are replaced at very infrequent intervals – 30 years or more is not unusual.

Allergy-friendly materials

The Environmental Management Standard helps a company to focus on environmental issues in its daily operations. The solutions found often prove to be not only less expensive and better for the environment, but also better for the employees working with the products and for custo-

mers and end-users. Assa's nickel-free key, the Miralloy surface treatment and powder-coated products for interior doors are good examples. These are all designed to protect people who are allergic to nickel, an increasingly common problem. A complete nickel-free package was developed for the construction company Skanska and has been used when building new allergy-friendly houses in Sweden.

The vertical integration of production processes at ASSA ABLOY is strong. Security products are manufactured from raw materials such as steel and brass and processed into finished packaged products ready for delivery to customers. As a result, companies in the ASSA ABLOY Group have excellent control over design,

production methods and the utilization of resources at every stage in the sequence, and can use this to create security products having a low impact on the environment. There are few constraints, but important ones are the high quality and the strict functional requirements expected from security products. These can affect the choice of materials, machining requirements and distribution routines in ways that may occasionally conflict with environmental requirements.

Recycling pays

Surface treatment is an important area of technology where the ASSA ABLOY companies are continually striving to improve environmental performance. To look attractive and resist many years of daily use, most security products need either a decorative metallic layer or a lacquer. In the last few years many of the companies have made major investments intended not just to meet the requirements of the environmental codes, but to follow even stricter internal rules which exceed the codes' requirements.

As well as giving environmental benefits, these investments very often pay off well by saving material and by introducing advanced handling processes that reduce the cost of waste treatment. In Germany,

for example, IKON has changed from a solvent dye lacquer to a low-temperature powder coating, which has eliminated the need for environmentally aggressive solvents. In France, a powder recycling system installed at JPM has been shown to pay for itself in just one year. The main saving lies in reduced losses of the powder itself, but the system has also cut inventories and significantly reduced disposal costs and maintenance costs. Color changes are also quicker now, increasing flexibility and productivity.

For some years now, Abloy, Assa and many other Group companies have had a highly developed structure for collecting and sorting waste. This not only produces a very clean factory environment which pleases employees; it also yields a direct payback from sales of metals recovered from the different processes in the factories. Abloy in Finland is one company that draws up an 'Eco-balance' every year. This shows that emissions of different heavy metals have been reduced by between 20 percent and 40 percent between 1996 and 1998, even though production volumes increased by 37 percent over the same period.

Abloy has also involved its authorized A-quality dealers in the recycling program, each dealer having a system of 'Eco-points'. The system ensures that all product scrap is reprocessed under Abloy's control.

The Danish company Ruko manufactures locks and high-security cylinders and has a factory filled with metalworking machine tools that consume large volumes of cutting fluids for cooling and lubrication. A major investment in a coolant recycling plant was completed

during 1999 that will reduce waste by 100,000 liters over a three-year period.

These examples are just a few of the Group's environmental initiatives. There are many more already up and running – and many more to come.

Quality assurance

Security, trust and quality are closely related. ASSA ABLOY companies are continuously improving the quality of their performance in all areas: products, production, development, delivery reliability and, not least, the handling of security documentation pertaining to lock systems that have been installed.

To assist them in the area of quality management, virtually all companies in the Group – with few exceptions – have already adopted the international ISO 9001/9002 Quality Assurance Standard. However, this quality stamp is not a final seal of approval, and adopting the Standard does not in itself create quality in the companies' processes. Rather, it marks the inauguration of an ongoing program of improvement. The companies' quality management systems are what the Standard certifies – systems that will help companies to measure and monitor their quality; to discover defects and rectify them in time; to learn from their mistakes and steadily improve performance so as to establish sustained, long-term quality.

Many of the ASSA ABLOY companies hold quality and environmental certification.

Here are some examples.

Quality certification ISO 9001:

- | Assa AB
- | Abloy Oy
- | AZBE B ZUBIA S.A
- | Björkboda Lås Oy Ab
- | FIX AB
- | IKON AG
- | Laperche S.A.
- | Litto n.v.
- | Lockwood Security Products Pty Ltd
- | Medeco Security Locks, Inc.
- | Ruko A/S
- | Securitron Magnalock Inc.
- | Vachette S.A.

Environmental certification ISO 14001:

- | Assa AB
- | Abloy Oy
- | FIX AB
- | Ruko A/S
- | IKON AG



Environmental measures can also be cost-effective. A powder recycling system installed at JPM in France has paid for itself in just one year.



The trend towards higher security:

Growing needs for physical protection in the information society

We live in an information age. Wide-band communications channels, ever more powerful computers and, above all, the exponential growth of the Internet mean that information and communication are becoming increasingly important all over the world. Business today depends crucially on fast transfer of information: in the factory, at the office and in dealings with external suppliers and customers. Individual householders are taking to e-mail, voicemail, electronic shopping and the Internet at a rate of tens of thousands a day. New records are achieved day by day and we are all communicating volumes of information not dreamed of only a few years ago.

And yet the information society is still in its infancy. In the foreseeable future its growth is expected to accelerate rather than level out. In this new age, what are the security needs? Is information security the key to the future?

Information security is certainly one key, but not the only one. It is true that much of today's development effort in the security field is focused on this area. In recent years the word encryption has entered people's daily language, and techniques once used exclusively by the world's most advanced defense forces have become part of the public domain. And there is no doubt about the importance of information security. It is vital for bank transactions and for electronic commerce on the Internet. It allows communication of commercially sensitive information between manufacturers, wholesalers and distributors. There is also an ever-increasing flow of information inside and between government departments, much of it dealing with citizens' private affairs or company-confidential matters. A lot remains to be done before all the information currently stored in databases or moving between computers is securely protected from unauthorized access.

Locks and physical security

But even if information security were perfect, it could never stand on its own. Advanced cryptographic systems can only block electronic routes of access to databases or information flows. The hardware itself still needs physical protection: the computers that hold the information and the terminals that transmit it. The huge concentration of data in large information systems makes them vulnerable to attack and calls for ever more advanced levels of physical security. Today's manufacturing practices based on just-in-time production, minimal stocks and e-commerce are wholly dependent on computers and information exchange. There is also the economic success of the 'crime business', which in most countries around the world has shown stable, long-term growth at a rate higher than GNP. All these factors drive the trend towards higher security, demanding new functional requirements that are changing faster than ever before.

Higher security does not just mean stronger locks, however. It also calls for solutions that are both smarter and more convenient than before. Solutions providing flexibility in use. In response to these demands, a new generation of security systems and products has been born that can be adapted to individual (and often rapidly changing) requirements while remaining very convenient to use and providing high security levels over a long period of time.

Regular security reviews

All aspects of modern society are characterized by increased technical sophistication and demands for ever-greater efficiency. Production is precisely tailored to market demands, offices are supported by advanced electronic equipment, homes are equipped with computers and expensive household appliances. From the smallest cottage to the biggest multinational business, demands on security are increasing. Every section of this modern society needs to take a fresh look at its security requirements.

Solutions that were considered the height of security only a few years ago are now merely standard practice in most applications. And installations 10, 20 or even 30 years old simply do not meet all the requirements of today's society, even if they were state-of-the-art when installed. For new buildings and refurbishments it is natural to survey the latest technology, but it is equally important to consider upgrading existing installations at a regular security review.

To protect the new investments contain-

ed in every modern building and also to meet the requirements of the insurance companies, you need, at the very least, a highly pick-resistant installation and mechanically strong locks and accessories that comply with modern standards. Ideally, old lock systems should be upgraded to the current state of the art, from a lock system without key control to a lock system with key control and from mechanical solutions to combined electrical/mechanical solutions that can meet safety and convenience requirements as well as those of security.

The pace of technical progress is increasing all the time. This calls for regular reassessment and upgrading, which are indeed happening more and more as governments, local authorities, companies and households become more aware of the growing need for better security – often as a result of events in their neighborhood. This goes to explain why every year, at every level and in every market, there is a gradual shift towards better and more secure products, higher-security lock solutions, and a higher proportion of electromechanical products, which offer higher security without compromising safety and convenience.

From cylindrical to mortise locks

A particular trend in North America, and also in parts of the Far East influenced by American standards, is the trend from cheap and simple cylindrical locks to heavier-duty types, and from cylindrical locks towards mortise locks. The trend is led by professional and institutional end-users but also discernible in other seg-

ments of the market. Growing levels of violence and crime are forcing end-users to move towards the idea – familiar in Europe for several decades now – that doors and locks must be a strong barrier to unauthorized entry.

In many of the fast-developing countries of eastern Europe and the Far East there have been few lock standards in the past, but standards based on existing examples, mostly from western Europe and the USA, are now under consideration almost everywhere.

The trend towards higher security thus now extends across the world, influencing all products and every level of society.

Security needs are on the rise

At the office



In hotels



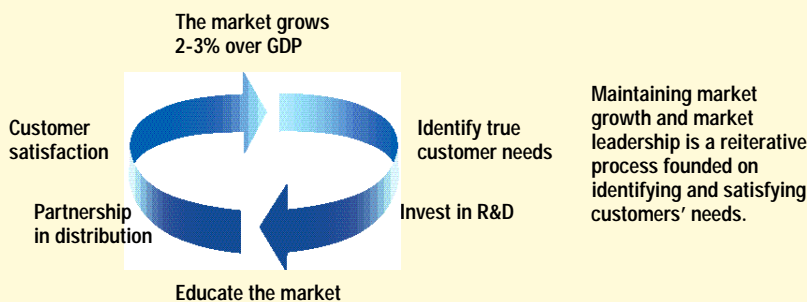
At home



When traveling



Leading the trend towards higher security



Meeting security challenges in a changing world

If you could harness it, the power of thought would be the ideal security control device, opening a door when you wished and keeping it closed and locked at other times. This is impossible, of course, but you might suppose that modern computer electronics could achieve much the same and require only a minute expenditure of energy.

In practice, however, significant energy is normally needed to move the strong mechanical components on which security still ultimately depends. If the lock is well designed, quite small amounts of electricity can achieve this. Alternatively, you can use a strong magnetic or electric field to create a force. This could avoid using moving mechanical parts at all, but it consumes considerable amounts of energy.

Security, safety and convenience

The most powerful security products available today are based on a combination of mechanics, electrics and intelligent electronics working well together. The use of electromechanical security products is increasing all the time, showing a good double-digit growth rate worldwide. Major factors in this growth are the increased use of access control and the need to combine higher levels of security with safety and convenience features.

The well-established products for latching and locking doors – electric

strikes, motorized locks and magnetic locks – are all used for access control and for remote or timer control. They are now increasingly accompanied by convenience products like door operators for automatic door opening and closing, and by safety products like time-delayed exits which resolve the contradiction between a secure door and a safe exit route.

This strong development of electro-mechanical products and the growing market for them has not eliminated the need for new mechanical products. New types of cylinders can provide key control for many years to come. New multi-point locks make doors stronger, offer increased security against burglary, and can be motorized for interlocking doors in banks, monitoring centers etc. The increased use of panic exits in a wide variety of environments calls for new designs for the new century.

Local realities decide

Different countries and continents have very different traditions, attitudes and driving forces when it comes to security and safety.

The USA is strongly influenced by liability. Personal liability lawsuits are common and awards, when granted, can be substantial. This makes it very expensive to erect or own a building with poor escape facilities. Considerations of liability have made the US market a strongly pro-

nounced safety market, with security also important in special areas such as hotels.

The market in northern Europe, especially Germany and Scandinavia, has been driven very much by considerations of high security, led by the insurance companies and the police. Stringent rules and requirements for locks and security products and their application have been laid down.

In southern Europe, security has always been of great importance. In the last few decades solutions balancing safety and security demands have been found. This development can partly be explained by a disaster several years ago in a Geneva discotheque in which many people died. This led to the creation of stricter standards for the fast evacuation of public buildings and other places where many people gather for work or pleasure.

The newer markets of the Far East and eastern Europe are picking up a variety of trends from elsewhere. As transport, communication and more open borders make the world a lot smaller – stimulating foreign travel, working abroad and permanent migration – there is a general tendency for standards to converge. Customers become increasingly aware of requirements and solutions in other parts of the world, and markets where either security or safety has been paramount are gradually learning the importance of the other.



Lock functions are viewed with different emphasis in different parts of the world. Countries can learn a lot from each other, and the growing pool of knowledge in turn creates new and better products.

An opportunity for ASSA ABLOY

For ASSA ABLOY, with its strong presence in many different countries, the differences between markets, and the increasing flow of know-how and expectation across borders, have already proved a source of important opportunities. Each country is in a position to supply a full assortment of established products whose R&D is already paid for. And as well as serving the needs of each market, there is a great opportunity to expand into less developed market sectors. For example, experience in northern Europe can be used to reinforce growing security awareness in the US market. Scandinavia's gradually increasing demand for safe exit routes from buildings can be encouraged by US and southern European experience. Further development of security is possible in southern Europe and elsewhere. And there is scope for all the Group's products in the new markets of eastern Europe and the Far East.

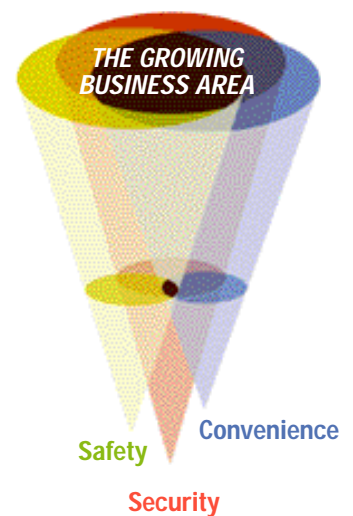
These trends have led to the identification of major cross-selling opportunities within the Group, and a lot of cross-selling has begun. Both electromechanical and mechanical products require adaptation to the mechanical standards of each market so that the core technology can be fully exploited.

Joint development

Cross-selling and the exchange of know-how have stimulated further cooperation between Group companies and a number of projects have been initiated on a bilateral or multilateral basis to develop and share core technology. The manufacture of Abloy door closers in Finland for the US companies is a good example of a project launched in 1998. Door operators and motorized locks are already sold in many new areas and magnetic locks from Securitron in the USA have likewise been adapted to many different markets. Similar projects have been initiated for a number of mechanical products, with the object of creating a new shared core technology which can then be adapted to the specific needs of each market by the local companies around the world.

ASSA ABLOY's steady expansion has enabled it to reach a critical mass where new development pays off. The multi-domestic structure ensures that the ASSA ABLOY companies in each market have a strong foothold created by strong local brands, a local presence and – especially valuable – detailed know-how. At the same time, the future needs of many different markets can often be synthesized into a single need for important core technology, often requiring major financial strength for its realization.

On top of a growing need for security, there are new demands for safety and convenience in security products. Manufacturers have to satisfy all of these often conflicting requirements.



Adding value through product development

ASSA ABLOY's business is founded on the manufacturing of individual security products. But every day more and more of these products are finding their way into a great variety of sophisticated systems, making it increasingly important to design and develop products from the outset to fit these systems. Many long-established traditional products are evolving into something new. Sometimes this just involves enhancing the mechanical performance, but increasingly often now, electrical functions are being integrated into the older mechanical products.

Focus on innovation

The ASSA ABLOY Group has a long tradition of innovation. One good way to measure innovation is to look at the number of active patents. At the end of 1999 the Group had around 450 active original patents, each registered in many different countries.

Patents provide an important way of protecting key blanks, and many of the patented innovations cover manufacturing methods for keys and security designs for lock cylinders. Lock cases are another product group with fairly complex designs incorporating many interesting security, safety and convenience features. The ASSA ABLOY Group companies

devote a lot of effort to making substantial product improvements that will produce strong, long-lasting patents, rather than developing trivial new features for the sake of getting a patent. The most recently launched products have patents valid until 2014-2015.

The distribution of patents among the different product groups is shown in the pie chart. In total, nearly half of the active patents cover keys, locks and lock cases. Behind this group, security doors and fittings account for 29 percent and electromechanical products for 15 percent of the patents.

International cross-fertilization

ASSA ABLOY's companies throughout the world focus strongly on locks and security products, both mechanical and electromechanical. This means that a great number of widely dispersed companies within the Group are busy with the same types of products, creating many opportunities for synergy and the sharing of know-how.

To coordinate product development internationally, a Group Product Council has been active for some years, and a number of areas of synergy have been identified over this period. Multipoint locks and lock cases, mechanical cylinders, exit devices and electromechanical

products were the first areas in which a lot of know-how has already been shared. Cooperation on development and production also leads to increased cross-selling and to the identification of new opportunities, both geographically and productwise. In many fields, too, there are opportunities to develop a shared core technology.

Mechanical locks

The many developments in lock and cylinder technology over the last few years have generated pressure for the renewal of old lock systems, with upgrading to state-of-the-art security. The latest new products and concepts include longer patent protection for key blanks, double mechanical systems, and better system design capabilities. The demand for upgrading is growing in most markets and often leads to renewal of other products like handles and fittings at the same time.

An interesting new type of product was brought into the ASSA ABLOY Group when AZBE in Spain was acquired during 1999. More than two years ago the company started to market a new-generation electromechanical cylinder called Meca-tronic. This is a patented technology for creating a small lock system or a small 'keyed alike' residential system which allows users to cancel a lost key by means of a simple reprogramming procedure

without having to change their mechanical cylinders. It is based on the mechanically coded key and cylinder of the company's reversible key system, and provides strong mechanical protection enhanced with an electronic code. There is a growing market demand for lock products of this type which maintain the established security levels of high-security mechanical locks and cylinders but provide additional flexibility.

Fittings and security doors

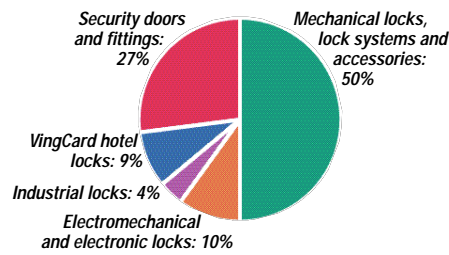
Even if locks are the most obvious security product, the other components of a door or window are just as important in creating a secure and safe environment. The hinges, for example, need to be as strong and secure as the lock itself. As a result, the door and window industry in most countries forms a major customer for ASSA ABLOY. In other countries the door industry has become more integrated into the lock and security business. In the USA, for example, ASSA ABLOY has a significant interest in door manufacturing through Curries and Graham.

In France, Fichet Serrurerie Bâtiment, a new company in the Group, has a similar background as a door manufacturer with strong links to the lock industry and a strong nationwide security distribution network. Its main products are security doors for homes, including integrated, attractive high-security lock installations.

Electromechanical products

With a double-digit rate of sales growth, electromechanical products are seen as a major opportunity by many Group companies. Abloy is now distributing its products widely within the Group accompanied by application advice and drawings to enable them to be combined with electromechanical products from other Group members. This makes it easier to start selling new products, even if most products require some adaptation to local mechanical standards before launch. Efforts are under way to coordinate the mechanical design of the products for the many different markets and to make them easy to connect together for reliable performance and ease of maintenance.

The ASSA ABLOY product portfolio



Industrial locks

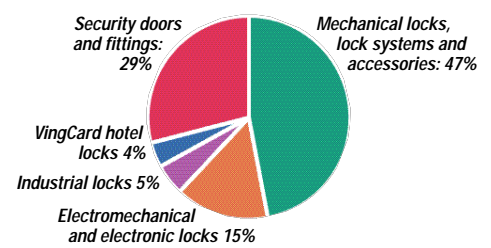
Assa, Abloy and other Group companies sell industrial locks – or camlocks as they are usually called in the USA – in many different markets. Medeco in the USA has provided the market with mechanical camlocks since 1976 and has added a growing proportion of electromechanical camlocks during the last decade.

Camlocks form a very different market segment from construction locks. Camlocks are locks integrated in other products like vending machines, gaming machines, parking meters and payment machines, many of them highly complex pieces of machinery. The main purpose of the locks is of course to keep unauthorized persons away from the valuables, which may include both the money in the machines and any contents for sale. But the lock also becomes part of the daily routine of the vending company. It should support the regular servicing of the machines to replenish stock or paper for receipts and to collect the income. The lock becomes a central part of planning the daily service tour, capable of meeting increasing demands for time stamping and registration so that the company can monitor and improve its performance.

Hotel locks

The new DA VINCI series of locks from VingCard is a good example of the growing importance of design in all areas. It is also a good example of how new technologies are introduced into lock products. The DA VINCI locks can handle both traditional magnetic cards and 'smart' cards with built-in chips to provide high security and greater flexibility. The same applies to the latest advanced hotel locks from

Patents by product group

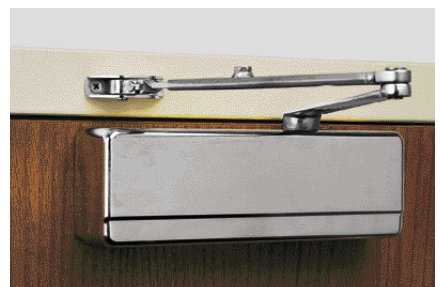


Timelox, a new company in the ASSA ABLOY Group.

Elsafe has continued with the development of security products for the hotel room. A new safe for storing personal computers has been launched and offers advanced support functions for the computer.

Products for the handicapped

The elderly and handicapped form a growing proportion of society in many countries, and special solutions are needed to create a secure, safe and convenient environment for them. This often involves delayed exits, motor locks and automatic door operators as well as other electromechanical features.



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