

Infratek Annual Retail Theft Survey (IARTS) 2015: Denmark, Finland, Norway, Sweden and Iceland

~ A Research Report for Infratek Security Solutions

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Executive Brief

Report. This independent report into the current extent, impact and trends of retail crime and shrinkage in Nordic countries has been funded by Infratek Sikkerhet AS as a contribution to discussion within the industry. The survey has been carried out by the Centre for Retail Research, Nottingham (CRR).

Coverage. 1,500 retailers of all kinds (large multiples as well as small businesses) were questioned as part of this survey. Responses were received from 499 retailers, a response rate of 33.3%: these firms operated a combined total of 10,270 stores. The response was lower than the 571 companies in 2014. However the sample is robust with between 30% and 37% of respondents in each country and varied responses from each country. The respondents came from a wide cross section of companies, with 40.9% of retailers in food businesses and 59.1% in non-food. Vertical markets covered included supermarkets, convenience stores, department stores, apparel, electricals, pharmacy, health & beauty, books, furniture, hardware, sports and sporting shops and jewellers.

Countries. Retailers in Denmark, Finland, Norway, Sweden and Iceland were surveyed.

The Survey. The study took place during June to August 2015. A questionnaire with 41 questions dealing with key shrinkage and crime issues in the five countries was used to collect the data. The information provided related to the period July 2014-June 2015.

Shrinkage Losses. Shrinkage (the difference between expected store revenues and actual store revenues) as a percentage of sales rose slightly from an average of 1.34% (2014) to 1.35% in 2015. Food shrinkage rose from 1.18% (2014) to 1.20% whilst non-food shrinkage remained stable at 1.49%. Total shrinkage was €2,811mn, consisting of €1,193mn of losses suffered by food retailers and €1,618mn in non-food. In 2015 shrinkage was €211mn higher than 2014 (+8.1%). The pattern varied: shrinkage as a percentage of sales rose most in Denmark (+1.6%), Norway (+1.5%) and Iceland (+1.4%) and was stable in Sweden and Finland.

Shrinkage rates were above average in fashion, clothing and shoes (1.74%), mixed/general department stores (1.61%), sports/sporting (1.61%), and health & beauty (1.58%). Shrink rates were lowest in food/supermarkets (1.13%) and electricals (1.17%).

Calculating Shrinkage. In this report shrinkage is expressed as a percentage of retail sales at the retail price, and the results from retailers who do not use this method have been converted to retail prices. In the last three years of this survey, many retailers have switched from the retail method of estimating shrinkage (currently 43.5%), in favour of the cost method (currently 36.8%) and a mixture of both (currently 19.7%).

Sources of Shrinkage. Shoplifters were seen as the main source of loss (53.1% of shrinkage), equivalent to €1,495mn (€131mn more than 2014) and a small proportion of dishonest employees (29.0% of shrinkage) costing €808mn (€63mn more than 2015). Administrative errors, such as pricing or invoicing mistakes, declined slightly to 17.9% of shrinkage (a total of €507mn). Online Shrinkage. The shrinkage suffered by multichannel retailers and online specialists from 0.93% of sales to 1.01% in 2015. It cost retailers €130.2mn in 2015, made up of 0.70% (the rate of losses on false orders) and 0.31% (payment crime, caused by illegal payments made by cards

and bank transfers that banks deduct from retailers). The combined rate is still lower than the retail average, but it is obviously growing very quickly.

The Crime Problem. As might be expected when total Nordic shrinkage costs are €2,811mn, 76.0% of respondents declared that actual and expected crime was a major problem for their company. The main problems were seen as: theft by customers (52.8%), employee dishonesty (24.3%), and a problem caused both by shoplifters and by dishonest employees (22.9%).

Thefts and Thieves. The average customer offence in 2015 was €57.19 and the average employee offence was €267.68, both slightly lower than last year, although these averages have large extreme values which can make changes difficult to interpret. There is evidence of retail loss prevention targeting offenders more carefully, with the total number of shoplifters apprehended being 137,860 (a fall of 6,646 compared to 2014) and the number of employee thieves apprehended rising slightly to 3,674. Males were 51.2% of all customer thieves apprehended and 37.2% of apprehended dishonest employees. 16.4% of shoplifters were under 18 years, 26.5% were 18-24 years and 23.4% were aged 25-34 years. The totals of thieves do not necessarily correspond with those published by the criminal justice system because not all apprehended thieves are passed to the police or documented (see below).

Methods of Theft. Goods (or merchandise) stolen by customers, organised gangs and/or dishonest employees were the main source of loss to retailers (76.1% or €1,751mn) followed by cash (€212mn). False refunds accounted for €178mn (7.8% of losses), payment thefts (€77mn), counterfeits (€30mn), false deliveries (€35mn) and illicit use of coupons and staff cards (€17mn).

Reporting to the Police. Slightly fewer retailers reported shoplifters to the police, and more reported dishonest employees. 32.3% of retailers 'always' reported shoplifters to the police (down 1.0% compared to 2014) and 37.2% did so 'for the most part'. For employee thieves, 29.2% of retailers 'always' reported employees to the police (up 5.8% compared to last year) and 33.9% did so 'for the most part' (an increase of 10.1% compared to 2014 figures.

Crime risks

- Collusion. More than one-half of retailers (54.1%) thought that employee-customer collusion was a problem for their company (an increase compared to the 50.0% who thought so last year), and retailers were slightly more prepared to believe that senior staff or keyholders were responsible for a proportion of employee crime the proportion was 17.1% in 2015. 13.3% of retailers estimated that thefts by senior staff and keyholders had increased in the past 12 months.
- Organised Crime. An increased proportion of retailers experienced crimes from gangs and organised retail crime (ORC) with 33.6% reporting this in 2015 compared to 30.8% in 2014 and 26.9% in 2013.
- Robbery. The proportion of retailers believing that there was a possibility of their stores being robbed rose from 33.7% to 37.6% this year. However the most vulnerable retailers, who believed their stores were 'very likely' to be robbed in the next year, fell to 5.3%.
- Metal Foil Bags. The proportion of retailers stating that the increased use of foil-lined bags was a particular risk to their company rose by 7.8%, from 49.0% to 52.8% in 2015. These bags inhibit the effective operation of electronic article surveillance systems.
- Self-service Checkouts. 30.0% of Nordic retailers surveyed used self-service checkouts (not necessarily in every store) with a further 7.4% expecting to adopt them in 'the near future'. What will be the impact of these self-checkout tills upon shrinkage? This year, 34.4% of retailers felt that self-service checkouts would not affect shrinkage or were not related to shrinkage issues and the proportion believing that shrinkage would fall (32.5%) was almost as high as those who believed that shrinkage would rise as a result of these checkouts (33.1%). Last year, 40.2% expected that self-service checkouts would increase

shrinkage. Changing attitudes probably reflect the improved systems, procedures and staffing designed to improve the customer experience and inhibit opportunities for theft.

Who Decides about Shrinkage? Typically several departments are involved in decision-making about shrinkage. In 36.4% of retailers the chief executive was directly involved: other involved departments included operations (58.8%), finance (42.2%), and IT and systems (38.9%), with HR and marketing rather less involved (20.7% and 12.3% respectively).

Loss Prevention Spending. There was some overall increase in Nordic loss prevention budgets from €524mn to €530.3mn this year, although budgets fell slightly in Finland (-0.6%) and rose significantly only in Sweden (2.4%) and Norway (1.3%). The main budget headings did not change significantly, although spending on third-party security employees increased once more and there was additional spending on CCTV and other equipment, training and rental/maintenance. The main areas of spending were: security staff (52.0% of the budget, €276.0mn); security equipment including CCTV and EAS (25.9% or €137.5mn); €40.3mn was budgeted for training and €42.2mn for rental and maintenance. Software costs were €34.3mn. Retailers expected to control spending on loss prevention next year as well: 28.5% felt they would increase their investment in loss prevention next year, although this was greater than last year's 25.7%.

Means of Apprehending Thieves. 42.6% of shoplifters and 46.6% of dishonest employees were identified and/or apprehended by security employees and other shop staff. For shoplifters, CCTV was involved in 25.2% of cases, EAS in 18.7% of incidents, and customers alerting staff (4.8% of incidents). For dishonest employees, data mining (24.7%) was the second most successful method of identifying dishonest staff, followed by CCTV (18.1%), EAS (4.5%), and customers (4.8%).

Environmental Impact. An increasing percentage of retailers was using environmental concerns as part of decision making for loss prevention: in 2015 50.5% were doing so (45.8% in 2014) and a further 32.7% took environmental issues into account 'to a small amount'.

Methods of Protecting the Most-stolen Items. The proportion of the most-stolen goods with some form of direct protection rose in 2015 to 61.1% (59.2% in 2014 and 57.8% in 2013). The most extensively used devices were EAS products, which protected 48.9% of these goods: hard tags protected 15.2%, paper tags 16.8%, and source-tagging 11.3%. Safers/keepers were used on 5.6% of the most-stolen lines. Other protection methods included line security and cables and locked cabinets (6.9% and 5.3% respectively).

Store Audits. Regular store audits for loss prevention were now used by 86.3% of retailers that responded to the survey (81.9% in 2013), with a further 4.1% expecting to introduce store audits in the next 12 months. The use of regular security store audits is now so high that further rapid growth seems unlikely.

Rates of Exchange. The financial (values) results are given in euros to make comparison easier. Because rates of exchange have fluctuated considerably over the past twelve months we have continued to use the existing rates of exchange, thus preventing errors creeping in, for example an apparent growth of shrinkage caused by a currency's revaluation rather than because of an increase in losses, or stable loss prevention spending being turned into an apparent fall in spending because the country's currency has fallen in value. The average rates of exchange for each currency for the period studied have been calculated from the daily published noon interbank exchange rates for each currency between 1 July 2013 and 30 June 2014. These are bulk exchange rates not travellers' exchange rates.

Nordic Shrinkage and Retail Theft Survey 2015: Denmark, Finland, Norway, Sweden and Iceland

~ A Research Report for Infratek Sikkerhet AS

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Nordic Shrinkage and Retail Theft Survey 2015: Denmark, Finland, Norway, Sweden and Iceland ~ A Research Report for Infratek Sikkerhet AS

Part One The Survey

Infratek Sikkerhet AS has commissioned the third independent survey into retail shrinkage, theft and crime in the Nordic countries. This annual study, first published in 2013, examines the current impact on retailers of shrinkage and crime and the emerging trends surrounding retail loss prevention and methods used by businesses to combat crime.

Coverage. The countries studied were: Denmark, Finland, Norway, Sweden and Iceland. The retailers that replied (see Table 1) operated a total of 10,270 stores, covering all types of business vertical markets (food and non-food) have contributed to these results. Their support is hereby acknowledged.

Extent. The main topics of this study include: retailers' losses from crime and non-crime related shrinkage; the extent and patterns of crime by customers and crime by disloyal employees; the reporting of thefts to the police; the use of anti-theft devices such as EAS and CCTV; issues such as the use of metal foil bags, customer counting, RFID (for stock control and security), collusion, robbery, and self-service checkouts. The survey also examined current and future spending on loss prevention, whether organised retail crime was rising, and the methods used to protect the most-stolen goods from theft.

Confidentiality. This survey has been carried out independently by the Centre for Retail Research (CRR), Nottingham, England, and is one of several international studies of retail crime and shrinkage they have carried out in the past ten years. The survey was carried out under conditions of strict confidentiality regarding the individual data and the identity of respondents and has been prepared by Professor Joshua Bamfield, Director of the Centre for Retail Research.

The Survey. A questionnaire was sent to 1,500 retailers, both large and small, comprising all kinds of business including supermarkets, convenience stores, department stores, hardware/DIY, clothing/apparel, entertainment/leisure, pharmacy/perfume/ cosmetics, and electricals/ electronics. There were 41 questions in the questionnaire, which was sent out in June. Responses were received from a total of 499 retailers, 33.3% of those polled. This is a good response rate for a survey of this kind, though the response rate was lower than in 2013 and 2014. Variation in responses occurs in surveys of this type from year to

year. However a sufficient number of results were found in each of the countries surveyed, although the problems of surveying Iceland are well known.

The sample. The 499 respondents comprised a range of retailers of different sizes, who ran a combined total of 10,270 stores (Tables 1 and 2). The small businesses replying were naturally unlikely to employ a security specialist, but this functional task would be carried out by the chief executive, the finance director or the operations manager/controller (or by all three).

Table 1
Respondents by Country

Respondents to the Survey 2015									
Country	Sample	Responses	(response rate)						
Denmark	353	116	32.9%						
Finland	353	108	30.6%						
Norway	353	114	32.3%						
Sweden	401	148	36.9%						
Iceland	40	13	32.5%						
Totals	1,500	499	33.3%						

This sample of 499 companies is robust. Apart from the number of companies that responded to the survey, there are three elements relating to the sample's robustness. The first is the degree to which the sample is representative of all five countries studied. The country response rate varied from 30.6% (Finland) to 36.9% (Sweden), indicating a robust sample compared to a situation where, for example, one-half of the results came from one country. The second is the degree to which the sample is representative of different kinds of business. Analysis by detailed kind of business (Table 3) shows that both collectively and by country a wide range of different vertical markets were covered, the weighted average of food businesses was 37.6% of the sample and of non-food 62.4%. The third element is representativeness of different sizes of business. The average size of business surveyed is 20.6 stores, but one-fifth of respondents had fewer than five stores and of course a large number of respondents had 100 or more stores.

Table 2
Retailers Surveyed, by Country, Store Number and Main Type of Business

	Food	Non-food		Non-	Store
Country	Companies	Companies	Food %	food %	Numbers
Denmark	53	63	45.7%	54.3%	2430
Finland	42	66	38.9%	61.1%	2274
Norway	44	70	38.6%	61.4%	2398
Sweden	62	86	41.9%	58.1%	3136
Iceland	3	10	23.1%	76.9%	32
Totals	204	295	37.6%	62.4%	10270
			40.9%*	59.1%*	

^{[*} weighted averages]

This is of course only a sample survey and, as such, provides a good indicator of underlying quantities and trends in each country but the results cannot be absolutely

guaranteed. Although the response rate falls below what would be acceptable in consumer market research, in business market research this response rate would be very satisfactory. Care should be exercised when examining the Icelandic data as these come from a small base and may report extreme results. This year there was a wider representation by different types of business in Iceland. In practice however the Icelandic results are similar to those of the other countries surveyed.

Table 2 shows that 204 companies – a mean or arithmetical average of 37.6% - of the respondents were food retailers (mainly supermarkets, specialist food stores, or convenience stores) and 295 (62.4%) were in non-food (department stores, general stores, electricals, clothing, furniture, health & beauty and others). The weighted averages of respondents were 40.9% for food and 59.1% for non-food.

The breakdown by detailed types of business (vertical markets) is shown in Table 3, which indicates a broadly similar pattern within each country and an acceptable coverage by each kind of business category. Table 4 shows each country's respondents in percentages by vertical market .

Table 3
Retailers by detailed type of business

	Food	Conven- ience & Food Specialists	Mixed, depart- ment stores	Fashion, clothing, shoes	Health & Beauty	Electrical	Furniture/ hardware DIY	Sports & sporting	other	Total
Denmark	23	30	7	18	11	7	9	5	6	116
Finland	14	28	6	16	10	11	9	5	9	108
Norway	16	28	5	19	10	12	8	9	7	114
Sweden	25	37	8	27	8	11	10	10	12	148
Iceland	2	1	1	2	1	2	2	1	1	13
Total	80	124	27	82	40	43	38	30	35	499

Table 4
Retailers by detailed type of business (percentages)

	Food	Conven- ience & Food Specialists	Mixed, depart- ment stores	Fashion, clothing, shoes	Health & Beauty	Electrical	Furniture/ hardware DIY	Sports & sporting	other	Total
Denmark	19.8%	25.9%	6.0%	15.5%	9.5%	6.0%	7.8%	4.3%	5.2%	100.0%
Finland	13.0%	25.9%	5.6%	14.8%	9.3%	10.2%	8.3%	4.6%	8.3%	100.0%
Norway	14.0%	24.6%	4.4%	16.7%	8.8%	10.5%	7.0%	7.9%	6.1%	100.0%
Sweden	16.9%	25.0%	5.4%	18.2%	5.4%	7.4%	6.8%	6.8%	8.1%	100.0%
Iceland	15.4%	7.7%	7.7%	15.4%	7.7%	15.4%	15.4%	7.7%	7.7%	100.0%
Total	16.0%	24.8%	5.4%	16.4%	8.0%	8.6%	7.6%	6.0%	7.0%	100.0%

Questionnaire. The questionnaire developed for this survey reflected what were considered to be key issues facing retail loss prevention in different Nordic countries. There were a total of 41 questions, covering all aspects of shrinkage, crime types, and the

use of anti-theft equipment and methods by retailers to protect their property, employees and customers.

Analysis: the data provided by respondents has been analysed by Professor Joshua Bamfield and the consolidated results are provided in this report. Businesses responding to the questionnaire were promised confidentiality, both relating to the information they provided and the names of the companies which provided information.

Retail Crime and Crime-prevention spending

This survey is concerned exclusively with the costs and policies adopted by retailers in the five countries studied. It does not include the costs of retail crime as they affect the police or the criminal justice system. There will of course be differences in statistical results resulting from surveying retailers compared to those produced by the public authorities, for example reflecting the number of thieves apprehended by retailers compared to the numbers dealt with by police. Police and public data have not been used to make the calculations given here, which are solely based on the costs and experiences of the retail businesses. Hence, the costs of illegal payment relate solely to the costs paid by retailers (not total losses caused to the system) which may often be different from those suffered by the banking system as a whole.

Rates of Exchange. The financial results (values) are given in euros to make comparison easier. Because rates of exchange have fluctuated considerably over the past twelve months we have continued to use the existing rates of exchange first used last year, thus preventing errors creeping in, for example an apparent growth of shrinkage caused by a currency's revaluation rather than because of an increase in losses, or stable loss prevention spending being turned into an apparent fall in spending because the country's currency has fallen in value. The average rates of exchange for each currency for the period studied have been calculated from the daily published noon interbank exchange rates for each currency between 1 July 2013 and 30 June 2014. These are bulk exchange rates not travellers' exchange rates.

Average Rates of	of Exchange 2014-201	.5						
12 months ending June 2014								
	€1.000 =	1.000 kr =						
Denmark	DKK 7.461	€0.1340						
Finland	€1.000	€1.0000						
Norway	NOK 7.915	€0.1263						
Sweden	SEK 8.678	€0.1152						
Iceland	ISK 162.390	€0.0062						

Interpreting the results. The results of this study are provided in good faith. However this is not a 100% survey of the entire retail sector. The sample reflects companies of differing sizes and types of business and, as such, is a satisfactory cross-section of the retail industry. Errors can occur, however, in several ways. Differential response rates may mean that retailers with an above-average problem (or a recent dramatic incident such as a robbery) may be more motivated to take part than retailers with low or non-existent problems. The reverse may also be true.

In order to overcome any issues caused by a differentiated response rate, the approach adopted here is to 'gross up' the figures for each sector and country and report them as figures at a national level. The figures given in the remainder of this report as totals or percentages are figures that are nationally applicable based on the total retail sales for each country and detailed trade category.

Infratek Sikkerhet AS

Infratek Sikkerhet AS is a leading Nordic provider of integrated solutions to retailers and other businesses for increased performance and security. Infratek's solutions are currently installed in 80% of the leading retail chains in Scandinavia. Customers range from individual stores to large global chains. The company operates in all five Nordic countries, and provides retailers with real-time information about their assets and inventory. This helps to improve operations, optimize profitability and create memorable shopping experiences for the end user.

The Centre for Retail Research

The Centre for Retail Research carries out independent research in Europe and North America into retail security, retail systems, and the impact of change upon the sector. Best known is probably *The Global Retail Theft Barometer (GRTB)*, which benchmarked the crime suffered by retailers annually in 42 countries from the U.S. to China. The Centre has given evidence before the UK Parliament and the EU Commission on the future of retailing, and its figures have been widely quoted in the media and published by Government departments in France, the UK, the EU Commission and the OECD. Professor Joshua Bamfield's book, *Shopping and Crime*, is published in paperback by Palgrave Macmillan later in 2015.

Part Two Shrinkage and Crime Losses

Part Two analyses the losses from crime and from shrinkage amongst retailers in the Nordic countries.

Shrinkage Losses

Retail shrinkage, expressed as a percentage of retail sales prices, was an average of 1.35% (Table 5), a slight increase (+0.7%) from the 1.34% average in 2014. Within this global average, increases were noted in Denmark (up from 1.24% to 1.26%), Iceland (up from 1.41% to 1.43% in 2015), and Norway (up from 1.30% to 1.32% in 2015. The most common cause of the increase in the shrinkage rate was an increase in food shrinkage: this rose in 2015 from an average of 1.18% (2014) to 1.20%, whilst the non-food average remained constant at 1.49%.

Shrinkage is an accountancy figure based on purchases of inventory that shows the difference between the actual sales made by retailers and the potential. Shrinkage reflects losses from theft as well as for non-crime reasons, such as waste, pricing errors and poor administration.

Table 5
Shrinkage as a Percentage of Sales by Country and Main Categories

Country	Total Shrink- age 2015 *	Shrink- age Food 2015 *	Shrink- age Non- food 2015 *	Total Shrink- age 2014 *	Shrink- age Food 2014 *	Shrink- age Non- food 2014 *	Percentage Change 2014- 2015
Denmark	1.26%	0.98%	1.54%	1.24%	0.96%	1.53%	+1.6%
Finland	1.38%	1.30%	1.44%	1.38%	1.30%	1.44%	0.0%
Norway	1.32%	1.18%	1.46%	1.30%	1.16%	1.44%	+1.5%
Sweden	1.36%	1.24%	1.48%	1.36%	1.20%	1.51%	0.0%
Iceland	1.43%	1.32%	1.54%	1.41%	1.30%	1.51%	+1.4%
Averages	1.35%	1.20%	1.49%	1.34%	1.18%	1.49%	+0.7%

[* as a percentage of sales.]

Sweden's unchanged national shrinkage rate results from the fact that a large growth in food shrinkage was compensated for by a fall in non-food shrinkage. In Norway, both food and non-food shrinkage rose by 1.5% or two percentage points. However shrinkage often varies from year to year, but Table 5 indicates that whilst there was a general upwards thrust in food shrinkage there were different patterns in the various countries.

By value, total shrinkage in euros was €2,811 in 2015 (Table 6) compared to €2,600mn in 2014. Food shrinkage (42.4% of the total) was €1,193mn in 2015 and non-food shrinkage €1,618mn. The rates of exchange used for each country are given on page 3.

Table 6
Shrinkage as a Percentage of Sales in 2015 by Country and Main Categories

Country	Shrinkage Total 2015	Shrinkage Food 2015	Shrinkage Non-food 2015	Change in Total Shrinkage 2014-2015
Denmark	€ 461	€ 180	€ 281	€32
Finland	€ 514	€ 208	€ 306	€14
Norway	€ 770	€ 336	€ 434	€58
Sweden	€ 1,039	€ 457	€ 582	€105
Iceland	€ 27	€ 12	€ 15	€2
Totals	€ 2,811	€ 1,193	€ 1,618	€211

Tables 7 to 9 show shrinkage as percentage of sales by detailed type of business in 2015 (Table 7), 2014 (Table 8) and the changes between 2014 and 2015 (Table 9). The business headings or vertical markets are based on each retailer's main business category: they do not show shrinkage by product categories. Hence 'food/supermarkets' comprises all products sold by supermarkets, including clothing, small electricals, housewares and stationery.

Food retailers recorded an overall increase in shrinkage rates of 2.2% and specialists and convenience stores of 1.4% (Table 9). In non-food, health & beauty and electrical retailers recorded increases in shrinkage rates of 1.3% and 0.9%, respectively, and mixed retailers (department and general stores) and sports/sporting retailer shrink rose by an average of 0.6%.

Table 7
Shrinkage by detailed type of business 2015

	Food	Conven- ience & Food Specialists	Mixed, depart- ment stores	Fashion, clothing, shoes	Health & Beauty	Electrical	furniture/ hardware DIY	Sports & sporting	other	Weighted Average
Denmark	0.91%	1.34%	1.57%	1.74%	1.55%	1.49%	1.44%	1.61%	1.43%	1.26%
Finland	1.17%	1.50%	1.65%	1.77%	1.64%	1.01%	1.35%	1.60%	1.51%	1.38%
Norway	1.13%	1.38%	1.60%	1.69%	1.51%	1.02%	1.41%	1.58%	1.56%	1.32%
Sweden	1.19%	1.38%	1.59%	1.73%	1.58%	1.07%	1.30%	1.73%	1.57%	1.36%
Iceland	1.25%	1.43%	1.62%	1.78%	1.63%	1.24%	1.18%	1.54%	1.53%	1.43%
Averages	1.13%	1.41%	1.61%	1.74%	1.58%	1.17%	1.34%	1.61%	1.52%	1.35%

The pattern in individual countries was varied, with Finland, Norway and Sweden achieving significant reductions in electricals' shrinkage (by -3.8%, -2.9% and -2.7% respectively) and Denmark and Sweden in furniture (-5.8% and -1.4% respectively)

Table 8
Shrinkage by detailed type of business 2014

	Food	Conven- ience & Food Specialists	Mixed, depart- ment stores	Fashion, clothing, shoes	Health & Beauty	Electrical	furniture/ hardware DIY	Sports & sporting	other	Weighted Average
Denmark	0.89%	1.32%	1.57%	1.72%	1.53%	1.45%	1.46%	1.63%	1.40%	1.24%
Finland	1.17%	1.50%	1.63%	1.75%	1.64%	1.05%	1.33%	1.58%	1.48%	1.38%
Norway	1.12%	1.34%	1.58%	1.67%	1.44%	1.05%	1.36%	1.60%	1.57%	1.30%
Sweden	1.16%	1.34%	1.58%	1.77%	1.58%	1.10%	1.38%	1.71%	1.53%	1.36%
Iceland	1.22%	1.43%	1.65%	1.78%	1.61%	1.20%	1.15%	1.50%	1.50%	1.41%
Averages	1.11%	1.39%	1.60%	1.74%	1.56%	1.16%	1.34%	1.60%	1.50%	1.34%

[- data not available]

Table 9
Change in Shrinkage as a Percentage of Sales 2014-2015

	Food	Conven- ience & Food Specialists	Mixed, depart- ment stores	Fashion, clothing, shoes	Health & Beauty	Electrical	furniture/ hardware DIY	Sports & sporting	other	Weighted Average
Denmark	2.2%	1.5%	0.0%	1.2%	1.3%	2.8%	-1.4%	-1.2%	2.1%	1.6%
Finland	0.0%	0.0%	1.2%	1.1%	0.0%	-3.8%	1.5%	1.3%	2.0%	0.0%
Norway	0.9%	3.0%	1.3%	1.2%	4.9%	-2.9%	3.7%	-1.3%	-0.6%	1.5%
Sweden	2.6%	3.0%	0.6%	-2.3%	0.0%	-2.7%	-5.8%	1.2%	2.6%	0.0%
Iceland	2.5%	0.0%	-1.8%	0.0%	1.2%	3.3%	2.6%	2.7%		1.4%
Averages	1.8%	1.4%	0.6%	0.0%	1.3%	0.9%	0.0%	0.6%	1.3%	0.7%

[- data not available]

Calculating Shrinkage

Shrinkage, as noted above, is the difference between the value of goods purchased by retailers for resale to the final consumer and the actual revenues of the retailer. In this report, shrinkage figures are all given as a percentage of retail sales prices, although, as shown by Table 10, only 43.5% actually do this. The percentage using a cost basis for shrinkage is 36.8% and a further 19.7% used both methods for different parts of the business.

Table 10
Main Methods of Calculating Shrinkage 2015, as a Percentage of Respondents

Country	retail	cost	combination	total
Denmark	43.4%	37.3%	19.3%	100.0%
Finland	50.1%	31.1%	18.8%	100.0%
Norway	42.4%	37.2%	20.4%	100.0%
Sweden	43.4%	38.5%	18.1%	100.0%
Iceland	38.4%	39.8%	21.8%	100.0%
Totals	43.5%	36.8%	19.7%	100.0%
Change 2014-15	-4.2%	+4.0%	+2.6%	-

Each business decides its own way of calculating shrinkage and this will often reflect the way it controls inventory in stores. More recently there has been a shift towards cost-based methods of calculating shrinkage as a result of the introduction of new enterprise software that uses cost-based systems and because what was once 'the' retail price now varies much more frequently than previously.

This report uses retail prices as this is a standardised system of reporting shrinkage rates: because cost levels vary between retailers, then the declared percentage (cost-based) shrinkage will also vary even in cases where overall shrinkage is identical. Using retail sales as the shrinkage benchmark permits better comparisons to be made because we are comparing *like* with *like*. In any event the national statistics published about retailing use retail prices and not cost prices, so we would have no basis for making comparisons based on costs. We are not advocating at all that retailers should use the retail price method to control inventory or calculate shrinkage. Accurate comparisons are far easier to make using retail prices for this and other surveys, and, as a result, this is the practice we adopt.

Sources of Shrinkage

The main cause of shrinkage according to retailers (Table 11) was theft by customers/shoplifters: this was responsible for an average of 53.1% of losses (in 2014 this was 55.0%). Dishonest employees caused 29.0% of shrinkage (28.8% in 2014) of losses. Mistakes and administrative errors (eg incorrect pricing or incorrect transfers) were thought to be an average of 17.9% of shrinkage losses (18.9% in 2014).

Table 11 Main Sources of Shrinkage 2015

		Dishonest	Administrative	
Country	shoplifters	employees	error	total
Denmark	52.3%	29.3%	18.4%	100.0%
Finland	54.0%	27.8%	18.2%	100.0%
Norway	53.7%	28.6%	17.7%	100.0%
Sweden	52.8%	29.1%	18.1%	100.0%
Iceland	52.8%	30.0%	17.2%	100.0%
Average	53.1%	29.0%	17.9%	100.0%

Table 12
Main Sources of Shrinkage 2015
(€ millions)

Country	shoplifters	Dishonest employees	Administrative error	total	Change 2014- 2015
Denmark	€241	€135	€85	€461	€ 32
Finland	€278	€143	€93	€514	€ 14
Norway	€413	€220	€136	€770	€ 58
Sweden	€549	€302	€188	€1,039	€ 105
Iceland	€14	€8	€5	€27	€2
Totals	€1,495	€808	€507	€2,811	€ 211
Percent	53.3%	28.8%	18.1%	100.2%	

Total shrinkage losses in 2015 were €2,811mn, comprising €1,495mn in customer theft or shoplifting, €808mn stolen by dishonest employees and €507mn resulting from administrative error (Table 12).

Total Retail Crime

Table 12 shows that not all shrinkage is actually crime. If the costs of errors (€507mn) is deducted from costs of shoplifters plus dishonest employees, then crime costs are a total of €2,303mn, made up of €1,495mn (shoplifting) and €808mn (dishonest employees). The percentage of shrinkage caused by crime therefore is 81.9% (see Table 12). Compared to 2014, when estimated crime costs were €2,109mn, this indicates an increase of €194mn (+9.2%) compared to 2014.

Online Shrinkage

As online retailing is growing faster than retailing through conventional shops and stores, it is important to collect data about losses from this source. On average, retailers that engaged in online sales lost 0.70% of sales through fake orders (0.62% in 2014) and 0.31% of sales (as last year) as a result of payment crime (Table 13). The average level of shrinkage in ecommerce sales at 1.01% had increased by 8.6% compared to 2014. The total cost to retailers of these losses was €130.2mn, €90.1mn from order fraud and €40.1mn from payments fraud.

'Payment crime' relates to losses caused by illegal or improper use of credit, debit card crime, illegal brank transfers, direct debit based on the use of illegally acquired personal financial details. Although private individuals are generally reimbursed when they are subject to these frauds, retailers normally find that any illegal payments from a victim's account (a private consumer) are deducted from their payments received from banks and credit card merchant acquirers. Thus payment crime, representing illegal payments made for merchandise, is a direct loss to retailers as well as banks although the estimate given here relates only to retailers.

As last year, Danish retailers seem to have been badly affected by online theft as average shrinkage costs of online retailers rose by 17.7% in 2015, but the largest increase in 2015 was in Norway, where the online shrinkage rate increased by 18.5%.

Table 13
Shrinkage in Online Retailing

		Payment		Change 2014-
Country	False orders	crime	total	2015
Denmark	0.78%	0.35%	1.13%	17.7%
Finland	0.69%	0.32%	1.01%	0.0%
Norway	0.69%	0.27%	0.96%	18.5%
Sweden	0.70%	0.33%	1.03%	12.0%
Iceland	0.65%	0.27%	0.92%	Not available
Averages	0.70%	0.31%	1.01%	8.6%

Part Three Thieves and Retail Losses

Part Three provides fundamental data about the people who steal and the losses they produce for retailers and customers.

The Significance of Crime to Nordic Retailers

The proportion of Nordic retailers that felt that crime in stores was a significant problem facing them slipped slightly from 79.1% to an average of 76.0% in 2014 (Table 14) and those considering it to be 'only a small problem' rose to 24.0%. In spite of this marginal decrease, Table 14 shows that over three-quarters of respondent regarded crime as a significant problem for them.

Table 14
Is Crime In Stores a Significant Problem for You?

	Only a Small				
Country	Yes	Problem	Totals		
Denmark	68.5%	31.5%	100.0%		
Finland	73.3%	26.7%	100.0%		
Norway	74.0%	26.0%	100.0%		
Sweden	75.8%	24.2%	100.0%		
Iceland	88.6%	11.4%	100.0%		
Averages	76.0%	24.0%	100.0%		

The main crime issues were seen to be shoplifters (52.8%), dishonest employees (24.3%) and a further 22.9% of retailers suffered significant crime losses from both shoplifters and dishonest employees (Table 15). This is slightly different from Table 11, which shows the breakdown of shrinkage into crime and error, whilst Table 15 attempts to measure the relative significance of shoplifters (external crime) and dishonest employees.

Table 15
The Main Theft Problem 2015

Country	shoplifters	employees	both	total
Denmark	55.2%	20.4%	24.4%	100.0%
Finland	55.6%	21.0%	23.4%	100.0%
Norway	54.6%	23.0%	22.4%	100.0%
Sweden	52.5%	23.6%	23.9%	100.0%
Iceland	46.0%	33.7%	20.3%	100.0%
Averages	52.8%	24.3%	22.9%	100.0%

Average Thefts and the Numbers of Thieves

Table 16 shows that the equivalent in euros of the average value stolen by apprehended shoplifters was €57.19 and dishonest employees stole an average of €267.68. This was a reduction (-1.3% in theft by shoplifters and -4.1% in theft by employees) compared to 2014, when the averages were €57.95 and €279.13 respectively. These figures normally reflect *known* thefts or crimes when offenders have been identified and may vary as a result of different success rates. The highest average value for shoplifting (€64.55) was reported in Sweden and the highest employee theft average was Norway, €296.30.

Table 16
Average Values Stolen by Shoplifters and Dishonest Employees 2015

Country	Average theft by shoplifters	Average theft by dishonest employees
Denmark	€ 55.52	€ 235.11
Finland	€ 61.37	€ 251.75
Norway	€ 60.29	€ 296.30
Sweden	€ 64.55	€ 290.74
Iceland	€ 44.23	€ 264.48
Averages	€ 57.19	€ 267.68

The numbers of thieves apprehended by retailers are given in Table 17, which shows a similar number of dishonest employees apprehended but 6,646 fewer shoplifters. The number of shoplifters apprehended in 2015 was 137,860 (144,506 in 2014) and 3,674 dishonest employees (3,605 in 2014). These totals are for the numbers caught by retailers: a smaller proportion will usually have been handed over to the police, usually because liability may have been unclear, the amount involved was small, the culprit was a first-time offender, the police were too busy to send an officer, or simply that the whole process would take up too much time. Hence there may be a significant difference between total numbers reported to the police and total apprehended.

For shoplifters, it should be noted that prolific offenders may well be apprehended more than once in a 12 month period so a proportion of the individuals in Table 17 may be counted several times.

Table 17
The Numbers of Thieves Apprehended

Country	Total shoplifters	Male shoplifters	Female Shoplifters	Total Employee Thieves	Male employee thieves	Female employee thieves
Denmark	22,600	11,390	11,210	873	328	545
Finland	25,742	13,283	12,459	821	296	525
Norway	40,846	21,526	19,320	908	337	571
Sweden	47,383	23,739	23,644	1,026	389	637
Iceland	1,289	686	603	46	17	29
Totals	137,860	70,624	67,236	3,674	1,367	2,307
Change since 2014	-6,646	-5,285	-1,361	-69	-12	81

Although shoplifting is often considered to be a predominantly female crime, 51.2% of offenders were male, reflecting the findings in the two previous surveys. Amongst dishonest employees, only 37.2% were male, although this low proportion probably reflects the gender balance of males and females employed in the retail sector. Table 18 gives the breakdown of apprehended shoplifters by age group. As might be expected a large proportion of shoplifters are young – 22,673 were under 18 years (16.4% of shoplifters), 36,536 (26.5%) were between 18 and 24 years, a further 32,212 (23.4%) were aged 25 to 34 years and 46,439 (33.7%) were more than 34 years of age. Compared to most other crimes shoplifting is unusual in that a large proportion of offenders are female and all age groups can be engaged in this form of crime.

Table 18
The Demographics of Shoplifters

			Age categories				
	Total	< 18	18 to 24	25 to 34			
Country	Shoplifters	years	years	years	>34 years		
Denmark	22,600	3,774	6,238	5,198	7,390		
Finland	25,742	4,119	6,770	6,049	8,804		
Norway	40,846	6,413	11,396	10,130	12,907		
Sweden	47,383	8,150	11,798	10,519	16,916		
Iceland	1,289	217	334	316	422		
Totals	137,860	22,673	36,536	32,212	46,439		

Methods of Theft

The breakdown of retail losses through different forms of crime is shown in Table 19. The administrative error element of shrinkage has been eliminated: the figures relate only to crimes. A total of €1,751mn, (or 76.1% of total crime losses) were physical goods and €212mn (9.2%) losses of cash. False refunds (goods returned having been used or previously stolen) accounted for €178mn of crime losses (7.8%). Other methods of theft included payment crime/illegal payments (€77mn, the costs of such losses to retailers as opposed to the banking system), counterfeits (€30mn), delivery crime (€35mn, goods delivered to fake addresses or misreported as not having been delivered), and illicit use of coupons and staff cards (€17mn).

Table 19 Methods of Theft

	Stolen goods	Cash	Payment crime	Counter- feit	Coupons/ staff cards	False refunds	Delivery crimes	Total
Denmark	€ 293	€ 33	€9	€ 4	€3	€ 28	€6	€376
Finland	€ 319	€ 36	€ 13	€9	€2	€ 34	€7	€420
Norway	€ 482	€ 60	€ 23	€8	€ 4	€ 45	€8	€630
Sweden	€ 640	€81	€ 29	€9	€8	€ 71	€ 14	€852
Iceland	€ 17	€ 2	€3	€0	€0	€0	€0	€22
Total	€ 1,751	€ 212	€ 77	€ 30	€ 17	€ 178	€ 35	€2,300

Main categories of loss

Table 20 shows that the top three categories of loss were: computers and smartphone accessories, shaving products and clothing accessories (scarves, belts, gloves and other accessories). Most of these products, indeed virtually everything in this list, consisted of well-regarded goods that people either decided to acquire without having to pay or were stolen in order to resell to other people. A number of items of merchandise have changed their position, shaving products fell from number 1 to number 2, batteries and meat and cheese moved up whilst watches and electronics moved down. DVDs/CDs left the list, and stationery and tea/coffee came in. The changes shown in Table 20 probably reflect several causes: the use by retailers of targeted crime-prevention methods to inhibit theft of the most-stolen items, thieves responding to new loss-prevention strategies by stealing different things and changes in what thieves (and their 'customers') habitually steal, eg reduced interest stealing CDs and DVDs as a result of the importance of streaming services.

Table 20
Which Category Of Merchandise Suffers The Greatest Theft?

Category of product *	Loss as % of	Rank 2015	Rank 2014
	product lines		
Computer and smartphone accessories	4.3%	1	2
Shaving products	4.2%	2	1
Batteries	3.8%	3	5=
Clothing accessories	3.7%	4	3
Tools	3.5%	5	5=
Watches	3.2%	6	4
Meat and cheese	2.6%	7	9
Stationery	2.4%	8	-
Toys	2.3%	9	7
Electronics	2.2%	10	8
Tea/coffee	2.1%	11	-
Health & Beauty	2.0%	12	10=
Childrens wear	1.9%	13=	10=
Underwear/lingerie	1.9%	13=	12
Clothing & Apparel	1.8%	15	13

^{*} Note that most of these categories are sold by a range of stores and the results do not necessarily relate to losses by specialist retailers

Reporting Thieves to the Police

Table 21 shows that 32.3% of retailers stated that they 'always reported shoplifters to the police', 37.2% did it 'for the most part' and 30.5% 'seldom or never'. The results show that compared to 2014, retailers have tended to report slightly fewer shoplifters to the police as well as apprehending 6,646 fewer than before (see Table 17).

In contrast, retailers have become more likely to report their dishonest employees 29.2% of retailers 'always' reported dishonest staff to the police (27.6% in 2014) and 37.2% did it 'for the most part' (30.8% in 2014) (Table 22). This is evidence of a more focused approach, given the high average level of loss suffered as a result of a dishonest employee.

Table 21
Reporting Shoplifters to the Police

Country	Always	For the most part	Seldom or Never	Total
Country	Aiways	most part	INCVCI	TOtal
Denmark	25.9%	42.2%	31.9%	100.0%
Finland	37.5%	27.9%	34.6%	100.0%
Norway	32.0%	39.0%	29.0%	100.0%
Sweden	29.8%	37.4%	32.8%	100.0%
Iceland	36.3%	39.7%	24.0%	100.0%
Averages	32.3%	37.2%	30.5%	100.0%
Change 2013	-1.8%	-0.5%	2.7%	

Table 22
Reporting Dishonest Employees to the Police

Country	Always	For the most part	Seldom or Never	Total
Country	Aiways	illust part	ivevei	TOTAL
Denmark	26.5%	34.6%	38.9%	100.0%
Finland	31.6%	33.0%	35.4%	100.0%
Norway	28.1%	33.6%	38.3%	100.0%
Sweden	28.8%	32.8%	38.4%	100.0%
Iceland	31.2%	35.5%	33.3%	100.0%
Averages	29.2%	33.9%	36.9%	100.0%
	5.8%	10.1%	-11.5%	

Staff-customer Collusion

Table 23 gives an answer to the question of whether collusion, the practice of employees dishonestly giving away goods to 'customers' or relatives, was a problem for their company. An average of 54.1% of businesses reported that staff collusion was indeed a problem. The remainder either did not suffer greatly from collusion or had more significant types of loss that were of greater concern for them.

Table 23
Is Employee-customer Collusion a Problem for Your Company?

Country	Yes	No	Total
Denmark	48.1%	51.9%	100.0%
Finland	59.2%	40.8%	100.0%
Norway	53.6%	46.4%	100.0%
Sweden	52.1%	47.9%	100.0%
Iceland	57.3%	42.7%	100.0%
Averages	54.1%	45.9%	100.0%

Internal Theft by Senior Staff and Keyholders

On average, retailers estimated that around 17.1% of their internal theft was committed by senior staff or keyholders in stores and the organisation (Table 24). In 2014 the average was 16.3%, so retailers perceive that the risks of theft by dishonest senior staff may be starting to rise. These are of course only estimates and may not reflect actual differences between countries. The reason why senior staff and keyholders may commit disproportionate amounts of internal crime is naturally that these staff know the retailer's systems and have access to the company's systems, stores and merchandise. Losses caused by thefts originating from senior staff and keyholders were certainly significant, however this was not the main driver of internal theft: only 13.3% reported that losses due to crimes by senior staff and keyholders rose this year, although the corresponding figure last year was only 11.5%.

Table 24
Estimated Internal Theft by Senior Staff and Keyholders

Country	The Estimated Percentage of Internal Theft committed by Senior staff in 2015	Percentage of Retailers Suffering Increased Losses from Senior-staff Internal Theft in 2015
Denmark	17.4%	11.4%
Finland	16.2%	14.2%
Norway	17.7%	13.8%
Sweden	16.6%	12.6%
Iceland	17.8%	14.6%
Averages	17.1%	13.3%

Part Four Organised Crime and Other Crime Issues

Part Four examines the impact of organised crime and other crime concerns.

Organised Retail Crime

Organised retail crime (ORC) includes such problems as gang-related crimes against retailers, groups of thieves working in concert and thieves using mechanical or electronic methods of avoiding anti-theft systems.

Table 25 shows that the percentage of retailers believing they were suffering increased losses caused by ORC rose by 9.1% this year to an average of 33.6% (30.8% in 2014). The percentages varied from 36.3% in Sweden and 27.9% in Iceland.

Table 25
Has your business experienced an increase in crime resulting from organised retail crime or gangs this year?

Country	Yes	No	Total
Denmark	33.7%	66.3%	100.0%
Finland	36.3%	63.7%	100.0%
Norway	33.6%	66.4%	100.0%
Sweden	36.3%	63.7%	100.0%
Iceland	27.9%	72.1%	100.0%
Averages	33.6%	66.4%	100.0%
Change 2013	9.1%	-4.0%	

The Likelihood of Robbery

Table 26 shows retailers' perceptions of the likelihood that one or more of their stores would be robbed in the next 12 months. Naturally larger retailers tended to be more likely to report a higher incidence of robbery simply because they owned more stores. The proportion of retailers that expected that it was 'very likely' that one or more of their stores would be robbed was 5.3% and a further 12.9% thought that this was 'likely', a combined total of 18.2%, an increase compared to 14.5% in 2013.

The proportion of retailers believing that there was some possibility or likelihood that their stores would be robbed in the next year increased from 33.7% to 37.6%. This has

been calculated by comparing the combined percentages of columns 3, 4 and 5 ('very likely', 'likely' and 'somewhat likely') in both years. However the proportion of the most vulnerable retailers, who felt their stores were 'very likely' to be robbed, reduced from 6.4% to 5.3% in 2015, perhaps indicating the benefits of higher investment in loss prevention and support from the police.

Table 26
Retailer Perceptions of Likelihood of Robbery Against Stores in 2014

			Likelihood o	of Robbery		
	1 Very unlikely	2 Unlikely	3 Somewhat likely	4 Likely	5 Very likely	total
Denmark	33.8%	29.2%	19.8%	10.8%	6.4%	100.0%
Finland	40.7%	29.9%	16.7%	9.5%	3.2%	100.0%
Norway	31.6%	26.5%	19.3%	15.9%	6.7%	100.0%
Sweden	35.1%	26.1%	21.6%	12.6%	4.6%	100.0%
Iceland	34.2%	24.8%	19.8%	15.7%	5.5%	100.0%
Averages	35.1%	27.3%	19.4%	12.9%	5.3%	100.0%
Change 2014	-7.6%	-3.5%	14.1%	25.2%	-17.2%	

Metal Foil Bags

Bags lined with metal foil, which inhibit electronic article surveillance (EAS) signals, have proved to be an increasing problem for retailers worldwide. In the Nordic countries, an increased percentage of retailers said that they were particularly susceptible to thefts by criminals using metal foil bags (52.8% in 2015 compared to 49.0% last year) and a further 22.3% said they were 'somewhat' susceptible. Such problems are now typical of most countries. A store that suffers little shoplifting or has no EAS is unlikely to be vulnerable to bags lined with metal foil.

Table 27
Is the Use of Bags Lined with Metal Foil a Particular Risk to Your Company?

			Not	
Country	Yes	Somewhat	particularly	Total
Denmark	47.4%	29.1%	23.5%	100.0%
Finland	55.8%	20.7%	23.5%	100.0%
Norway	59.6%	21.6%	18.8%	100.0%
Sweden	52.4%	19.8%	27.8%	100.0%
Iceland	48.7%	20.2%	31.1%	100.0%
Averages	52.8%	22.3%	24.9%	100.0%
Change 2013	7.8%	13.2%	-20.4%	

Self-service Checkouts

Customer-operated self-service or self-count checkouts have been increasingly used by retailers for both customer service and cost reasons. Table 28 shows that 30.0% of Nordic retailers have installed one or more of these devices in at least one of their stores. A

further 7.4% expect to install customer self-checkouts 'in the near future'. Multiple chain retailers with several stores may, of course, have only one or two sites with customer self-checkout. Only a proportion of checkouts in a store are likely to be self-service, though this may change over time as customers become more familiar with their operation. Table 28 suggests that around 37.4% of retailers expect to make some use of self-service checkouts, so any impact that this change will have on shrinkage needs to be taken into account.

Table 28
Proportion of Retailers with Self-Service Checkouts

		In near		
Country	Yes	future	No	Total
Denmark	28.6%	7.1%	64.3%	100.0%
Finland	31.3%	8.6%	60.1%	100.0%
Norway	33.1%	6.2%	60.7%	100.0%
Sweden	35.7%	7.9%	56.4%	100.0%
Iceland	21.3%	7.0%	71.7%	100.0%
Averages	30.0%	7.4%	62.6%	100.0%
	31.6%	-48.3%	-0.5%	

Self-service checkouts may affect shrinkage levels in various ways. Because a staff member is not present to ensure that goods are presented for scanning at all times, some customers may use these to obtain goods without making payment; in contrast the range of software controls may inhibit customers from trying to cheat and, in stores where there is collusion or high staff dishonesty, self-service checkouts may actually reduce shrinkage.

Table 29
Do You Expect Self-Service Checkouts to Affect Shrinkage Levels

			No	
Country	Reduce	Increase	connection	Total
Denmark	43.7%	31.5%	24.8%	100.0%
Finland	28.3%	34.2%	37.5%	100.0%
Norway	34.7%	34.6%	30.7%	100.0%
Sweden	29.9%	31.4%	38.7%	100.0%
Iceland	26.0%	33.8%	40.2%	100.0%
Averages	32.5%	33.1%	34.4%	100.00%
	21.5%	-10.0%	-5.8%	

Table 29 shows that at present loss prevention managers are divided about the impact of self-service checkouts with the number expecting shrinkage to fall (32.5%) being only slightly smaller than the number expecting shrinkage to rise (33.1%), a difference of 0.6%. Last year 36.8% of retailers expected self-service checkouts to increase shrinkage and 26.7% expected shrinkage to fall because of them, a difference of 10.1%, so attitudes seem to be changing. In addition 34.4% thought that self-service checkouts would have no effect on shrinkage.

The increase acceptance of self-service checkouts shows the importance for retailing that they should be well managed and their use controlled. The change in attitudes about self-service checkouts may indicate that the equipment software, controls and staff training may have helped to reduce the potential losses that might have otherwise occurred and that loss prevention and operations departments have learned how to manage these devices to discourage theft and help customers operate them successfully.

Part Five Loss Prevention and Retail Crime

Part Five examines the amount spent by Nordic retailers spend on loss prevention and the methods used to ensure that vulnerable products remain safe.

Decision-making about Shrinkage

A number of departments and functional areas are involved in decisions about shrinkage (Table 30). In 36.4% of retailers, the chief executive or owner was directly involved and this proportion is increasing slowly as more CEO view security and loss prevention as a key element in managing risk. The main departments involved with shrinkage decision making were: operations (58.8%), finance (42.2%) and IT and systems (38.9%). Other interested departments included HR (human resources) which was involved in 20.7% of businesses and marketing (10.3%). 'Other' such as distribution and training were involved in 13.4% of businesses.

Security or Loss Prevention itself was of course centrally involved in virtually every company.

Table 30
Which Departments Are Involved in Decision-making Regarding Shrinkage?

	CEO	Finance	Operations	Security/ Loss/Risk	IT	Marketing	HR	other
Denmark	36.8%	41.2%	55.8%	99.3%	35.8%	16.0%	20.8%	13.0%
Finland	32.0%	42.8%	59.0%	98.4%	38.7%	13.4%	19.6%	13.8%
Norway	33.8%	40.3%	56.2%	97.8%	36.8%	10.5%	19.4%	12.6%
Sweden	35.8%	41.2%	61.0%	98.7%	39.0%	13.5%	21.5%	14.2%
Iceland	43.6%	45.3%	62.0%	98.0%	44.2%	8.3%	22.2%	13.6%
Average	36.4%	42.2%	58.8%	98.4%	38.9%	12.3%	20.7%	13.4%

Loss Prevention Budgets

Loss prevention spending rose by 1.2% from €521.6mn last year to €530.3mn in 2015 (Table 31). This pattern varied with Sweden and Norway increasing spending by 2.4% and 1.3% respectively, with a marginal increase in Denmark (+0.6%) and no change in Iceland. In Finland spending fell by 0.4%. Security spending fell by €1mn in Sweden but rose or remained the same elsewhere. Table 31 shows that in most countries retailers were very careful in controlling their loss prevention budget, although the pattern of spending by category was varied.

Spending on loss prevention employees, at €276.0mn, was the largest part of the security budget, representing 52.0% of the total. Directly-employed security staff cost €126.5mn and third-party staff was estimated to cost €149.5mn, with spending on third-party staff rising from €147.5mn to €149.5mn whilst spending on directly employed staff fell.

Spending on security equipment rose to €137.5mn from €135.8mn in 2014. CCTV spending and EAS both rose slightly by €1.3mn and €0.2mn respectively. Spending on software at €34.3mn remained unchanged for the second year, but training spending increased by €0.9mn to €40.3mn.

Table 31
Loss Prevention Spending in 2015 (€millions)

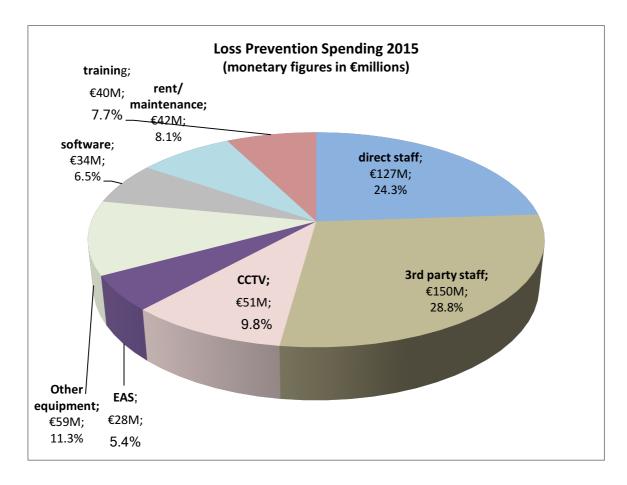
	All Figures in € millions										
	Total staff	Direct staff	3 rd - party staff	ссту	EAS	Other	Total Equip- ment	Software	Rent/ maint- enance	Training	Totals
Denmark	€49	€23	€26	€7.1	€5.0	€9.1	€21.2	€5	€8.1	€6.2	€89.5
Finland	€56	€25	€31	€9.0	€6.0	€10.6	€25.6	€6	€8.0	€9.0	€104.6
Norway	€71	€32	€39	€13.2	€7.0	€19.0	€39.2	€11	€9.4	€11.2	€141.8
Sweden	€98	€46	€52	€21.0	€9.2	€19.4	€49.6	€12	€16.3	€13.5	€189.4
Iceland	€2	€0.5	€1.5	€0.6	€0.4	€1.0	€1.9	€0.3	€0.4	€0.4	€5.0
Total	€276.0	€126.5	€149.5	€50.9	€27.6	€59.1	€137.5	€34.3	€42.2	€40.3	€530.3

Table 32 deals with the question of whether retailers expect that their investment in loss prevention is likely to increase next year. Prospects seem to have improved with 28.5% of retailers expecting to spend more on loss prevention next year, compared with last year's figure of 25.7%. Countries were retailers were most likely to spend more next year included Finland and Sweden (both 31.6%).

Table 32
Do You Expect to Increase Your Investment in Loss Prevention Next Year?

Country	Yes	No	Total
Denmark	28.4%	71.6%	100.0%
Finland	31.6%	68.4%	100.0%
Norway	25.3%	74.7%	100.0%
Sweden	31.6%	68.4%	100.0%
Iceland	25.5%	74.5%	100.0%
Averages	28.5%	71.5%	100.0%





The key areas of new spending (Table 33) were expected to be in training (19.4%), CCTV (18.8%), and RFID (17.3%): more staff and EAS were rather less favoured — though still significant - at 15.3% and 14.9% respectively. However it was expected that one of the main thrusts of spending would be in RFID (+26.3% compared to 2015).

Table 33
Expected Key Areas of New Loss Prevention Spending 2015

	EAS	RFID	Camera	Training	More staff	Other	Total
Denmark	14.2%	17.6%	19.4%	22.4%	11.3%	15.1%	100.0%
Finland	15.2%	20.6%	17.2%	17.5%	13.7%	15.8%	100.0%
Norway	14.4%	18.1%	17.9%	18.6%	15.3%	15.7%	100.0%
Sweden	15.3%	17.6%	21.8%	17.1%	17.7%	10.5%	100.0%
Iceland	15.2%	12.6%	17.8%	21.4%	18.6%	14.4%	100.0%
Total	14.9%	17.3%	18.8%	19.4%	15.3%	14.3%	100.0%
Change 2014	-2.6%	26.3%	-5.1%	-17.1%	-3.8%	20.2%	

The Methods Used to Apprehend Thieves

Table 34 shows the impact of different methods of identifying and/or apprehending thieves in the Nordic countries. Only a proportion of retailers were able to provide this information so we are unable to show any differences there may be between countries.

Naturally several methods may be used together in order to apprehend a thief, including a member of the security team and CCTV, but security staff and store sales employees had the highest 'hit rate' in apprehending both shoplifters and dishonest employees, 42.6% and 46.6% respectively. Amongst shoplifters, CCTV was involved in 25.2% of cases, EAS in 18.7% of them, customers alerted staff in 4.8% of cases and in 5.2% of instances data mining was the key factor.

Table 34
Nordic Averages for the Key Methods Used to Apprehend Thieves

Method	Shoplifters	Dishonest Employees
CCTV	25.2%	18.1%
EAS	18.7%	4.5%
Security/employees	42.6%	46.6%
Customers	4.8%	4.8%
Data mining	5.2%	24.7%
Other	3.5%	1.3%
Total	100.0%	100.0%

Data mining was the second most significant method of identifying dishonest employees (after security/sales staff), being used in 24.7% of cases, followed by CCTV (18.1% in 2014), EAS (4.5%), customers (4.8%) and 'other' (mainly police or intelligence) 1.3%.

Environmental Issues and Loss Prevention Programmes

There has been an increase in the proportion of Nordic retailers expressing their support for taking environmental issues into account when making loss prevention or security investments. Table 35 shows that 50.5% of respondents regarded environmental issues as being important when purchasing loss prevention products (45.8% in 2013), and a further

Table 35
Importance of Environmental Issues When Making Loss Prevention Investments

		A Small		
Country	Yes	Amount	No	Totals
Denmark	51.6%	27.5%	20.9%	100.0%
Finland	48.7%	30.2%	21.1%	100.0%
Norway	49.7%	31.5%	18.8%	100.0%
Sweden	53.0%	30.8%	16.2%	100.0%
Iceland	49.3%	35.7%	15.0%	100.0%
Averages	50.5%	32.7%	16.8%	100.0%
Change 2013	10.3%	0.0%	-21.9%	

32.7% stated that they took these issues into account to 'a small amount'. The proportion of retailers emphasising that the environment was important when making loss prevention spending decisions was either near to or more than 50%.

Methods of Protecting the Most-stolen Items

Table 36 shows the main methods used to protect the most vulnerable products in the five Nordic countries. The average percentage of lines that was actually protected by devices rose to 61.1% compared to 59.2% last year) and the most common method of protection was some form of EAS.

EAS protected 48.9% of the most vulnerable goods (the figure two years ago was 40.7%), primarily paper tags (16.8%), hard tags (15.2%), and source tagging (11.3%). In addition, safers/keepers were used for 5.6% of products. Other methods used were line security (such as locks and cables) (6.9% of the total) and locked cabinets (5.3%).

Table 36
Main Methods of Protecting the Most-stolen Items

					Line		
	Hard tags	Paper tags	Source tagging	Safers/keepers	Locked cabinets	security	Totals
Denmark	14.1%	16.3%	11.4%	6.3%	4.3%	6.3%	58.7%
Finland	14.0%	16.3%	13.0%	5.7%	5.4%	7.0%	61.4%
Norway	14.1%	16.6%	12.0%	5.3%	4.6%	6.9%	59.5%
Sweden	13.5%	15.3%	12.2%	5.0%	3.8%	5.5%	55.3%
Iceland	20.2%	19.7%	8.0%	5.8%	8.5%	8.6%	70.8%
Average	15.2%	16.8%	11.3%	5.6%	5.3%	6.9%	61.1%
Change 2013	0.0%	-2.3%	11.9%	3.7%	-7.0%	21.1%	3.2%

Store Loss Prevention Audits

Regular store audits to ensure that every store is actually applying company-approved security procedures form an increasing part of loss prevention throughout the world. Some companies concentrate on the worst 20% of stores, but may undertake an occasional audit of every store. Other retailers may rigidly assess every store by audit between three and six times a year. There are many different ways, therefore, in which store audits may occur.

Table 37
Store Loss Prevention Audits

Country	Regular Store Audits Used	We Intend to Start Using Store Audits	No Plans to Use Store Audits in 2013-14
Denmark	88.7%	4.8%	11.3%
Finland	85.6%	5.0%	14.4%
Norway	91.6%	3.4%	8.4%
Sweden	93.0%	3.0%	7.0%
Iceland	72.7%	4.5%	27.3%
Averages	86.3%	4.1%	13.7%
Change 2013	3.6%	-34.9%	-18.0%

An average of 86.3% of Nordic retailers use regular security store audits, an increase of 4.6% compared to 83.3% last year. A further 4.1% of retailers expect to introduce regular store audits in the next 12 months (Table 37). Retailers in Sweden, Norway and Denmark were most like to conduct regular store audits (93.0%, 91.6% and 88.7% respectively). As the proportions of retailers with store audits are already high, it seems unlikely that these figures will rise much further, particularly as many smaller retailers are fairly unlikely to want to adopt regular store audits. The percentage of retailers with no store audits and no intention of adopting them was as low as 13.7%.

Centre for Retail Research Limited Newark Beacon Innovation Centre Beacon Hill Office Park Cafferata Way Newark, Nottinghamshire NG24 2TN www.retailresearch.org Tel: 0845 122 7058 research@retailresearch.org www.retailresearch.org

Registered in England No: 3401261

VAT: 694 5871 76