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# COUNTING COUNTERFEITS:

Defining a method to collect, analyse and compare data on counterfeiting and piracy in the Single Market

Final report for the European Commission  
Directorate-General Single Market

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This is the final report on the study for the European Commission defining a 'methodology for the collection, analysis and comparison of data on counterfeiting and piracy in the single market'.

This report is intended as a basis for discussion. Whilst every effort has been made to ensure the accuracy of the material in this report, neither the authors nor the centre for economics and business research ltd will be liable for any loss or damages incurred through the use of this report.

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# 1. SUMMARY & RECOMMENDATIONS

This report develops and recommends methods of research that the member states or private organisations can use to measure the incidence of counterfeiting and piracy in a range of different product sectors.

The Directorate-General Internal Market of the Commission of the European Communities has commissioned the report; it is written and based on a study by centre for economics and business research ltd – a London-based economics consultancy that has conducted studies into the economic impact of counterfeiting.

The methods we recommend – which, to the best of our knowledge, conform to existing Community legislation – have been designed to provide members states and the private sector with appropriately robust, consistent and comparable estimates of counterfeiting and piracy with the least cost and effort.

We provide recommendations, which are based on a year long study during which over a hundred organisations across the European Union and beyond were consulted, for 19 different product groups:

- Pharmaceuticals
- Spectacles including sunglasses
- Watches
- Plants
- Leather goods
- Food and drink
- Perfumes and cosmetics
- Alcoholic beverages
- Textiles and sporting goods
- Durable goods
- Toys and games including electronic games
- Vehicle spare parts
- Aircraft spare parts
- Industrial spare parts
- Computer hardware
- Books and publications
- Films and motion pictures
- Sound recordings
- Computer software

In this summary and recommendations chapter, we first consider some general rules and guidance for member states and private organisations attempting to measure counterfeiting and piracy. Second, we recommend specific methods for each of the 19 product groups. Third, we describe a simple model that can help extrapolate counterfeiting and piracy rates from sectors and countries where data are available to those where data are not.

## 1.1 General rules and guidance

We have derived some general rules and guidance for organisations – member states or private sector businesses and their representatives – establishing surveys and measurements of counterfeiting and piracy.

### Focus on consumption measures first

First, we believe initial efforts should focus on measuring the level of consumption rather than production of counterfeits and pirates. We find that typically these are easier and less costly to implement.

### Be clear about geographic coverage and units of measurement

Second, organisations should be clear and explicit about the geographic coverage of their surveys and measurements. As a minimum, we recommend that consumption by EU nationals within each EU member state should be measured. Then, in addition, surveys of consumption by non-EU nationals within the EU and surveys of consumption by EU nationals outside the EU can be made.

Third, organisations should be clear and explicit about the unit of measurement of their surveys. We recommend that, as a minimum, volume measures should be used. Then, in addition, value measures may be estimated provided their method of calculation is totally transparent.

### Don't rely on seizure, arrests or conviction data

Fourth, although many existing estimates of the size of the counterfeiting and piracy problems are based on extrapolating from the number of seizures, arrests or convictions made by enforcement agencies, we do not recommend this approach except in rare circumstances. We recommend data from enforcement agencies should only be used as the primary basis for estimating counterfeiting or piracy activity when either:

- (i) detection rates – i.e. the proportion of total counterfeiting or piracy activity detected by enforcement agencies – can be known with confidence; or
- (ii) where detections rates are known to be high – e.g. above 75 per cent.

We do not believe either of these criteria is met in the product areas we have considered in our study.

## 1.2 Product-specific recommendations

To minimise overall costs, we find that different products require different approaches to measuring the counterfeiting and piracy problems.

There are six categories of recommendation; we review each in turn.

### 1.2.1 Use existing measurements

First, there is one group of products – computer software – for which we recommend that existing methods of measuring counterfeiting and piracy activity be used by member states and other parties.

Business Software Alliance estimates are credible ....

We have conducted a detailed audit of existing sources of data, information and intelligence on counterfeiting and piracy to identify what measures are already available. We find that the approach taken by the Business Software Alliance is thorough and robust, although not always fully transparent. We are, though, satisfied that their estimates are credible and based on a sound approach.

.... but we wouldn't rely on existing estimates for other sectors

We are less confident in the measurements and estimates made for other product groups. We recommend that for all other product groups new methods for estimating the size of the counterfeiting and piracy problems reliably are required.

### 1.2.2 Measurement by consumer survey

Second, we recommend that, for some products, counterfeiting and piracy be measured through the use of a consumer survey.

Seven product areas could be covered in a single consumer survey

For some products, most consumers or end-users know they have purchased or acquired a counterfeit or pirate item. In these cases, the most cost effective method to measure the number of illicit goods is to use quantitative survey techniques to ask consumers the status of their purchases.

We believe this approach is appropriate to measuring the incidence of counterfeiting and piracy of:

- Books and publications
- Computer software
- Electronic games software
- Films and motion pictures

## Counting counterfeits

- Sound recordings
- Branded sunglasses
- Branded watches

We recommend that each member state or private organisation conduct a single consumer survey covering all seven product areas. As a minimum, a representative sample of 1,000 recent consumers of the products should be interviewed (a sample of 500 for Luxembourg would be adequate). It would be preferable if a sample of 2,000 can be surveyed (1,000 in Luxembourg).

We include computer software in the list of seven product areas even though we believe the estimates by the Business Software Alliance to be reliable. This is because the additional cost of including computer software in a survey covering multiple products will be marginal.

### Use 'omnibus surveys' to reduce costs

The questions may be placed on 'omnibus surveys' already conducted by market research agencies in each member state. These are large consumer surveys conducted regularly by agencies on which multiple clients can purchase space for their questions. By effectively spreading the costs across a number of clients, the agencies can offer market research on omnibus surveys at low rates per question; the danger, however, is that clients do not know what and how many other questions have been placed on the survey.

Alternatively, to improve the quality of the interview, they may be asked as part of a separate and independent telephone survey. We do not believe that this exercise warrants the additional costs of either face-to-face or computer aided self-interviewing techniques (except as part of an omnibus).

We have estimated indicative costs for this survey.

For Greece, Italy, Portugal and Spain – where the costs of market research are relatively low, we recommend indicative budgets per member state of:

- €10,000 for a 1,000 sample omnibus survey
- €19,000 for a 2,000 sample omnibus survey
- €85,000 for a 2,000 sample bespoke telephone survey

For Austria, Belgium, Denmark, France, Germany Ireland, Netherlands and the United Kingdom, we recommend indicative budgets per member state of:

- €14,000 for a 1,000 sample omnibus survey (€8,000 for Luxembourg)
- €24,000 for a 2,000 sample omnibus survey (€14,000 for Luxembourg)



- €110,000 for a 2,000 sample bespoke telephone survey (€60,000 for Luxembourg)

For Finland and Sweden – relatively high cost countries for market research, the budgets for this task are estimated to be at a minimum

- €24,000 for a 1,000 sample omnibus survey
- €42,000 for a 2,000 sample omnibus survey
- €180,000 for a 2,000 sample bespoke telephone survey

These budgets include an allocation for qualitative research to develop in detail the questionnaire, piloting of the survey and analysis of the results. In addition, member states or private organisations should allocate five weeks management time to the process over period of three to six months.

### 1.2.3 Part measurement by consumer survey

For a third group of products, we find that measuring counterfeiting and piracy through the use of consumer surveys will provide only an initial estimate of the size of the problem. More thorough analysis – using experts to identify counterfeits and pirate goods – is needed to provide a comprehensive appraisal.

Four further products can be covered less robustly by consumer survey

For these products, only some consumers or end-users know they have purchased or acquired a counterfeit or pirate item. In these cases, the use of quantitative survey techniques to measure the number of illicit goods will tend to understate the level of illicit activity.

We believe four product-types fall into this category:

- Branded clothes, footwear and sporting goods
- Fragrances, perfumes and cosmetics
- Branded leather goods
- Branded spectacles

As an initial (under) estimate of the problem, we recommend that these four products be included in the consumer survey described above. The additional costs of including these products will be marginal and can be deemed to be included in the indicative budgets presented earlier.

If comprehensive assessments of the incidence of counterfeiting for these products are required, a more thorough approach should be employed. The approach we recommend combines mystery shopping, expert evidence and a consumer survey; it is described more fully below.

## 1.2.4 Measurement by supplier survey

For a fourth group of products, we recommend measuring the incidence of counterfeiting and piracy through surveys of suppliers.

Spare parts are best investigated through surveys of suppliers

Few purchasers of motor vehicle, aircraft and other industrial spare parts will recognise whether they have bought counterfeits, grey market imports or unauthorised production overruns. But, many – if not most – suppliers of these spare parts will have a good understanding of the provenance of their stock.

We recommend that individual member states or private organisations conduct surveys of:

- 500 – or, preferably, 1,000 – senior managers in motor vehicle spare parts retailers and suppliers (50 or 100 for Luxembourg)
- 50 or 100 senior managers in aircraft spare parts suppliers (5 or 10 for Luxembourg). In addition, the member states should conduct a similar survey of aircraft spare parts-providers based outside the European Union but who supply EU aircraft
- 500 or 1,000 senior managers in suppliers of each type of industrial spare parts to be investigated (50 or 100 for Luxembourg)

These surveys should ask respondents in detail about the sources and legitimacy of their stock. To ensure interviewees answer truthfully, every effort should be made to demonstrate to participants that their responses will be treated in confidence and that their anonymity will be respected. Independent market research agencies – and not government or other official bodies – should conduct these surveys and, if budgets permit, computer aided self-interviewing (CASI) techniques should be employed.

Assuming CASI is used, indicative costs of these surveys are tabulated below. In addition, member states should allocate five weeks management time to the process over period of three to six months.

## Indicative budgets per member state for supplier surveys using CASI

	Low-cost country	Mid-cost country	High-cost country
Motor vehicle spare parts			
500 sample	€85,000	€110,000	€195,000
1,000 sample	€170,000	€220,000	€390,000
Aircraft spare parts			
500 sample	€8,500	€11,000	€19,500
1,000 sample	€17,000	€22,000	€39,000
Each type of industrial spare part			
500 sample	€85,000	€110,000	€195,000
1,000 sample	€170,000	€220,000	€390,000

### 1.2.5 Measurement by sample purchases and expert identification

For a fifth group of products, we find that the use of experts to identify fakes from samples of products randomly purchased in retail outlets across the member states will provide the most cost-effective robust measurement of the incidence of counterfeiting and piracy.

Four product groups require experts to identify fakes

For these products, few consumers or end-users know they have purchased or acquired a counterfeit or pirate item. As such, consumer surveys will not be satisfactory. But, experts can be used to distinguish between genuine items and counterfeits and pirates thereof.

We believe there are four products for which this method is appropriate and will provide comprehensive results:

- Alcoholic beverages
- Food and drink
- Pharmaceuticals
- Plants and seeds

Samples will need to be purchased from a range of outlets

We recommend that each member state or private organisation conducts mystery shopping exercises to buy random samples of these products from the range of retail outlets through which they are sold. Typically,

samples should be purchased from at least 50 or, preferably, 100 outlets in each potential retail channel (e.g. specialist stores, street markets, online retailers). In addition, the member states between them should conduct a single mystery shopping exercise for each relevant product covering purchases from online retail outlets based outside the European Union.

Suitably qualified individuals should then examine the samples so that counterfeits and pirates are identified – and, thus, an assessment can be made of the incidence of counterfeiting and piracy in each retail channel. Many of legitimate manufacturers already retain relevant expertise and capabilities to do this. It would be most cost effective if the member states and private organisations negotiate access to these existing facilities where available.

And consumer survey is needed to reveal importance of different outlets

Additionally, a survey of consumers should be conducted to identify the relevant importance of the different retail channels. Consumers should be asked where they make their purchases. The results of this survey should then be used to weight-up the estimates of the incidence of counterfeiting and piracy in each retail channel to produce an overall rate that is fully representative of consumption patterns.

We have made indicative estimates of the costs of the mystery shopping exercises. Each member state or private organisation should budget:

- €20 - 30,000 (depending on sample size) for alcoholic beverages
- €20 - 30,000 for food and drink
- €4 - 7,000 for pharmaceuticals
- €20 - 40,000 for plants and seeds.

The budgets for the consumer survey should be the same as described above.

In addition, there may be costs for acquiring the relevant expertise and facilities to test sample and identify the fakes. Moreover, member states should allocate 10 weeks of management time per mystery shopping exercise spread over a 3-6 month period.

### 1.2.6 Part measurement using purchased samples and expert identification

Finally, there is a group of products where no method will deliver a wholly satisfactory measure of counterfeiting and piracy.

Productions overruns means expert evidence won't be 100% accurate

For these products, a significant proportion of counterfeits are likely to be production overruns. This is where production runs by authorised manufacturers have exceeded the number permitted by the brand

owner, and the excess is distributed illicitly. Unfortunately, production overruns are virtually impossible to identify once they have become freely distributed.

The final group of products includes:

- Branded clothes, footwear and sporting goods
- Computer hardware
- Durable goods
- Fragrances, perfumes and cosmetics
- Branded leather goods
- Branded spectacles
- Toys and games

The use of mystery shopping and expert identification will nonetheless provide the best results – but there will always be a tendency to understate the size of the problem, as it is unlikely that all production overruns will be spotted.

We have made indicative estimates of the costs of the mystery shopping exercises. Each member state or private organisation should budget:

- €50 - 90,000 (depending on sample size) for clothes, footwear and sporting goods
- €100 - 170,000 for computer hardware
- €160 - 280,000 for durable goods
- €40 - 60,000 for fragrances, perfumes and cosmetics
- €100 - 170,000 for leather goods
- €20 - 40,000 for spectacles
- €160 - 280,000 for toys and games

### 1.3 Method to extrapolate data

In the absence of existing reliable data, we have developed a simple mathematical model to predict which countries and products are likely to have a higher or lower incidence of counterfeiting and piracy.

The model considers nine factors that influence the likely behaviour of counterfeiters and pirates, and ascribes to each pair of country and product a score on a 100-point scale. The nine factors are:

- Production costs
- Barriers to legitimate entry
- Detection and enforcement intensity
- Ease of detection and enforcement
- Proximity to source of production or point of entry
- Elapsed production and distribution time
- Legal penalties
- Sunk costs in production

- Cultural attitudes

We have scored each product-country pair on a four point scale for each of the nine factors. A score of 5 implies the greatest risk from counterfeiting and piracy; a score of 1 implies the lowest risk. We have then combined the scores using allocating different importance to different factors to generate an overall score out of a hundred.

The results are tabulated below.

Likely incidence of counterfeiting and piracy (Score out of 100)

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
<b>Pharmaceuticals</b>	29	28	23	25	33	39	43	28	40	24	30	31	30	24	33
<b>Toys &amp; games</b>	52	48	48	46	46	44	66	61	61	47	43	57	53	44	44
<b>Textile &amp; sports</b>	63	59	59	57	57	55	77	72	72	58	54	68	64	55	54
<b>Leather goods</b>	51	47	47	44	44	43	64	59	59	46	42	56	52	43	44
<b>Perfumes &amp; cosmetics</b>	53	49	49	47	47	46	67	62	62	48	44	58	54	46	47
<b>Durable goods</b>	27	26	23	21	23	22	41	36	36	25	21	35	31	20	23
<b>Spectacles</b>	63	64	59	52	57	60	77	72	77	60	59	70	67	53	62
<b>Watches</b>	54	53	50	48	50	49	70	65	68	52	48	62	58	47	50
<b>Plants</b>	67	66	63	61	58	56	76	73	72	64	54	72	66	59	57
<b>Food &amp; drink</b>	46	42	42	39	37	34	57	54	53	41	33	51	47	38	36
<b>Alcoholic beverages</b>	50	47	47	44	42	39	62	59	58	45	38	55	52	43	40
<b>Books &amp; publications</b>	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
<b>Films &amp; motion pictures</b>	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
<b>Sound recordings</b>	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
<b>Computer software</b>	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
<b>Vehicle spare parts</b>	32	28	28	23	28	31	43	34	39	27	26	36	34	22	24
<b>Aircraft spare parts</b>	24	23	23	23	28	25	28	25	26	24	24	26	25	24	24
<b>Industrial spare parts</b>	38	34	34	32	32	30	52	47	47	33	29	43	39	30	32
<b>Computer hardware</b>	57	54	54	51	51	50	71	66	66	52	49	62	59	50	51

The maximum score of 100 would imply that that product-country pair had scored five for each of the nine factors. The minimum score of zero would imply that that product-country pair had scored one for each of the nine factors. Importantly, a high score – say, over 90 – does not imply that over 90 per cent of goods are counterfeit or pirate; rather that this market will have the among the highest incidence of counterfeiting in any of the areas we have studied. Similarly, a low score – say, under 40 – does not imply that under 40 per cent of goods are counterfeit or pirate; rather that this market will have among the lowest incidence of counterfeiting in any of the areas we have studied.

Although the scoring is not in itself an actual measure of the incidence of counterfeiting, it does give an indication of where we believe counterfeiting and piracy is more or less likely. Moreover, it can be used as an initial rough method of grossing-up data from specific countries and sectors, as and when measurements are made.

The scores are not necessarily directly scalable i.e. a score of 60 does not necessarily imply double the probability of a score of 30. However, as a first approximation, this is a reasonable assumption. As such, the model can be used to extrapolate available data on the incidence of counterfeiting and piracy to products and countries where no data is available – although we would expect estimates made within a product group would be more reliable than those made across product groups.

The basis for the extrapolation should be the following equation:

$$E_{XY} \cdot A_{xy} \cdot [ S_{XY} / S_{xy} ]$$

Where:

$E_{XY}$  is the extrapolated percentage of items of product X that are consumed in country Y that are counterfeit or pirate

$A_{xy}$  is the actual (or independently estimated) percentage of items of product x that are consumed in country y that are counterfeit or pirate

$S_{XY}$  is the score out of 100 given to product X in country Y

$S_{xy}$  is the score out of 100 given to product x in country y

And, for greater reliability,  $X = x$

For example, if surveys show that 0.6 per cent of pharmaceuticals in Spain are counterfeit then our model would estimate that the incidence in Italy would be 0.8 per cent. This is because Italy has a score of 40 for pharmaceuticals compared with 30 in Spain.

## 2 INTRODUCTION AND BACKGROUND

In this chapter we provide a brief overview of counterfeiting and piracy and context to our study. We then go on to provide a brief overview of the individual chapters that make up the report.

### 2.1 Context

Counterfeiting is the production of fake or forged goods, while piracy is the infringement of copyright. The sale and/or distribution of counterfeit and pirate merchandise can have serious negative social and economic implications.

There is no standard definition of counterfeiting and piracy, but the European Commission have used a definition in the Green Paper on 'Combating counterfeiting and piracy in the single market'.

The Commission's definition has been couched in such terms as to include all cases of products which are copied fraudulently and also the case of products which are identical to the original but which are made without the rightholder's consent. The definition covers 'all products, processes and services which are the subject-matter or result of an infringement of an intellectual property right (trade mark or trade name, industrial design or model, patent, utility model and geographical indication), of a copyright or neighbouring right (the rights of performing artists, the rights of producers of sound recordings, the rights of the producers of the first fixations of films, the rights of broadcasting organisations), or of the "sui generis" right of the maker of a database.'

Consumers suffer from trade in fakes ...

Consumers often suffer from the trade in fake goods. They may find themselves having purchased goods under false pretences or with a quality well below their expectations. More worryingly, outside the stringent regulatory requirements of legitimate trade, some counterfeiters are happy to risk the health and safety of consumers.

... while legitimate businesses lose revenues

The trade in fake goods also damages the legitimate revenues of the businesses that properly own the intellectual property being infringed. This reduces the firm's profitability and can negatively impact on its investment and employment decisions.

But the impact is not simply confined to the particular industry affected by the counterfeited or pirated product. At the macroeconomic level, its affect is observed through lower investment levels in the economy, lower overall employment and a reduced rate of economic growth.



Counterfeiting and piracy restricts the smooth operation of the Single Market. It destabilises trade, discourages innovation and potentially restricts growth and competitiveness of the European economy.

Costing European economy €8 billion per annum

The detrimental effects of counterfeiting on the European Union economy have been estimated in a study by cebr – commissioned by Global Anti-counterfeiting Group.<sup>1</sup> The study demonstrated how counterfeiting impacts on the European economy through lower corporate profitability and investment. We estimated the trade in counterfeits in just four industries reduces EU gross domestic product by €8 billion per annum and costs 17,000 jobs. It is undoubtedly a serious issue for both national and European authorities.

Table 2-1 Employment and GDP impact of counterfeiting in four key sectors in the European Union.

Sector	Employment impact	GDP impact (€ millions, 1995 prices)
Clothing and footwear	7,280	€3,462
Perfume and toiletries	3,520	€1,637
Toys and sports goods	4,370	€2,001
Pharmaceuticals	1,960	€937
<b>Total</b>	<b>17,130</b>	<b>€ 8,037</b>

Source: cebr estimates

Illicit activities are difficult to measure

Counterfeiting is by its very nature a clandestine operation, and few records are kept – let alone submitted to authorities. There is, therefore, sparse and all-too-often unreliable data on the extent of counterfeiting and piracy.

Estimates made by the member states' governments are often based on police seizures or criminal convictions, and thus may grossly understate the true level of counterfeit activity. Business groups also make estimates of the size of illicit activity in certain sectors, but this evidence may not be wholly objective, and may overstate the problem. Moreover, what data that does exist often cannot be compared against other existing sources because methodologies vary.

Measuring of economic impact has been attempted

The study by cebr<sup>2</sup> for the Global Anti-Counterfeiting Group and the study on behalf of the Union des Fabricants "Votre entreprise et la

<sup>1</sup> The economic impact of counterfeiting in selected industries of the EU economy, CEBR, 2000 and the economic impact of counterfeiting in selected industries of the UK economy, CEBR, 1999.

<sup>2</sup> The economic impact of counterfeiting in selected industries of the EU economy, CEBR, 2000 and the economic impact of counterfeiting in selected industries of the UK economy, CEBR, 1999.

contrefaçon<sup>3</sup> by Sofres and KPMG attempt to quantify the economic consequences of counterfeiting activity given an estimated level of counterfeiting. These surveys do not include a mechanism for counting the number of counterfeits, which is the objective of this study.

Most used estimates come from OECD report

The other much quoted study is that of the International Chamber of Commerce in association with the OECD<sup>4</sup> which asserts that between 5 and 7 per cent of world trade is in counterfeits goods and then goes on to specify estimates for selected sectors. Not all of these are based on research and, as they admit, the data did not exist to make robust estimation process possible. They have recently asserted that they believe the figures to be correct as an indication of activity, despite the absence in some cases of any statistical underpinning.

## 2.2 Study objectives

Within this context, the primary objective of the study is to define one or more methodologies for the collection, analysis and comparison of data on counterfeiting and piracy in the Single Market.

The methodologies selected must cover certain key sectors of economic activity and be applicable to every member state of the EU. These are:

- phytopharmaceutical medicines and products
- toys and games (including electronic games)
- vehicle, aircraft and other industrial spare parts
- textile products and shoes (including sports articles)
- perfumes, leather goods and cosmetic products
- books, films, sound recordings and multimedia products (CD-ROM, DVD, etc.)
- databases, software and other computer products (diskettes, etc.)
- durable goods (including household electrical appliances)
- spectacles and watches
- plants, food and drinks (including alcoholic beverages)

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<sup>3</sup>Sofres, KPMG: Votre Entreprise et la Contrefaçon commissioned by the Union des Fabricants

<sup>4</sup> OECD, International Chamber of Commerce (1998) The economic impact of counterfeiting

We have later subdivided these product categories to provide more flexibility in the use of different methodologies. Some products which had been grouped together can be better estimated separately.

## 2.3 Summary of report

### 2.3.1 Chapter 1: Summary and recommendations

Chapter 1 concisely summarises the contents of the report and regroups the key recommendations of the study in one place for ease of access.

### 2.3.2 Chapter 2: Introduction and background

Chapter 2 provides the context and background to the study and a brief chapter by chapter summary of this text.

### 2.3.3 Chapter 3: Current state of knowledge

Chapter 3 reviews the data and information currently available on counterfeiting and piracy in the European Union. The review is based on consultations we have had with over 100 organisations across the European Union and beyond. Appendices provide country-by-country details of what data and information is available as well as a list of organisations consulted.

Estimates of the scale of counterfeiting and piracy are sometimes made by companies and trade bodies to illustrate the impact of counterfeiting and piracy on their sector. These estimates are based on varied methodologies including those involving survey and seizure data and also some where a fair degree of guesswork is employed. We have found the existing data to be very sparse; we recommend the creation of survey based estimates for cross country comparison purposes.

Structures for recording of intellectual property infringements are complicated by the many different bodies that have responsibility for policing within and at the frontiers of member states. There are both criminal and civil legal actions in the field further complicating affairs.

Volume based measures are the best way of presenting and reporting any data on counterfeiting and piracy. There are many value and people based measures. These are far more subjective and typically less well defined.

### 2.3.4 Chapter 4: Towards a methodology

Chapter 4 considers the various approaches that can be taken to measuring the counterfeiting and piracy. In this chapter, we build a generic framework for identifying the most appropriate method for estimating the number of counterfeits in a sector.

In examining the sampling techniques one may use for the purposes of studying counterfeiting and piracy, it is clear that there will be a trade off between cost and applicability. CASI (computer aided self interview) would be the preferred option if it were not for the high cost associated with the use of this technique. Omnibus surveys are cheap but probably less effectual.

Surveys have been used effectively in the past to estimate other illicit activity such as drug dealing and prostitution. We remain positive about the use of surveys as a basis for estimating counterfeiting and piracy activity. We have reviewed these studies to see what could be learnt from the methodologies other researchers have previously employed.

### 2.3.5 Chapter 5: Product recommendations

Chapter 5 uses the framework developed in Chapter 4 to recommend a method for measuring counterfeiting and piracy in each of the redefined 19 product groups:

- Pharmaceuticals
- Spectacles including sunglasses
- Watches
- Plants
- Leather goods
- Food and drink
- Perfumes and cosmetics
- Alcoholic beverages
- Textiles and sporting goods
- Durable goods
- Toys and games including electronic games
- Vehicle spare parts
- Aircraft spare parts
- Other industrial spare parts
- Computer hardware
- Books and publications
- Films and motion pictures
- Sound recordings
- Computer software

We have examined each product in terms of the most appropriate techniques used to measure counterfeiting and piracy at each point in the products lifecycle. We provide a brief description of the nature of counterfeiting or piracy in each of the respective product groupings.

The use of our decision-making flowchart reveals the most appropriate methodology in each sector, which by answering several questions leads one to favour one technique over the others available. There are four types of recommendations for methodology across the product sectors, these are:

- use a retailer survey
- use a consumer survey
- use a targeted expert survey plus a consumer survey
- use a comprehensive expert survey plus a consumer survey

Where robust estimates already exist provided by firms and trade bodies they could be used although we do not believe this to be the case for the majority of sectors, with the exception perhaps of the Business Software Alliance's piracy study.

### 2.3.6 Chapter 6: Ways forward

Chapter 6 examines the cost implications of adopting the recommended methodologies.

There are differing cost options when a particular methodology is specified because there can be several variations in sampling technique and in sample size. Typically, reducing a sample size will result in lower levels of accuracy, however using the smaller sample may be more cost effective.

Some of the recommendations involve multiple stages, particularly those involving mystery shopping. We specify in which sequence the tasks should be undertaken to yield the maximum benefit from the study.

We also suggest possible questions one may ask in undertaking a consumer survey.

### 2.3.7 Chapter 7: Estimating missing data

Chapter 7 presents a technique that will help estimate the levels of counterfeiting and piracy in any member state for any product when direct measurements are not available. This approach used therein allows for the estimation of missing data, which means that partial datasets can be completed with some degree of confidence.

In this chapter, we postulate a general model of counterfeiting that can be translated, with data, into a mathematical model using multi-variant regression techniques. Once the model has been estimated mathematically, it can be used to predict robustly the level of counterfeiting in a certain product in a certain country.

The development of the model depends on the availability of data. We provide data for the independent (or X) variables. However, the

## Counting counterfeits

estimation of the equation will only be practicable when 10 members states covering at least 75 per cent of EU GDP report counterfeiting activity for a number of sectors.

## 3 CURRENT STATE OF KNOWLEDGE

In this chapter, we review what data and information is currently available on the size of the counterfeiting and piracy problems in the European Union.

### 3.1 General findings

We've consulted over 100 different organisations across the EU ....

We have conducted a detailed audit of data and information currently available on the size of the counterfeiting and piracy problems. We have contacted in excess of a hundred organisations throughout the European Union and beyond to identify any estimates or measures of counterfeiting and piracy. An appendix provides a country-by-country description of what we found. A further appendix lists the organisations with which we consulted.

... but, despite broad interest in the issue, very limited data is available

From the research we have undertaken it has become apparent that **there is only limited reliable data on the counterfeiting phenomenon currently in existence. We have been surprised by the lack of information – and by the lack of transparency regarding the basis for the information that does exist.** Although interest in the causes and consequences of counterfeiting is significant, very little in the way of robust or even credible numerical data exists.

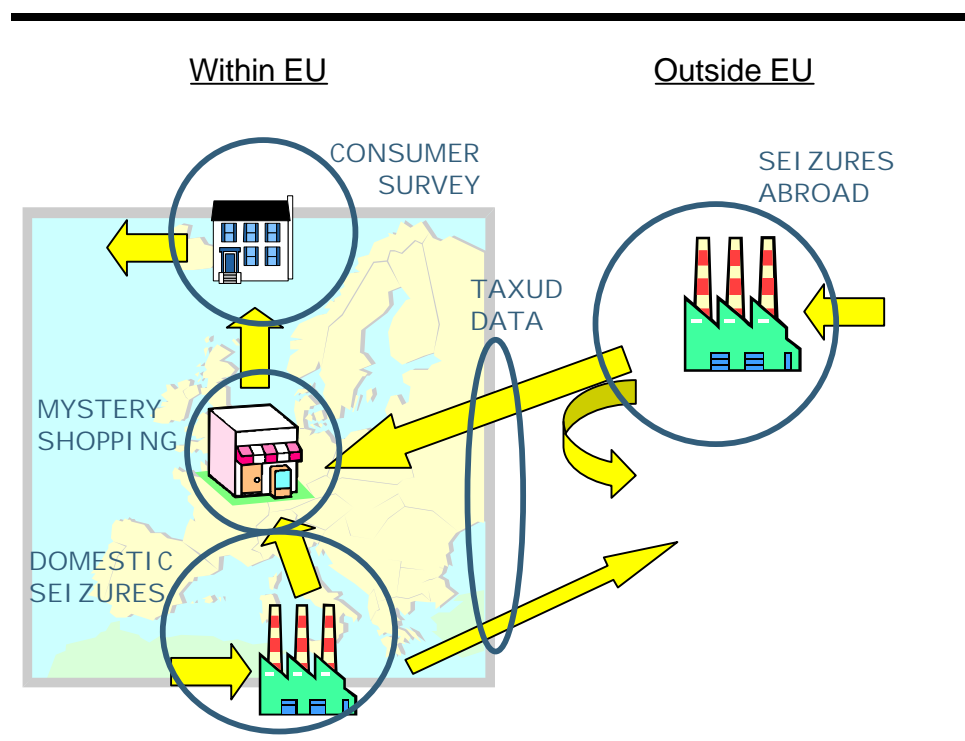
Three sources of 'data' identified

There are three prime types of information that we encountered in our sweep of sources:

- enforcement and judicial agencies
- companies and industry bodies
- economic impact studies by research consultancies

We consider each in turn.

Schematic of various data sources



### 3.2 Enforcement and judicial agencies

The first source of information is enforcement and judicial agencies.

Some information exists on seizures, arrests and convictions

As counterfeiting and piracy is typically illegal, there are data collected on, for example, the number of seizures of counterfeit or pirate goods, the number of arrests and the number of convictions. The brand owners may also keep record of their attempts to enforce their property rights.

And the Commission collates data on seizures at the Community frontier

The European Commission also has a role in collating data. Its taxation and customs union directorate-general – known as 'TAXUD' – collects statistics from the member states on the number of seizures made by authorities of counterfeits and pirated goods at the EU's external frontier. This includes goods imported into the EU, exported out of the EU, re-exports, transshipments and transits. Data is collected quarterly and reported annually. Countries are obliged to file by statute. All seizures have to be confirmed by the brand owner before they are included.

Similarly, the World Customs Organisation (WCO) collates data on seizures of counterfeits at a global level. Unlike for TAXUD, there is no obligation on members to report their activities to the WCO but there is a standardised on-line reporting mechanism.



### 3.3 Companies and industry bodies

The second source of information is the companies – and their representative bodies – that have their rights infringed by counterfeiters and pirates.

The chart below summarises the some of the key studies of this type.

There are examples of good practice: combining a variety of sources and methodologies to provide a balanced view and minimise the biases any one method may have. However, there are also examples of estimates which are less robust. Methodologies are often lacking in transparency; some are openly admitted to be guesswork; and, more fundamentally, many are based on underlying datasets that are either partial or are not collected on a systematic basis. Those that do have underlying data often rely on seizure counts, which are notoriously difficult to gross-up to overall estimates of counterfeit activity.

Summary of existing data sources

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK	EU	
Pharmaceuticals																	Pharmaceuticals Security Institute
Toys & games																	Toy Industries of Europe
Textile & sports																	Nike and Addidas
Leather goods																	
Perfumes & cosmetics																	
Durable goods																	Anti Counterfeiting Group
Spectacles & sunglasses																	
Watches																	
Plants																	
Food & drink																	
Alcoholic beverages																	
Books & publications																	Copyright Licensing Agency
Films & motion pictures																	Motion Picture Association
Sound recordings																	International Federation of the Phonographic Industry
Computer software																	Business Software Alliance
Vehicle spare parts																	Various motor manufacturers
Aircraft spare parts																	ACEA and ECAR
Industrial spare parts																	
Computer hardware																	Union des Fabricants
Cross-sectors																	cebr

Monetary values most often quoted

Where we have found estimates of counterfeiting, they have mostly been reported in monetary terms. However, it is often unclear how the money estimates have been derived. Are they estimates of the

turnover of the counterfeiter or potential revenues lost by the legitimate suppliers, for example?

Business Software Alliance have a solid approach

The best example we have identified is the Business Software Alliance. They have an established methodology for creating estimates for counterfeiting in their sector based upon robust original research. Their methodology appears to have remained consistent over time permitting comparisons between countries and over time.

The approach used by the BSA to estimate piracy in the business software sector is to compare the quantities of software sold with the number of computer packages owned. The difference between that which is sold and that which is owned is attributed to piracy. This seems a reasonable assumption generally, although this would not account for genuine software sold in non licensed channels, which the companies would not recognise.

Companies provide data under non disclosure agreement

The data used in this estimation process is sourced directly from the software companies. This is both the legitimate sales data and the market research undertaken by the firms. One downside to this is that data is provided under a non disclosure agreement, hence it is not possible to interrogate the base data independently.

Countries are ranked on a five point scale according to their level of information technology sophistication based on the number of professional services workers. This is to derive a country specific estimate of the number of installed personal computers.

Piracy the difference between demand and supply

Market research on the part of the business software firms establishes an average number of packages owned by each pc user in each country. The average packages per computer can be multiplied by the number of computers installed to yield an estimate of overall demand for software in a country. This figure is compared to the number of legitimate packages shipped to a country. The difference between the two numbers is the number of pirate packages.

The level of intellectual property infringement is defined as the piracy rate. This is the number of pirate packages divided by the total number of pirate and legitimate packages together.

Inherent danger in taking value estimates at face value

The BSA use this rate to make value estimates of the cost to the industry. It must be remembered that value estimates can be elaborated in many ways, so the monetary values quoted by the BSA must be viewed with some trepidation.

Phonographic industry also have estimation process

The approach of the International Federation of the Phonographic Industry towards the challenge of estimating the problem is commendable in attempting a mixed methodology approach. However, their estimates requires that estimates are made by national federations which may lead to inconsistency, and are based on production data (number of writeable cd's sold) rather than consumption measures. Their methodology diagram details inputs from consumer surveys but they had not satisfactorily incorporated survey data in their estimates. Moreover, there have been years where estimates have changed sharply reflecting changes in methodology employed, so this will not permit meaningful comparisons across time.

### 3.4 Economic impact studies

The third source of information is the small number of economic impact studies that have been conducted by research consultancies.

We consider three such studies.

#### 3.4.1 WEFA for InTA

No estimates of counterfeiting activity

The economics consultancy WEFA Inc conducted a study into footwear and apparel for the International Trademarks Association (InTA). Their approach doesn't make any estimate of actual levels of counterfeiting whatsoever. They try to measure the impact of counterfeiting by predicting the effect of trademark protection on sales revenues of firms.

Questionnaire of 'experts'

The model employed uses data already held by WEFA plus two additional sources, a survey of patent attorneys to provide country specific estimates of trademark protection and individual country sales data from the manufacturers. The survey of attorneys only numbered 230 worldwide, however. In some countries estimates were based on just two responses to a questionnaire.

WEFA use econometric models to derive their value estimates but their approach for differentiating between countries essentially comes down to the use of the questionnaire which asks questions that are graded on a five point scale.

Respondents indicate how they perceive intellectual property protection in a 13 question questionnaire. The responses are graded in order of importance in a subjective fashion. Estimates of a percentage of counterfeiting which occurs per country are then derived and value

estimates of counterfeiting are achieved by multiplying total sales by the counterfeiting rate.

This study does not help in defining a methodology to 'count boxes' of counterfeit.

### 3.4.2 cebr for ACG and GACG

There have been two studies by cebr into the economic impact of counterfeiting. The first for the anti counterfeiting group looking specifically at Great Britain and the second for the global anti counterfeiting group in a study concentrating on the EU.

In the second study, data was sourced from a MORI survey and from estimates from the Anti counterfeiting group and AIM (association des industries de marque). There are four prime product sectors analysed, clothing and footwear, perfume and toiletries, toys and sports and pharmaceuticals.

Counterfeiting dents company profits...

This analysis estimates the impacts of counterfeiting on the microeconomic and macroeconomic level. The microeconomic side deals with impact of counterfeiting on revenues and company profits.

...which in turn harms the overall economy

Using a macroeconomic model (EUROMOD2), these estimates of profit and revenue losses for individual sectors have been elaborated to give overall impacts on the EU GDP and employment.

Whilst economic studies of the consequences of counterfeiting can be insightful, the data on which both studies are based has involved speculative estimates of the level of counterfeiting that occurs.

### 3.4.3 KPMG and Sofres for Union des Fabricants

This study was an attempt to quantify the economic impact of counterfeiting on French businesses worldwide. It was done by KPMG and Sofres and commissioned by the Union des Fabricants.

Data is sourced from questionnaire

Their data is sourced from a questionnaire, surveying a wide range of businesses of different sizes from different sectors.

The questionnaire asks the businesses to estimate as a proportion of turnover their losses due to counterfeiting. An average loss of 6.4% of turnover is estimated by the survey. They then apply this to the

declared turnover of all companies surveyed to come up with a total loss of 40 billion francs and this translates to 38000 jobs lost.

Nothing to prevent overstatement by companies

One issue with this approach is that there would be nothing preventing the companies from overstating their losses through counterfeiting for lobbying purposes. This study also quotes a value and people based estimate of the effects of counterfeiting rather than a number or percentage of the market which is counterfeit.

Useful but can't help with 'box counting'

Having examined these differing techniques and methodologies for estimating the economic effects of counterfeiting, we have concluded that these do not necessarily help in deriving an estimate of the number of counterfeit products, which is the objective of the methodology we are to define.

## 4 TOWARDS A METHODOLOGY

In this chapter, we develop a general methodology for the collection of data on counterfeiting and piracy.

Building on the lessons learnt from the audit of existing information, we consider from first principles how to generate robust estimates of counterfeiting activity.

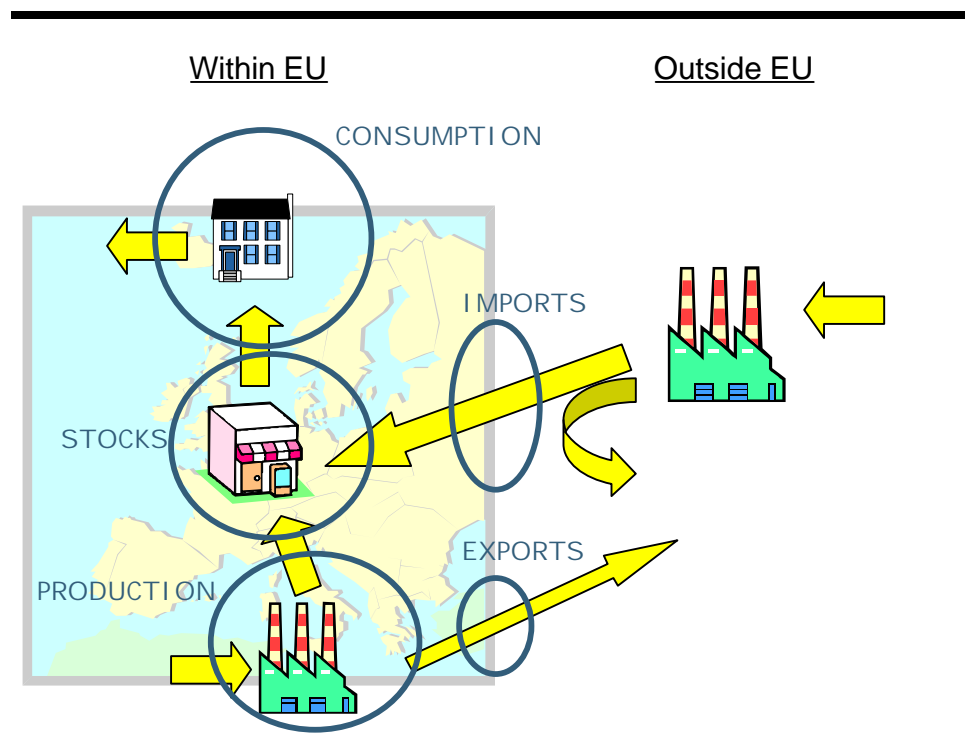
### 4.1 Different measures of activity

Our objective in this study is to identify and recommend methods to estimate counterfeiting and piracy activity in each of ten different product groups. There are, though, different but equally valid measures of 'activity'. In this section, we consider the various dimensions.

Activity can be production or consumption — but these are different

Counterfeiting activity can be measured in terms of either production or consumption. Although both measures have their merits and are linked, it must be remembered that they are different.

The relationship between consumption and production measures



The diagram illustrates how production and consumption are related:

$$\begin{array}{rcl} \text{Consumption in the EU} & = & \text{Production in the EU} \\ & & \text{plus Imports from outside EU} \\ & & \text{minus Exports to outside EU} \\ & & \text{minus Increase in stocks within EU} \end{array}$$

For products where there is significant cross-border trade in counterfeits – or where there are significant and variable stocks of counterfeits – one can expect production and consumption measures to vary from one another.

Much of the socio-economic damage from counterfeiting derives from their consumption; moreover, as we discuss below, measuring counterfeit production rather than consumption is more difficult and costly in many sectors. As such, **we recommend that the first priority should be for the member states and private organisations to collect data on the consumption or use of counterfeit and pirate goods**, although we would encourage the collection of production data in addition.

#### International dimension adds further complexity

The international dimension adds further complexity. On the consumption measures, there are three categories of consumption that could be picked-up:

- Consumption within the EU by EU nationals
- Consumption within the EU by non-EU nationals
- Consumption outside the EU by EU nationals

Similarly, for production there are three categories:

- Production within the EU for consumption within the EU
- Production within the EU for consumption outside the EU
- Production outside the EU for consumption within the EU

There are no right or wrong answers about which of these categories of consumption and production should be captured. What is important, though, is that when developing methodology or comparing results it is fully understood what has and what hasn't been included.

**As a minimum, we recommend that member states and private organisations should identify, collect and report data for consumption within the EU by EU nationals.** Although they should also be encouraged to collect data on consumption within the EU by non-EU nationals, consumption outside the EU by EU nationals and production, these other data should be clearly identified as such when reported.

## 4.2 Units of measurement

Activity can be measured in three different units

There are three different units of measurement: volume, value and people-based measures. We consider each in turn.

### 4.2.1 Volume measures

First, one can attempt to measure the actual number of counterfeit and pirate items. This can be expressed as a number of units or as a share (or percentage) of all legitimate and counterfeit items.

A volume measure can be made at various stages of a counterfeit product's lifecycle (see below for more detail). For example, one can attempt to measure the volume of counterfeit goods manufactured in a specific geographic area (e.g. a country) over a specific time period (e.g. a year). Alternatively, one can attempt to measure the number sold (in a specific geographic area over a specific period) or even the number in circulation.

**We recommend that, as a minimum, all member states should collect volume measures of counterfeiting and piracy** in each of ten reference sectors. Volume measures have the advantage of being easily comparable, and less susceptible to misrepresentation – provided there are clear and consistent units of output.

### 4.2.2 Value measures

Second, measurements can be made of the value of counterfeiting activity i.e. how much the activity is worth in financial or monetary terms. However, there are various – equally valid – methods of valuing counterfeit goods:

- Legitimate product price basis. The value of activity can be measured on the basis of how much the counterfeit goods would be worth if valued at the price applicable to the legitimate products of which they are copies.
- Counterfeit product price basis. This measurement of value is based on the price actually paid for the counterfeit products.
- 'Intrinsic' price basis. This measurement of value is based on the 'intrinsic' price of the counterfeit item – i.e. the price consumers would pay for the item if they were fully aware of its fake status.
- Cost basis. This measurement values activity as the sum of the costs of the counterfeit goods: input materials, labour costs and finance costs.



Again, value measures can be made at various stages through a counterfeit item's lifecycle (see below).

The value measures are particularly important for policy-makers when assessing the economic cost of counterfeiting and piracy, and we would encourage their collection and publication by member states.

However, such statistics are easily misrepresented or misinterpreted – either inadvertently or on purpose. There may be a tendency on the part of some stakeholders – e.g. legitimate manufacturers – to emphasise value estimates made using the 'legitimate product price basis' because the number will be larger, whereas a valuation on one of the other three methods may be much smaller in scale. Care must be exercised when collecting, analysing and disseminating value estimates. There must be a clear indication of which basis is used for valuation.

### 4.2.3 People-based measures

Third, measurements of activity can be quantified in terms of the number of people affected. There are two main potential approaches:

- Employment basis. This measures activity as the number of people (or their 'full time equivalents') employed in counterfeiting activities
- Consumer basis. This measures activity as the number of consumers (or businesses) that have purchased or used counterfeit goods

Although people-based measures are interesting and have a policy value, we would recommend that they should only be collected to supplement volume measures.

## 4.3 Measurement opportunities

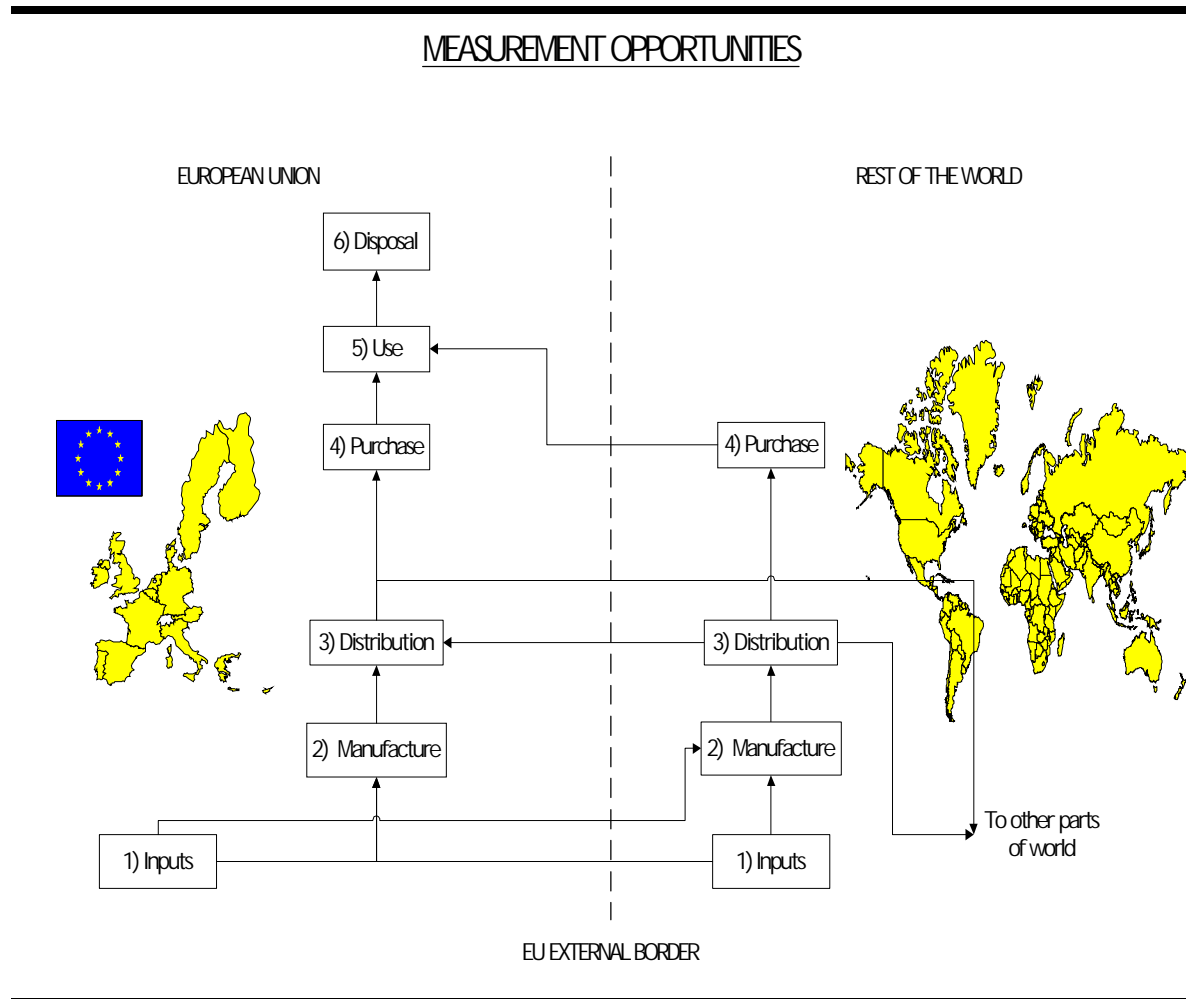
There are several stages of a counterfeit product's lifecycle; each stage may offer an opportunity for measuring the level of activity.

Typically, there are six different opportunities for measuring activity:

- Material inputs. The first stage of the product lifecycle – and potential opportunity for measurement – is the input materials. Measuring the level of use of key inputs into a counterfeit product can provide an indication of the maximum production of counterfeit output. A good example here is pirate music which is reproduced on CD. Clearly, the maximum production of pirate CDs cannot exceed the number of 'writeable' or 'gold' CDs manufactured.

- **Manufacture.** The second stage is manufacture. Here seizure and enforcement data can help provide estimates of activity. These estimates are robust in sectors where the manufacture of counterfeit goods is concentrated in only a few large-scale manufacturing locations. For example, in the early 1980s, raids on the manufacturing locations where counterfeited and pirated goods were produced helped to corroborate estimates produced by the International Federation of the Phonographic Industry (IFPI). Obviously when the problem is caused by many small operators then it is more difficult to get an accurate picture of what is happening in the sector.
- **Distribution.** The third stage is distribution, which may include either import or export across the EU frontier or within the EU either inter or intra state. Typically, seizure data is the most likely source from the distribution stage. This comes from frontier authorities or member states' enforcement agencies.
- **Purchase.** The fourth stage – purchase by the end consumer – offers another opportunity for measurement through surveys of retailers or through mystery shopping exercises.
- **Use.** The fifth stage is the product's use. Again, sample surveys of consumers/users can provide an opportunity to measure the extent of counterfeit activity.
- **Disposal.** The sixth stage is the disposal of the product in some cases the disposal will leave evidence which can be sampled.

## Schematic of product lifecycle



### 4.4 Measurement techniques

In general terms, there are three techniques for measuring counterfeiting and piracy.

Three main sources of data

Measurements – as opposed to estimates – of activity can be based on:

- counts of seizures and convictions made by customs and other enforcement authorities
- sample surveys of counterfeiting activity
- mystery shopping and expert evidence

We consider each in turn.

#### 4.4.1 Seizure and conviction counts

Most member state governments maintain – and publish – reasonable statistics on seizures of counterfeit and pirate goods by enforcement authorities. They also often record and report the number and nature of criminal convictions for infringements of relevant counterfeiting and piracy legislation. These counts of counterfeit seizures and convictions are often the only ‘hard’ data available.

Seizure data are an easy and cheap source of information

These data – and the central collection of cross-EU frontier numbers by the European Commission’s TAXUD directorate-general – provide the easiest to access and cheapest source of potential information on which to base estimates of counterfeiting activity.

But they tell us little about how much goes undetected

However, by themselves, these data do not provide a measure of the overall size of the counterfeiting and piracy problem because they do not measure the level of activity undetected by enforcement authorities.

Any measure of total activity requires both the count of detected activity and an estimate of the detection rate (i.e. the proportion of total activity detected by enforcement authorities):

$$\text{Total activity} = \text{Activity detected} \div \text{Detection rate}$$

Clearly, estimating the detection rate is problematic – and in most sectors detection rates are both low (say lower than 20 per cent) and almost impossible to calculate with any degree of confidence.

So estimates of overall activity will be subject to large margins of error

It is possible to consider the different levels of statistical confidence we can have in the estimate of total activity given different detection rates. Clearly, as the detection rate nears 100 per cent, any error in estimating the detection rate will make little difference to the estimate of total activity. But, at the other extreme, detection rates around, say, 20 per cent would yield far less robust estimates of total activity.

The table illustrates the point. It shows three different estimates of counterfeit activity based on different detection rates. Although in all three cases the number of seizures is the same (10,000 fake goods seized) and the detection rate range is the same (five percentage points), the margins of error vary dramatically.

## Estimating activity from a seizures count of 10,000 units

Detection rate	Activity estimate (units)	Error margin
5 - 10%	100 - 200 k	100%
10 - 15%	66.7 - 100 k	50%
90 - 95%	10.5 - 11.1 k	6%

Studies of estimates of illegal activity in other spheres demonstrate the dangers of grossing-up data from enforcement agencies into estimates of illegal activity. (See list of case studies below.)

And cross-border comparison is problematic

The use of seizure and conviction counts for cross-border comparison is also problematic. Our survey of member states' data sources indicates that:

- different enforcement authorities have different detection rates
- different enforcement authorities operate within different legislative and criminal codes
- there are varying levels of rigour with which records are made and kept

These differences make comparisons less simple and less robust. It may be possible to adjust data from different jurisdictions to take account of these factors – but this additional computation adds the potential for further error and inaccuracy, and will compound errors in the estimation of the detection rate.

Given these two problems, we suspect that, in many sectors, the use of seizure and conviction-based data will not yield satisfactory estimates of overall illicit activity. As such, **we recommend seizure and conviction-based data should only be used as the primary basis for estimating counterfeiting activity when either:**

- (i) **detection rates can be known with confidence; or**
- (ii) **where detection rates are known to be high – e.g. above 75 per cent.**

Nevertheless, seizure and conviction data still provide a valuable source of information. In themselves, they provide valuable policy information about the performance of enforcement regimes. They should also be used to corroborate other measurements of counterfeiting activity.

## 4.4.2 Sample-based surveys

The second method of measuring counterfeit and piracy activity is through the use of sample survey techniques.

Surveys offer an alternative, but who do you sample?

Sample surveys take evidence acquired directly from a small representative group of the population and use statistical analysis to draw robust conclusions about the population at large.

The first question is: who do you sample? There are a number of alternatives along the various life stages of a counterfeit product:

Producers and distributors can be surveyed — if they can be identified

(1) Survey of producers of counterfeits. Surveys can be conducted among the producers of counterfeits. The surveys would ask a representative sample of producer about their levels of production (and other factors such as the eventual destination of output, etc); these can then be gross-up to estimate overall production.

Clearly, though, producer surveys will only be applicable in the rare circumstances that authorities can identify with confidence all (or most) production facilities. **We recommend that surveys of producers of counterfeits only be conducted if the number and scope of producers is known, and if it is believed that a large and representative sample of producers can be identified for the research.**

Moreover, we must be mindful that estimates of production are not the same as estimates of consumption. If a large proportion of counterfeits consumed in the EU are produced outside the EU, a survey of EU producers will not yield a satisfactory estimate of EU consumption. Similarly, if a sizeable share of EU production of counterfeits is destined for customers outside the EU, a survey of producers will again fail to estimate European consumption accurately. Accordingly, **we recommend that surveys of producers of counterfeits be used only as a guide to consumption if it is believed that:**

- (i) **less than 20 per cent of EU consumption of counterfeits is produced outside the EU; AND**
- (ii) **less than 20 per cent of EU production of counterfeits is consumed outside the EU.**

(2) Survey of distributors, retailers, etc. Similar to the producer survey, research can be conducted among distributors and retailers asking them how many counterfeits they handle.

Consumers can be asked about more than one product at a time

(3) Survey of consumers. Third, research can be conducted among the actual end-users or consumers of (potentially counterfeit) products. Applying standard market research techniques, the general population can be sampled, with respondents being asked questions about their purchases/use of counterfeit products. Surveying the end-consumer has an added benefit: multiple products can be researched simultaneously – reducing costs. **To minimise costs, we recommend conducting consumer surveys that cover multiple products.** The major limiting factor on the applicability of consumer surveys is whether the respondent actually knows they are consuming a counterfeit product. For some goods, the consumer is fully aware of whether they have purchased or are using a fake or pirate item; in these circumstances, a survey will yield robust results. For other goods, only some consumers may be aware they have purchases illegitimate item; and for some, they will be unaware. Here, consumer surveys will yield less satisfactory estimates.

(4) Surveys of the legitimate businesses. Fourth, research can be conducted among legitimate businesses to ask for their estimates of the level of counterfeiting and piracy in their markets. This approach has been taken by others including KPMG in their attempt to estimate the economic impact of counterfeiting. This approach is, however, open to significant criticism. Why should the legitimate businesses know how big the illegitimate trade is? And, if they do, how robust and consistent are the methods they have used to estimate it? But, on a more sceptical – even suspicious – note, can we rely on estimates made by the legitimate trade when they may have a vested interest in over-stating (and sometimes under-stating) the size of the counterfeiting and piracy problems? **We do not recommend the use of surveys of legitimate producers as the sole or primary basis for estimating the size of the counterfeiting and piracy problems.**

There are, of course, limits on the robustness of surveys in this area – over and above the normal constraints of sample size and cost.

Will survey respondents tell the truth?

First, where people are asked to disclose their activities, there is no guarantee that they will actually tell the truth. Moreover, given the illicit and illegal nature of counterfeiting and piracy, respondents may be chary of admitting their involvement. This would suggest that survey-based estimates might understate systematically such activity. We have discussed this issue with a number of reputable market research agencies. Although their views vary about which methodology will best ensure accurate responses, all the market research practitioners we interviewed said that they thought the issue of counterfeiting could be handled without significant under-representation using standard market research techniques.

Second, it may be difficult to construct with confidence fully representative and unbiased samples. With much counterfeiting and piracy activity conducted in secret, researchers may inadvertently fail to sample whole areas of activity simply because they do not know they exist.

Learn from research into other illegal, immoral and private activities

We are positive about the use of surveys as a basis for estimating counterfeiting and piracy activity even though the activities are clandestine, illegal and often conducted in secret. There are lessons to be learnt from practitioners in similar fields where quantitative research has been conducted successfully. There are plenty of examples of where social research into other criminal, immoral and private activities – e.g. drug abuse, prostitution, sexual orientation – has been robust and effective. We provide below a review of seven studies covering issues more delicate than counterfeiting.

Examples: Seven studies into illegal, immoral and private activity

Reports measuring illegal or immoral activities face many problems, as survey data cannot be collected as it would be usually, and there is a possibility of bias or under representation, as people may not always tell the truth. This report examines other studies into illegal activities to compare the methodological approach used. The general conclusions which should be taken into account are that there is a need for anonymity, that computer assisted data collection can be useful and that a multi-methodological approach may be important in order to gather all the necessary information.

In a study measuring the black market for tobacco<sup>5</sup>, data was collected through returned tobacco packets from consumers, by advertising free gifts in return for empty packets. These packets were analysed to discover their origin and whether duty had been paid or not, and therefore whether they were illegal. No distinction was made between legal cross-border and illegal smuggling, therefore this data is reliant on HMCE data that cross-border shopping accounts for less than 5%.

This may be beneficial as it allows a baseline measurement of extent of problem. As it is consumer based it is therefore not reliant on data from producers or seizure data, which may be more susceptible to bias and which gives no estimate of the total extent of the problem as it is not known what the percentage of goods seized compared to the total size of the market.

However, there are also problems with this methodology. As it is a self-selecting process it is likely that the extent of the problem will be underestimated, as smokers of illegal tobacco less likely to return packets. This may question the reliability of the data, and how

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<sup>5</sup>Report for The Tobacco Manufacturers' Association by DTZ Pieda Consulting, May 2000, [http://www.the-tma.org.uk/acrobat\\_files/bmitp.pdf](http://www.the-tma.org.uk/acrobat_files/bmitp.pdf)



representative it is. There may be another problem in that the sample size of this survey was quite small, as the data set for this report was only for 1372 postal districts, with an average of 7.3 respondents per district.

Despite this there is some relevance to counterfeiting. There should be a similar methodology because counterfeiting and tobacco smuggling benefit both producers and consumers if they are aware of the problem. Both counterfeiting and tobacco smuggling are only detrimental to producers of genuine or legitimate products in the short run. This methodology will only provide reliable analysis if consumers are unaware that they are buying counterfeit goods, or will not return. However, although this methodology may lead to a minimum estimate, it is doubtful whether it will reveal the full extent of the problem.

A report into the misuse and smuggling of hydrocarbon oils<sup>6</sup> uses a different methodology to estimate the extent of the problem. This uses a variety of approaches, including a Self-completion questionnaire to road fuel audit units and excise risk managers in UK, and performance data gathered from individual teams. There was also observation of Customs control of oil duty evasion at three ports, and a study of the approach used in other countries. However, the data was still largely reliant on detection rates as a basis of a quantitative approach.

Although this methodology may have some benefits in that it is not just reliant on data of seized illegal hydrocarbon fuels, as it also examines officers involved and their perceptions of the level of smuggling. The random spot checks as well as intelligence-based data may provide more evidence. However, the reliability of the sample is questionable, and as there is a need for gathering quantitative evidence then it is questionable whether measuring perceptions is important or not. Therefore, this report only has a limited application to counterfeiting, as although it highlights the importance of observing officials and spot checking goods, it places too much emphasis on the strengths and weaknesses of teams, as the aim of the hydrocarbons study was also to examine why as well as to what extent the problem occurred.

The need for a multi-methodological approach is shown in a study measuring prostitution in Chicago<sup>7</sup>, which used a variety of tactics, for example by collecting arrest statistics, documenting court dispositions, conducting individual interviews with police officers, social providers and the prostitutes themselves, and examining a range of news reports and online communications.

This approach can be beneficial as it shows the importance of studying the variety of individuals affected by illegal activity on both the demand and supply sides in order to adequately gauge the extent of the problem. The arrest statistics in this case are used as a base level on which to

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<sup>6</sup> HM Customs and Excise: The Misuse and Smuggling of Hydrocarbon Oil, [http://www.nao.gov.uk/publications/nao\\_reports/01-02/0102614.pdf](http://www.nao.gov.uk/publications/nao_reports/01-02/0102614.pdf)

<sup>7</sup> The Prostitution of Women and Girls in Metropolitan Chicago: A Preliminary Prevalence Report, Centre for Impact Research, May 2001. [www.impactresearch.org](http://www.impactresearch.org)

construct estimate, not merely as a percentage of activity. However, it may be that the survey here is too emotive, and that officials' estimates may be based more on their own perceptions and feelings rather than reality. Therefore, a quantitative approach is required. Despite this, some of the methods used could be applied, especially the importance of studying the extent of individuals affected in order to provide a more realistic figure of the prevalence of the problem.

Similarly, a report examining the extent of trafficking of women into the UK<sup>8</sup> focused on quantifying a definite lower boundary and then using this as an estimate of the full extent of the problem. Again, a multi-methodological approach was used. There was a national of police forces using questionnaires designed to discover extent of known cases. There were also interviews with senior personnel, media searches using both newspaper and the Internet, and secondary analysis of existing data.

This was beneficial because of the problem of the reliability of the estimates, and so the report presented these estimates within a range. The multi-methodological approach allowed a greater number of factors to be taken into account, although this does raise the question of whether some form of weighting is required.

However, again there may be a similar problem as results may be based more on perceptions of officials rather than the real extent of the problem. Also, it is important to consider the different impacts on different actors in the two situations, as in the case of human trafficking, the negative impact falls on women being sold or prostituted; in the case of counterfeiting, this negative impact falls more onto the legitimate producers. However, attempts to gauge the level of counterfeiting may be more successful because of its greater tangibility.

Another comparison with counterfeiting can be shown by a report measuring alcohol smuggling<sup>9</sup>. This relied on a variety of measures in order to examine the extent of the problem. An estimate of cross-channel smuggling was based on a HM Customs and Excise survey of ports carried out over two weeks of each year. This random sample was based on traffic flows and stratified by various forms of transport. An estimate of total alcohol excise fraud has been calculated using a consumption series constructed from data provided by FES & NFS, which has been indexed for underreporting and to remove duty free consumption, assuming constancy. The consumption figure remaining was then compared with actual clearances, providing an estimate for the revenue evaded.

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<sup>8</sup> Liz Kelly and Linda Regan, Stopping Traffic: Exploring the extent of, and responses to, trafficking in women for sexual exploitation in the UK, Police Research Series Paper 125.

<sup>9</sup> NAO report (HC 178 2001-2002): HM Customs and Excise - Losses to the Revenue from Frauds on Alcohol Duty, [http://www.nao.gov.uk/publications/nao\\_reports/01-02/0102178es.pdf](http://www.nao.gov.uk/publications/nao_reports/01-02/0102178es.pdf)

However, these estimates of cross-channel smuggling cannot be assumed to be completely accurate as are based on a relatively limited survey that is only carried out once a year. It is important to remember that it is more difficult to provide an estimate for total alcohol fraud, because unlike tobacco it is not possible to obtain a reliable figure of volume of products used, and the products are not homogenous, nor is there a single rate of tax. The greatest problem in calculating the scale of alcohol fraud has been the lack of information regarding consumption.

There may be a comparison here with counterfeiting as both are heterogeneous products and there is a limited knowledge of consumption therefore it is difficult to calculate the loss of revenue and extent of problem. However, as with the data for alcohol smuggling, official data is often unreliable or unrepresentative, and therefore it is questionable how dependable these method is.

A BMRB Social Research report into prisons and the number of crimes committed by each offender shows the importance of surveys as a means of measuring activity<sup>10</sup>. The study was conducted in 34 prisons, using interviews and questionnaires. The study aimed to provide estimates of the number of crimes committed by those convicted of a prison sentence, and also to quantify the extent of illegal activities such as drug use once in prison. The sample of the survey was split into two parts: firstly a random sample of recently convicted male prisoners; and also boost sample of those convicted of burglary, TDA and theft from a vehicle, as it was on these specific areas that the authors wished to focus.

There was also the opportunity for the more sensitive topics to be conducted through self-completion, for example by Computer Aided Personal Interviewing (CAPI) self completion methods, which have been proven to result in more accurate and honest results, although in this case these methods were not used.

However, although this report highlights some interesting points about methodologies and survey techniques, there cannot be a direct comparison with counterfeiting because in the case of the prison surveys, the aim is to quantify the activities of a certain number of people who have already been found guilty of a crime, and therefore have nothing to lose. In the case of prisons, there is a definite group of people to target and survey, whereas the same thing cannot be said about counterfeiting unless interviewing those convicted of this activity are interviewed as part of the methodology in order to gauge the extent of the problem.

Similarly, a BMRB report into the prevalence of child abuse<sup>11</sup> aimed to establish benchmarks for the measurement of child abuse and neglect

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<sup>10</sup>A Life of Crime: The Hidden Truth Behind Illegal Activity, BMRB International, [www.bmr.co.uk/socialresearch/NSPCCMRS.htm](http://www.bmr.co.uk/socialresearch/NSPCCMRS.htm)

<sup>11</sup> Prevalence of Child Maltreatment in the UK, BMRB International, [www.bmr.co.uk/socialresearch/CrimeMRS.htm](http://www.bmr.co.uk/socialresearch/CrimeMRS.htm)

because of the lack of evidence and research into the prevalence of the problem. This survey used random probability sampling on a national basis, and it was necessary to interview large sample of young adults because of the low prevalence of the problem. A Postcode Address File used as basic sampling frame, with a separate boost needed to ensure adequate sample numbers from ethnic minorities. In total, 2869 surveys were carried out, with a response rate of 69%.

Again, computer aided survey techniques were implemented, although in this case the interviewers used Computer Aided Self Interviewing (CASI), which again may have provided more reliable results, as due to the sensitive nature of the issue this allows for a greater degree of anonymity and honesty. The questionnaire began by covering attitudes and general behaviour before moving on to more detailed experiences and questions, that is, it focused on qualitative analysis before moving onto quantitative data. Another significant point the survey raises is the importance of piloting a survey before using it nationwide, because of the sensitivity of the subject matter and the complexity of the questionnaire design.

This survey has important implications for measuring counterfeiting, as it shows the need for anonymous surveying, and therefore the use of CAPI or CASI may be required. However, it is questionable whether a direct comparison with child abuse can be made, as in the case of counterfeiting the illegal activity is as a result of consumer action and choice, and results from interaction with the suppliers of the illegal goods; this is not the case with child abuse. Similarly, there are different levels of secrecy and social stigma associated with these two illegal activities, and this may have an impact on the survey techniques and methodologies required to gauge the extent of this problems.

Perhaps a more comparable activity is illegal drug use, which has been the focus of a survey by the Illegal Drug Monitoring Unit.<sup>12</sup> This survey is targeted at drug users rather than the general population, and is anonymous with inbuilt checks and balances to maintain reliability. The IDMU calculates prevalence from arrest indicators by questioning how many of the respondents had been arrested for drug offences. As 21.2% had been, they calculated that as just over 500,000 people had been cautioned or convicted up to 1994, the prevalence of the problem stood at approx 2.5 million. Using average consumption data, they were then able to estimate availability and size of market. However, it is questionable whether this is fully representative of the problem and whether this over or underestimates the prevalence. For example, as the IDMU targets festivalgoers as respondents to their surveys, the results and estimates therefore depend on whether these people are more likely to consume more and also whether they are more likely to be arrested, as both of these would greatly bias the survey.

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<sup>12</sup> Independent Drug Monitoring Unit, Regular Drug Users Survey, <http://www.idmu.co.uk/research.htm>

Although this survey may have some application to counterfeiting, the problem remains that the extent of the problem of counterfeiting and the variety of products is much more varied and this will therefore mean that activity is more difficult to measure. However, the use of targeting the surveys individuals who are likely to be involved in the illegal activity rather than the general public is an important point which should be taken into consideration, if the fact that the good is counterfeit is known to the consumer.

In conclusion, the evidence suggests that consumer surveys can be important tools for measuring the extent of the problem, and have been used extensively through individual interviews and questionnaires. Computer based anonymous assessments through a system such as CASI may be most appropriate when examining the extent of illegal activities because of their clandestine nature. The need for a multi-methodological approach has also been confirmed by the variety of studies examined, and in particular the idea of focusing on specific groups of people likely to be involved may be important.

Our review of surveys into other illegal and immoral activities provides a basis for establishing some recommendations for the methodology of future consumer research into counterfeiting. In addition, we have consulted with a number of reputable market research agencies to obtain their recommendations on how to approach the topic:

It's good practice to do qualitative research first

(1) Qualitative research and pilot questionnaire first. Given the complex and sensitive nature of the issues being researched, it is essential that interviews and questionnaires be designed well. We would recommend that questionnaire design – especially use of language and question ordering – be informed by qualitative research. Furthermore, draft questionnaires should be tested in pilot surveys before going to the expense of a full survey.

(2) Use independent market research agencies. If someone perceives an official body is involved in the survey they may fear the information collected about them may be used to identify them to police or other enforcement agencies. As such, we recommend that independent market research agencies are used to recruit, question and hold all information relating to respondents. Although less important, we also recommend that data analysis be conducted by independent agencies rather than government statistical offices, trade bodies or others with a potential vested interest.

(3) Private 1-to-1 interviewing. Interviewees are less likely to respond truthfully about illicit activities in front of others. As such, we recommend interviews should be conducted with respondents within a private – and preferably one-to-one – environment. The interviews could be conducted by telephone or face-to-face. We would not, though, necessarily recommend interviewing people in their own homes – as this may be perceived by interviewees as jeopardising their anonymity.

Computer self-interviewing is highly confidential, but is it needed?

(4) Use computer aided self-interviewing. CASI research techniques offer the highest levels of confidentiality and anonymity for respondents. They allow interviewees to answer questions directly on computer rather than to a person. This approach has substantially improved response rates and robustness in other surveys of illicit activities – and it could be used to research counterfeiting, if such levels of confidentiality are believed to be required.

It is unclear whether counterfeiting is such a difficult topic to discuss with interviewees so as to demand CASI techniques. Moreover, it is an expensive research methodology. Typically, a 30-40 minute CASI interview would cost €150 in agency fees in the UK. Fees in some northern European countries may be closer to €200 per interview, although the Mediterranean states may be cheaper at around €100. CASI methods can deliver some cost savings in data capture and analysis later in the process. **We recommend the use of CASI techniques for producer and distributor surveys and, if budgets permit, for consumer surveys.**

Ensure the anonymity of respondents is demonstrable to them

(5) Demonstrable anonymity. Underlying our recommendations is the need for interviewees' anonymity throughout the process. Interviewees must feel confident that their anonymity will be respected. The need for 'demonstrable anonymity' must be central to any research methodology used.

And sample at least 1,000 for a consumer survey

(6) Robust sample sizes properly representative of the population. We have discussed the issues with a number of reputable market research agencies. The table illustrates the level of accuracy achieved with different sample sizes; it shows that if X per cent of a sample of 2,000 report buying a counterfeit, there is 95 per cent confidence that X  $\pm$  1.1 per cent within the population at large have bought a counterfeit. The table is based on a country with the population of the United Kingdom, but the variance in margins of error between the member states is marginal (except for Luxembourg). **Our recommendation is that a random sample survey measuring the consumption of counterfeits should interview no fewer than 1,000 consumers of the relevant product in each member state (except Luxembourg where 500 is adequate). A larger sample of 2,000 (1,000 for Luxembourg) would improve accuracy and should be considered if budgets permit.**

## Margins of error at 95 per cent confidence level on different sample sizes

Sample size	Margins of error
500	4.4%
1,000	3.1%
2,000	2.2%

Surveys can be expensive — but can be procured in open competition

Surveys can be costly to develop, implement, analyse and interpret, although the services of market research agencies can be procured easily in open competition.

There are five options for surveys with different costs, and varying advantages and disadvantages:

- Postal self-completion. The cheapest option is a postal self-completion questionnaire — however, this method typically has poor response rates and is liable to self-selection bias. **We do not recommend the use of postal self-completion survey techniques to research counterfeits.**

Omnibus surveys are cheap — but aren't always very serious

- Omnibus surveys. Buying space on an omnibus survey is another relatively inexpensive option. These are multi-client surveys conducted regularly by the major market research agencies. Typically each client asks a few questions each and the interviewee replies to all of them. The advantage is that they are cheap — if you are asking relatively few short (or well structured) questions. This disadvantages are that: the sampling is not always based on the most robust methods; the interviews can be quite long and respondents may suffer from interview fatigue with a negative impact on the accuracy of results; and clients have little control over when their question is asked. Typically, companies tracking advertising use omnibus surveys — so the questions on counterfeiting may come among other questions of a far less serious nature.

CATI surveys can't use visual stimuli — but does that matter?

- Telephone interviewing. Many market research agencies now offer computer aided telephone interviewing (CATI) facilities. Conducting interviews over the telephone allows agencies to reduce fieldworker costs. Obviously, there are some interviews — especially those involving visual stimuli — that cannot be conducted in this way. But this is unlikely to restrict its use for

our purposes. Another disadvantage of CATI is that it is difficult to sample people who do not have a telephone or whose telephone number is not listed in directories.

Face-to-face is most flexible method — but comes at a cost

- Face-to-face. The fourth option is conducting interviews face-to-face. This method has three advantages. First, it allows the use of visual stimuli. Second, it provides the interviewer with greater opportunity to control and manage the process flexibly. Third, it allows the interviewer to record non-verbal responses to questioning — i.e. body language. But this comes at greatly increased costs — especially if the survey is going to include interviews in rural, remote or dangerous areas.

And CASI is the gold standard — with a price to match

- CASI. See above.

We have discussed the potential costs of a consumer survey with a number of market research agencies. The costs vary with the size of the sample required, the length and complexity of the questionnaire, and the type of people to be interviewed. But, most important to the costs is the choice of research technique.

Market research fees vary between countries

We provide below the indicative fees for fieldwork and tabulation for each of the five approaches. We have based the fees on a similar sized questionnaire — equivalent to a 20 minutes telephone interview. The costs vary between countries; for illustrative purposes, we have provided indicative fees in three bands:

- Low-cost countries: Greece, Italy, Portugal and Spain
- Mid-cost countries: Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, Netherlands and the United Kingdom
- High-cost countries: Finland and Sweden

Omnibus option is a fifth of the cost of CATI alternative

It is clear that the costs vary substantially. Omnibus surveys are the cheapest option — costing €8,000 for a 1,000 sample in the mid-cost countries and €14,000 for a 2,000 sample. An ad hoc telephone survey is the next cheapest option but, at €50,000 for 1,000 sample and €80,000 for a 2,000 sample, is still over five-times the cost of the omnibus option.



Face-to-face and CASI are even more expensive

The face-to-face and CASI options are even more expensive with fees of circa €100,000 and €160,000 respectively for a 1,000 sample and €160,000 and €290,000 respectively for 2,000.

Indicative fees for fieldwork and tabulation of a consumer survey

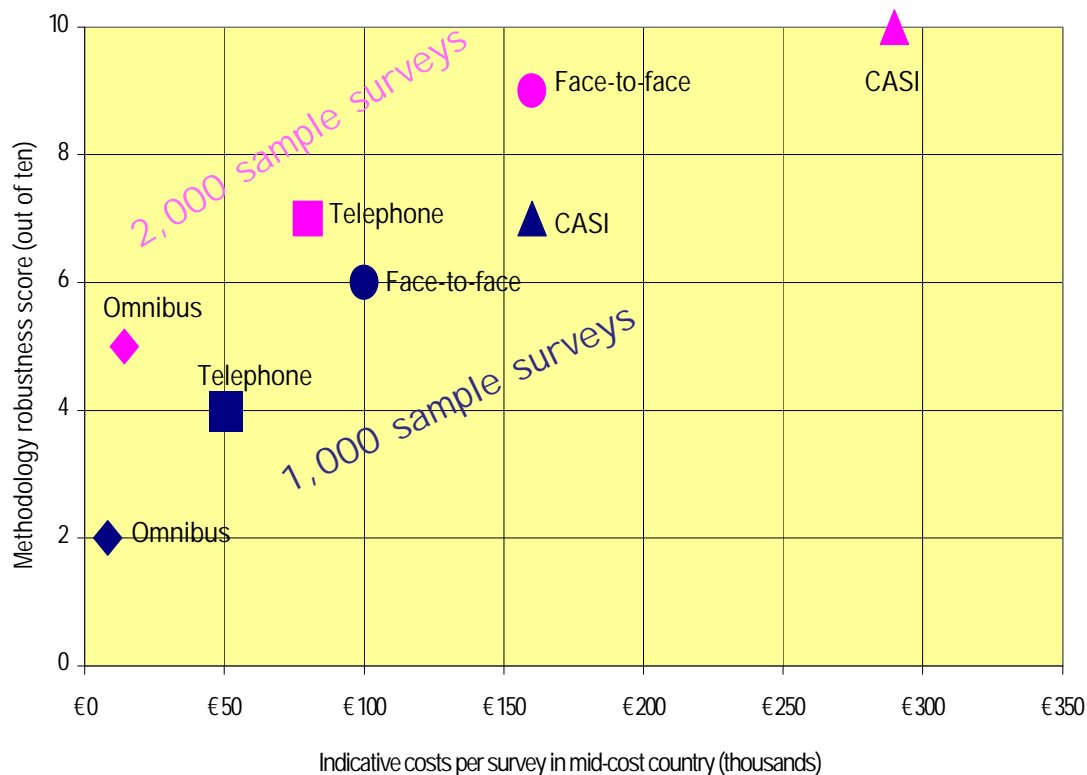
	Low-cost countries	Mid-cost countries	High-cost countries
<b>Omnibus</b>			
1,000 sample	€ 6,000	€ 8,000	€ 14,000
2,000 sample	€ 11,000	€ 14,000	€ 25,000
<b>Telephone</b>			
1,000 sample	€ 35,000	€ 50,000	€ 80,000
2,000 sample	€ 60,000	€ 80,000	€ 130,000
<b>Face-to-face</b>			
1,000 sample	€ 70,000	€ 100,000	€ 170,000
2,000 sample	€ 110,000	€ 160,000	€ 280,000
<b>CASI</b>			
1,000 sample	€ 120,000	€ 160,000	€ 280,000
2,000 sample	€ 220,000	€ 290,000	€ 500,000

There is a trade-off between cost and robustness

Unsurprisingly, there is, then, a trade-off between costs and robustness of a survey technique.

To illustrate this, we have given each of the survey methods a 'robustness score' to reflect how reliable, comprehensive and defensible the approach is. CASI with a sample of 2,000 gets the top score of 10 because it is flexible, allows visual stimuli and provides the highest level of confidentiality. We give face-to-face score of nine with a sample of 2,000 – because it shares many of the benefits of CASI, and telephone a score of seven. We rate omnibus surveys at a score of five. For all approaches, we deduct three points if the sample is reduced to 1,000.

Survey methods trade-off: costs against robustness



Better to spend on a bigger sample than on a more expensive method

The graph maps the robustness scores against costs for a mid-cost country. This analysis indicates that:

- a 2,000 sample omnibus survey is cheaper and better than a 1,000 sample telephone survey
- a 2,000 sample telephone survey is cheaper and better than a 1,000 sample face-to-face survey
- a 2,000 sample face-to-face survey is as cheap as but is better than a 1,000 sample CASI survey
- CASI surveys are expensive relative to the additional benefit they deliver over other cheaper methods

It is not for us to prejudge the budgets to be allocated by member states, but **we do not believe the added expense of face-to-face or CASI methods is warranted for consumer surveys**, although they may be appropriate to surveys of producers and distributors. Instead, **we recommend that consumer surveys be conducted using omnibus (if practicable) or telephone survey techniques.**

But fieldwork and tabulation aren't the only costs

The agency fees quoted above would include the costs of fieldwork (i.e. recruiting interviewees and conducting the interview with them) and tabulating the interviewees' responses. In addition, the organisation commissioning the survey will incur further costs:

- Managing the project. The commissioning organisation will need to manage the agency and the process. The effort here should not be under-estimated. Based on our own experience, and discussions with market research practitioners, we would expect one survey would require approximately five weeks of management time spread over a 3-6 month period.

Spend time and money developing and testing the questionnaire

- Development of questionnaire. An allowance of additional 20 to 30 per cent of survey costs to cover the development of the questionnaire. (The allowance should be closer to 50 per cent if omnibus methods are being used.) This would include qualitative research (especially focus groups) and pilot studies.

Estimates of fees for focus group qualitative research in different countries

	Typical agency fees per focus group
Benelux countries	€4,300
France	€4,000
Portugal and Spain	€2,900
United Kingdom	€3,000

- Data analysis, interpretation and reporting. The analysis and interpretation of the survey data is separate – and sometimes lengthy – task. An allowance of 10-20 per cent of survey costs would be reasonable.

The table below illustrates the total out-sourced budget that should be allocated for each approach and sample size. **We recommend an overall budget of:**

- €10,000 to €24,000 for a 1,000 sample on an omnibus survey
- €19,000 to €42,000 for a 2,000 omnibus survey
- €85,000 to €180,000 for a 2,000 sample telephone survey

In addition, five weeks of management time from within the commissioning organisation should be allocated.

Indicative overall costs of consumer surveys

	Low-cost countries	Mid-cost countries	High-cost countries
<b>Omnibus</b>			
1,000 sample	€ 10,000	€ 14,000	€ 24,000
2,000 sample	€ 19,000	€ 24,000	€ 42,000
<b>Telephone</b>			
1,000 sample	€ 50,000	€ 70,000	€ 110,000
2,000 sample	€ 85,000	€ 110,000	€ 180,000
<b>Face-to-face</b>			
1,000 sample	€ 100,000	€ 140,000	€ 240,000
2,000 sample	€ 150,000	€ 220,000	€ 390,000
<b>CASI</b>			
1,000 sample	€ 170,000	€ 220,000	€ 390,000
2,000 sample	€ 310,000	€ 410,000	€ 700,000

#### 4.4.3 Mystery shopping and expert evidence

The third method for measuring counterfeit and pirate activity is through the use of mystery shopping techniques combined with expert evidence.

Mystery shopping samples products, not people

With this approach, the researcher samples the products – not people.

Samples of the relevant products are purchased from shops and other appropriate retail channels – like internet distributors. People with sufficient expertise to identify whether they are legitimate then assess these samples. From this, an estimate of the proportion of goods that are counterfeit in each retail outlet can be made.

We have discussed this approach with a number of reputable agencies. The consensus is:

- a sample of 15 outlets per channel will provide an indicative estimate, but will not be statistically robust
- a sample of 50 outlets per channel is the minimum required for a statistically valid result
- a sample of 100 outlets per channel will deliver a robust result with a relatively narrow margins of error

The table below provides confidence intervals. It shows that if 5 per cent of outlets sampled during a mystery shopping exercise sell counterfeits then, at the 95 per cent confidence level, we can be sure that the rate in the overall population is:

5% ± 5.5% if the sample is 15  
 5% ± 5% if the sample is 50  
 5% ± 2.15% if the sample is 100

Meanwhile, the samples should be representative of the range of different outlets in each channel and should reflect the different regions of each country. Again, given the nature of statistical sampling, these quotas are applicable equally to all member states – with the exception of Luxembourg.

We recommend mystery shopping exercises should sample 50 outlets per channel (15 for Luxembourg) and, if budget permits, 100 outlets (30 for Luxembourg).

Confidence interval by sample size for mystery shopping exercise

Percentage fake	Sample size		
	15	50	100
5	11.0	6.0	4.3
10	15.2	8.3	5.9
15	18.1	9.9	7.0
20	20.2	11.1	7.8
25	21.9	12.0	8.5
30	23.2	12.7	9.0
35	24.1	13.2	9.3
40	24.8	13.6	9.6
45	25.2	13.8	9.8
50	25.3	13.9	9.8
55	25.2	13.8	9.8
60	24.8	13.6	9.6
65	24.1	13.2	9.3
70	23.2	12.7	9.0
75	21.9	12.0	8.5
80	20.2	11.1	7.8
85	18.1	9.9	7.0
90	15.2	8.3	5.9
95	11.0	6.0	4.3

Source: NOP

Mystery shopping exercises must cover illicit and informal retail channels

This method will deliver robust estimates of counterfeiting provided a representative sample of outlets can be identified. Importantly, this sample must cover all potential outlets used by consumers in the EU – including illicit and informal channels.

Use consumer survey to weight results to reflect real shopping behaviour

To ensure that the sample of outlets is representative, it is advisable to run a parallel consumer survey to identify where consumers shop, and the relative importance of different channels. **We would recommend that estimates of counterfeit activity derived from mystery shopping exercises should be weighted by retail channel in proportion to the use of that channel by consumers** – as revealed in the parallel consumer survey. The table illustrates how the results from mystery shopping exercises can be weighted-up using evidence from consumer surveys to generate a robust estimate of the incidence of counterfeiting in the entire market.

Example of calculating overall counterfeiting levels from mystery shopping and survey evidence

Retail channel	Incidence of counterfeits identified in mystery shop	Proportion of total sales conducted through channel identified in consumer survey	Contribution of channel to incidence of counterfeits in entire market
Town centre	1%	80%	0.80%
Street market	10%	10%	1.00%
Informal exchange	80%	5%	4.00%
EU-based online	5%	3%	0.15%
Global online	50%	2%	1.00%
Total market			6.95%

How do you know if they're fake? ...

Once the sample products have been collected from the outlets, they have to be examined and identified as either legitimate or fake.

The ease with which this identification can be conducted will vary by product. This is considered in detail for each relevant product below. For many products, highly specialist expertise or testing facilities will be needed to recognize counterfeit or pirate material. This may be costly.

Ask the legitimate businesses to help

One option may be to enlist the assistance of the legitimate trade. Many brand owners already have facilities or expertise to test for counterfeits, and work with enforcement agencies to identify the legitimacy of seized goods. These facilities may be made available to assess samples purchased as part of the mystery shopping exercise. **We recommend member states work closely with legitimate brand owners to establish a cost effective method of testing samples.**

Often impossible to identify production overruns

In some cases, it may not be possible to identify all counterfeits or pirates. This is especially the case where production overruns from legitimate manufacturers have been sold illicitly. These often have identical characteristics to their legitimate counterparts making them virtually impossible to distinguish.

We now turn to considering the costs of the mystery shopping approach.

Approach is costly, but sometimes it's the only option

The mystery shopping method can be costly, especially if expert advice or analysis needs to be procured to identify fakes. There are, however, some occasions when it is the only suitable approach. In particular, for those products where the consumer does not know whether they have purchased an illegitimate product, expert identification of fakes may be the only option open.

€10,000 budget for the shoppers

There are a number of research agencies that have a force of fieldworkers who can conduct the shopping. We provide an appendix with a list of such agencies.

We have been quoted fees of around €30 per establishment visited on a mystery shop. This was the same for the range of options we specified. For smaller samples one may pay more than €30 per shop; for larger samples it may be possible to pay less.

Typically, there can be around seven generic retail channels. So the costs of the mystery shopping at 50 outlets in each of seven channels will be around €10,000 per product per member state.

Then add the costs of purchasing the samples and the fees for experts

However, these are only part of the overall costs of a mystery shopping exercise.

In addition, the costs of buying the samples must be reimbursed to the agency. Clearly, these will depend on what products are being sampled – but this can add considerably to the overall cost.

Furthermore, the experts and facilities required to identify fakes need to be financed. If relationships can be built with the brand owners to use their services, the marginal costs may be relatively small. Otherwise, this may be another significant additional cost.

Finally, the commissioning organisation will need to manage the agency and the process. The effort here should not be under-estimated. Based on discussions with relevant practitioners, we would expect one mystery shopping exercise would require approximately ten weeks of management time spread over a 3-6 month period.

#### Focus on only at-risk channels to reduce costs

The costs of this approach can be reduced if, through the use of intelligence about where fakes are sold, the mystery shopping efforts are focused on only those retail channels where counterfeits are most likely to be offered for sale.

To a certain extent, this is assuming what we are setting out to measure – but, at a practical level, focusing on only the ‘at-risk’ channels offers potentially large cost savings. Alternatively, the at-risk channels can be sampled at 50 or 100 outlets, with the channels not believed to be at risk can be sampled at, say, only 15 outlets.

The results can then be weighted (as discussed above) to reflect the overall level across all channels.

To reduce costs, we recommend that channels identified as not-at-risk (i.e. where less than 3 per cent of sales are believed to be counterfeit or pirate) should only be surveyed with a sample of 15 outlets. If this initial survey suggests that counterfeiting or piracy exceeds 1 per cent in the channel, the sample should be increased to 50 or 100.

## 4.5 Choosing an appropriate methodology

We now consider how to choose the appropriate methodology.



## The 'cost and applicability ladder'

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There's a trade-off between costs and applicability

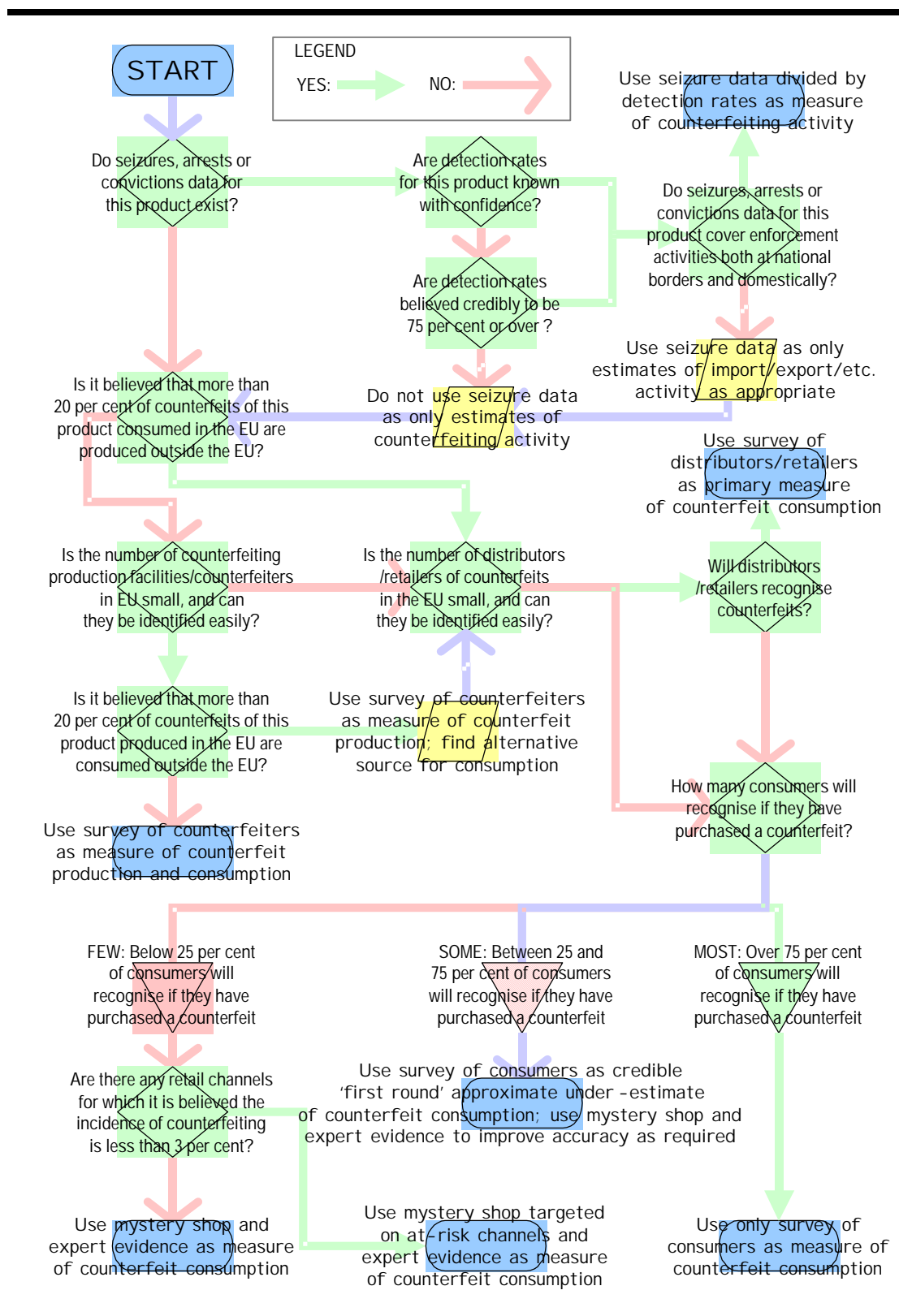
The different approaches we describe above have very different cost implications. The method that can be applied in all circumstances – namely mystery shopping – is also the most expensive. The cheapest approach – using already existing seizure data – is also the least robust and least applicable. The graphic illustrates where different approaches stand on the 'cost and applicability ladder'.

Our decision tree helps identify the least cost appropriate method

We have developed a decision tree to help identify least cost appropriate method for measuring counterfeits of any given product.

The decision tree runs through the hierarchy of methods starting with the cheapest. It then applies the recommendations above to identify the cheapest robust method for estimating the number of counterfeits in a given market.

Methodology decision tree



## 5 PRODUCT RECOMMENDATIONS

In this chapter, we apply the approach recommended in chapter four to each of our 19 different product areas.

We briefly consider the nature of the counterfeiting and piracy problem in each area and then use the methodology decision tree to recommend the most appropriate research approach to measuring the problem.

The 19 product areas are:

- Pharmaceuticals
- Spectacles including sunglasses
- Watches
- Plants
- Leather goods
- Food and drink
- Perfumes and cosmetics
- Alcoholic beverages
- Textiles and sporting goods
- Durable goods
- Toys and games including electronic games
- Vehicle spare parts
- Aircraft spare parts
- Other industrial spare parts
- Computer hardware
- Books and publications
- Films and motion pictures
- Sound recordings
- Computer software

We consider each in turn.

### 5.1 Pharmaceuticals

The pharmaceutical industry has not escaped the attentions of the counterfeiter. Without the need to adhere to strict and expensive regulatory controls, the manufacturer of counterfeit products can make large profits. Like other industries, the economic cost of counterfeiting is large, leading to brand damage and distorting trade and competition. More worrying, it can also pose a serious public health risk.

WHO treats all deliberately non-genuine products as counterfeits

There is more than one method of counterfeiting pharmaceuticals. The World Health Organisation has identified seven:

## Counting counterfeits

- fake packaging + correct quantity of active ingredient
- fake packaging + wrong active ingredient
- fake packaging + no active ingredient
- fake packaging + incorrect quantity of correct active ingredient
- genuine packaging + deliberate use of wrong active ingredient
- genuine packaging + deliberate exclusion of active ingredient
- genuine packaging + incorrect quantity of active ingredient

One of the safeguards of medicinal quality is the fact that genuine medicines carry indicators which allow for verification of the origin and quality of the product. Counterfeit products, even if they contain correct ingredients, cannot by definition have the same standards of integrity.

These differing forms of counterfeiting mean that estimating the scale of the counterfeiting of pharmaceuticals is difficult as some measures of detection will account for some, but not all, of the counterfeiting possibilities.

Consumer is likely deceived for counterfeits to enter market

The issue of the safety and the integrity of medicine is particularly important to the consumer. However, a poll by MORI<sup>13</sup> in the UK has shown that, of all counterfeit products, pharmaceuticals are the least likely to be knowingly bought by consumers.

Close regulatory supervision

In comparison with the most of the rest of the world, the market for pharmaceuticals is closely regulated in Europe and standards are rigorously enforced to ensure quality and efficacy of products. Pharmaceuticals companies spend large amounts of money on research and development and ongoing quality controls on their products.

Packaging of pharmaceuticals largely simplistic

The packaging of pharmaceuticals tends to be simple and functional, and thus provides an opportunity for easy replication in some cases. In general, self-medication products feature strong branding and may also have built-in safety devices such as seals and holograms; this is rarely the case for those drugs which are not sold directly to the public.

4 ways into the market for counterfeit products

There are five ways into the market for counterfeit pharmaceuticals:

- Franchising: Counterfeiters have been known to apply the branding of a genuine medication to other products that are not

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<sup>13</sup> MORI (1997), Why you should care about counterfeiting: The costs and dangers of buying fake products, commissioned by the Anti-counterfeiting Group.

part of the original range. This potentially damages the brand of the genuine product

- Parallel trading: Licensed trading, although not illegal within the EU, has provided the opportunity for genuine consignments to be mixed with counterfeit products
- Diversion or illegal trading: This can involve the resale of promotional samples distributed to physicians or the fraudulent adulteration of expiry dates. Illegal trading can also be trade in sometimes 'genuine' product but from unlicensed premises.
- Substitution: Sometimes inferior quality ingredients are substituted for genuine ingredients
- Adulteration and reuse: This involves the retrieval of products from clinical waste and recycling them for resale. This practice has been seen in the Asia Pacific region

Counterfeiting is a global phenomenon

Counterfeiters of pharmaceuticals, like their legitimate counterparts, can be large international organisations. For example authorities in Italy seized counterfeit materials which originated in China and India and were being repackaged before being sent to Latin America. Whilst close market regulation in the EU relative to the rest of the world makes it less likely for counterfeits to occur within the EU, there are significant worldwide flows of counterfeits to which the EU is not entirely immune.

Counterfeiting likely to be small

We do, though, believe instances of counterfeit pharmaceutical goods in the EU to be small. Public health is monitored closely across the EU by the relevant drug administrations and instances of counterfeits are thought to be relatively rare.

Threat to EU from the east

According to the Pharmaceutical Security Institute (PSI), the most dangerous threat posed to the EU comes from Eastern Europe. There have been instances of exports of counterfeit medicines, produced within the EU to areas where there is less control on medication e.g. sub-Saharan Africa or South America. Here, the frontier data concerning counterfeit pharmaceuticals could prove to be useful.

Generic medicines as much at risk as high value

Worldwide, generic medicines are as counterfeited as high value products according to the PSI. Even such medicines as Amoxicillin have fallen victim to counterfeiters. It is not clear, with the rigorous policing of the industry and the potential penalties involved, that the incentive

to replicate generic medicines would be sufficient to induce their production within Europe.

#### Inputs difficult to monitor

It may be possible to estimate the scale of some counterfeiting of from the seizures of counterfeit packaging/packing production facilities. This would not account for those counterfeits which are made and put in genuine packaging. If the counterfeiter were employing large quantities of a particular ingredient then this may be possible to measure the possible output from the size of the input. There are, however, many ingredients that could conceivably be mixed with one another to resemble medication or the counterfeit could simply be constituted of the base ingredient alone i.e. chalk, typically for tablets.

#### Production may take place all over

There may be many production facilities in which counterfeiting can take place. It could be done on a large scale depending on the nature of the counterfeiting however it may take place on small scale. Considering the massive margins on the price of pharmaceuticals (which is accounted for in R&D costs, marketing, etc) that are not borne by the counterfeiter, one would not need to have massive scale economies to make counterfeiting a profitable exercise. In any event the range of possibilities is vast. The simple repackaging of a genuine product, constituting a counterfeit, could be done on a smaller scale than say manufacturing a product with packaging from scratch, also constituting a counterfeit.

In its response to the European Commission's Green Paper on Counterfeiting and Piracy, the European Federation of Pharmaceutical Industries and Associations (EFPIA) stated that manufacturer of counterfeit pharmaceutical products occurs in Italy, Spain, Greece, the Netherlands, Portugal and Germany.<sup>14</sup> Spain was cited as an example where permanent production facilities existed. This facility manufactured counterfeit pharmaceutical products for domestic consumption, but also for export to other EU countries.

#### Frontiers give some measurement opportunity

The distribution stage is one point where it may be possible to measure counterfeiting. External frontiers to the EU provide an opportunity whereby sampling of imports can occur. This would not account for those counterfeits produced within the EU for the EU market, but would give a sense of cross border flows.

One is also presented with the problem that detection rates are both variable and small. In this instance it is nearly impossible, with any

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<sup>14</sup> European Federation of Pharmaceutical Industries and Associations (1999), Response to Commission's Green paper on combating counterfeiting and piracy in the single market.

merit, to assert a rate of detection and base the estimates on a scaled up number of seizures.

In some of the instances where counterfeiting has occurred in the past, fake medication has been interspersed with genuine medication at the distribution stage. Whilst sampling here (at the wholesalers level) may give some indication of the level of this practice, it does not account for the possibility that the counterfeit enters the distribution chain later i.e. between the retailer and the counterfeiter directly. Again detection rates for these seizures are likely to be low.

#### Consumer survey alone reveals nothing

As we have already noted it is unlikely that the consumers would be a willing party in the decision to buy counterfeit pharmaceuticals. The consequence of this is that surveys of consumers alone will be unable to demonstrate the scale of the market, as many consumers will not know whether they have consumed counterfeit pharmaceuticals or not.

A representative of the Pharmaceutical Security Institute expressed concern that, increasingly in the future, counterfeit drugs could arrive in Europe via the internet. Some slimming drugs and anti impotence drugs are available online typically at a much reduced price to the domestic market price. These are purchased and mailed directly to the end user. The only way of estimating counterfeiting using this practice is to use an expert survey and then see what percentage these outlets that distribute counterfeit represent as a proportion of the market by a consumer survey.

It is necessary, in the case of self-medication to sample at the point of sale.

#### Point of use is the best sampling opportunity

Sampling of pharmaceuticals, which are free, or of a fixed cost at the point of use, has to be done just before the point of use. This is due to the numerous stages of distribution in which the counterfeit medicine may enter the supply chain.

Surveying consumers in this case would not reveal much as many would not buy a counterfeit drug hence by implication if they end up consuming a counterfeit it would not be as a result of a commercial, rational choice they had made.

It may be possible to deduce the size of production of a counterfeit drug if its effects were particularly harmful. In this case, it would come to light how many people had been adversely affected through taking this medication through a simple counting process. The relevant national drug administrations would record instances where patients had had an adverse reaction to a drug.

This doesn't cover the range of other possibilities for counterfeits however. It may well be in the case of a counterfeit with no active ingredient that the patient is not aware of having taken a counterfeited product, as he will probably not notice an adverse effect, just no positive effect from the medication.

#### Measurement opportunity lost by disposal stage

It is nearly impossible to try and quantify the level of counterfeiting at this point. If it is medication it is taken by the consumer the evidence of its existence has then gone. It may be possible to isolate counterfeit packaging at the disposal stage, but that does not account for all the types of counterfeiting i.e. counterfeit drug in genuine packaging.

Counterfeiting through mainstream distribution channels is currently likely to be so small as to make it practically impossible to measure. Anecdotal evidence may be the best means of determining where in the EU instances of counterfeiting are at their greatest.

### 5.1.1 Recommended methodology for pharmaceuticals

We recommend the use of mystery shopping and expert evidence to assess the level of counterfeiting of pharmaceuticals. The decision tree illustrates the rationale.

Random samples of a range of pharmaceuticals should be purchased from:

- 50 or 100 pharmacies in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers

We believe a smaller sample size is appropriate for online retailers as there are currently relatively few such websites.

The samples should cover the full range of pharmaceutical products – including both generic and higher value branded drugs. They should include both prescription and over-the-counter medication. Consideration should be given to how the mystery shoppers will procure prescribed drugs.

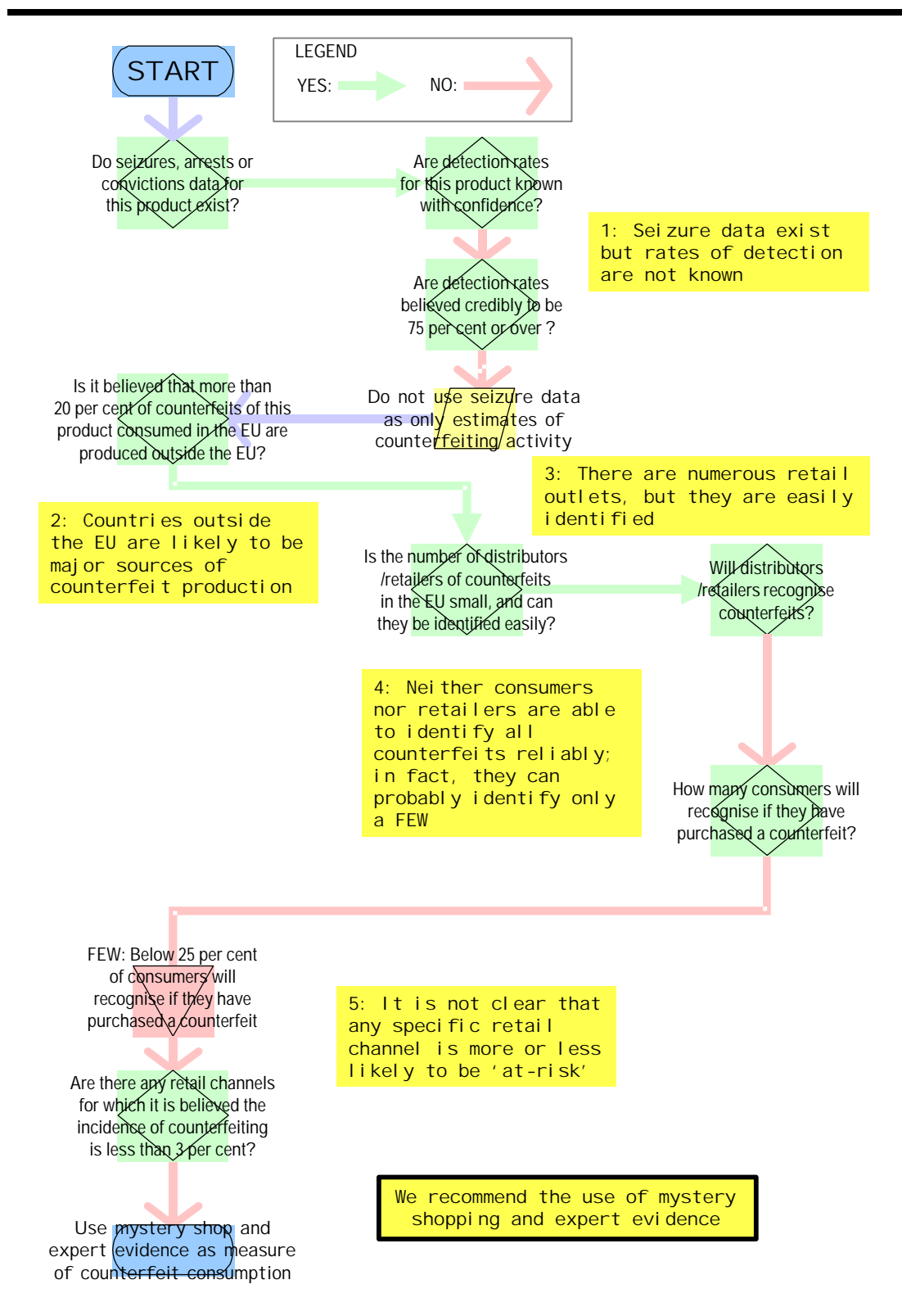
To save costs, initial focus can be placed on the online channels only. Moreover, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy at suitably qualified laboratories. We recommend that attempts be made to enlist the assistance of the legitimate pharmaceutical producers in this.



A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

Methodology decision tree for pharmaceuticals



## 5.2 Spectacles and sunglasses

Distinct products

Spectacles and sunglasses do not fall neatly into a single category for analysis purposes. There are marked differences in each product type which has implications for the likelihood of counterfeiting taking place.

Regular spectacles are not widely counterfeited...

We suspect that counterfeiting of regular spectacles is low. This is due to the fact that glasses are engineered to individual specification and their sale takes place through recognised and regulated channels i.e. registered outlets. Given the functional nature of the product there is little opportunity to entice the consumer to make the trade off between price and quality. Lenses in particular are difficult to replicate at a significantly lower cost than they are currently produced.

...however, sunglasses are a popular target

In contrast, we place sunglasses as a product that is likely to be counterfeited. Consumers play an active role rather than a passive role in the process. That is to say that in purchasing a counterfeit good they are aware that they are receiving a counterfeit, of a supposed lower quality than the genuine product, but at a sufficiently lower price than a genuine to compensate for the fact that it is not genuine. For the counterfeiter it is more appealing. In many ways the counterfeiting of sunglasses follows a similar pattern to the counterfeit of designer clothes. The product is one much sought after by the consumer with a high price and relatively easy to copy, although the product specification tends to be much lower.

The physical cost of producing high quality optics and the costs associated with advertising and marketing make costs high relative to the intrinsic value of the product. The counterfeiter can seek to take advantage this initial investment at substantially lower exploitation cost either through the use of lower quality materials and/or through not having to incur marketing costs.

Brands are the main target

Many spectacles bear the logos of famous brands for example those of some fashion designers, but almost exclusively they are produced under licence.

Three forms of counterfeiting

In general the counterfeiting of sunglasses and spectacles takes three forms:

- a production over-run which occurs when manufacturer produces additional batches without the consent of the right owner
- a counterfeiter produces a pair of sunglasses/spectacles which are meet product specification
- a counterfeiter produces a pair of sunglasses/spectacles which does not meet the legitimate product's specification

### 5.2.1 Recommended methodology for sunglasses

We recommend the use of consumer survey to assess the level of consumption of counterfeit sunglasses. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers of sunglasses should be surveyed and asked whether they believe their sunglasses to be counterfeit.

### 5.2.2 Recommended methodology for spectacles

As an initial estimate, we recommend the use of a consumer survey to assess the level of consumption of counterfeit spectacles. The decision tree illustrates the rationale.

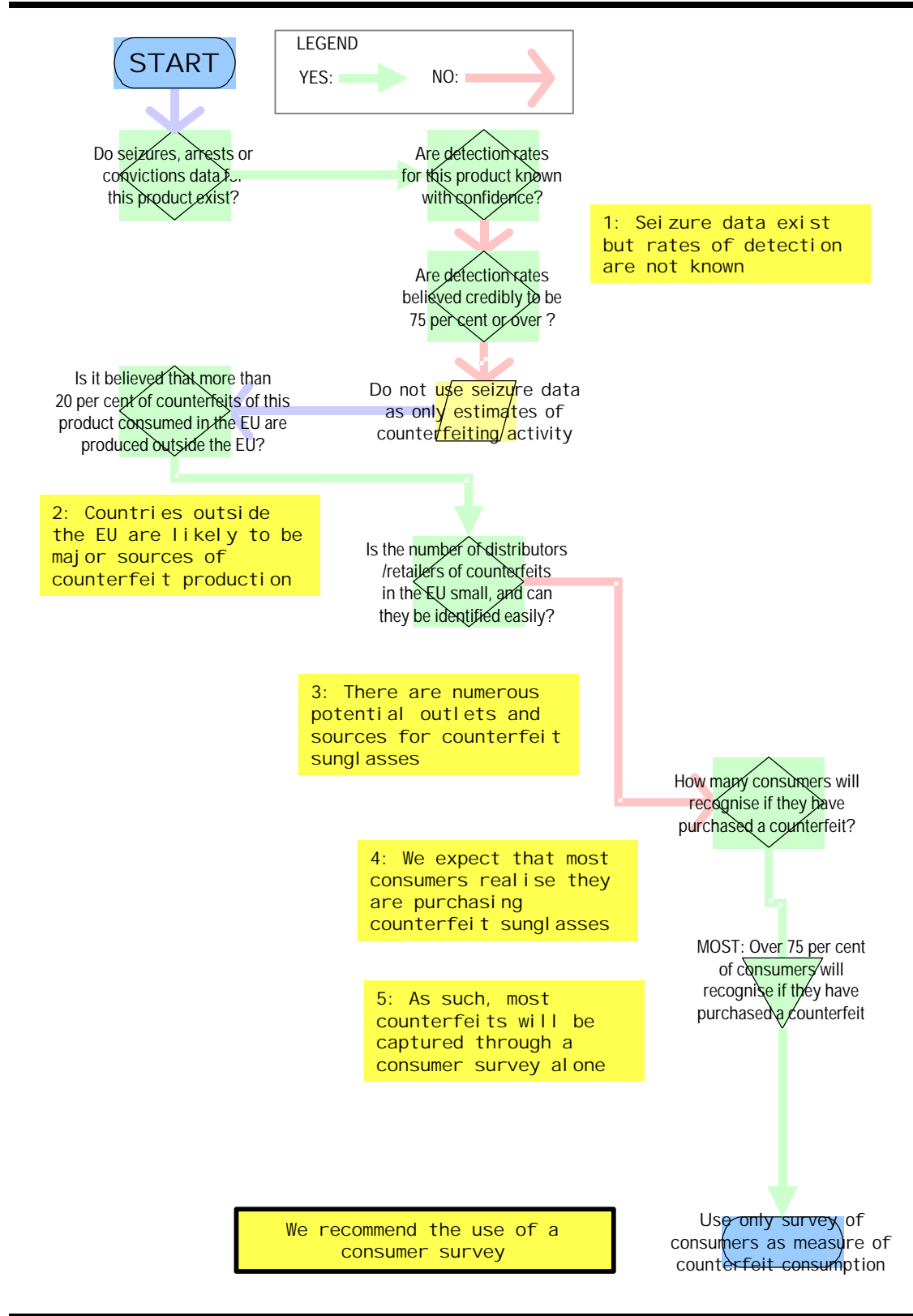
A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers of spectacles should be surveyed and asked whether they believe their spectacles to be counterfeit.

We believe the consumer survey alone will understate the incidence of counterfeiting. As such, we recommend that a mystery shopping exercise be conducted to provide more conclusive results, if budgets permit.

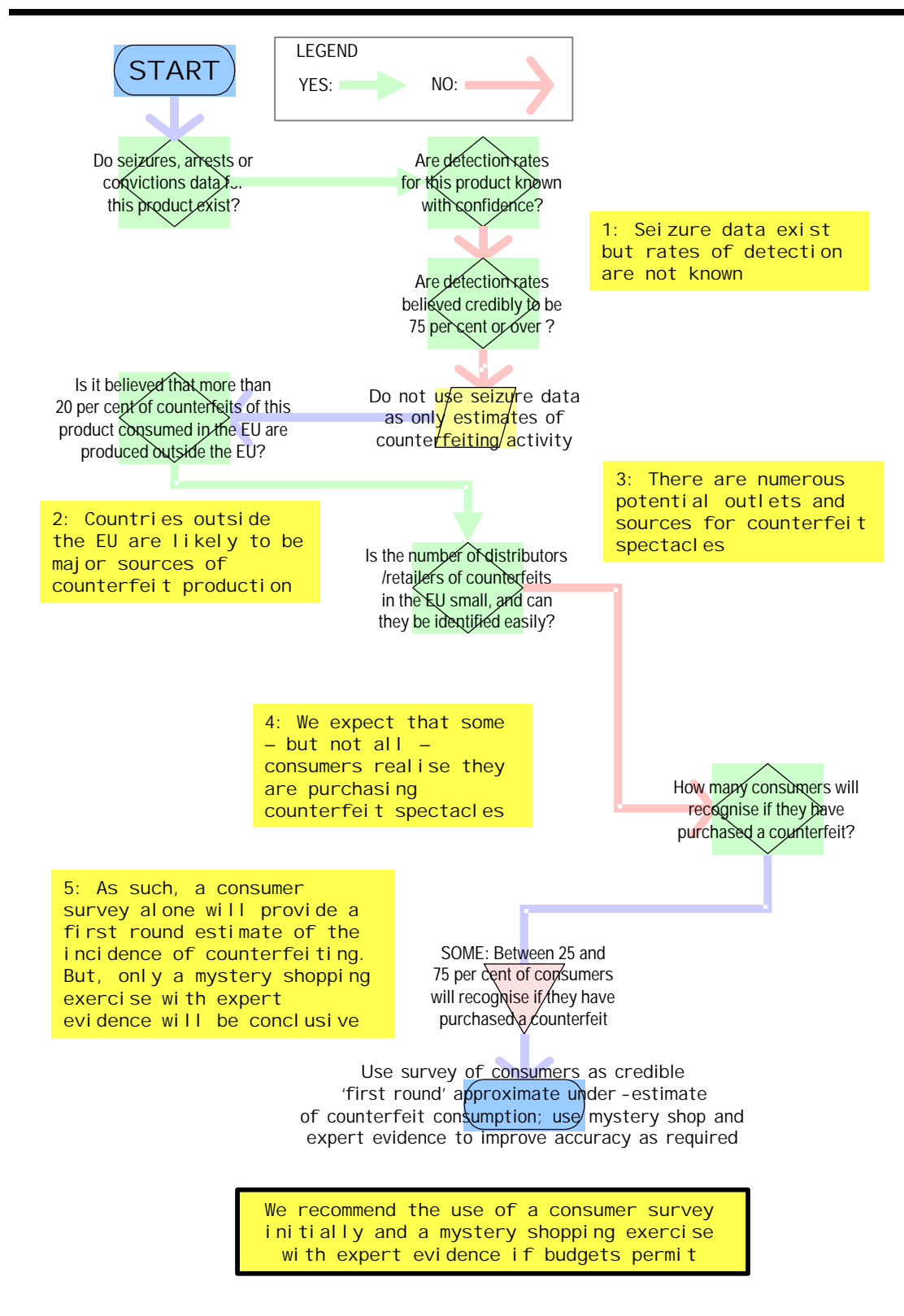
Random samples of a range of spectacles should be purchased from 50 or 100 opticians in each member state (15 or 30 for Luxembourg). The samples should cover the range of high-value branded spectacle frames. The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of the legitimate spectacles producers in this.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production over-runs. As such, it may not be possible to capture data on the full extent of counterfeiting.

# Methodology decision tree for sunglasses



Methodology decision tree for spectacles



## 5.3 Watches

### Various forms of counterfeit

The counterfeiting of watches ranges from sophisticated replication of a particular model through to placing a counterfeit logo on a basic otherwise unbranded model. Moreover, a wide range of brands is believed to suffer from counterfeiting; this has been compounded by the relatively recent diversification of some sportswear brands and even motor companies into watches, albeit through licensing agreements.

The standing committee of the European watch making industry (CHPE) indicated in 2001 that they believed much of the problem of counterfeiting in timepieces in continental Europe was concentrated in Spain, Italy, Turkey and the Benelux countries. But there is believed to be a significant number of counterfeits produced outside but sold within the EU.

### Consumer survey could provide the answers

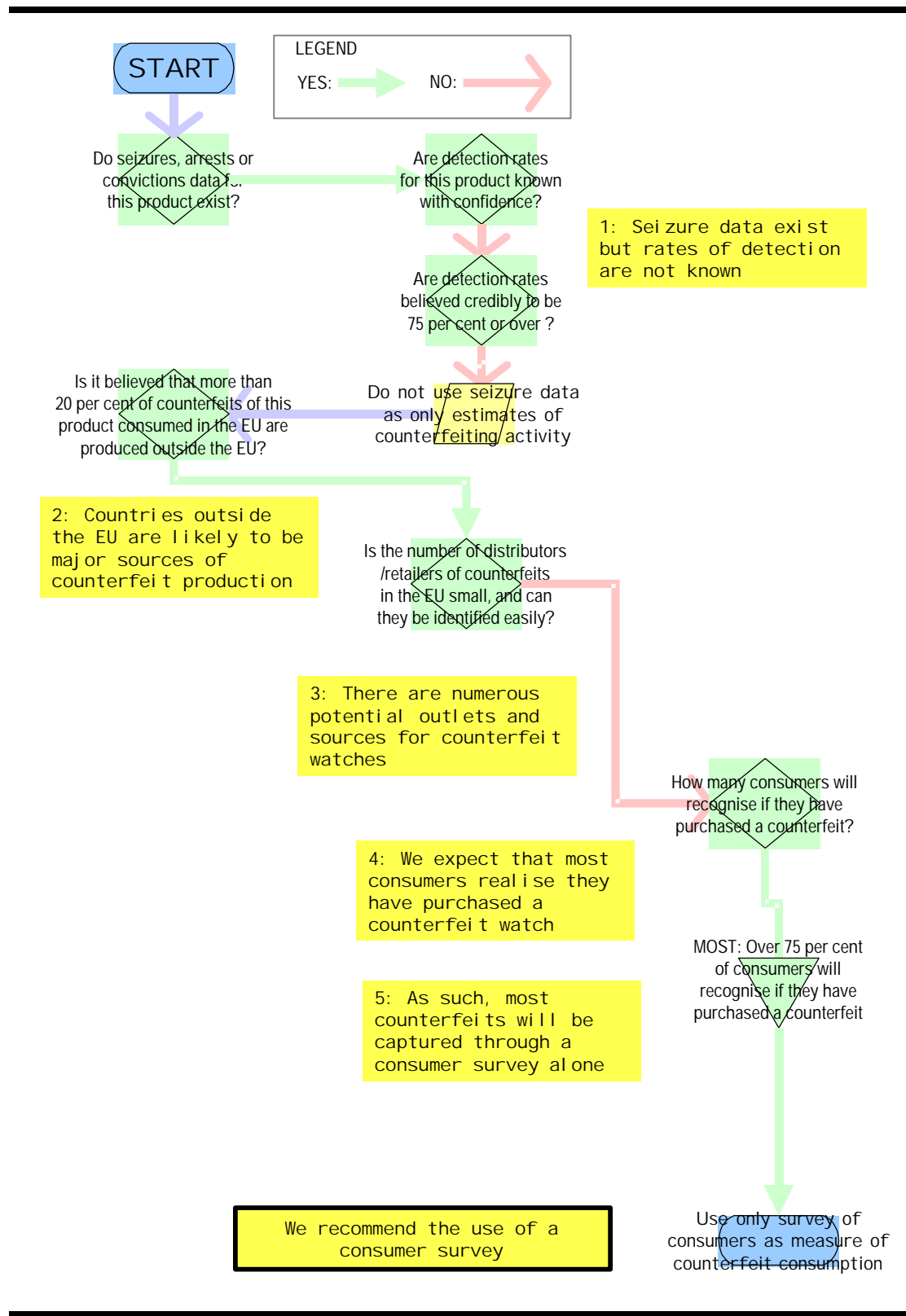
Most consumers buy a counterfeit watch knowingly – or soon realise it to be such. Contingent on the wording of a consumer questionnaire, it would be relatively easy to extract details of past consumption from the consumer.

#### 5.3.1 Recommended methodology for watches

We recommend the use of consumer survey to assess the level of consumption of counterfeit watches. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers of watches should be surveyed and asked whether they believe their watches to be counterfeit. The sample should cover the range of potential counterfeit watches including high price watch brands and watches branded under sports, motor company or other brands.

Methodology decision tree for watches





## 5.4 Plants

The counterfeiting of plants takes a single generic form: the misrepresentation of plants or seeds as a higher quality and price variety.

Plants are passed-off as a more expensive variety

Plants of one variety are passed-off as another more expensive variety. This could involve, for instance, labelling low quality seeds as a disease resistant variety or selling a cheap plant for the price of a less common variety.

Misrepresentation only occurs as the point of sale

The misrepresentation often only occurs at the point of sale. As such, there is little point trying to measure the counterfeiting problem at any point other than at the points of sale or consumption.

### 5.4.1 Recommended methodology for plants

We recommend the use of mystery shopping and expert evidence to assess the level of misrepresentation of plants and seeds. The decision tree illustrates the rationale.

Random samples of a range of plants and seeds should be purchased from:

- 50 or 100 garden centres and specialist horticultural retailers in each member state (15 or 30 for Luxembourg)
- 50 or 100 hardware and DIY retailers in each member state (15 or 30 for Luxembourg)
- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 general retailers – such as supermarkets – in each member state (15 or 30 for Luxembourg)
- 20 or 40 mail order retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers

We believe a smaller sample size is appropriate for mail order and online retailers as there are currently relatively few such providers.

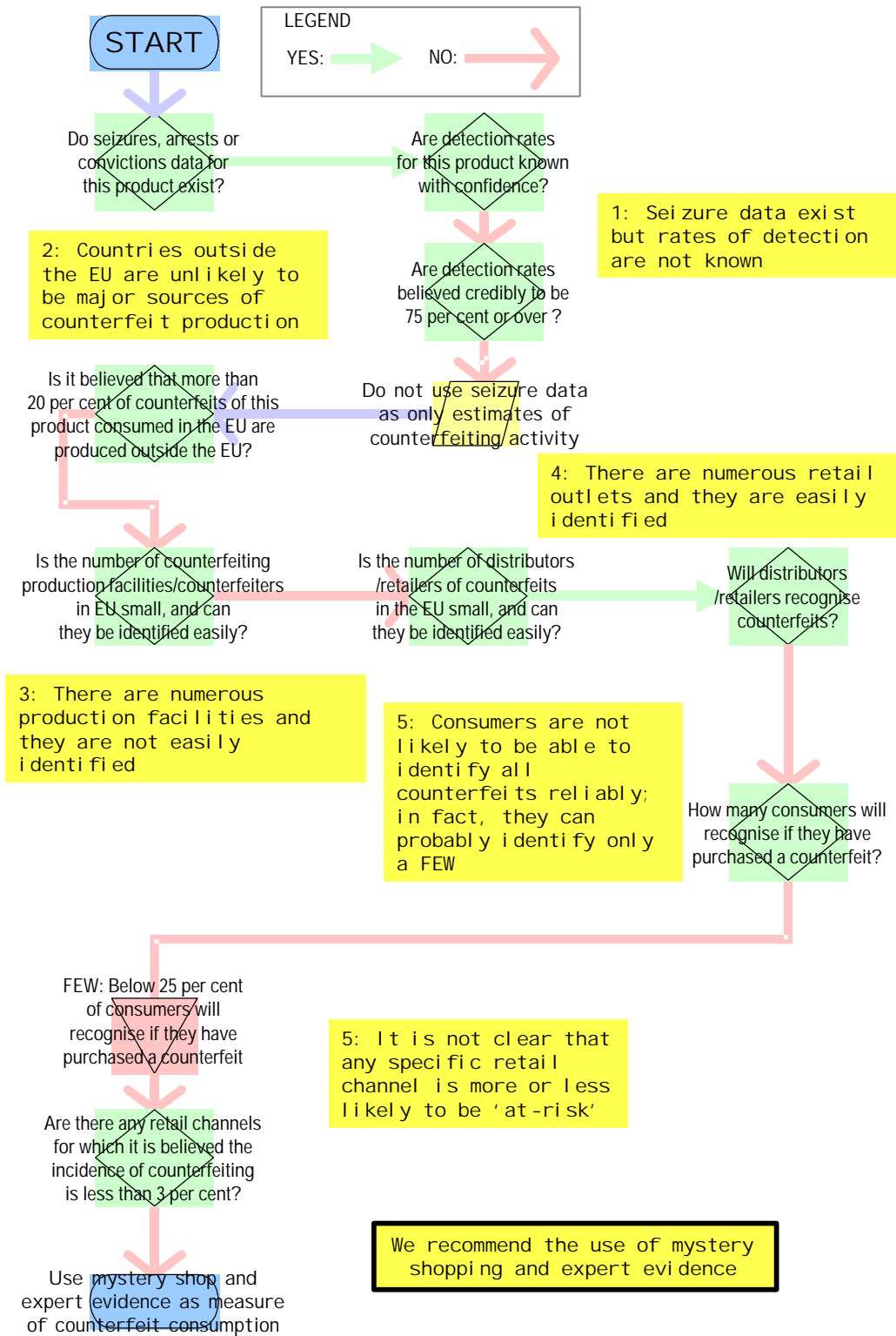
The samples should cover the full range of higher value plant and seed varieties. To save costs, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the

assistance of legitimate horticultural suppliers, plus horticultural societies and colleges, in this. Consideration should also be given to the potential need to allow plants and seeds to grow before they can be examined and appraised.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

# Methodology decision tree for plants



## 5.5 Leather goods

The extent and type of counterfeiting varies between different leather goods.

Limited scope to counterfeit leather clothing unlike handbags

On the one hand, leather clothing and footwear rarely feature logos overtly and designs are fairly standard, so there is limited scope for counterfeiting – except by deceiving the consumer into purchasing poor quality merchandise at a higher price. On the other hand, handbags and luggage for example often carry considerable branding – offering the additional opportunity of selling counterfeits to consumers who know the items are fake but, regardless, want the branded item.

Trio of counterfeiting options

There are three main types of counterfeiting of leather goods:

- Production overruns
- Copying of products to specification
- Copying of good without matching specification

### 5.5.1 Recommended methodology for leather goods

As an initial estimate, we recommend the use of a consumer survey to assess the level of consumption of counterfeit leather goods. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers of leather goods should be surveyed and asked whether they believe their purchases to be counterfeit.

We believe the consumer survey alone will understate the incidence of counterfeiting – because not all consumers will recognise counterfeits as such. Therefore, we recommend that a targeted mystery shopping exercise be conducted to provide more conclusive results, if budgets permit. We believe efforts can be targeted at street markets, online retailers and discount stores.

Random samples of a range of leather goods should be purchased from:

- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 independent discount leather good retailers in each member state (15 or 30 for Luxembourg)

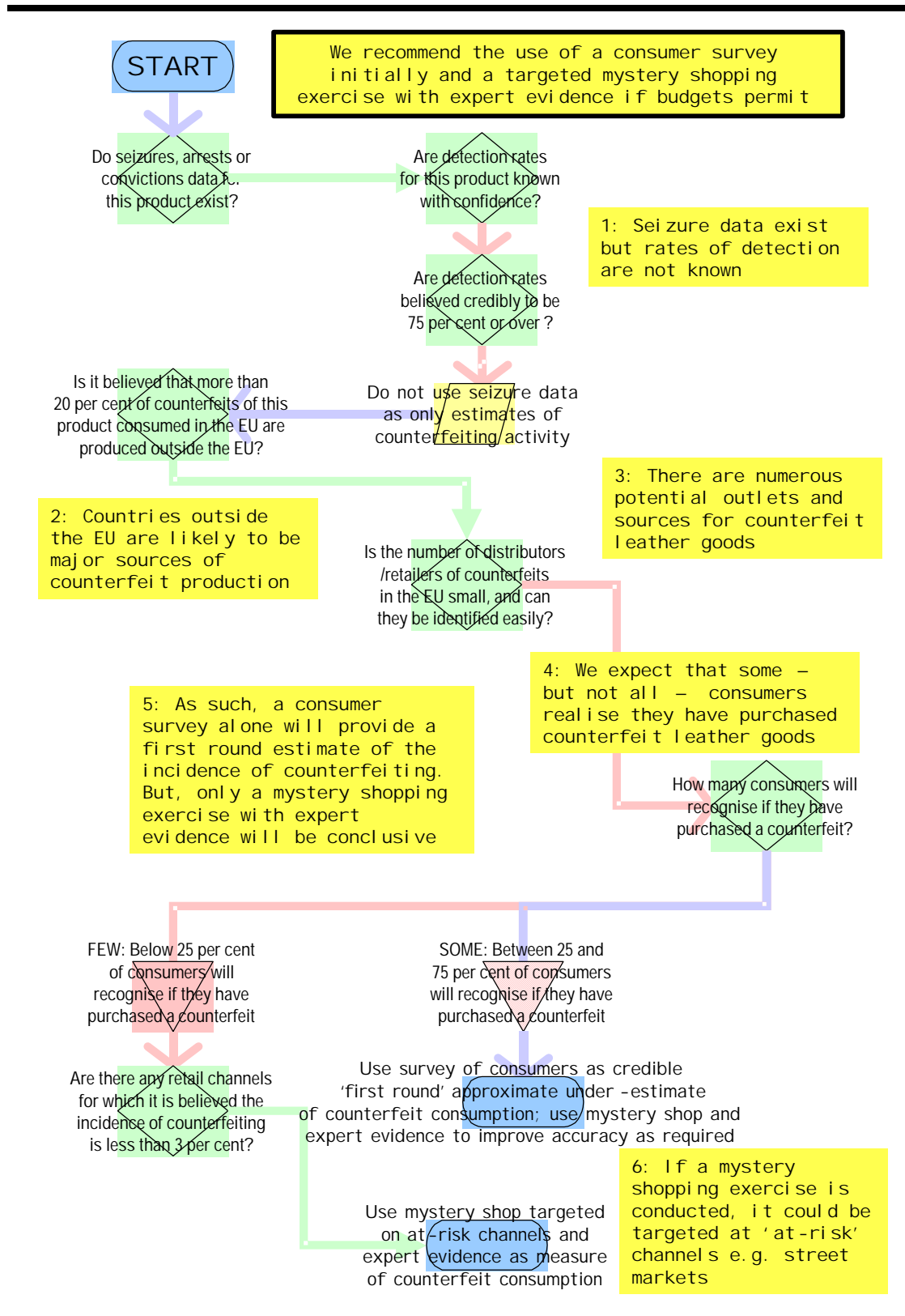
- 20 or 40 mail order retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers
- 15 'high street' leather goods retailers (5 for Luxembourg)
- 15 general/department stores (5 for Luxembourg)

The samples should cover the range of high-value leather goods. The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of the legitimate leather goods producers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

Methodology decision tree for leather goods



## 5.6 Food and drink

Counterfeiting of food and drink can vary from the wholesale manufacture of products intended as imitations of genuine products to the act of misrepresentation of inferior products as being of a higher quality. Examples of foodstuffs which have been counterfeited in the past are baby formula and sweets. Consumers are typically unaware of acquiring a counterfeit.

Food and drink can be misrepresented at the point of sale to deceive consumers into buying something of lower value than they expect.

Misrepresentation of food and drink takes many forms

Misrepresentation can take a numerous forms including:

- Use of branded packaging to pass-off non-branded, out-of-date or sub-standard merchandise
- Production of replica packaging and merchandise
- Simple mislabelling

And can occur in various locations

Misrepresentation can occur in restaurants, bars and cafés as well as during the sale of food and drink for consumption off premises.

### 5.6.1 Recommended methodology for food and drink

We recommend the use of mystery shopping and expert evidence to assess the level of misrepresentation of food and drink. The decision tree illustrates the rationale.

Random samples of a range of food and drink should be purchased from:

- 50 or 100 specialist food retailers in each member state (15 or 30 for Luxembourg)
- 50 or 100 stores selling food and drink amongst other items (15 or 30 for Luxembourg)
- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)

We believe that the vast majority of food is sold via these channels. Online and mail order purchases of food and drink are so marginal that it would not be worth attempting to quantify the purchases via these outlets.

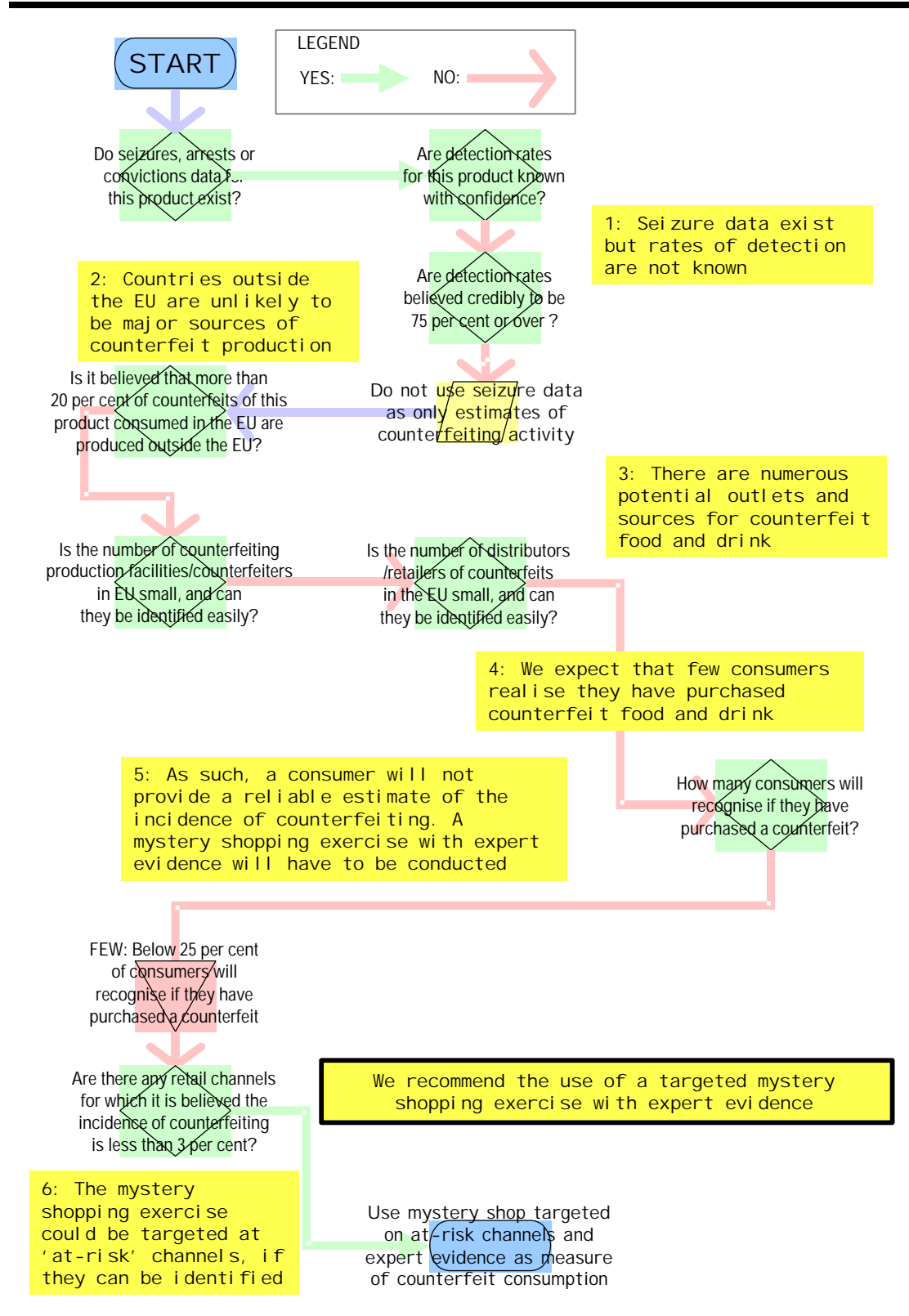
The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the

assistance of legitimate food and drink suppliers. It may not always be apparent whether a product is counterfeit or not. This would require the forensic testing of some of the products. Assistance may be required in this from the member states food safety agencies.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.



# Methodology decision tree for food and drink



## 5.7 Fragrances and cosmetics

Many fragrances and cosmetic products are sold under prestige brand names, either those specialising in fragrances and cosmetics exclusively or those diversifying from other areas such as fashion.

### Quality of counterfeit reflects route into market

The range of counterfeiting opportunities is wide – from crude imitations bearing logos to detailed replicas of an original product. One can argue that if it is evident that a product is non-genuine, then the consumer is a willing party in the transaction, but the closer a counterfeit appears to the genuine product, the more likely it is that it can be passed off as genuine.

### Quality of packaging crucial to deception

In the case of most cosmetics and fragrances, packaging is sealed; hence there is no way of verifying the quality of the contents of the product without opening the box. This feature, which protects the integrity of genuine products, also allows the counterfeiter to deceive the consumer into believing that the product they offer for sale is genuine, as it puts the counterfeit product beyond view for a sufficient time to enable the counterfeit to be sold.

Some counterfeit packaging is so detailed that it is almost indistinguishable from the original. Some counterfeiters even go to the extent of recreating barcodes for authenticity.

### Price and location signals to consumer

In most cases perfume and cosmetic suppliers have some degree of discretion over where their product is stocked and more than likely some influence over the price at which it is sold. The location of purchase and price of the product therefore gives the consumer an indication of whether a product is likely to be counterfeit or not. Fragrances and cosmetics made through recognised distributors at standard prices would not necessarily raise questions in the minds of consumers. Fragrances and cosmetics offered for sale in street markets or at substantial discounts, on the other hand, may raise questions in the mind of the consumer as to their authenticity.

### 5.7.1 Recommended methodology for fragrances and cosmetics

As an initial estimate, we recommend the use of a consumer survey to assess the level of consumption of counterfeit fragrances and cosmetics. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers

of fragrances and cosmetics should be surveyed and asked whether they believe their purchases to be counterfeit.

We believe the consumer survey alone will understate the incidence of counterfeiting — because not all consumers will recognise counterfeits as such. Therefore, we recommend that a targeted mystery shopping exercise be conducted to provide more conclusive results, if budgets permit. We believe efforts can be targeted at street markets, online retailers and discount stores.

Random samples of a range of fragrances and cosmetics should be purchased from:

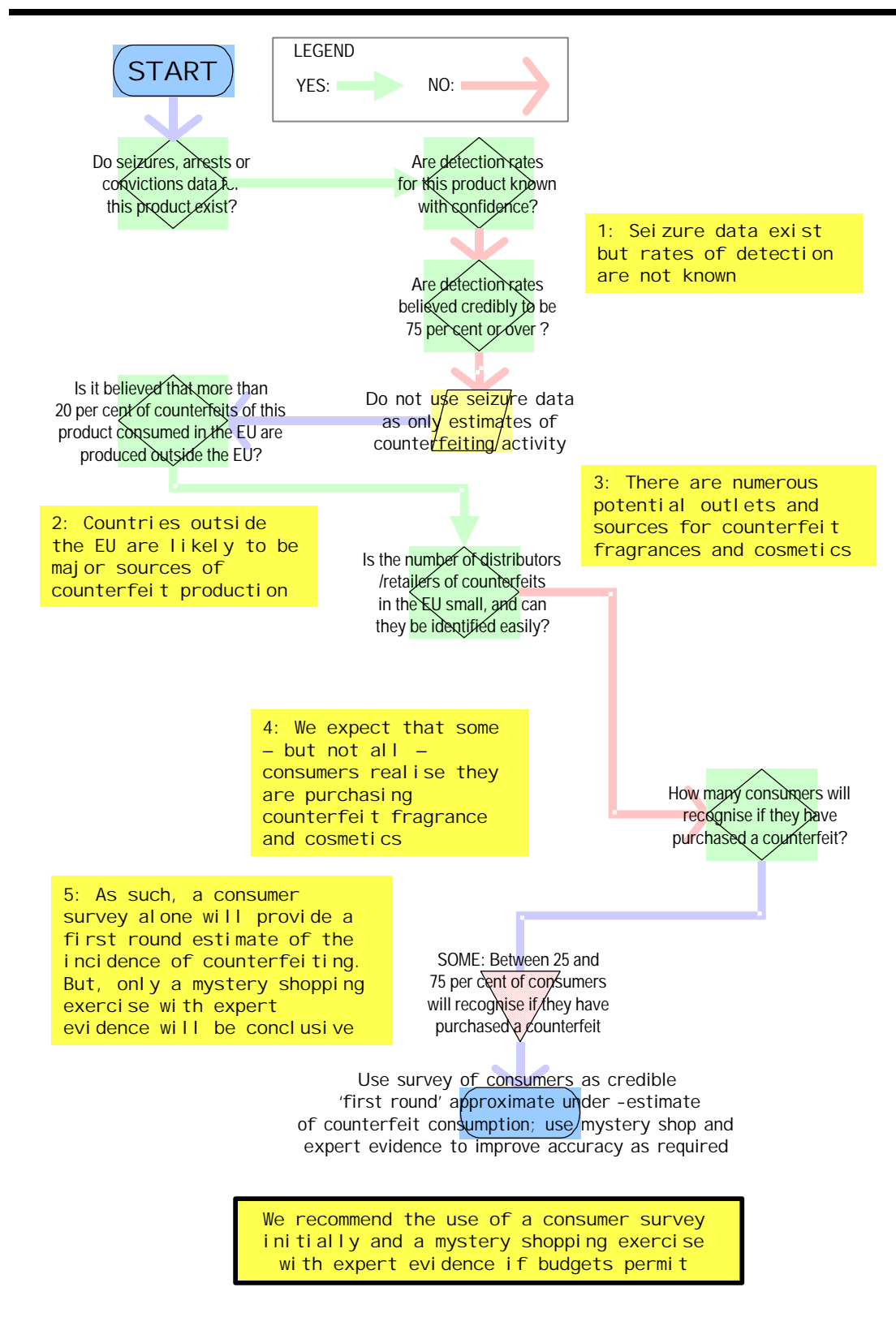
- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 independent discount retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 mail order retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers
- 15 'high street' fragrance and cosmetic retailers (5 for Luxembourg)
- 15 general/department stores (5 for Luxembourg)

The samples should cover the range of higher value fragrances and cosmetics. The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of the legitimate producers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop — and ensure the overall estimates are fully representative of consumption patterns.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

Methodology decision tree for fragrances and perfumes



## 5.8 Alcoholic beverages

Consumers would not, in general, knowingly buy counterfeit alcohol

The majority of counterfeiting occurs through the counterfeiter misrepresenting the quality of the product contents or its origins.

Strict criteria exist in certain European countries relating to classifications of alcoholic products e.g. the grading system for wines in France. Some counterfeiters may make claims as to the quality of the product incorrectly, which could have the effect of artificially elevating the price of the product.

One would not expect the consumer to intentionally purchase counterfeits, as there is a sufficient price range of alcohols to enable people to make their own tradeoffs between price and quality.

### Three forms of alcohol counterfeiting

Counterfeiting in the alcoholic drinks industry takes three forms and largely affects the major international brands:

- 'Tipping' is a practice whereby genuine containers are in some way supplemented with alcohol from a non-genuine source. This gives the illusion that the consumer is receiving the genuine product, when they are in fact receiving a (presumably) lower cost substitute
- Collection of empties on a commercial basis for refilling, selling counterfeit labels and capsules. This tends to be more prevalent in less developed countries and is not a problem in Western Europe
- Producing the whole product: bottle, capsule and liquid

### 5.8.1 Recommended methodology for alcoholic beverages

We recommend the use of targeted mystery shopping and expert evidence to assess the level of misrepresentation of alcoholic beverages. The decision tree illustrates the rationale.

Random samples of a range of branded alcoholic beverages should be purchased from:

- 50 or 100 bars in each member state (15 or 30 for Luxembourg)
- 50 or 100 restaurants and cafés in each member state (15 or 30 for Luxembourg)
- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)

## Counting counterfeits

- 50 or 100 specialist retailers – e.g. off licenses – in each member state (15 or 30 for Luxembourg)
- 20 or 40 mail order retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers
- 15 supermarkets

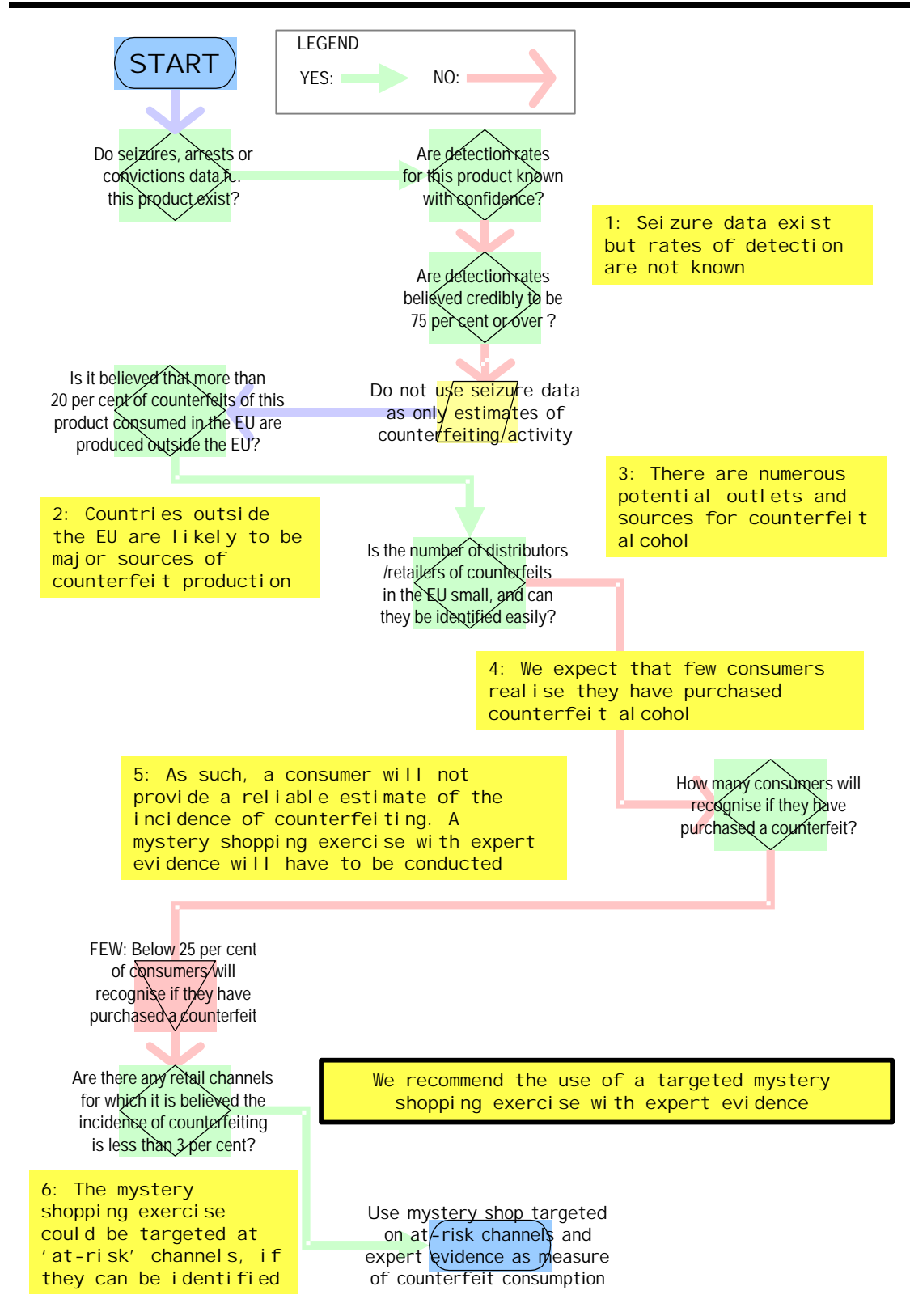
We believe a smaller sample size is appropriate for mail order and online retailers as there are currently relatively few such providers. We also suggest that efforts are concentrated away from retailers that acquire direct supplies from the drinks' manufacturers – e.g. the supermarkets and national chains of liquor stores.

The samples should cover the full range of higher value alcoholic drinks. To save costs, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of legitimate drinks' producers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

# Methodology decision tree for alcoholic beverages



## 5.9 Textile products and sporting goods

Popular target for counterfeiters

Textiles and sporting goods are amongst the most readily counterfeited products. Close replicas of genuine merchandise can be sourced at low cost and sold at a high mark up. Textiles can be a low cost input and be of similar appearance to higher cost materials, even though the latter, in genuine products, may be more technologically advanced and of better quality.

Counterfeiter use three methods

Counterfeiters rely on three main methods:

- Production through over runs
- Reproduction of product matching specification
- Reproduction of product without any attempt to capture specification of original product

Cross border flows a possible point

Domestic production is believed to be small with most counterfeiters taking advantage of the low costs of production in developing countries. This would seem to imply that sampling at the EU's external border would provide a good estimate of the scale of the counterfeiting. However, there are many possible problems with this approach. First, counterfeiters have been known to bypass border controls by producing components of counterfeits in multiple locations and assembling them within the EU. Second, detection rates are unknown.

### 5.9.1 Recommended methodology for textile and sporting goods

As an initial estimate, we recommend the use of a consumer survey to assess the level of consumption of counterfeit textile products and sporting goods. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) purchasers of branded textile products and sporting goods should be surveyed and asked whether they believe their purchases to be counterfeit.

We believe the consumer survey alone will understate the incidence of counterfeiting — because not all consumers will recognise counterfeits as such. Therefore, we recommend that a targeted mystery shopping exercise be conducted to provide more conclusive results, if budgets permit. We believe efforts can be targeted at street markets, online retailers and discount stores.



Random samples of a range of textile products and sporting goods should be purchased from:

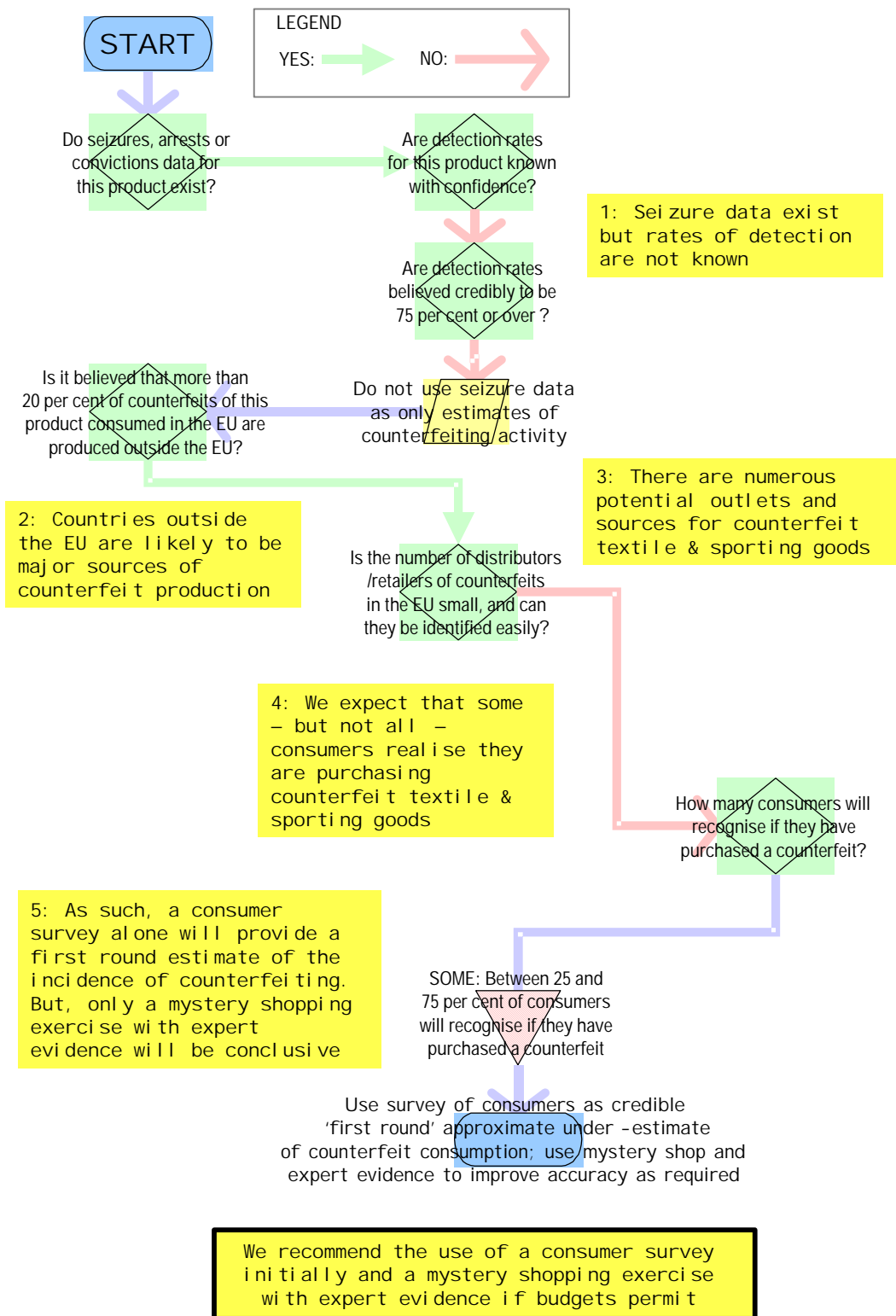
- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 independent discount retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 mail order retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers
- 15 'high street' specialist retailers (5 for Luxembourg)
- 15 general/department stores (5 for Luxembourg)

The samples should cover a wide range of branded clothes and sports goods. The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of the legitimate producers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

Methodology decision tree for textile products and sporting goods



## 5.10 Durable goods

A wide range of durable goods – including large domestic appliances or ‘white goods’, such as washing machines and dishwashers, through home electronic equipment, like televisions and DVD players, to small personal appliances, like hairdryers and food processors – are counterfeited.

Poor quality equipment is packaged as branded, and overruns are sold

Typically, substandard equipment is packaged and/or branded under a well-known manufacturer’s name or close to it. The sophistication of the replicas – machinery, packaging and documentation – varies greatly. But almost invariably, in these circumstances the consumer believes they are buying a genuine item – possibly with all the associated guarantees and service commitments.

There are also cases where production overruns from legitimate manufacturing facilities have entered the market illicitly. Similarly, many who purchase these items also probably believe the items to be genuine – and expect to receive the manufacturer’s customer support.

Manufacturers gain intelligence through their customer service operations

Unlike some of the product areas we have investigated, the legitimate manufacturers of durable goods do have a good source of intelligence on where counterfeits are being sold. Consumers of counterfeit durable goods often contact the manufacturers’ customer service facilities believing they can receive maintenance and support for their equipment. Information from these customers can provide manufacturers with a good understanding of where counterfeits are sold (even if it is not sufficient to estimate the size of the problem).

### 5.10.1 Recommended methodology for durable goods

We recommend the use of targeted mystery shopping and expert evidence to assess the level of counterfeiting of durable goods. The decision tree illustrates the rationale.

Random samples of a range of durable goods should be purchased from:

- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 independent specialist retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers
- 15 large general retailers
- 15 large chain specialist retailers

We believe a smaller sample size is appropriate for mail order and online retailers as there are currently relatively few such providers. We also suggest that efforts are concentrated away from retailers that acquire direct supplies from the manufacturers – e.g. the national chains.

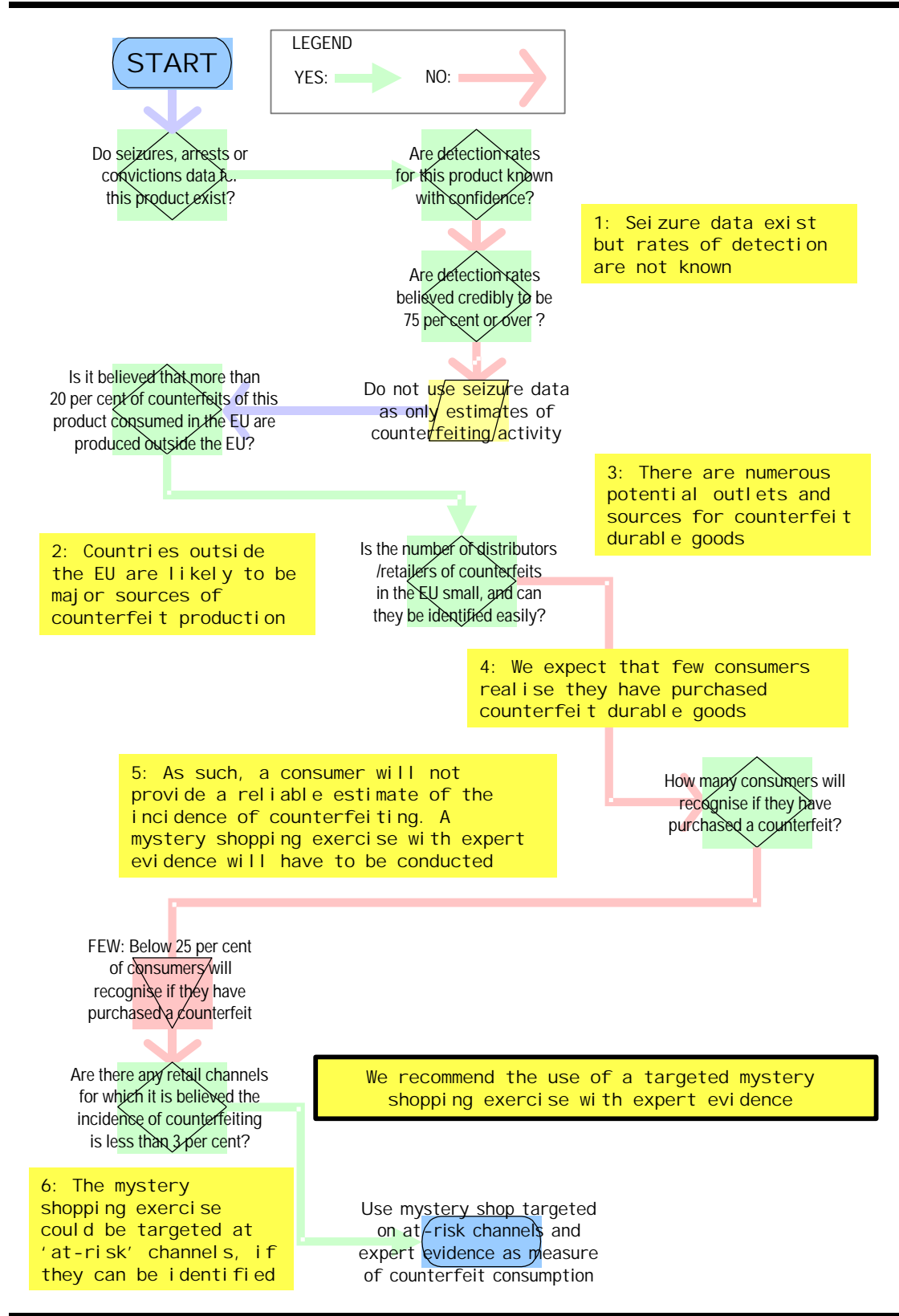
The samples should cover the full range of branded durable goods. To save costs, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of legitimate manufacturers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

# Methodology decision tree for durable goods



## 5.11 Toys and games including electronic games

There is anecdotal evidence, supported by seizures data, to suggest there is significant counterfeiting of branded toys and games – and the problem is growing.

### Four types of counterfeit toys and games

There are four main ways in which (non-electronic) toy and games are counterfeit:

- Replicas are produced to standards similar to the legitimate product it is copying
- Replicas are produced which do not meet standards similar to the legitimate product it is copying. In these circumstances, the counterfeit products may pose a health and safety risk
- Products are branded and/or trademarked with a well-known brand, even though the product may not match anything in the legitimate brand owner's product range. In these circumstances, the counterfeit products may pose a health and safety risk
- Illicit sale and distribution of production overruns

....plus piracy of 'video games'

In addition, many commentators believe that the piracy of electronic games software – for games consoles and other 'video games' – is rife.

With electronic games software now available on CDs, DVD and other removable and recordable media – and even online for some platforms, its illicit reproduction and distribution has become easier and widespread.

### 5.11.1 Recommended methodology for toys and games (excluding pirate electronic games software)

We recommend the use of targeted mystery shopping and expert evidence to assess the level of counterfeiting of toys and games. The decision tree illustrates the rationale.

Random samples of a range of toys and games should be purchased from:

- 50 or 100 street markets in each member state (15 or 30 for Luxembourg)
- 50 or 100 independent specialist retailers in each member state (15 or 30 for Luxembourg)
- 20 or 40 online retailers in each member state
- 20 or 40 non-EU based online retailers

- 15 large general retailers
- 15 large chain specialist retailers

We believe a smaller sample size is appropriate for mail order and online retailers as there are currently relatively few such providers. We also suggest that efforts are concentrated away from retailers that acquire direct supplies from the manufacturers – e.g. the national chains.

The samples should cover the full range of branded toys and games. To save costs, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of legitimate manufacturers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

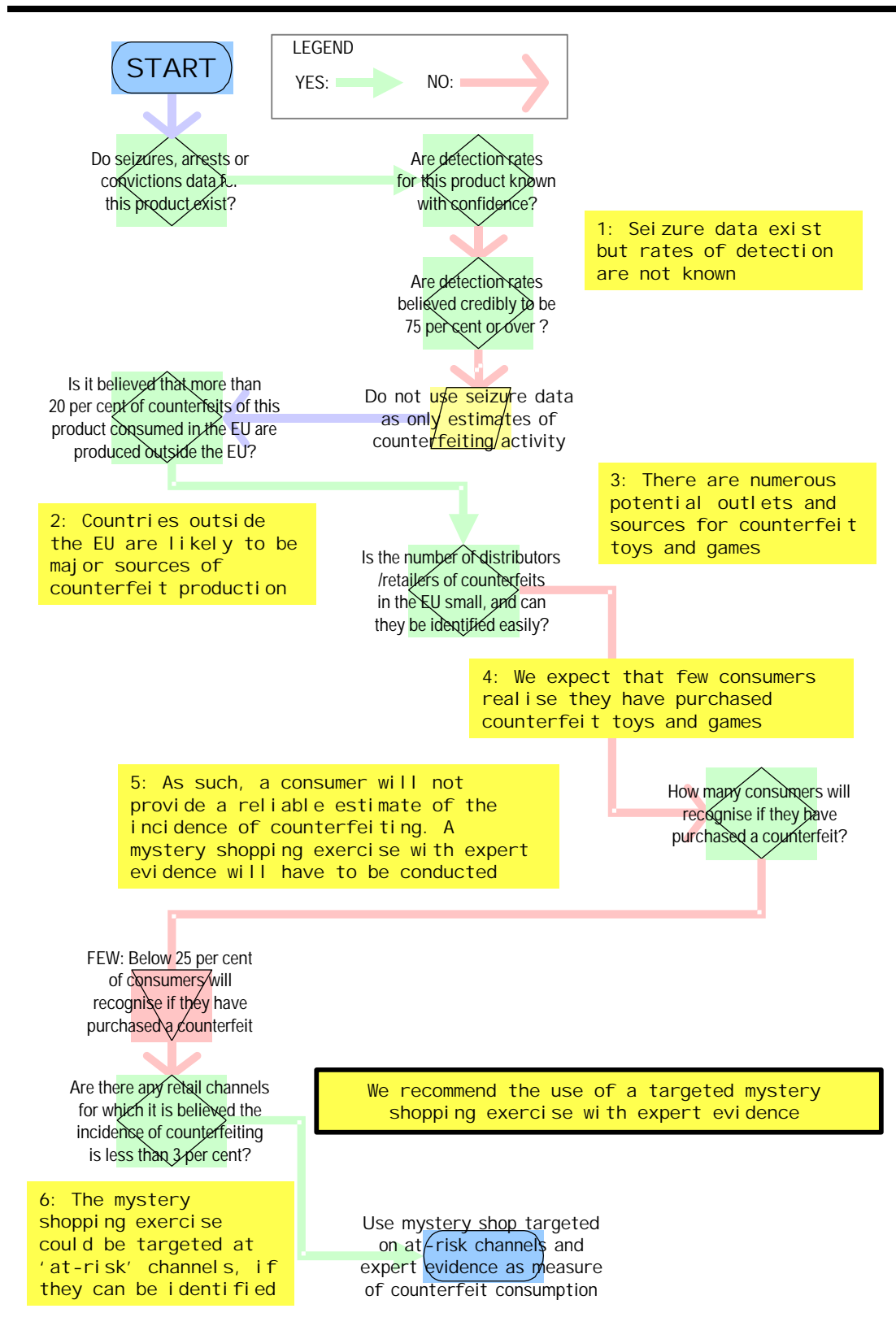
Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

### 5.11.2 Recommended methodology for electronic games software

We recommend the use of consumer survey to assess the level of consumption of pirate electronic games software. The decision tree illustrates the rationale.

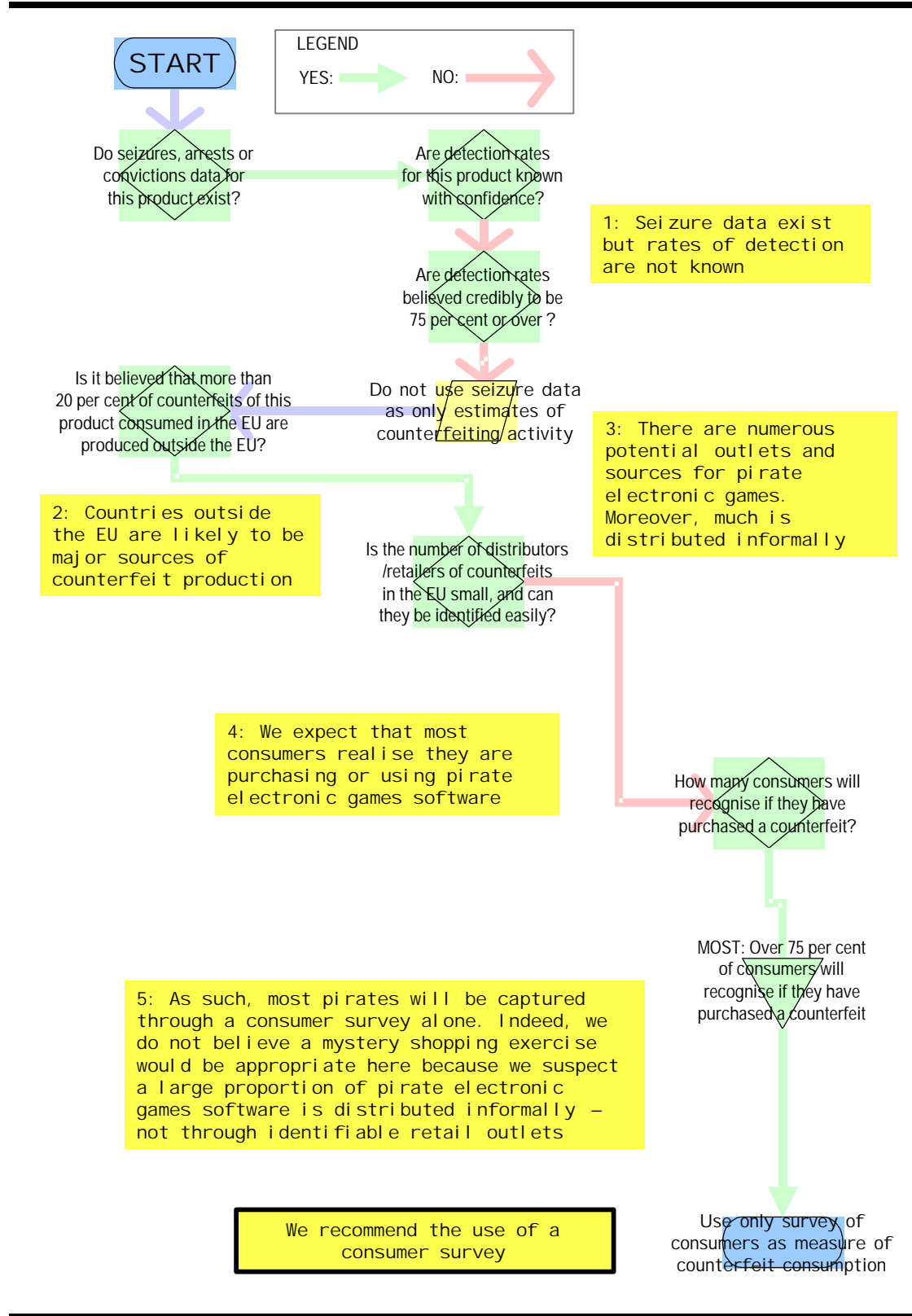
A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) users of electronic games software should be surveyed and asked whether they believe their games to be pirate. The sample should cover the range of potential electronic games users – including children.

Methodology decision tree for toys and games (not electronic games software)





# Methodology decision tree for electronic games software



## 5.12 Vehicle spare parts

3 main types of counterfeiting

The counterfeiting of vehicle spare parts falls into three main categories:

- Production overruns
- Specially-manufactured counterfeit parts branded under the name of well-known manufacturer
- 'Grey market' imports of legitimate spare parts authorised for sale in a different country

Counterfeiting of vehicle spare parts is difficult

The counterfeiter is faced with large number of spare parts specifically tailored to a car model. Garages need to consult specific catalogues of more than 100,000 articles in order to find the specific replacement part for a specific car model. These replacement parts are basically subject to ad-hoc demands and the workshops order such parts in general only piece by piece. In order to market parts in economic quantities, a counterfeiter must therefore find a partner at the wholesale level, at the established channels of distribution. However, scope remains for counterfeiting some replacement parts, such as seat covers, mats, wiper-blades or light bulbs, but these components form a small share of total market activity.

Consumer unlikely to buy knowingly counterfeits

It is unlikely that the consumer would willingly buy a counterfeit spare part except for items such as seat covers, mats and other non-essential parts. Given the demands placed on most spare parts, the consumers wants to be sure that they can trust the safety and integrity of their spare parts. The European Campaign for the Freedom of the Automotive Parts & Repair Market (ECAR) suggests that 'counterfeiting does not constitute a substantial problem in the market for replacement parts'.

Structure of spare parts industry is unique

Car manufacturers are responsible for 20 per cent of the industry's output and independent producers account for the remainder. About 43 per cent of independent producers' output is sold directly to car manufacturers with an additional 9 per cent sold on to authorised car dealers. This implies that around 49 per cent of independently produced spare parts are sold outside the control of the car manufacturers.<sup>15</sup>

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<sup>15</sup> Estimates of automotive spare parts aftermarket in the EU provided by European Campaign for the Freedom of the Automotive Parts & Repair Market (ECAR).

Input stage unlikely to offer easy measurement opportunity

Meanwhile, much of the manufacturing of counterfeit spare parts is believed to be concentrated in China, Turkey and Russia. As such, data on seizures at the EU frontier are useful – if not conclusive.

#### 5.12.1 Recommended methodology for motor vehicle spare parts

We recommend the use of a survey of motor vehicle spare parts retailers to assess the level of consumption of counterfeits. The decision tree illustrates the rationale.

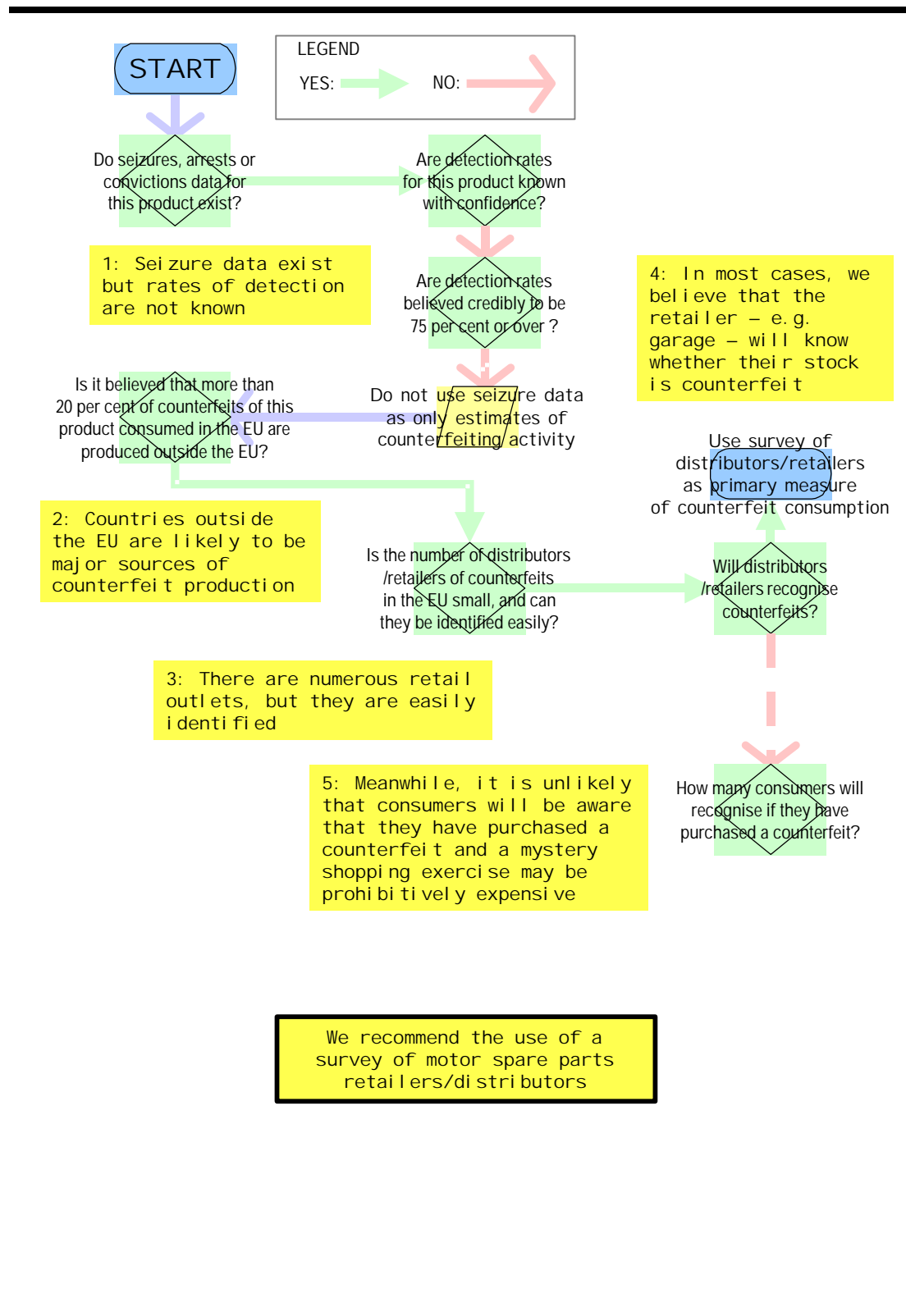
A nationally representative sample of 500 or 1,000 (50 or 100 for Luxembourg) motor vehicle spare parts retailers should be surveyed and asked whether they believe their stock to be counterfeit.

The survey should cover and be representative of the full range of motor vehicle spare part retailers.

The questionnaire should identify different types of vehicle spare parts – e.g. tyres, bulbs, brake pad, etc – and different forms of counterfeiting – i.e. production overruns, misrepresentation and grey market imports.

It will be important to demonstrate to interviewees that their responses will be treated with the utmost confidence and that they will have anonymity. If budgets permit, the use of CASI techniques should be considered.

Methodology decision tree for vehicle parts



## 5.13 Aircraft spare parts

Despite the strict controls over their manufacturer and distribution, many counterfeit aircraft spare parts have been found.

The US Federal Aviation Association report that, having reviewed its accident/incident database, 'unapproved' aviation spare parts played a role in 174 aircraft accidents or crashes between May 1973 and April 1996. These resulted in 17 deaths and 39 injuries (none involving major commercial carriers).

The aircraft industry is split into three main sectors – commercial, government and private – with each susceptible to counterfeiting by varying degrees.

Counterfeiting can take many forms

A counterfeit aviation part may consist of:

- A completely fabricated counterfeit part which doesn't meet specification
- Salvaged parts previously damaged, removed from service, and subsequently reintroduced into the market
- Affixing air worthiness tag on a rebuilt component
- Production overrun parts
- Bogus parts making a part to specification but with inferior material

### 5.13.1 Recommended methodology for aircraft spare parts

We recommend the use of a survey of aircraft vehicle spare parts suppliers to assess the level of consumption of counterfeits. The decision tree illustrates the rationale.

A nationally representative sample of 50 or 100 (5 or 10 for Luxembourg) aircraft spare parts suppliers should be surveyed and asked whether they believe their stock to be counterfeit.

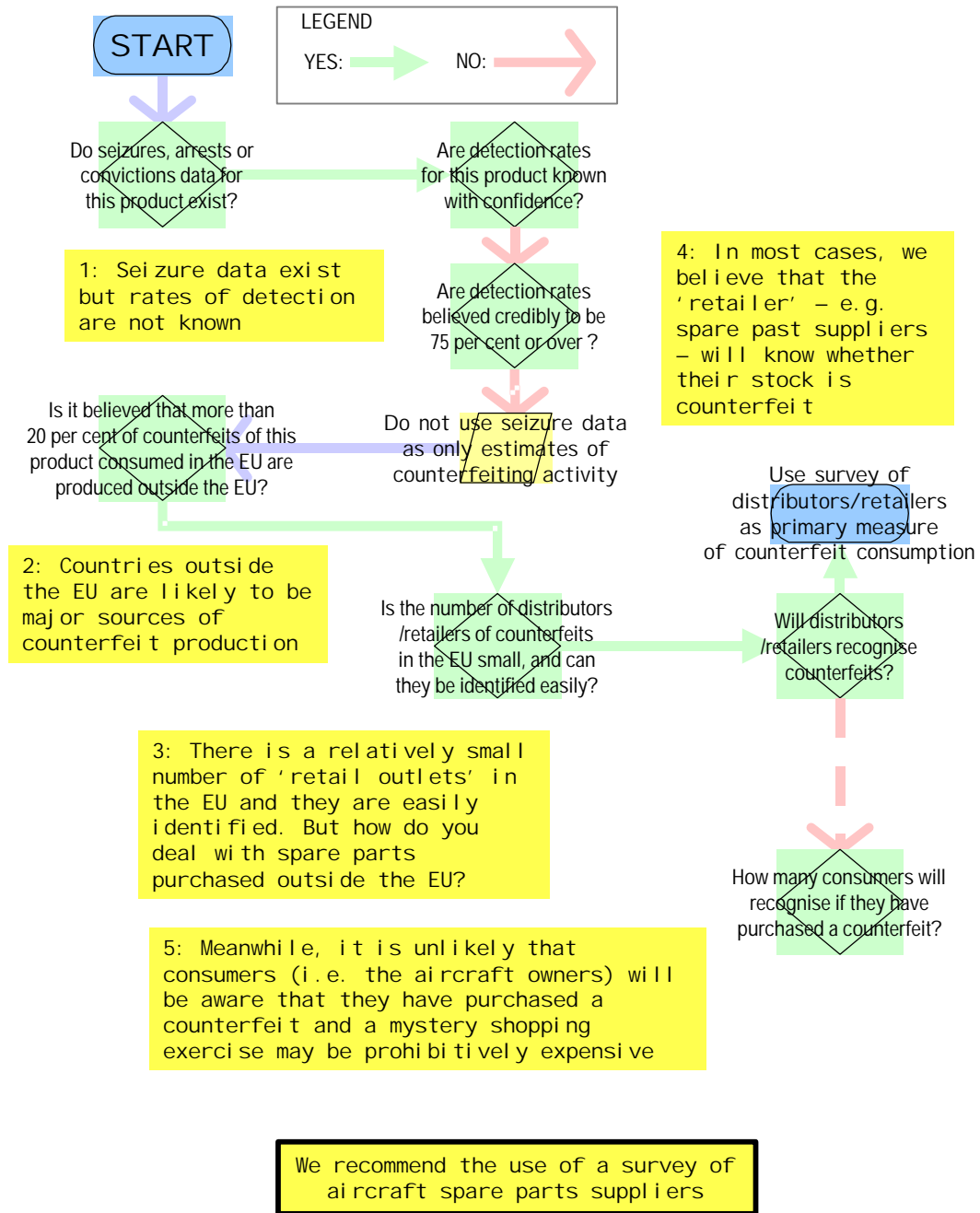
In addition, the member states should consider conducting a similar exercise among those aircraft spare parts suppliers who supply parts to EU aircraft, but are based outside the EU.

The survey should cover and be representative of the full range of aircraft spare part suppliers. The questionnaire should identify different types of aircraft spare parts and different forms of counterfeiting – e.g. production overruns, misrepresentation and grey market imports.

## Counting counterfeits

It will be important to demonstrate to interviewees that their responses will be treated with the utmost confidence and that they will have anonymity. If budgets permit, the use of CASI techniques should be considered.

# Methodology decision tree for aircraft spare parts



## 5.14 Industrial spare parts

Counterfeiting extends to the widest range of 'industrial spare parts'.

Everything from heavy machinery parts through photocopier spare parts and electronic component to branded hand tools may be copied and misrepresented.

### 3 forms of counterfeiting

Counterfeiting of industrial spare parts falls into three main categories:

- Production and sale of completely fabricated counterfeit part not meeting specification or using inferior material
- Production and sale of completely fabricated counterfeit part meeting specifications but misrepresented as authorised
- Illicit sale and distribution of production overruns by authorised manufacturer

### 5.14.1 Recommended methodology for industrial spare parts

For each category of industrial spare parts to be examined, we recommend the use of a survey of relevant suppliers to assess the level of consumption of counterfeits. The decision tree illustrates the rationale.

A nationally representative sample of 500 or 1,000 (50 or 100 for Luxembourg) industrial spare parts suppliers should be surveyed and asked whether they believe their stock to be counterfeit.

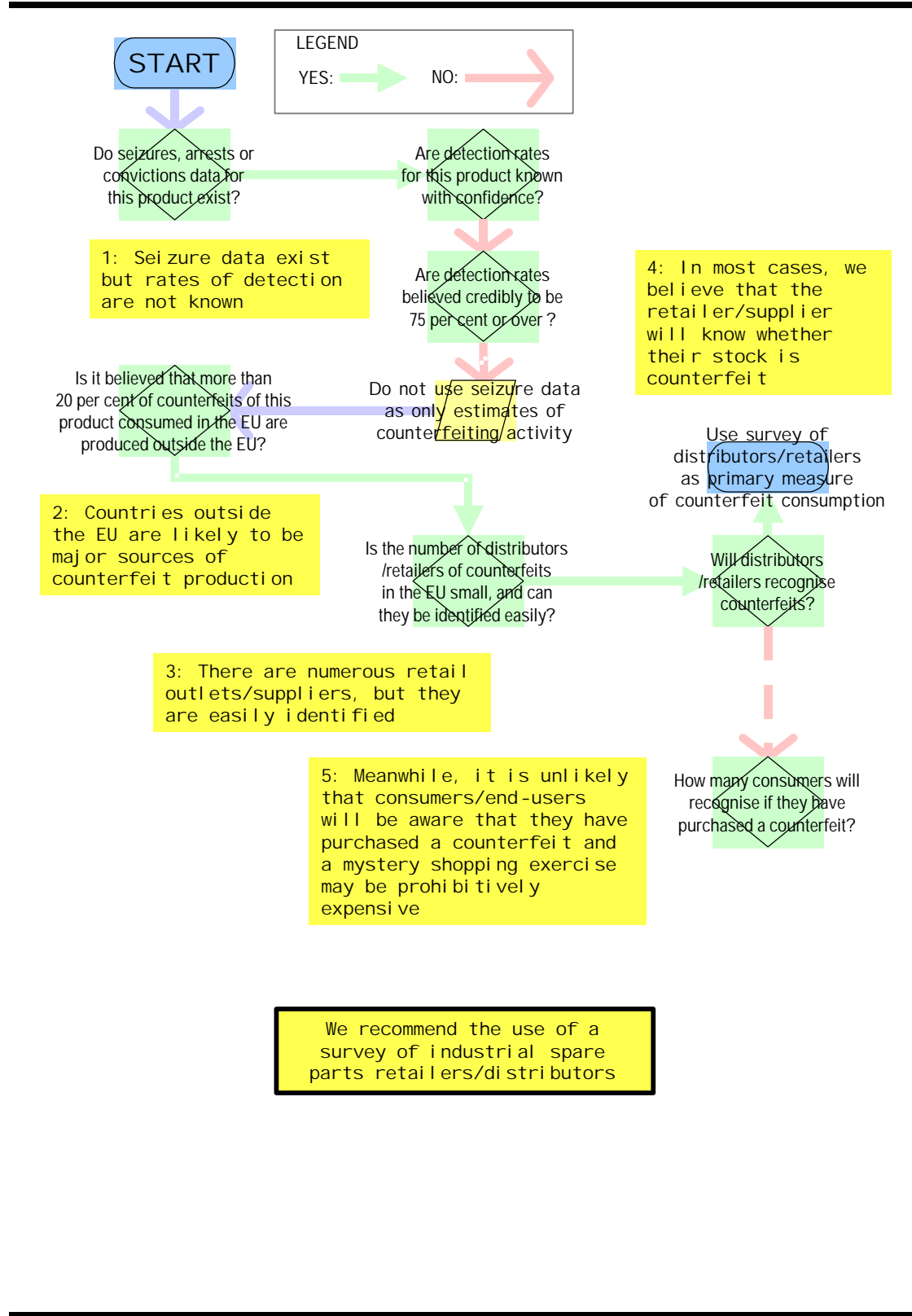
The survey should cover and be representative of the full range of relevant industrial spare part retailers.

The questionnaire should identify different types of relevant industrial spare parts and different forms of counterfeiting – i.e. production overruns, misrepresentation and grey market imports.

It will be important to demonstrate to interviewees that their responses will be treated with the utmost confidence and that they will have anonymity. If budgets permit, the use of CASI techniques should be considered.



# Methodology decision tree for industrial spare parts



## 5.15 Computer hardware

A wide range of computer hardware and components are counterfeited.

Poor quality equipment is packaged as branded, and overruns are sold

Typically, substandard equipment is packaged and/or branded under a well-known manufacturer's name or close to it. The sophistication of the replicas – machinery, packaging and documentation – varies greatly. But almost invariably, in these circumstances the consumer believes they are buying a genuine item – possibly with all the associated guarantees and service commitments.

There are also cases where production overruns from legitimate manufacturing facilities have entered the market illicitly. Similarly, many who purchase these items also probably believe the items to be genuine – and expect to receive the manufacturer's customer support.

### 5.15.1 Recommended methodology for computer hardware

We recommend the use of targeted mystery shopping and expert evidence to assess the level of counterfeiting of computer hardware. The decision tree illustrates the rationale.

Random samples of a range of computer hardware should be purchased from:

- 50 or 100 independent specialist retailers in each member state (15 or 30 for Luxembourg)
- 50 or 100 online retailers in each member state
- 50 or 100 non-EU based online retailers
- 15 large general retailers
- 15 large chain specialist retailers

We suggest that efforts are concentrated away from retailers that acquire direct supplies from the manufacturers – e.g. the national chains.

The samples should cover the full range of branded computer hardware and components – including: memory chips, processors, hard drives, printers and complete PCs.

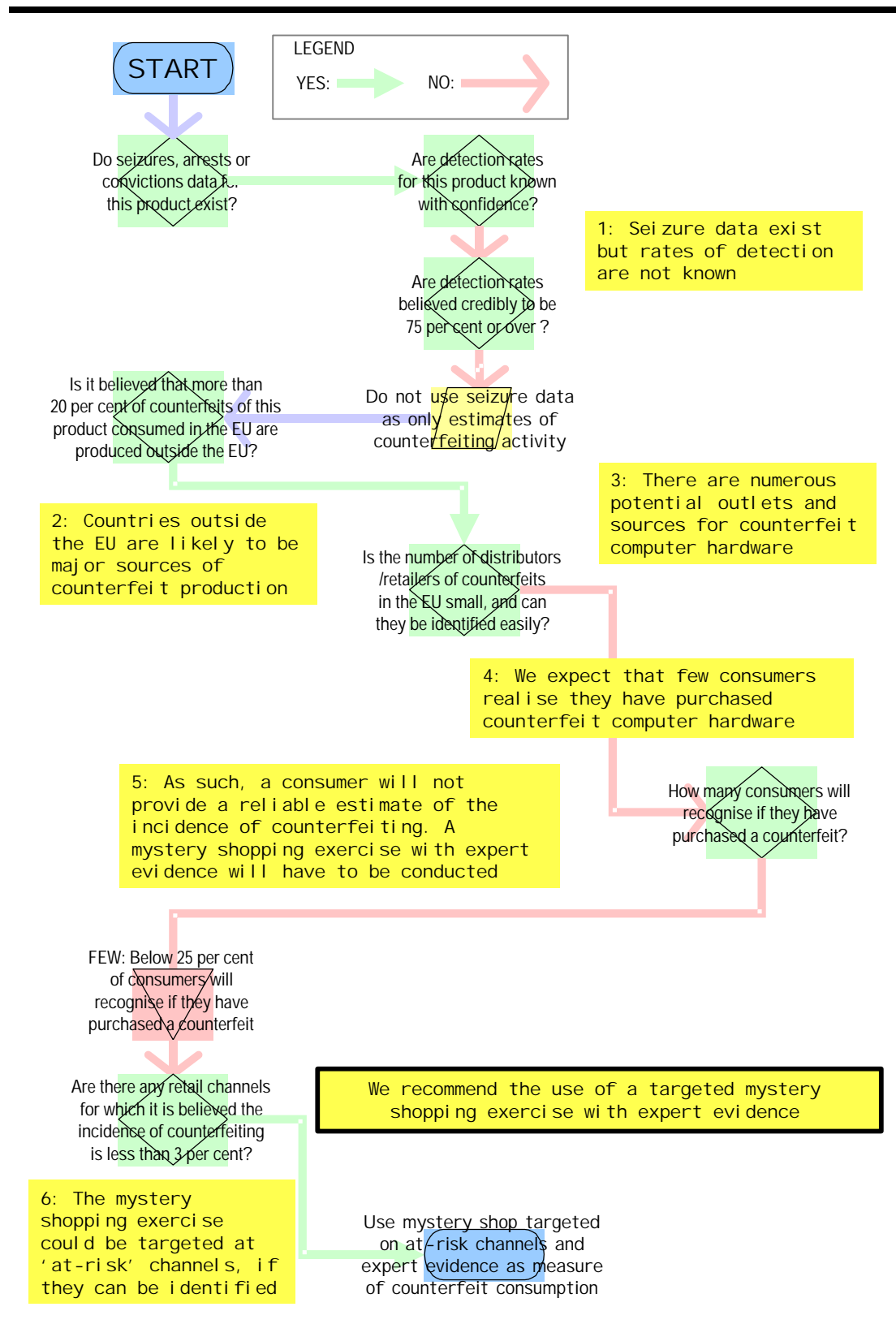
To save costs, samples from non-EU based online retailers may only be conducted once – and need not be replicated by each member state.

The samples will need to be tested for their legitimacy by suitably qualified experts. We recommend that attempts be made to enlist the assistance of legitimate manufacturers in this.

A parallel consumer survey to assess the importance of each of these channels will be required. The results from this survey should be used to weight the results from the mystery shop – and ensure the overall estimates are fully representative of consumption patterns.

Nevertheless, the mystery shopping exercise is unlikely to be able to identify counterfeits which are production overruns. As such, it may not be possible to capture data on the full extent of counterfeiting.

Methodology decision tree for computer hardware



## 5.16 Books and publications

The piracy of books and publications is thought to be widespread.

Piracy – but not often for money

Infringements of intellectual property in books and publications most often occur without the exchange of money. Copies may be taken of publications and be passed between several people or groups of people. These although effectively as harmful to the right owner as widespread copying for commercial gain must be kept distinctly separate from this form of counterfeiting. In recent years there has been an increase in internet piracy where a book can be downloaded without any payment to the copyright holder.

And, now even counterfeiting of well-known titles

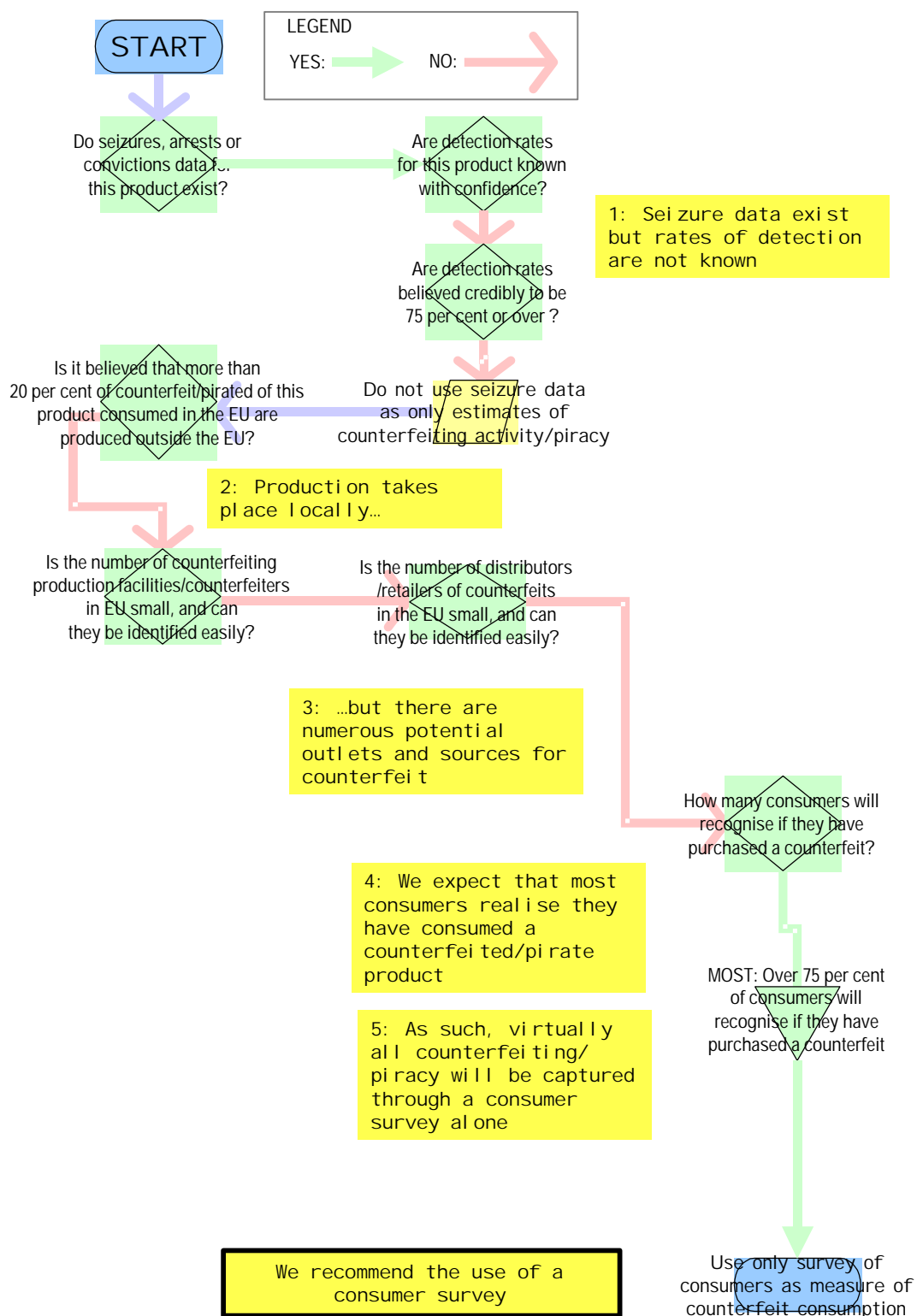
In addition, there is evidence of counterfeit publications – such as the illicit production of Harry Potter books in China.

### 5.16.1 Recommended methodology for books and publications

We recommend the use of a consumer survey to assess the level of consumption of counterfeit and pirated books and publications. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) consumers of books and publications should be surveyed and asked whether they believe their products to be counterfeited or pirated. The sample should cover the range of potential counterfeit and pirate books and publications.

Methodology decision tree for books and publications



## 5.17 Films and motion pictures

The consumption of pirate of films and motion pictures takes a number of forms:

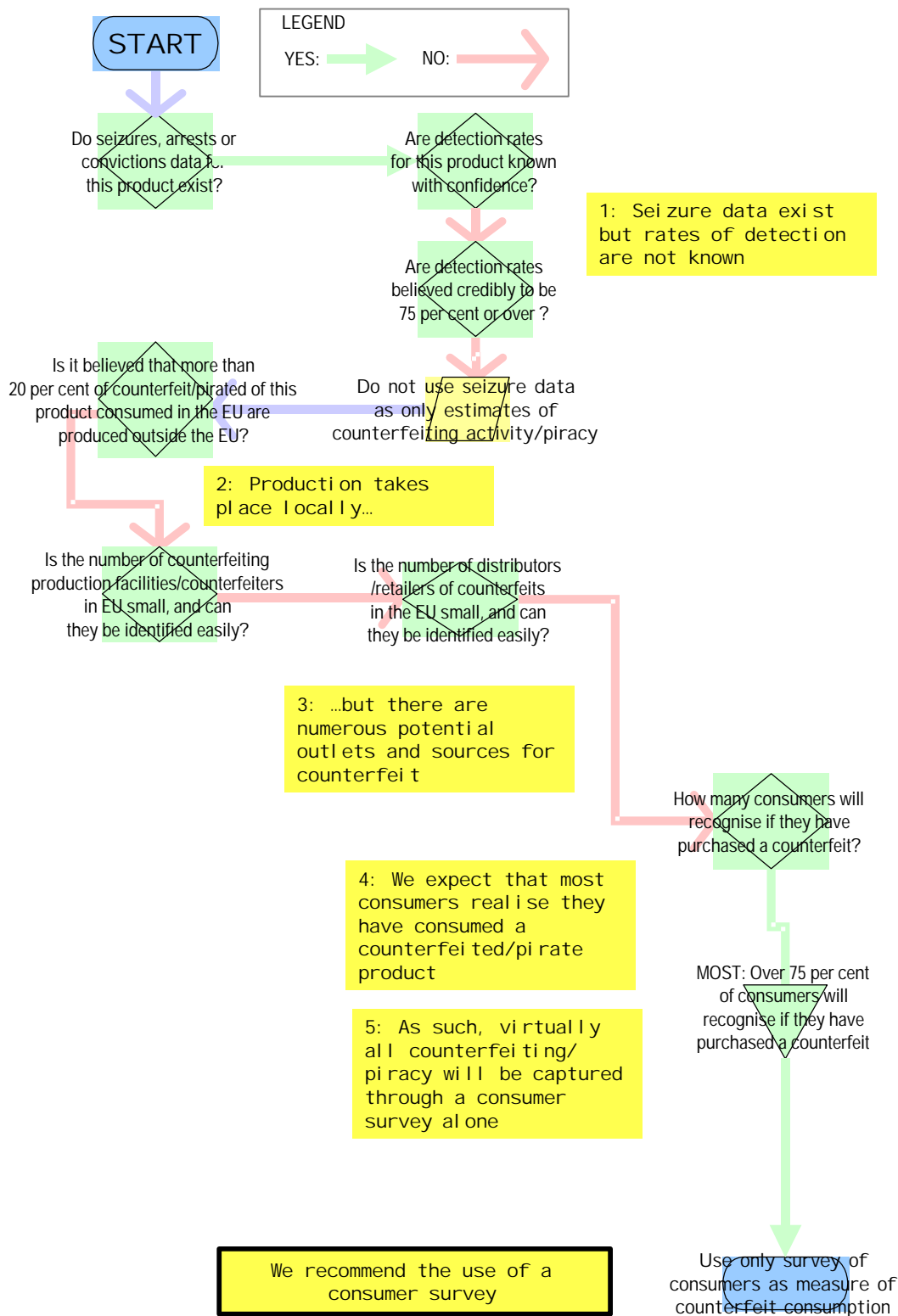
- Counterfeiting is recognised as the reproduction of a copy of a recording with the intention of passing it on as the real product in either videocassette or DVD format
- Piracy entails the illegal reproduction of an original videocassette, DVD or broadcast without efforts to pass it off as legitimate
- Bootlegs are video recordings made at cinemas
- Internet piracy which involves the storing and sharing of motion picture on the worldwide web

### 5.17.1 Recommended methodology for films and motion pictures

We recommend the use of consumer survey to assess the level of consumption of counterfeit/pirated films and motion pictures. The decision tree illustrates the rationale.

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) consumers of films and motion pictures should be surveyed and asked whether they believe the products they own to be counterfeited or pirated. The sample should cover the range of potential counterfeit film and motion pictures including the whole spectrum of media on which film and motion pictures are available.

Methodology decision tree for films and motion pictures





## 5.18 Sound recordings

Although global music piracy as measured by the International Federation of Phonographic Industries<sup>16</sup> fell between 1999 and 2000, technological advances mean that it is much easier to copy and distribute sound recordings.

### Four types of counterfeiting

The recording industry recognises four forms of counterfeiting and piracy:

- Counterfeiting is recognised as the reproduction of a copy of a recording with the intention of passing it on as a 'dead-ringer' for the real product. This can take several forms: copying audiocassettes, CD at home and work and industrial copying of CDs
- Piracy entails the illegal production of compilation recording from several authorised recordings
- Bootlegs are recording made at live concerts which are then sold on to the consumer
- Internet piracy which involves the storing and sharing of music

### Piracy has changed

In the EU, piracy has evolved over the last decade. The counterfeiters preferred medium has changed from audiocassette to CD. The introduction of the CD has allowed the counterfeiter to improve the quality of the illegal copy. Though much depends on the quality of blank used in the reproduction process and the speed of the copying. In the last few years the incidence of internet piracy has increased.

### User has full knowledge of product history

The user stage offers the best opportunity to measure the scale of counterfeiting and piracy. First, a survey at this point provides insight into the whole gamut of counterfeiting activities. Second, the consumer is generally aware that they are buying a counterfeit good. Third, it will provide a consistent and robust measure of counterfeiting over time.

#### 5.18.1 Recommended methodology for sound recordings

**We recommend the use of consumer survey to assess the level of consumption of counterfeit/pirated sound recordings.** The decision tree illustrates the rationale.

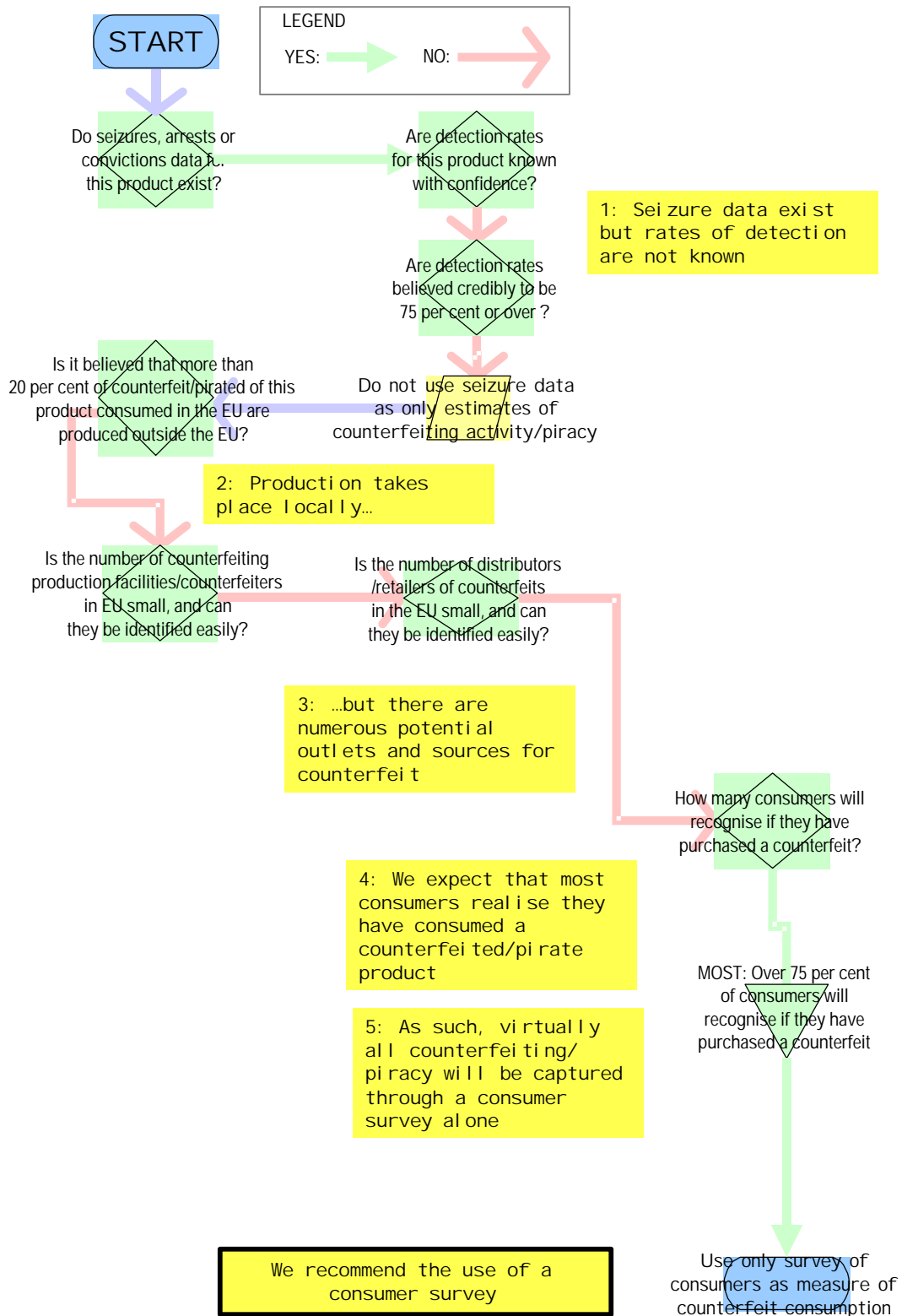
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<sup>16</sup> International federation of Phonographic Industries, (2001) IFPI Music piracy report.

## Counting counterfeits

A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) consumers of sound recordings should be surveyed and asked whether they believe the products they own to be counterfeited or pirated. The sample should cover the range of potential counterfeit sound recordings including the whole spectrum of media on which sound recordings are available.

# Methodology decision tree for sound recordings



## 5.19 Computer software

In the software industry, piracy is recognised as the reproduction, distribution and/or making available of copyrighted computer programmes without the consent of the copyright holder.

According to the Business Software Alliance study into counterfeiting,<sup>17</sup> the European Union has some of the lowest piracy rates in the world. The EU average rate of piracy is 38.6 per cent in 2001 – but the range is quite large, the lowest rates are 26 per cent rate in Denmark and the UK, and the highest rate is 66 per cent in Greece. However the piracy rate has fallen since 1995 when the EU average was 56.6 per cent and the highest rate was 86 per cent in Greece.

Counterfeiting and piracy of computer software is relatively easy. It takes several forms:

- Corporate end-user piracy is when the end user purchases fewer software copies or licences and then loads more copies on to the company's computers.
- Hard-disk loading is when copies of a software programme are loaded on to a personal computer before it is resold.
- Counterfeiting is when copies of the programme are copied and sold on to consumers.

### 5.19.1 Recommended methodology for computer software

We recommend the use of consumer survey to assess the level of consumption of counterfeit/pirated software. The decision tree illustrates the rationale.

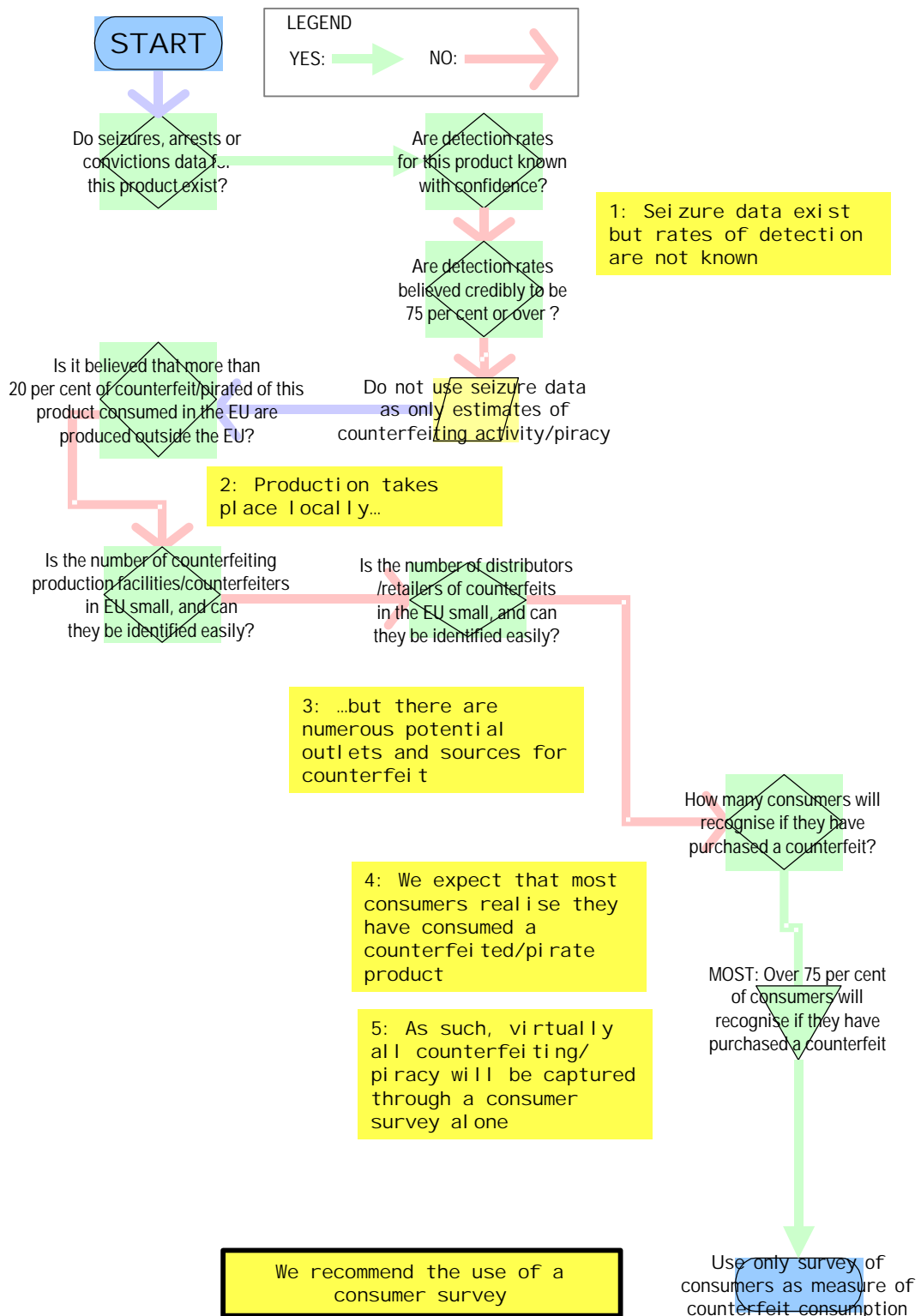
A nationally representative sample of 1,000 or 2,000 (500 or 1,000 for Luxembourg) recent (i.e. within the past 24 months) consumers of software should be surveyed and asked whether they believe the products they own to be counterfeited or pirated. The sample should cover the range of potential counterfeit software including the whole range of media on which software are available.

The Business Software Alliance approach seems to yield consistent and comparable results over time. We believe that this is sufficiently robust and could be used as it currently stands as a reliable estimate of the scale of software piracy.

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<sup>17</sup> Business Software Alliance, (2001) Sixth Annual BSA Global Software Piracy Study.

# Methodology decision tree for computer software



## 6 WAYS FORWARD

In this chapter, we bring together the product recommendations from chapter 5 into a series of recommended and costed potential actions for the member states.

### 6.1 Action 1: Multi-product consumer survey

The first action we recommend is for each member state to commission a consumer survey to assess consumption of counterfeit and pirate goods across a number of product areas.

#### 6.1.1 Product coverage

We recommend that the multi-product consumer survey cover:

- Books and publications
- Computer software
- Electronic games software
- Films and motion pictures
- Fragrances, perfumes and cosmetics \*
- Branded leather goods \*
- Sound recordings
- Branded spectacles \*
- Branded sunglasses
- Branded clothing, footwear and sporting goods \*
- Branded watches

For eight of these products, we believe a consumer survey is an adequate method for measuring consumption of counterfeits and pirates on its own. For the remaining four (\*namely: fragrances and perfumes; leather goods; spectacles; textiles and sporting goods), we believe it will provide a sensible first round estimate of the size of the problem, although there will be a tendency for the approach to under-state.

#### 6.1.2 Questionnaire

We believe the issue can be handled in a survey with straightforward questions (see below).

Nevertheless, as research best practice, we recommend that the precise wording of the questionnaire be developed using qualitative research among the general population. Moreover, it should be piloted in advance of rollout.

Have you purchased or otherwise acquired a [add name of product] in the past 24 months?

If yes: Consider your most recent purchase of [add name of product]. Which of the following statements best describes whether you believe the product to be a genuine example of its brand or whether it is a counterfeit:

- 1: "I am sure the item I purchased was a genuine article"
- 2: "I am unsure whether the item I purchased was counterfeit [pirate] or genuine"
- 3: "I am sure the item I purchased was a counterfeit [pirate]"

For some products types, it will be possible to provide a more detailed sub-division of products and greater explanation. For example:

Have you purchased or otherwise acquired a pair of branded footwear (e.g. Nike trainers, Timberland shoes, etc.) in the past 24 months?

If yes: Consider your most recent purchase or acquisition of a pair of branded footwear. Which of the following statements best describes whether you believe the product to be a genuine example of its brand or whether it is a counterfeit:

- 1: "I am sure the pair of branded footwear I purchased was a genuine article "
- 2: "I am unsure whether pair of branded footwear I purchased was counterfeit or genuine"
- 3: "I am sure the pair of branded footwear I purchased was a counterfeit i.e. the pair of branded footwear and/or its packaging is branded as if it were a genuine example of that brand's products; however I am sure it is not."

### 6.1.3 Sample size and survey

We recommend a minimum sample size of 1,000 recent purchasers/users of each product (500 for Luxembourg), although 2,000 would be preferable (1,000 for Luxembourg).

We do not believe it is necessary to use particularly expensive survey methods. In fact, we suspect the survey can be conducted satisfactorily through existing omnibus surveys. If not, a telephone-based ad hoc survey will be fully satisfactory.

The appendices provide lists of organisations in each member state that can conduct the research.

### 6.1.4 Costs

The indicative total costs (excluding management time) for the survey are provided in the table.

Indicative costs for the action 1 consumer survey

	Sample of 1,000	Sample of 2,000
Omnibus		
Low-cost country	€10,000	€19,000
Mid-cost country	€14,000	€24,000
High-cost country	€24,000	€42,000
Telephone		
Low-cost country	not recommended	€85,000
Mid-cost country	not recommended	€110,000
High-cost country	not recommended	€180,000

## 6.2 Action 2: Mystery shopping programme

The second action is a programme of mystery shopping exercises in a range of retail outlets to measure the number of counterfeit and pirate goods available for purchase.

Action 2 can cover up to 11 product areas:

- Alcoholic beverages
- Branded clothes, footwear and sporting goods \*
- Computer hardware
- Durable goods
- Food and drink
- Fragrances, perfumes and cosmetics \*
- Branded leather goods \*
- Pharmaceuticals
- Plants and seeds
- Branded spectacles \*
- Toys and games

Four of the product areas (marked with an asterisk \*) are already covered in the consumer survey recommended as action 1 – although the mystery shopping exercise is likely to yield more accurate results.

There are three tasks for this action:

- Task 1: Consumer survey to identify relative importance of different retail channels



- Task 2: Mystery shopping to acquire sample product from each retail channel
- Task 3: Expert examination of samples to identify counterfeits and pirates

### 6.2.1 Task 1: Consumer survey

The first task is to conduct a survey of consumers to identify which retail channels they use when purchasing the potentially counterfeit items.

The objective of the survey is not to measure the incidence of counterfeiting or piracy; instead, the survey will be used to weight-up results of the mystery shopping exercise.

We believe the issue can be handled in a survey with straightforward questions (see below for an example). Nevertheless, as research best practice, we recommend that the precise wording of the questionnaire be developed using qualitative research among the general population. Moreover, it should be piloted in advance of rollout.

Have you purchased or otherwise acquired a television in the past 24 months?

If yes: Consider your most recent purchase of television. Which of the following statements best describes the outlet from which you acquired it.

1. "I purchased the television from a electrical and electronic retail store e.g. Darty"
2. "I purchased the television from a general retailer, supermarket or department store e.g. Carrefour, Fnac"
3. "I purchased the television direct from the manufacturer e.g. Thomson"
3. "I purchased the television from a mail order company e.g. Littlewoods"
4. "I purchased the television from a website which I believe is based in the European Union e.g. empiredirect.com"
5. "I purchased the television from a website which I believe is based outside the European Union"
6. "I purchased the television from a street market"
7. "I purchased the television from a friend, colleague or some other individual"
8. "I purchased the television from another retail channel, (please specify)"

We recommend a minimum sample size of 1,000 recent purchasers/users of each product (500 for Luxembourg), although 2,000 would be preferable (1,000 for Luxembourg).

We do not believe it is necessary to use particularly expensive survey methods. In fact, we suspect the survey can be conducted satisfactorily through existing omnibus surveys. If not, a telephone-based ad hoc survey will be fully satisfactory.

The appendices provide lists of organisations in each member state that can conduct the research.

The indicative total costs (excluding management time) for the survey are provided in the table.

#### Indicative overall costs for consumer survey

	1,000 sample	2,000 sample
Omnibus		
Low-cost country	€10,000	€19,000
Mid-cost country	€14,000	€24,000
High-cost country	€24,000	€42,000
Telephone		
Low-cost country	Not recommended	€85,000
Med-cost country	Not recommended	€110,000
High-cost country	Not recommended	€180,000

### 6.2.2 Task 2: Mystery shopping

The second task is – for each type of product under scrutiny – to collect a representative random sample of products for sale in each relevant retail channel.

The mystery shopping exercises for the different product types are separate. As such, member states can choose which products to prioritise when without interfering with the overall programme.

The mystery shopping exercises can be out-sourced to specialist fieldworkers; an appendix provides details of potential suppliers in each member state.

We provide indicative costs for the fieldwork for each product in the table below. The first two column cost the acquisition of samples from the domestic outlets recommended in chapter 5. The final two columns also add the cost of acquiring from non-EU based online retailers.

Indicative mystery shopping costs: fieldwork fees only

	Small sample	Large sample	Small sample inc non EU online	Large sample inc non EU online
Pharmaceuticals	€2,100	€4,200	€2,700	€5,400
Spectacles	€1,500	€3,000	€2,100	€4,200
Plants	€7,200	€14,400	€7,800	€15,600
Food and drink	€4,500	€9,000	€5,100	€10,200
Leather goods	€5,100	€9,300	€5,700	€10,500
Perfumes and Cosmetics	€5,100	€9,300	€5,700	€10,500
Alcoholic beverages	€7,650	€14,850	€8,250	€16,050
Textiles and sporting goods	€5,100	€9,300	€5,700	€10,500
Durable goods	€4,500	€8,100	€5,100	€9,300
Toys and games	€4,500	€8,100	€5,100	€9,300
Computer hardware	€3,900	€6,900	€4,500	€8,100

In addition to the fieldwork fees, the commissioning agencies will also have to reimburse the purchase costs of the products acquired. We provide in the table below indicative budgets inclusive of these costs.

## Indicative mystery shopping costs including budget for purchase of samples

	Small sample	Large sample	Small sample inc non EU online	Large sample inc non EU online
Pharmaceuticals	€4,000	€7,000	€5,000	€9,000
Spectacles	€20,000	€40,000	€30,000	€50,000
Plants	€20,000	€40,000	€30,000	€50,000
Food and drink	€20,000	€30,000	€20,000	€30,000
Leather goods	€100,000	€170,000	€110,000	€190,000
Perfumes and Cosmetics	€40,000	€60,000	€40,000	€70,000
Alcoholic beverages	€20,000	€30,000	€20,000	€30,000
Textiles and sporting goods	€50,000	€90,000	€60,000	€100,000
Durable goods	€160,000	€280,000	€180,000	€320,000
Toys and games	€160,000	€280,000	€180,000	€320,000
Computer hardware	€100,000	€170,000	€110,000	€200,000

### 6.2.3 Task 3: Expert examination

The third task is for experts to examine the samples and identify those which are counterfeit or pirate.

We recommend that member states enlist the assistance of the legitimate manufacturers in this task. Many legitimate manufacturers already have the expertise and infrastructure to test and identify potentially counterfeit and pirate merchandise. Our discussions with a number of such manufacturers lead us to believe that many will be willing to offer these services to member states for a nominal fee. As such, we have not included fees for the use of such facilities.

### 6.3 Action 3: Surveys of spare parts suppliers

The third action we recommend is that the member states commission a series of surveys of suppliers to identify the incidence of counterfeiting in various spare parts markets.

To measure the incidence of counterfeiting in motor vehicle, aircraft and other industrial spare parts sectors, we recommend surveys of the suppliers of these products. Separate surveys will need for motor vehicle spare parts and aircraft spare parts. Industrial spare parts cover a wide range of different products and suppliers; as such, a separate survey will be required for each different type of industrial spare part.

As the surveys are separate, member states can prioritise the timing of the different surveys without impacting on the overall programme.

We discuss in chapter 5 the required parameters of each survey. Importantly, we recommend – if budgets permit – the use of CASI interviewing. We provide below the names of research agencies listed by the European research industry body, ESOMAR, as offering CASI interviewing services.

Research agencies listed by ESOMAR as offering CASI services

FESSEL-GfK, Austria  
Significant Marketing Research, Belgium  
PMR - Partners in Marketing Research, Netherlands  
BMRB International Social Research, United Kingdom

The use of CASI is expensive. We provide below indicative costs for each survey using this technique.

Indicative costs for survey aircraft spare parts suppliers

	Small sample	Large sample
Low-cost country	€8,500	€17,000
Mid-cost country	€11,000	€22,000
High-cost country	€19,500	€39,000

Indicative costs for survey of car parts suppliers

	Small sample	Large sample
Low-cost country	€85,000	€170,000
Mid-cost country	€110,000	€220,000
High-cost country	€195,000	€390,000

Indicative costs for each survey of suppliers of a given industrial spare part

	Small sample	Large sample
Low-cost country	€85,000	€170,000
Mid-cost country	€110,000	€220,000
High-cost country	€195,000	€390,000

## 7 ESTIMATING MISSING DATA

In this chapter, we develop a potential method for estimating the size of the counterfeiting problem in a particular sector or country if no robust data exists.

It is unlikely that all member states will be able to implement the recommendations of this report to the same timeframe. In this interim period, there will be gaps in the data collected:

- Some member states may not report for all sectors
- Some member states may not report for any sectors
- For some sectors, no member state may report

Although there is no substitute for original research, it may be possible to use economic behavioural theory – and, in future, regression analysis techniques – to estimate the missing data.

### 7.1 A general model of counterfeiting activity

Counterfeiting and piracy is an economic activity ....

The production, distribution, sale and consumption of counterfeits and pirates are economic activities, albeit illicit and (usually) illegal, driven by financial reward (or the avoidance of financial cost).

.... so it can be modelled mathematically like other economic behaviours

Typically, economic behaviour can typically be modelled mathematically – provided the process can encapsulate the key motivations behind the behaviour.

And, the model can help us fill-in gaps in the data

Such a model can provide a basis for predicting the size of the counterfeiting problem in sectors and/or countries which have been unable to measure the problem directly.

What, then, should be included in a general model of counterfeiting activity?

Any general model will need to consider the decisions of potential counterfeiters and pirates – and how they will vary between products and between countries. What factors will influence his/her decision to produce and sell illicit copies? Equally important, why do they choose to

enter the market illicitly – with counterfeits or pirates – rather than legitimately?

First, we consider the reasons why counterfeiters may chose to counterfeit – the ‘up-side’ factors. Then, we consider the reasons why the counterfeiters may be dissuaded from conducting the illicit activity – the ‘down-side’ factors.

### 7.1.1 Up-side factors

It is reasonable to assume that counterfeiting occurs only when the financial rewards from it are greater than can be achieved through the alternative legitimate activities open to the potential counterfeiter.

Counterfeiters may be able to produce at lower costs

There are two scenarios for this:

(1) Lower production costs. The clearest example of when counterfeiting provides a pecuniary advantage over legitimate trade is when counterfeits can be produced at a lower cost than their legitimate alternatives. There are a number of reasons why the counterfeiter may be able to produce at lower costs:

- Use of lower cost and/or lower quality input materials
- Failure to comply with safety and other regulations
- Use of others’ intellectual property, creativity and enterprise without properly remunerating them
- Free-ride on legitimate suppliers’ advertising and branding

In such circumstances, the counterfeit can be offered at the price of the genuine product and generate for the counterfeiter a profit margin in excess of what can be achieved in the legitimate market. Indeed, the counterfeit may be sold at a discounted price against the legitimate item provided the discount on the price is no greater than the difference in costs.

Or there may be barriers to entering the market legitimately

(2) Barriers to legitimate entry. It may also be rational to produce counterfeits even when there are no cost advantages. Where there is a concentration of property rights or market power, it may not be possible for new competitors to enter the market legally – yet there may be benefits of entry if the incumbent already prices in excess of marginal costs. Under these conditions, counterfeiting may occur.



## 7.1.2 Downside factors

But there are downsides to counterfeiting

Although there may be financial benefits from counterfeiting, there are also potential dangers and costs – in addition to those experienced by legitimate businesses. In particular, counterfeiting and piracy is an illicit activity that – in many cases – can render those who engage in it liable to pay pecuniary damages to those whose rights they infringe and, in some cases, criminal prosecution and penalties.

It is reasonable to assume, then, that the likelihood that a certain good will be counterfeited in a certain country will depend on:

- counterfeiters' likelihood of getting caught
- likely penalties and costs that the counterfeiter will incur if caught

Different factors influence the likelihood of getting caught

There are a number of factors that influence the probability of getting caught:

(1) Detection and enforcement intensity. The efforts made by authorities to enforce anti-counterfeiting and anti-piracy legislation will impact on the probability of a counterfeiter getting caught. These efforts can be considered generally – in terms, for example, of resource allocated to policing, trading standards or frontier police. They can also be considered in the context of resources and initiatives focused on specific products. Meanwhile, many trade bodies and owners of property rights allocate their own resource to the detection and enforcement.

(2) Ease of detection and enforcement. The ease with which counterfeit activity can be detected, and legislation enforced, varies between products and countries. Physical geography, the structure of distribution channels and the ease with which counterfeits can be identified all impact on the likelihood of getting caught.

(3) Proximity to source of production or point of entry. It is also reasonable to assume that, the greater the distance over which counterfeit goods need to be transported, the greater the opportunity for them to be detected by enforcement agencies. For example, all other things equal, we would expect to find more counterfeit items produced in eastern Europe in circulation in those EU countries with east European frontiers than those on the western periphery.

(4) Elapsed production and distribution time. Similarly, the elapsed time over which counterfeits are produced, transported and stored will partially determine the opportunity for detection by enforcement agencies. All other things being equal, we would expect products with

lengthy production and distribution times exhibit a lower incidence of counterfeiting than those with shorter times.

.... and if you are caught, penalties vary between countries and products

The other consideration is penalties:

(1) Legal penalties. There are legal penalties that might face a counterfeiter or pirate. These include payment of damages to the owner of the property rights, fines and potentially imprisonment.

(2) Sunk costs in production. There are potential financial downsides. If the counterfeiter has to invest in equipment, property, working capital, etc. and if these investments are at risk of confiscation or redundancy if the counterfeiter is caught, this will act as a disincentive to counterfeit. The extent of these 'sunk costs' will vary between products – making some products more susceptible to counterfeiting than others.

(3) Cultural attitudes. There may also be different cultural attitudes to counterfeiting – making the activity more or less likely in different member states.

## 7.2 Building a mathematical model

On the basis of the description of the motives behind counterfeiting, we can postulate a relationship that can be represented mathematically; indeed, if there were sufficient data the relationship could be estimated using regression analysis.

The relationship is shown in the box. We would recommend that, if the relationship is estimated statistically, it should be calibrated against a logit-type probabilistic equation.

## Parameters of the general model of counterfeiting activity

Proportion of consumption of good/service X in country Y which is counterfeit or pirate (the Y or dependent variable) is a function of:

(X or independent variables)

1. Difference between cost of production for legitimate X and pirate X
2. Barriers to legitimate entry in to market for X in country Y
3. Detection and enforcement intensity for product X in country Y
4. Ease of detection and enforcement for product X in country Y
5. Proximity to source of production or point of entry for product X in country Y
6. Elapsed production and distribution time for product X in country Y
7. Legal penalties for product X in country Y
8. Sunk costs in production for product X in country Y
9. Cultural attitudes to counterfeiting in country Y

### 7.3 Data for the model

To translate the model into a practical tool, it will be necessary to have data on each of the variables listed. As we have discussed, there is currently little data on the level of counterfeiting – the dependent variables.

Despite the lack of data for the dependent variable, we can consider how to source estimates for the independent (or X) variables. There are three generic alternatives:

- Use direct measurements of calculations of the variables themselves – although this is the optimal solution, it is rarely practicable
- Use ‘proxies’; these are variables which, although are not the actual factor being measured, are believed to behave in such a way as to shadow the target. For example, spending by authorities on enforcement may be a good proxy for enforcement intensity
- Use ranking scores based on qualitative judgements about the relative values between countries and products

We have done the third.

In the following tables, we consider each of the factors in the general model of counterfeiting in turn. We scored, on a five-point scale, each of the factors for every pair of products and countries in our study.

Our scoring is based on judgements we have made taking account of a range of relevant factors – albeit in a qualitative metric. For example,

for the proximity factor, we have considered whether countries border eastern Europe for those products where this is a major supply route for counterfeits; whereas having deep sea ports may be an important influence for those products which are imported from distant continents in containers. For the cultural attitudes factor, we have based our scoring on the results of Transparency International's Corruption Perceptions Index for each of the 15 member states.

In the tables, a score of 5 represents the highest probability of counterfeiting; a score of 1 represents the least.

Assessment of production costs by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Toys & games	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Textile & sports	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Leather goods	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Perfumes & cosmetics	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Durable goods	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Spectacles	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Watches	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Plants	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Food & drink	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Alcoholic beverages	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aircraft spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Industrial spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Computer hardware	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Ease of legitimate market entry by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Toys & games	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Textile & sports	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Leather goods	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Perfumes & cosmetics	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Durable goods	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Spectacles	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Watches	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Plants	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Food & drink	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Alcoholic beverages	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Aircraft spare parts	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Industrial spare parts	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Computer hardware	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Sunk costs by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Toys & games	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Textile & sports	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Leather goods	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Perfumes & cosmetics	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Durable goods	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Spectacles	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Watches	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Plants	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Food & drink	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Alcoholic beverages	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aircraft spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Industrial spare parts	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Computer hardware	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Elapsed time by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	2	2	2	2	2	3	4	2	3	2	3	2	2	2	3
Toys & games	2	2	2	2	2	3	4	2	3	2	3	2	2	2	2
Textile & sports	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4
Leather goods	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4
Perfumes & cosmetics	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4
Durable goods	2	2	2	2	2	3	4	2	3	2	3	2	2	2	3
Spectacles	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4
Watches	2	2	2	2	2	3	4	2	3	2	3	2	2	2	3
Plants	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Food & drink	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Alcoholic beverages	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	2	2	2	2	2	4	4	3	4	2	3	3	3	2	2
Aircraft spare parts	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Industrial spare parts	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4
Computer hardware	3	3	3	3	3	4	5	3	4	3	4	3	3	3	4

Proximity to production by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	4	3	3	3	4	5	5	3	5	3	4	4	4	3	4
Toys & games	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Textile & sports	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Leather goods	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Perfumes & cosmetics	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Durable goods	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Spectacles	3	3	3	3	4	4	3	3	3	3	4	3	3	3	4
Watches	2	2	2	2	3	3	2	2	3	2	3	2	2	2	3
Plants	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Food & drink	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Alcoholic beverages	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	4	3	3	3	4	5	5	3	5	2	4	4	4	2	4
Aircraft spare parts	2	2	2	2	3	3	2	2	2	2	3	2	2	2	3
Industrial spare parts	2	2	2	2	3	3	2	2	2	2	3	2	2	2	3
Computer hardware	2	2	2	2	3	3	2	2	2	2	3	2	2	2	3

Intensity of enforcement by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Toys & games	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Textile & sports	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Leather goods	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Perfumes & cosmetics	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Durable goods	2	2	2	1	1	1	3	3	3	2	1	3	2	1	1
Spectacles	4	4	4	3	3	3	5	5	5	4	3	5	4	3	3
Watches	4	4	4	3	3	3	5	5	5	4	3	5	4	3	3
Plants	4	4	4	3	3	3	5	5	5	4	3	5	4	3	3
Food & drink	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Alcoholic beverages	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Books & publications	5	5	5	4	4	4	5	5	5	5	4	5	5	4	4
Films & motion pictures	5	5	5	4	4	4	5	5	5	5	4	5	5	4	4
Sound recordings	5	5	5	4	4	4	5	5	5	5	4	5	5	4	4
Computer software	5	5	5	4	4	4	5	5	5	5	4	5	5	4	4
Vehicle spare parts	2	2	2	1	1	1	2	2	2	2	1	2	2	1	1
Aircraft spare parts	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Industrial spare parts	3	3	3	2	2	2	4	4	4	3	2	4	3	2	2
Computer hardware	4	4	4	3	3	3	5	5	5	4	3	5	4	3	3

Ease of enforcement by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	2	2	1	2	3	4	4	2	4	1	2	2	2	1	3
Toys & games	4	2	3	4	3	2	4	4	3	2	2	3	3	4	2
Textile & sports	4	2	3	4	3	2	4	4	3	2	2	3	3	4	2
Leather goods	4	2	3	4	3	2	4	4	3	2	2	3	3	4	2
Perfumes & cosmetics	4	2	3	4	3	2	4	4	3	2	2	3	3	4	2
Durable goods	3	2	2	3	3	2	3	3	2	2	2	3	3	3	2
Spectacles	4	4	3	2	3	4	4	4	5	3	4	4	4	3	4
Watches	4	3	3	4	4	3	5	5	4	3	3	4	4	4	3
Plants	4	3	3	4	3	2	4	4	3	3	2	3	3	3	2
Food & drink	3	1	2	3	2	1	3	3	2	1	1	2	2	3	1
Alcoholic beverages	3	1	2	3	2	1	3	3	2	1	1	2	2	3	1
Books & publications	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Films & motion pictures	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sound recordings	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Computer software	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Vehicle spare parts	3	2	3	3	3	2	4	4	3	3	2	3	3	3	2
Aircraft spare parts	2	1	2	2	2	1	2	2	2	2	1	2	2	2	1
Industrial spare parts	3	1	2	3	2	1	3	3	2	1	1	2	2	3	1
Computer hardware	4	2	3	4	3	2	4	4	3	2	2	3	3	4	2

Penalties by product and country

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Toys & games	3	3	3	3	2	2	4	4	4	3	2	3	4	2	3
Textile & sports	4	4	4	4	3	3	5	5	5	4	3	4	5	3	3
Leather goods	4	4	4	4	3	3	5	5	5	4	3	4	5	3	4
Perfumes & cosmetics	3	3	3	3	2	2	4	4	4	3	2	3	4	2	3
Durable goods	3	3	3	3	2	2	4	4	4	3	2	3	4	2	3
Spectacles	4	4	4	4	3	3	5	5	5	4	3	4	5	3	4
Watches	4	4	4	4	3	3	5	5	5	4	3	4	5	3	4
Plants	5	5	5	5	4	4	5	5	5	5	4	5	5	5	5
Food & drink	2	2	2	2	1	1	3	3	3	2	1	2	3	1	2
Alcoholic beverages	3	3	3	3	2	2	4	4	4	3	2	3	4	2	3
Books & publications	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Films & motion pictures	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Sound recordings	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Computer software	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Vehicle spare parts	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aircraft spare parts	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Industrial spare parts	2	2	2	2	1	1	3	3	3	2	1	2	3	1	2
Computer hardware	3	3	3	3	2	2	4	4	4	3	2	3	4	2	3

Cultural differences

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Toys & games	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Textile & sports	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Leather goods	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Perfumes & cosmetics	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Durable goods	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Spectacles	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Watches	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Plants	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Food & drink	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Alcoholic beverages	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Books & publications	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Films & motion pictures	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Sound recordings	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Computer software	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Vehicle spare parts	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Aircraft spare parts	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Industrial spare parts	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2
Computer hardware	2	3	1	1	3	3	5	3	4	2	2	4	3	2	2



Too early for detailed statistical or regression-based modelling

There is currently too little data to execute any detailed statistical analysis. Indeed, it is impossible to use regression techniques while there are so few estimates of the size of the counterfeiting problem in different sectors or countries.

But when data become available, regression analysis will be most robust

However, **when there are estimates of counterfeiting for a range of products for 10 member states (covering 75 per cent of EU GDP), we believe the estimation of the relationship using regression analysis techniques is possible.** Such a regression-based estimation of the mathematical model will provide the most robust basis for predicting the level of counterfeiting in sectors/countries where measurements have not been made.

## 7.4 An interim model of counterfeiting

In the meantime, we have used the behavioural model specified above to score each country and product pair on a 100-point scale.

Based on our judgements and understanding of the issues, we have allocated a weight to each of factors in relation to how important we believe the factor is in determining the activity of potential counterfeiters and pirates:

- |   |             |
|---|-------------|
| • Production costs                                    | 20 per cent |
| • Barriers to legitimate entry                        | 10 per cent |
| • Detection and enforcement intensity                 | 20 per cent |
| • Ease of detection and enforcement                   | 10 per cent |
| • Proximity to source of production or point of entry | 10 per cent |
| • Elapsed production and distribution time            | 5 per cent  |
| • Legal penalties                                     | 10 per cent |
| • Sunk costs in production                            | 10 per cent |
| • Cultural attitudes                                  | 5 per cent  |

Combining these weights with the various factor scores tabulated above, we have derived an overall index of the likely prevalence of counterfeiting and piracy in each of pair of countries and products. The score is tabulated below.

The score has a maximum of 100 and a minimum of zero.

The maximum score of 100 would imply that that product-country pair had scored five for each of the nine factors. The minimum score of zero would imply that that product-country pair had scored one for each of the nine factors. Importantly, a high score – say, over 90 – does not imply that over 90 per cent of goods are counterfeit or pirate; rather that this market will have the among the highest incidence of

counterfeiting in any of the areas we have studied. Similarly, a low score – say, under 40 – does not imply that under 40 per cent of goods are counterfeit or pirate; rather that this market will have among the lowest incidence of counterfeiting in any of the areas we have studied.

Although the scoring is not in itself an actual measure of the incidence of counterfeiting, it does give an indication of where we believe counterfeiting and piracy is more or less likely. Moreover, it can be used as an initial rough method of grossing-up data from specific countries and sectors, as and when measurements are made.

The scores are not necessarily directly scalable i.e. a score of 60 does not necessarily imply double the probability of a score of 30. However, as a first approximation, this is a reasonable assumption. As such, the model can be used to extrapolate available data on the incidence of counterfeiting and piracy to products and countries where no data is available – although we would expect estimates made within a product group would be more reliable than those made across product groups.

The basis for the extrapolation should be the following equation:

$$E_{XY} \cdot A_{xy} \cdot [ S_{XY} / S_{xy} ]$$

Where:

$E_{XY}$  is the extrapolated percentage of items of product X that are consumed in country Y that are counterfeit or pirate

$A_{xy}$  is the actual (or independently estimated) percentage of items of product x that are consumed in country y that are counterfeit or pirate

$S_{XY}$  is the score out of 100 given to product X in country Y

$S_{xy}$  is the score out of 100 given to product x in country y

And, for greater reliability,  $X = x$

For example, if surveys show that 0.6 per cent of pharmaceuticals in Spain are counterfeit then our model would estimate that the incidence in Italy would be 0.8 per cent. This is because Italy has a score of 40 for pharmaceuticals compared with 30 in Spain.

Likely incidence of counterfeiting and piracy (Score out of 100)

	Aus	Bel	Den	Fin	Fra	Ger	Gre	Ire	Ita	Lux	Net	Por	Spa	Swe	UK
Pharmaceuticals	29	28	23	25	33	39	43	28	40	24	30	31	30	24	33
Toys & games	52	48	48	46	46	44	66	61	61	47	43	57	53	44	44
Textile & sports	63	59	59	57	57	55	77	72	72	58	54	68	64	55	54
Leather goods	51	47	47	44	44	43	64	59	59	46	42	56	52	43	44
Perfumes & cosmetics	53	49	49	47	47	46	67	62	62	48	44	58	54	46	47
Durable goods	27	26	23	21	23	22	41	36	36	25	21	35	31	20	23
Spectacles	63	64	59	52	57	60	77	72	77	60	59	70	67	53	62
Watches	54	53	50	48	50	49	70	65	68	52	48	62	58	47	50
Plants	67	66	63	61	58	56	76	73	72	64	54	72	66	59	57
Food & drink	46	42	42	39	37	34	57	54	53	41	33	51	47	38	36
Alcoholic beverages	50	47	47	44	42	39	62	59	58	45	38	55	52	43	40
Books & publications	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
Films & motion pictures	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
Sound recordings	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
Computer software	92	93	91	86	88	88	96	93	94	92	87	94	93	87	87
Vehicle spare parts	32	28	28	23	28	31	43	34	39	27	26	36	34	22	24
Aircraft spare parts	24	23	23	23	28	25	28	25	26	24	24	26	25	24	24
Industrial spare parts	38	34	34	32	32	30	52	47	47	33	29	43	39	30	32
Computer hardware	57	54	54	51	51	50	71	66	66	52	49	62	59	50	51

## APPENDIX 1. DATA AUDIT

This appendix reviews the current range of data and information available on counterfeiting and piracy.

It is based on an information audit conducted by us. The audit involved consulting well over a hundred organisations throughout the European Union and beyond.

### A1.1 Approach

Data held by national authorities and private companies and associations

Data on counterfeiting and piracy is held by many organisations and agencies throughout the European Union. The quality of this data can vary from sophisticated estimates of the size of counterfeiting in a particular sector to a crude count of the number of seizures made by national authorities. The data is held at several levels. National bodies tend to collect information on seizures of counterfeit goods. Private companies and trade associations tend to collect information on seizure of counterfeiting, but additionally some companies try to measure the full extent of counterfeiting by conducting some estimation process.

Information audit and assessment involves 4 tasks

The study employ a simple four-step methodology for collecting data. The first task was to identify which organisations collected data on each sector and country. We contacted a range of organisation – customs authorities, official statistics office, trade associations and major companies, pan-European organisations and cross-sectoral bodies – to ask if they held data or produced estimates on the scale of counterfeiting and piracy.

Second, we attempted to find out who was the main information gate-keeper in each organisation. Our experience taught us that few people had knowledge of counterfeiting or piracy unless it was their responsibility to monitor it. Information within an organisation generally resided with these people, so it was important to identify them.

Third, we contacted the relevant contact to establish whether they collected data on counterfeiting and piracy and/or produced estimates of the extent of counterfeiting in the sectors. We used email as an initial means of contact, followed by telephone and in some case we conducted face-to-face meetings.

Finally, we conducted an assessment of the data that we had collected and the methodologies used to produce estimates of the scale of counterfeiting and piracy in each product group.

## A1.2 Austria

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the aircraft industry. Internal seizures data in Austria is not collected in any systematic fashion, which lends itself to analysis.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union (TAXUD). However, this data does not include seizures made internally. The data for aircraft spare parts is collected and classified under the 'other goods' category. There are plans to split out this data in the future, but it has not been done to date.

The TAXUD data contains counterfeit and piracy products intercepted at the point of distribution from foreign manufacturing plants into the European Union. The data is simply a count of the number of seizures made at the external boundaries and is collected on a volume basis; there is no attempt to extract a value measure.

### Alcoholic beverages

Data on the seizure of counterfeit and pirated goods is not collected for Austria by any company or trade organisation. Indeed, there is no attempt to estimate the extent of the problem in the sector. Internal seizures made by national authorities are not collated in a systematic way, which would provide any indication of the scale of counterfeiting and piracy in Austria.

The only collection of data on counterfeiting and piracy in the sector is done by DG Taxation and Customs Union, which groups seizures for the sector into a grouping, which includes foodstuffs and other drinks.

The TAXUD data is a volume measure based on a count of seized items. The seizures reveal only part of the total problem because they are based on the interceptions of goods from point of manufacture outside the EU to the market in the EU. Domestic consumption from domestic production is not picked up in these statistics.

### Books and publications

In Austria, counterfeiting and piracy in this sector are not monitored. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

## Counting counterfeits

The only valid information source is external seizure data collated by DG Taxation and Customs Union. However, this data is not collated and published in its own category, rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. However, one would expect that this measurement point would only pick up a fraction of total activity.

## Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in any systematic way.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. This system only takes into account the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Austria.

## Computer software

The software sector is one of the few sectors where estimates on the extent of counterfeiting and piracy are produced with any rigour. The Business Software Alliance – association of software companies – is responsible for these estimates. These estimates are based on robust measurement process that quantifies the total software demand and supply.

The difference between their estimates of demand and supply produces a volume estimate of the scale of counterfeiting and piracy in the software industry. The measurement is done using a variety of techniques at separate measurement points.

The demand for software is produced from a detailed analysis of the number of PC in a country together with the number of new PCs shipped into the country in a given year. The estimates for new PCs are provided directly by manufacturers, but the estimates for the stock of PC in a country are estimated using PC penetration rates.

The average number of software programmes installed on each PC is estimated using market research data and is used to determine the demand for software programmes.

The supply of software programmes is derived from industry sources, but is recalibrated in two ways to adjust for the number of companies, which participated in the study.

For Austria, the piracy rate was estimated at 37 per cent in 2000 down from 47 per cent in 1995.

Additionally, data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. Unfortunately, these seizures are placed in another category with other products such as CDs.

#### Durable goods

The low incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. To date the industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment' in the TAXUD taxonomy. The data on durable goods relates to seizure made at the EU's external borders. It is a volume-based measure relating to the number of seizure cases and the number of items seized. However, it only captures part of the incidence of counterfeiting. It detects only a proportion of goods coming into the EU and does not include goods manufactured within the EU.

#### Films and motion pictures

The Motion Picture Association (MPA) produce an estimate of the extent of counterfeiting in Austria. The pirate market for videos and DVDs are estimated by sampling at the point of sale.

The number of stores that rent and sell pirated products is multiplied by the average number of pirated products rented or sold per shop each year. This produces a volume measure of the extent of counterfeiting in Austria. The MPA produce a value estimate by scaling the number of pirated sales to produce the number of legitimate products that would have been sold in the absence of the counterfeited and pirated products.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

#### Food and drink

In Austria no organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the sector.

## Counting counterfeits

There is a statutory requirement forcing Austrian custom officials to report to DG Taxation and Customs Union data on the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not release it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics. The normal caveats apply to this seizures data. First, it only reveals part of the total picture in terms of counterfeit and pirated goods coming into the EU as detection rates are generally quite small. Second, it does not include any information on the scale of domestic production and consumption. Finally, it ignores counterfeit and pirated goods taken into the EU by its citizens travelling from outside the EU.

## Leather goods

There is little information held by companies and trade associations on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses. The Austrian authorities do collect information on counterfeiting and piracy in the sector in any systematic way, which will provide insight into the scale of the problem in Austria.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources to certain global 'hot spots'.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure



records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Austria.

The Austrian authorities do not collect information on internal seizures, however, they do supply data on external seizures to TAXUD. This data on the seizure of counterfeit goods at European Union's external borders is a volume measure. Plants are listed under 'other' in the TAXUD category, which makes differentiation difficult.

## Pharmaceuticals

The major companies, which we contacted, believe the problem is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. This system relies on a voluntary reporting system and unfortunately most EU countries do not report to any significant degree. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

The only publicly available information on counterfeit pharmaceutical goods is collated and published by TAXUD, which survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'. However, there are plans to separate some of the components of the 'other goods' category.

Equally important is that the data only includes seizure at external border frontiers and does not include internal seizures. It is possible that the TAXUD data includes goods were in transit from one state to another – both of which are outside the European Union.

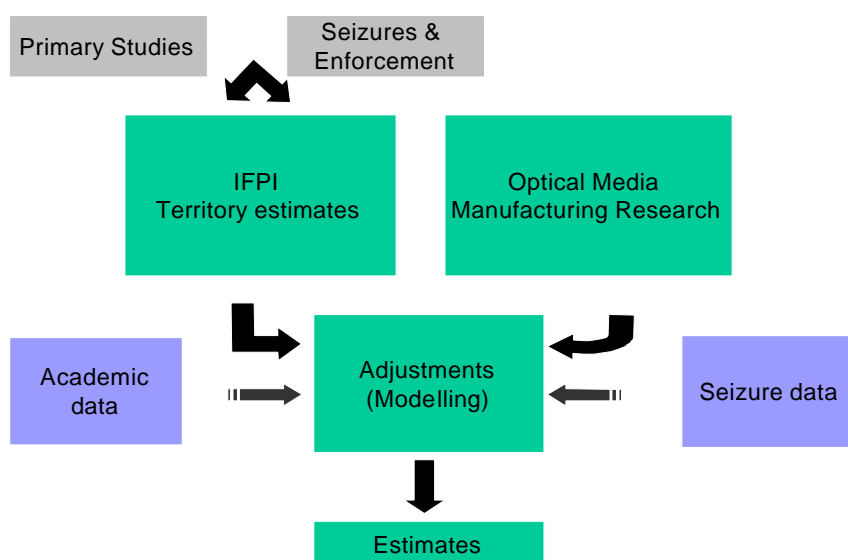
## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy. In Austria, the representative organisation of the International Federation of Phonographic Industries produces estimates based on a series of measures (see Error! Reference source not found.). In the first instance an estimate is made of the scale of counterfeiting and piracy in Austria, this is based on primary studies, mainly of manufacturing plants and seizures data, the enforcement regime is also taken into consideration. An estimate of the incidence of the problem in Austria is then made from these inputs.

These estimates are tested against information obtained from other sources. In particular, information is obtained on optical media output from industry sources. An estimate is produced of the likely use of CDs for non-legitimate purposes. Both these separate estimates are subject to an adjustment process which is informed by academic studies and industry knowledge.

## IFPI methodology

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Additionally, the seizure of counterfeit and pirated goods at European Union's external borders is collected by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

The Austrian authorities do not collect information on internal seizures in any systematic manner.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country. These estimates were based on two distinct methodologies, neither of which can be described as robust. The first approach uses TAXUD data and then applies a set of detection rates to these statistics to produce an indication of the scale of counterfeiting. The approach assumes that internal production is equal to half of the volume of imports. The second approach, using internal seizure data for the Netherlands and scales this figure up using the proportion of sales in the Netherlands as a percentage of EU sales, to produce a representative figure for the EU. This approach assumes that Dutch levels of counterfeit goods and detections are seen across the EU.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

For Austria, there is no attempt to measure the incidence of counterfeiting and piracy in the industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. Unfortunately, the validity of these estimates may be questionable. In the Report on Responses to the European Commission Green Paper on Counterfeiting and Piracy an estimate on the scale of the problem within the industry suggest that it is between 5 and 10 per cent of the total market. There seems to be no evidence to suggest the source of the estimate, nor the methodology employed to produce it.

Survey evidence produced by the European campaign for the Freedom of the Automotive Parts and Repair Market (ECAR) suggests that the incidence of counterfeiting and piracy is below 1 per cent, though the figure is only available for the European Union and not any specific country.

The Austrian authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders.

## Counting counterfeits

However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

The Swiss Watch Federation performs partial monitoring of the extent of counterfeiting and piracy in the industry. The data collection process involves some occasional monitoring of seizure within the national boundaries of certain countries, but the process can be described as patchy at best. It is not done on a systematic basis, which prevents its use as a means of tracking the incidence of counterfeiting and piracy in the industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.3 Belgium

### Aircraft spare parts

No industry or trade association collects data on the seizure or the scale of counterfeiting and piracy within the sector. Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods' – a catchall category.

The counterfeit and piracy products are intercepted at the point of distribution from foreign manufacturing plants into the European Union. The data is simply a count of the number of seizures made at the external boundaries and is collected on a volume basis; there is no attempt to extract a value measure. The TAXUD data does not contain any information on internal seizures within Belgium, which are not collected in any systematic manner.

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector. Data on the seizure of counterfeit and pirated goods is not collected for Belgium by any company or trade organisation.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure, which counts

the number of seized items. These seizures reveal only part of the total problem because they are based on the interceptions of goods from point of manufacture outside the EU to the market in the EU; consumption from domestic production is not picked up in these statistics. Moreover, internal seizures made by national authorities is not collated in a systematic way which would allow an analysis of the domestic market.

#### Books and publications

Counterfeiting and piracy activity in Belgium is not monitored to any significant extent. No companies or association have made any serious attempt to collect data on the activity or measure the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. However, one would expect that this measurement point would only pick up a fraction of total activity.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Belgium.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. This volume measure classifies computer hardware under 'computer articles' in the TAXUD taxonomy. The measure is simply a count of the number of counterfeit and pirated goods seized at the European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Belgium.

#### Computer software

The software sector is one of the few sectors where estimates on the extent of counterfeiting and piracy are produced with any rigour. The Business Software Alliance – collection of software companies – is responsible for these estimates. These estimates are based on robust measurement process that quantifies an estimate for total software demand and software supply.

The estimates for Belgium are based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These

## Counting counterfeits

figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

There is a perception in the industry that the incidence of counterfeiting and piracy in the sector is quite low. This has implied that monitoring the problem is not a major concern for the industry which has been reflected in the small amount of resources devoted to tracking it. The industry has not attempted to measure or collect information on the extent of the counterfeiting and piracy problem.

Data is only collected in a systematic manner at the EU's external borders. The data collected by TAXUD is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD system.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Belgium. These estimates use the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No Belgian organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the sector.

There is a statutory requirement forcing Belgian custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

#### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Austria.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report

## Counting counterfeits

instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy. The Belgian estimate of the scale of counterfeiting follows the same procedure as the Austrian estimate

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

A study by the International Trademark Association (INTA)<sup>18</sup> uses econometric techniques to estimate the impact of trademark infringement on the industry. However, while this study employs quite rigorous methods, it fails to get at the bottom of the problem – how to estimate the incidence of an illicit activity which conceals its activity.

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<sup>18</sup> INTA, (1998) The economic impact of trademark counterfeiting and infringement: estimation of the impact of trademark counterfeiting and infringement on worldwide sales of apparel and footwear.



The INTA study provides an indication of how one country deviates from the sample average but it does not resolve the underlying problem – absence of data.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

#### Toys and games including electronic games

For Belgium, there is no attempt to measure the incidence of counterfeiting and piracy in the industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

#### Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have consider the EU rather than specific countries.

The Belgian authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

#### Watches

The Swiss Watch Federation performs partially monitoring of the extent of counterfeiting and piracy in the industry. The data collection process involves the occasional monitoring of seizure within the national boundaries of certain countries at it is quite patchy. However, this is not done on a systematic basis, which prevents its use as a means of tracking the incidence of counterfeiting and piracy in the industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.4 Denmark

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Denmark and the information is not collated systematically.

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Denmark. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Denmark.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European

Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Denmark.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Denmark based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

#### Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Denmark which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

#### Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Danish sector.

There is a statutory requirement forcing Danish custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Counting counterfeits

### Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Denmark.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

## Counting counterfeits

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Danish industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have consider the EU rather than specific countries.

The Danish authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart form monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Denmark

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.5 Finland

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Finland and the information is not collated systematically.

#### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Finland. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Finland.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Finland.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Finland based on the same methodology as the Austrian estimates.

## Counting counterfeits

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Finland which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Finnish sector.

There is a statutory requirement forcing Finnish custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.



Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

#### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Finland.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report

## Counting counterfeits

instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Finnish industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have consider the EU rather than specific countries.

The Finnish authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart form monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Finland.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.6 France

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within France and the information is not collated systematically.

## Counting counterfeits

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in France. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in France.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in France.

### Computer software

The Business Software Alliance produces estimates of software piracy in France based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in France which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the French sector.

There is a statutory requirement forcing French custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector, however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector.

## Counting counterfeits

Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in France.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure

of fake pharmaceutical products is included in a category with 'other goods'.

#### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

#### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

#### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

In particular the INTA for France, however, we have reservations about the methodology employed in this instance.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

#### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the French industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However

## Counting counterfeits

electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The French authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in France.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.7 Germany

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Germany and the information is not collated systematically.

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.



The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Germany. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Germany.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Germany.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Germany based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

## Counting counterfeits

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Germany which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Germany.

There is a statutory requirement forcing German custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Germany.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Counting counterfeits

### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the German industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The German authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Germany.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.8 Greece

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Greece and the information is not collated systematically.

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

## Counting counterfeits

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

## Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Greece. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

## Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Greece.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Greece

## Computer software

The Business Software Alliance produces estimates of software piracy in Greece based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

#### Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Greece which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

#### Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Greece.

There is a statutory requirement forcing Greek custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

#### Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector, however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

#### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

## Counting counterfeits

under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Greece.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.



## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for Greek industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

Counting counterfeits

Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Greek authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Greece.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.9 Ireland

Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Ireland and the information is not collated systematically.

Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Ireland. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Ireland.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Ireland.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Ireland based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

## Counting counterfeits

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Ireland which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Irish sector.

There is a statutory requirement forcing Irish custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Ireland.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Counting counterfeits

### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Ireland.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Irish industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Irish authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Ireland.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.10 Italy

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Italy and the information is not collated systematically.

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

## Counting counterfeits

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

## Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Italy. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

## Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Italy.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Italy.

## Computer software

The Business Software Alliance produces estimates of software piracy in Italy based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.



The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

#### Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Italy which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

#### Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Italian sector.

There is a statutory requirement forcing Italian custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

#### Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

#### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

## Counting counterfeits

under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Italy.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Italian industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

Counting counterfeits

Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Italian authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Italy.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.11 Luxembourg

Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Luxembourg and the information is not collated systematically.

Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Luxembourg. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Luxembourg.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Luxembourg.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Luxembourg based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

## Counting counterfeits

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Luxembourg which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Danish sector.

There is a statutory requirement forcing custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Luxembourg.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Counting counterfeits

### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for industry in Luxembourg.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.



## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Luxembourg.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.12 Netherlands

REACT, an association of companies has a detailed database of internal seizures made by Dutch authorities, however, they do not trust the reliability of any estimates derived from the data.

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within the Netherlands and the information is not collated systematically.

## Counting counterfeits

### Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in the Netherlands. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in the Netherlands.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in the Netherlands.

### Computer software

The Business Software Alliance produces estimates of software piracy in the Netherlands based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in the Netherlands which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Dutch sector.

There is a statutory requirement forcing Dutch custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector, however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector.

## Counting counterfeits

Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Denmark.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure

of fake pharmaceutical products is included in a category with 'other goods'.

#### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

#### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

#### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

#### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Dutch industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

Counting counterfeits

Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Dutch authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in the Netherlands.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.13 Portugal

Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Portugal and the information is not collated systematically.

Alcoholic beverages

There is no attempt to estimate the extent of the problem in the sector by any company or trade organisation. Nor is data on the seizure of counterfeit and pirated goods collected.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Portugal. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

#### Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Denmark.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Denmark.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Portugal based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

## Counting counterfeits

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Portugal which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Portuguese sector.

There is a statutory requirement forcing Portuguese custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector, however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for



under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Portugal.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Counting counterfeits

### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Portuguese industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Portuguese authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Portugal.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.14 Spain

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Denmark and the information is not collated systematically.

### Alcoholic beverages

In the last year, International Federation of Spirit Producers (IFSP) has completed a survey of retail outlets in Spain. The survey is a replication of a UK study, however, the results are still awaited. Preliminary estimates suggest that the scale of the problem on the continent is not as widespread as in the UK because of the fitting at the top of bottles.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs

## Counting counterfeits

and other drinks). The TAXUD data is a volume measure which counts the number of seized items

## Books and publications

Counterfeiting and piracy is not monitored to any significant extent in Spain. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

## Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in Spain.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in Spain.

## Computer software

The Business Software Alliance produces estimates of software piracy in Spain based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

#### Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Spain which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

#### Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Spanish sector.

There is a statutory requirement forcing Spanish custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

#### Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector, however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

#### Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

## Counting counterfeits

under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Spain.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

## Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

## Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

## Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Spanish industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

Counting counterfeits

Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Spanish authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Spain.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.15 Sweden

Aircraft spare parts

Industry and trade associations do not collect data on the seizure of counterfeit and pirated products in the sector.

Seizures of counterfeit and pirated goods made at the European Union's external borders are collected by DG Taxation and Customs Union. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within Sweden and the information is not collated systematically.

Alcoholic beverages

No system has been put in place by any company or trade organisation to measure the total number of counterfeit and pirated products in the sector or to develop a methodology for estimating the scale of the problem. The Swedish authorities do not collect data on the seizure of counterfeit and pirated goods made within their boundaries.



The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure, which counts the number of seized items

#### Books and publications

Counterfeiting and piracy is not monitored in Sweden. In addition, there seems to have been no attempt by companies or trade association to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure is collated by DG Taxation and Customs Union, however, it published in its own category; instead it is grouped in an 'other category'. The TAXUD data is a count-based measure, which monitors the flow of counterfeit goods at a single measurement point – Sweden's external borders.

#### Computer hardware

There is no monitoring of counterfeiting and piracy of computer Hardware in Sweden apart from the measurement of external seizures. This data collected by the DG Taxation and Customs Union measures the total volume of counterfeit seizures made for goods destined for Sweden. The data is classified under 'computer articles' in the TAXUD classification system. It does not include seizures made internally; for which there is no systematic monitoring system in Sweden.

#### Computer software

The Business Software Alliance produces estimates of software piracy in Sweden based on the same methodology as the Austrian estimates.

Separately data on the number of counterfeit goods seized at European Union's external borders is compiled by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

#### Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

## Counting counterfeits

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in Sweden which adopts the same methodology as used to produce estimates for Austria.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the Swedish sector.

There is a statutory requirement forcing Swedish custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector. Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for

under clothing accessories, however this category also includes sunglasses.

#### Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

#### Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in Sweden.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

#### Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure of fake pharmaceutical products is included in a category with 'other goods'.

## Counting counterfeits

### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the Swedish industry.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There have been various attempts to classify the incidence of counterfeiting and piracy in the EU. All these approaches have considered the EU rather than specific countries.

The Swedish authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. The only data collected by any official organisation is on seizures data at external borders. However, this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

Apart from monitoring by the Swiss Watch Federation which is very patchy. No other organisation tracks the incidence of counterfeiting and piracy in Sweden.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. The data on watch seizures is collected grouped together in the same category as jewellery.

## A1.16 United Kingdom

### Aircraft spare parts

Industry and trade associations do not collect any data on seizure or the scale of counterfeiting and piracy within the sector.

Data on seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data for aircraft spare parts is collected and categorised under 'other goods'.

The TAXUD data does not contain any information on internal seizures within the UK and the information is not collated systematically.

### Alcoholic beverages

The International Federation of Spirit Producers (IFSP) does produce estimates of the scale of counterfeiting within the United Kingdom. The estimates were based on a survey of 1,000 UK licensed outlets in 1999. The survey was intended to gauge the extent of tipping in the industry. Each outlet was selected on a random basis throughout the UK. The approach they developed ensured a representative sample was chosen

## Counting counterfeits

and the size of the sample places is well within the scope of being statistically significant. Since then they have updated their estimates in 2000 and 2001 by using seizures data by UK local authorities. The most up-to-date estimates suggest that the problem has declined to around a cost of £8 million.

The only data is collected by DG Taxation and Customs Union, which groups seizures for the sector with those from other sectors (foodstuffs and other drinks). The TAXUD data is a volume measure which counts the number of seized items

## Books and publications

Counterfeiting and piracy is not monitored to any significant extent in the UK. Companies have made no attempt to collect data on the activity nor have they produced any estimates of the scale of the problem. Internal seizures made by national authorities are not collected on a consistent basis.

Data on external seizure are collated by DG Taxation and Customs Union, however, it is not collated and published in its own category; rather it is grouped together in the 'other category'. The TAXUD data is a count measure based at the external distribution point. There is no tracking of internal seizure for the sector.

## Computer hardware

The computer hardware industry does not collect information on counterfeiting and piracy of their products in the UK.

Data on computer hardware counterfeiting and piracy is collected by the DG Taxation and Customs Union. The volume measure is classified under 'computer articles' in the TAXUD classification system. The measure is a count of the number of counterfeit and pirated goods at European Union's external borders. It does not include seizures made internally; for which there is no systematic monitoring system in the UK.

## Computer software

The Business Software Alliance produces estimates of software piracy in the UK based on the same methodology as the Austrian estimates.

Data on the number of counterfeit goods seized at European Union's external borders is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. This information is collected and placed in category with other products such as CDs.

## Durable goods

The incidence of counterfeiting and piracy in the EU means that the industry has not devoted many resources to the measurement of the problem. The industry has not measured or collected information on the extent of the problem.

The only data readily available on the sector is collected by TAXUD. The data is a volume measure based on seizures and is categorised under 'electrical equipment in the TAXUD taxonomy.

## Films and motion pictures

The Motion Picture Association produce an estimate of the extent of counterfeiting in the UK which adopts the same methodology as used to produce estimates for Austria and other EU countries.

Data on the seizure at European Union's external borders of counterfeit and pirated goods seized is collected by DG Taxation and Customs Union. These figures are a volume measure and do not include seizures made internally. The data is grouped in a category with other products such as CDs.

## Food and drink

No organisation or company collects data on the number of internal seizure of counterfeit and pirated goods, nor do they estimate the incidence of counterfeiting and piracy in the UK.

There is a statutory requirement forcing UK custom officials to report to DG Taxation and Customs Union Data the seizure of counterfeit and pirated goods made at their borders. The data is collected together with 'foodstuffs, alcoholic and other drinks'. These figures are a volume measure and do not include seizures made internally.

## Fragrances and cosmetics

Some attempts were made by companies to track the incidence of counterfeiting and piracy in the sector; however, these estimates were at the European level and were not released.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The volume measure is collected for perfumes and cosmetics.

## Leather goods

Few companies or trade association collected data on seizure of counterfeit products or estimated the scale of the problem in the sector.

## Counting counterfeits

Those companies that did collect information would not divulge it due to confidentiality concerns.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. It does not include seizures made internally. This data is collected by TAXUD for under clothing accessories, however this category also includes sunglasses.

## Other industrial spare parts

The industry does not consider the counterfeiting and piracy of their products to be a considerable problem. Therefore, there have been no attempts to measure the extent of the problem in the sector. The industry believes that the problem is more serious outside the EU and has diverted its resources there.

Data on the seizure of counterfeit and pirated goods for this sector is collected by DG Taxation and Customs Union. However, this volume-based measure records the number of seizures at external boundaries and provides no additional information on the problem internally.

## Plants

Companies and trade association do not collect information on the extent of counterfeiting and piracy in the UK.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. This is a volume measure, but plants are listed under 'other' in the TAXUD categories which makes differentiation difficult. These figures are a volume measure and do not include seizures made internally.

## Pharmaceuticals

The major companies, which we contacted believe the problem, is not significant in the European Union. However, they do not monitor the extent of the activity.

The World Health Organisation has developed a reporting system and data bank/clearing house for governments and companies to report instances of counterfeiting and provide information within the necessary constraints of confidentiality. WHO have suggested that it is mainly developing countries which provide them with data on the problem. However – due to the sensitivity of the problem, WHO does not place the data in the public domain.

Information on counterfeit pharmaceutical goods is collated and published by TAXUD who survey national custom authorities. The seizure



of fake pharmaceutical products is included in a category with 'other goods'.

#### Sound recordings

The industry produces some of the most detailed estimates of counterfeiting and piracy; these are based on the same methods applied in Austria.

The seizure of counterfeit and pirated goods at European Union's external borders is monitored by DG Taxation and Customs Union. This is purely a volume measure based on a count of the items seized. The seizures are grouped together with DVD software as a single category.

There is no information on the number of seizures made internally.

#### Spectacles and sunglasses

No company or trade association collect data on seizure or produce estimates for these products.

Data on the seizure of counterfeit spectacles and sunglasses products at European Union's external borders is collected by DG Taxation and Customs Union. However, there are classed under two separate categories. Sunglasses are collected under the 'clothing accessories' and spectacles under 'other goods'. Neither of these volume-based measures includes seizures made internally.

#### Textile products and sporting goods

There have been attempts by companies and trade associations to measure the incidence of counterfeiting in Europe rather than in any particular country.

Seizure of counterfeit and pirated textile and sporting goods are collected at European Union's external borders by DG Taxation and Customs Union. The TAXUD measure is on a volume basis. This data does not include any information on internal seizures and no attempt is made to collect this information on a regular or consistent basis.

#### Toys and games including electronic games

There is no attempt to measure the incidence of counterfeiting and piracy for the UK. The main trade association – Toy Industries of Europe – do not produce any estimates of the scale of the problem within the industry. BBC Worldwide indicated that the information is not collected in any systematic manner. They expressed concern that seizure data may not be very reliable. First, there is no statutory requirement to notify them of seizures except in the case of trading standards

## Counting counterfeits

legislation. Second, the main source of counterfeit toys is China. As BBC Worldwide tend to concentrate their enforcement resources at source, it means that the scale of the problem in the European Union may not be fully reflected by seizures in Europe.

Data on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. However electronic games are grouped together with CDs and other categories. This measure does not include seizures made internally.

## Vehicle spare parts

There has been no concerted effort to measure the scale of counterfeiting and piracy in the United Kingdom. All attempts to classify the incidence of counterfeiting and piracy have taken place at the EU.

The UK authorities do not collate data on counterfeiting and piracy of vehicle spare parts in any systematic manner. However, the UK authorities do report seizures of counterfeited and pirated products made at external borders. But this data, which is measured on a volume basis, is not collated specifically for vehicle spare parts but grouped together with several other unrelated products.

## Watches

The Swiss Watch Federation (SWF) performs some monitoring of counterfeiting and piracy in the sector across Europe, mainly in hotspots. However, this is not done in a systematic way, which would help inform on the incidence of counterfeiting and piracy in the sector. For the UK we are unaware of any organisation that tracks the incidence of counterfeiting and piracy in the UK.

The only data collected on the seizure of counterfeit goods at European Union's external borders is collected by DG Taxation and Customs Union. The data on watch seizures is collected grouped together in the same category as jewellery. This data does not include seizures made internally and there is no monitoring of internal seizures.

## APPENDIX 2. ORGANISATIONS CONSULTED

In the process of our data audit, we consulted with the following organisations.

### 7.4.1 National statistical offices

Centraal Bureau voor der Statistiek, Netherlands

Central Statistics Office, Republic of Ireland

Danmarks Statistik, Denmark

Institut National de la Statistique et des Etudes Economiques, France

Instituto Nacional de Estadística Portugal, Portugal

Instituto Nacional de Estadística, Spain

Instituto nazionale di statistica, Italy

National Statistical Service of Greece, Greece

National Statistics, United Kingdom

Service central de la statistique et des études Economiques, Luxembourg

Statistics Belgium, Belgium

Statistics Sweden, Sweden

Statistik Austria, Austria

Statistisches Bundesamt Deutschland, Germany

Tilastokeskus, Finland

### 7.4.2 Customs Officials

Administration des Douanes et Accises, Luxembourg

Agencia Estatal de Adminsistracion Tributaria, Spain

Alfandegas Portuguesas, Portugal

Belastingdienst, Netherlands

Bundesministerium der Finanzen, Germany

Bundesministerium für Finanzen, Austria

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DG Taxud, European Commission

HM Customs and Excise, United Kingdom

Irish Revenue, Ireland

Ministère de L'Economie, des Finances et de l'Industrie, France

Told-Skat, Denmark

Tulli, Finland

Tullverket, Sweden

World Customs Organisation

### 7.4.3 Trade Bodies

Alliance against counterfeiting and piracy, UK

Anti copying in design, UK

Anti counterfeiting group, UK

Association Belge anti-contrefaçon, Belgium

Buma Stemra, Netherlands

Comité Colbert, France

Copyright licencing agency, UK

Danish Anti Counterfeiting Group, Denmark

Danish Textile & Clothing, Denmark

Danmarks Faste Repræsentation, Denmark

European Leisure software publishers association, UK

Federation against copyright theft, UK

Federation Francaise de la couture, France

Finatex, Finland

fvtextil, Austria

GESAMTTEXTIL, Germany

Greek Fashion, Greece

Institut Nationale de la Propriété Intellectuel (INPI), France

Luxury Timepieces, United Kingdom

Österreichische Vereinigung für gewerblichen Rechtsschutz und Urheberrecht, Austria

React Stichting Namaakbestrijding, Netherlands & Belgium

REACT, UK

sistemamodaitalia (SMI), Italy

Swedish Textile & Clothing Industries Association, Sweden

Union des Fabricants, France

Union des Industries Textiles, France

Vereniging Textielindustrie Nederland, Netherlands

#### 7.4.4 International trade bodies

ACEA Association des constructeurs europeens d'automobiles

AIM Association des marques

Association Européenne des Organisations Nationales des Commerçants Détaillants en Textiles (AEDT)

Association of the European Self medication industry

Business Software Alliance

CLEPA

Drug Information Association (Europe)

Euratex

European Association of Aerospace industries

European Brands Association

European Federation of Pharmaceutical Industries and Associations

Fédération de l'Industrie Horlogère Suisse

Federation of the European Sporting Goods Industry

FIGIEFA (International Federation of Automobile Aftermarket distributors)

International Federation of Pharmaceutical Industries and Associations

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International Federation of Recording Rights Artists

International Federation of Spirits producers

International Federation of the Phonographic Industry

International Planning and Research Corporation

International Publishers Association

International Trademarks Association

International Video Federation

Orgalime

Pharmaceutical Security Institute

Society of Motor Manufacturers and Traders

Toy Industry of Europe

World Brands Association

#### 7.4.5 Companies

Adidas

Allied Domecq

Aventis CropSciences

BBC worldwide

Bic

BMW

Ford

General Motors

Giddeon Richter

GlaxoSmithKline

Gucci

Harley Davidson

Hasbro

Intel

Levi Strauss

Louis Vuitton

Luxottica

Mattel Northern Europe

Nike Europe

Philips

Prada

Proctor and Gamble

Tommy Hilfiger

Unilever

#### 7.4.6 Other organisations

Civil Aviation Authority, United Kingdom

Community Plant Variety Office

European Medicines Evaluation agency

International Monetary Fund

International Trade Centre

Interpol

Joint Aviation Authority

Medicines Control Agency, United Kingdom

Organisation for Economic Cooperation and Development

Patent Office, United Kingdom

Universite Pierre Mendes France, Grenoble, France

University of Warwick, United Kingdom

World Bank

World Health Organisation

World Intellectual Property Organisation

## APPENDIX 3. RESEARCH AGENCIES

We have compiled country-by-country lists of organisations that can assist the member states in conducting the research we recommend.

There are three lists:

- Associations of market research agencies. These associations should be able to provide member states with advice on market research agencies capable of conducting the quantitative consumer surveys
- Research agencies offering mystery shopping services. These agencies may be able to provide the member states with fieldworkers able to conduct mystery shopping exercises.
- Research agencies listed by ESOMAR as conducting qualitative research. These organisations can conduct focus groups and other qualitative research to assist member states when developing questionnaires, etc.

### Associations of market research agencies

#### Austria

VMÖ - Verband der Marktforscher Österreichs

c/o Karmasin Marktforschung - Gallup Institut, Anastasius-Grün-Gasse 32 1180  
Vienna AUSTRIA

+43-1-470.4724

<http://www.vmo.at>

#### Belgium and Luxembourg

FEBELMAR - Belgian Federation of Market Research Bureaus

Kroonlaan 159-165 1050 Brussel BELGIUM

+32-2-640.0645

<http://www.febelmar.be>

The Marketing Foundation - Stichting Marketing

Research Park Zellik De Haak 1 1731 Zellik BELGIUM

+32-2-467.5959

<http://www.stichtingmarketing.be>

#### Denmark

Danish Marketing Association - The Market Research Club Dansk

Markedsforingsforbund - Markedsanalyseklubben

Finsensvej 80 2000 Frederiksberg DENMARK

+45-33.11.87.87

<http://www.d-m-f.dk>



FMD - The Association of Market Research Institutes in Denmark Foreningen af Markedsanalyseinstitutter i Danmark

c/o Jysk Analyseinstitut A/S Boulevarden 1 9000 Aalborg DENMARK

+45-98.11.40.90

<http://www.fmd.dk>

#### Finland

FAMRA - Finnish Association of Marketing Research Agencies Suomen Markkinatutkimusliitto Ry

Fredrikinkatu 62 A 22 100 Helsinki FINLAND

+358-9-45.41.94.10

<http://www.smtl.fi>

Finnish Marketing Research Society - Suomen Markkinointitutkimusseura ry  
Suomen Markkinointitutkimusseura Ry

Fabianinkatu 4 B 130 Helsinki FINLAND

+358-9-134.511

The Marketing Research Section of Finnish Marketing Federation Suomen Markkinointiliitto/Tutkimusjaosto

SML/Research Section Fabianinkatu 4 B 131 Helsinki FINLAND

+358-9-651.5

#### France

ADETEM - l'Association Nationale du Marketing Recherche-Stratégie-Action

221 Rue La Fayette 75010 Paris FRANCE

+33-1-40.38.97.10

<http://www.adetem.org>

AFM - Association Française du Marketing

c/o E.S.C.P. 79, avenue de la République 75543 Paris Cedex 11 FRANCE

+33-1-49.23.20.35

<http://www.dmsp.dauphine.fr>

SYNTEC Etudes Marketing et Opinion

3 rue Léon Bonnat 75016 Paris FRANCE

+33-1-44.30.49.20

<http://www.syntec-etudes.com>

IREP - Institut de Recherches et d'Etudes Publicitaires

62 rue la Boétie 75008 Paris FRANCE

+33-1-45.63.71.73

#### Germany

ADM - Arbeitskreis Deutscher Markt- und Sozialforschungsinstitute e.V.

Langer Weg 18 60489 Frankfurt am Main GERMANY

+49-69-97.84.31.36

<http://www.adm-ev.de>

BVM - Berufsverband deutscher Markt- und Sozialforscher e.V.

Postfach 100312 63003 Offenbach/Main GERMANY

+49-69-800.1552

<http://www.bvm.org>

OWM - Organisation Werbungtreibende im Markenverband

Schöne Aussicht 59 65193 Wiesbaden GERMANY

+49-611-586.721

## Greece

AGMORC - Association of Greek Market and Opinion Research Companies

99 Michalacopoulou Str. Athens 115 27 GREECE

+30-1-777.3144

## Ireland

AIMRO - Association of Irish Market Research Organisations

MRC, 24 Windsor Place Dublin 2 IRELAND

+353-1-676.8651

## Italy

ASSIRM - Associazione tra Istituti di Ricerca di Mercato, Sondaggi di Opinione, Ricerca Sociale

Via Larga 13 Milan 20122 ITALY

+39-02-58.31.57.50

<http://www.assirm.it>

## Netherlands

MarktOnderzoekAssociatie.nl

Herengracht 138 derde etage 1015 BW Amsterdam NETHERLANDS

+31-20-623.5215

<http://www.marktonderzoekassociatie.nl>

## Portugal

Associação Portuguesa de Empresas de Estudos de Mercado e de Opinião

Rua Alexandre Herculano, 5-1° 1150 - 005 Lisboa PORTUGAL

+351-21-317.58

<http://www.apodemo.com/>

APPM - Associação Portuguesa dos Profissionais de Marketing Sociedade Portuguesa de Comercialização

Av. Elias Garcia 172-2° Esq 1050 Lisbon PORTUGAL

+351-21-793.6772

<http://www.appm.pt>

## Spain

AEDEMO - Asociación Española de Estudios de Mercado, Marketing y Opinión  
Marketing y Opinión

Entenza, 332-334, 8º 5ª 8029 Barcelona SPAIN

+34-93-363.10.50

<http://www.aedemo.es>

ANEIMO - Asociación Nacional de Empresas de Investigación de Mercados y de la  
Opinión Pública

Velázquez, 146, 3º 2 28002 Madrid SPAIN

+34-91-411.06 85

<http://www.aneimo.com>

#### Sweden

FSM - The Association of Swedish Market Research Institutes Föreningen Svenska  
Marknadsundersökningsinstitut

P.O. Box 92152 120 08 Stockholm SWEDEN

+46-8-772.2403

<http://www.fsm.a.se>

SÖK - The Swedish Market Research Society Sveriges Marknadsundersökare och  
Marknadsanalytiker

c/o B2B Klara Norra Kyrkogata 33 111 22 Stockholm SWEDEN

+46-8-203.39

#### United Kingdom

British Market Research Association

Devonshire House 60 Goswell Road London EC1M 7AD UK

+44-20-7566.3636

<http://www.bmra.org.uk>

The Market Research Society

15 Northburgh Street London EC1V 0JR UK

44-20-7490.4911

<http://www.mrs.org.uk>

#### Research agencies offering mystery shopping services

##### Austria

Hoffmann & Forcher Marketing Research \*

Consent

IGF

IMAGE

Karmasin

Konso International Marketing Research GmbH

##### Belgium

Significant Marketing Research

Dedicated Research  
Marketing Development  
Lodge Service - React Surveys NV/SA

**Denmark**

DMA/Research A/S  
SocioResearch

**Finland**

Palvelu Plus - Service Plus Oy/Ltd \*  
Gallup Marketing Research  
ISS-Otantatutkimus Oy

**France**

Présence Mystery Shopping \*  
Société DMS \*  
ADCE/ ADC Logistic  
CEGMA TOPO Conseil et Etudes en Gestion et Marketing  
Field Facts France  
GMV Conseil  
iSL (Institut de Sondages Lavialle)  
La Maison Du Test  
Market Audit  
MV2 Conseil  
Profil Marketing Marketing Research and Study Company

**Germany**

International Service Check \*  
Confield Research  
Gelszus Marktforschung GmbH  
HKM - Hartmut Keller Marktforschung  
infas TTR GmbH  
L+H Marketing Services GmbH  
MKS Institut für Marktforschung GmbH  
Produkt + Markt mbH & Co. KG  
RCTA - Research & Consultancy Thomas Ansorge GmbH  
SKOPOS

**Greece**

'A' Research  
Metron Analysis SA  
Opinion - High Technology Market Research

**Ireland**

PAN Research Ltd \*  
Quota Search Ireland

**Italy**

Adacta

aRES Automotive Research Srl  
B&C s.r.l.  
Doxa S.p.A.  
Evolvere Srl  
Field Service Italia S.r.l.  
Grandi Numeri SR. Teleperformance Group  
Leader Field S.r.l.  
Marketing Management SRL  
Marketing Solutions Italy  
Marpool S.r.l.  
Müller & Associati srl  
Numero Blu SpA  
PEOPLESWG Srl  
Pragma S.r.l.  
Ricerca SpA  
SINETICA S.r.l.  
SINETICA S.r.l.

#### Luxembourg

None identified – but agencies based elsewhere will cover area

#### Netherlands

Advance in Quality Services \*  
ITC International BV  
Rie Schouten Veldwerk Organisatie BV

#### Portugal

Euroexpansao S.A.  
Indicator Ibérica SA  
Intercampus

#### Spain

Area Investigacion, SA  
Inner Line SA  
Invymark, SA  
Quota Unión SA

#### Sweden

AB Bättre Affärer/Better Business \*  
Retail Services Sweden \*  
IMRI - International Market Research Institute AB  
IntervjuPoolen Research EP AB  
Movement Research & Consulting Nordic KB  
Philipson Marknadsstrategi  
Survey Sweden AB

#### UK

NOP World Mystery Shopping \*

React Surveys \*  
ESA Market Research Ltd \*  
Field Facts Worldwide \*  
Aura Corporation UK Ltd.  
FDS International Ltd  
Marketing Sciences Ltd  
The Sample Surveys Research Group  
Taylor Nelson Sofres plc

\* Listed by Mystery Shopping Providers Association (MPSA)

Research agencies listed by ESOMAR as conducting qualitative research

**Austria**

2-morrow  
Consent  
FESSEL-GfK Institut für Marktforschung GmbH  
Hoffmann & Forcher Marketing Research  
IFES Ges.m.b.H - Institut für Empirische Sozialforschung  
IGF Institut für Grundlagenforschung GmbH  
IMAGE Markt- und Meinungsforschung  
IMAS International  
INFO Research International  
Institut für Motivforschung Univ  
Integral Markt- und Meinungsforschung Ges.m.b.H.  
Karmasin Marktforschung Das Österreichische Gallup-Institut  
Konso International Marketing Research GmbH  
MAFOS - Institut fuer Systemische Marktforschung GmbH  
Market-Marktforschungs GmbH & Co KG  
Marketing Data  
Müller -M- Marktforschung Ges.m.b.H.  
SPECTRA MarktforschungsgesmbH  
TECHNOMA GmbH  
TRICONSULT Wirtschaftsanalytische Forschung Ges.m.b.H

**Belgium**

Ask Business Marketing Intelligence  
Aspemar NV-SA  
CBEM SA - Centre Belge d'Etude de Marchés  
Censydiam NV

Columbus  
Dedicated Research  
EuroStrategy Consultants (Belgium)  
Gates Marketing Research & Consultancy  
IMADI  
Information & Data  
INRA Belgium  
INRA International Coordinations Office  
Ipsos Brussels  
IRB Europe Sprl  
ITC - Management Consultants  
Keystone Network  
MARESCO  
Market&More Belgium NV  
Quality Research  
Research International  
Research Solution  
Results Innovative Marketing Services  
Rofield/MR&C  
Rogil Field Research NV  
Significant  
TNS Dimarso  
TNS Media  
Yellow Window Management Consultants NV/SA

## Denmark

Aalund Business Research A/S  
ACNielsen AIM A/S  
Alsted Research A/S  
Berent Aps  
Biotechnological Institute  
CATINÉT Research ApS  
DMA/Research A/S  
EKG - Planning & Advertising ApS  
FENESTRA  
Gad:Ulveman A/S  
Gallup A/S  
GfK Danmark A/S  
Institut for Konjunktur-Analyse IFKA A/S

Lykke & Nedergaard Research Ltd  
Millward Brown Denmark APS  
NeedFindings ApS  
Research International  
SocioResearch  
SONAR - Institutttet for Markeds- og Opinionsanalyser  
Tranberg Marketing Rekommandation  
Userminds  
Vilstrup Research  
Wilke Markedsanalyse A/S

#### Finland

Consumer Compass - Kuluttajatieto Oy  
Corporate Image Oy  
Cureco Finland Ltd  
Gallup Advertising Research  
Gallup Automotive  
Gallup Food and Farm Facts  
Gallup Insight  
Gallup Marketing Research  
Gallup Media  
Gallup WEB  
IRO Research Oy  
ISS-Otantatutkimus Oy (International Sample Survey)  
Makrotest Finland Oy  
MAPS Psychological Consulting in Marketing  
Marketing Radar Ltd  
MDC Research Group  
Research International  
Suomen Gallup Oy  
Taloustutkimus Oy  
Tietoykkönen Oy  
Tutkimuspalvelu Pipsa Snell Oy Pipsa Snell Research Services Ltd.

#### France

A & A Healthcare Marketing Research  
ACNielsen  
Action Hexagone  
Actys Etudes Audit Conseil  
Ad Hoc Research



ADCE/ ADC Logistic  
Added Value France  
Adriant SA  
Allegoria Consultants  
Altavia Junium - Institut de l'Enfant - Youth Opinion International  
Ardoin Consultants  
Arkema  
Ask France  
Aviso Conseil  
BVA  
Catherine Delannoy et Associés  
CEGMA TOPO Conseil et Etudes en Gestion et Marketing  
Concret International SA  
Cryptos  
CSA TMO  
Cyble Marketing  
DAFSA  
Diana Beckett Marketing Research Consultant  
Dorset Développement  
Ducker Research Europe SA  
Dédution  
E/O Consult  
Efficienc 3  
Epigone Études et Recherche Marketing  
EPSY - Marketing and Social Research  
Euroquest  
Field Facts France  
Fovea SA  
FullSIX Research  
Gatard & Associés  
Gaultier & Associés  
GfK France  
GMV Conseil  
Herzog SA  
ICARE  
Icône France  
IES Information Europe Services  
IFEM Institute

IFOP  
Imago Etudes Conseil  
IMAJ  
InfraForces  
Insemma International Marketing Research  
Institut Français de Demoscopie  
IOD (Institut d'Observation et de Décision)  
Ipsos France  
Ipsos-Novaction Marketing Consultants  
iSL (Institut de Sondages Lavalie)  
IstiaGira consommateur  
La Maison Du Test  
Marc Gilles et Associés  
Market Audit  
Market&More France  
Mediaslife Sarl  
MFR Strategie SA  
Millward Brown France SAS  
Minerva  
Motivaction  
MSM - Motivation Stratégie Marketing  
MV2 Conseil  
NFO Infratest  
Novatest  
OPTEM  
PLM Marketing Research (Philippe Lespinet Marketing Conseil)  
Praxis  
Profil Marketing Marketing Research and Study Company  
Reperes  
Research International  
RISC International (Europe) SA  
Romance Alant Consultants  
SEGA Marketing  
SOCIOSCAN  
Sociovision Cofremca  
SORGEM  
Strategir  
SYLAB - YPSIS GROUP

Taylor Nelson Sofres  
TELEOS Recherche - Etudes - Conseil  
THEMA  
VECTIS CONSEIL  
Wilson Qualitative Research Consultants

## Germany

abs Marktforschung Abele & Ströhle OHG  
ACNielsen GmbH  
ACOS Analyse & Consulting GmbH  
AMR - Advanced Market Research GmbH  
Analysis the Scent Company International  
AnswerS Teststudio GmbH  
ASAP  
ASK  
Basis-Kontakt Marktforschung  
BBE Unternehmensberatung GmbH  
Bever Medizin- Marktforschung  
bmc -  
bms  
Cobus Marktforschung GmbH  
Cococe Communication Research and Consulting  
Compagnon Marktforschung GmbH & Co KG  
Confield Research  
CZAIA Marktforschung GmbH\*TECUM(R)  
Dialego AG Market Research Online  
Enigma GmbH  
Ernest Dichter  
facit Marketing-Forschung GmbH  
Field Facts Deutschland GmbH  
Foerster & Thelen GmbH  
forsa  
g/d/p  
Gelszus Marktforschung GmbH  
Georgiades Marketing GmbH  
GfK Data Services GmbH  
GfK Group  
GfK Marktforschung GmbH  
GfK Medienforschung

GIM  
GMS  
GO  
GP Forschungsgruppe  
H,T,P, Concept GmbH  
HKM - Hartmut Keller Marktforschung  
I+G Gesundheitsforschung  
icon brand navigation group GmbH  
iconkids & youth  
IfA  
IFAK  
IFEP Marktanalysen GmbH  
IJF Institut für Jugendforschung  
IMAS International  
Impulse  
IMW-KÖLN  
infas TTR GmbH  
InMaFo GmbH  
INRA Deutschland GmbH  
Insight Europe GmbH  
Insight Market Research & Consulting GmbH  
Institut für Demoskopie Allensbach GmbH  
Institut für Marktforschung GmbH  
Inviso  
Ipsos Deutschland GmbH  
IRES  
ISM GLOBAL DYNAMICS  
Klare Antworten  
Kleffmann & Partner GmbH  
Kohorten GmbH & Co.  
Konzept + Analyse AG  
L+H MarketingServices GmbH  
Leube Marktforschung GmbH  
Leyhausen & Partner Feldorganisation GmbH  
LINK + Partner  
MAFO-Institut  
Market&More Germany  
Marketing Systems GmbH Automotive Services

Marktforschung Zentzis GmbH  
mc markt-consult  
Media Markt Analysen GmbH & Co  
MediaTransfer AG Netresearch & Consulting Netresearch & Consulting  
Millward Brown Germany GmbH & CoKG  
MKS Institut für Marktforschung GmbH  
Monheimer Institut Team  
MRI MarketResponse GmbH  
MS Mott Schlebusch Marktforschung GmbH  
MTC EuroMarkenTest GmbH, Marketing Test & Conception  
MWRResearch Marketing Research Consultant  
Müller Goldfarb Consultants  
Naether Marktforschung GmbH  
NFO Infratest  
NFO Infratest InCom  
NFO Infratest Marketingforschung  
NFO Infratest Wirtschaftsforschung  
NFO TestPanel-Institut  
NOP Automotive  
Opinion Market Research & Consulting GmbH  
Partner Research Marktforschungs-Gesellschaft mbH  
PDC Marketing Research GmbH  
Perleberg Pharma Partner International Marketing Research for Health & Body Care  
Phone Research KG  
PM & Partner Marketing Consulting GmbH  
PMF Planmarktforschung GmbH  
Produkt + Markt gmbH & Co  
Profil Marketingforschung GmbH  
psychonomics AG  
psyma GmbH  
Psyma International Medical Marketing Research GmbH  
psyma online research GmbH  
RCM Market Research GmbH  
RCTA - Research & Consultancy Thomas Ansorge GmbH  
Research International  
Resultate Institut für Marktforschung und Marketingberatung GmbH  
rheingold - Institute for Qualitative Market and Media Research  
RISU - Research for International Strategies and Better Understanding

RMM Marketing Research International GmbH  
Roland Berger Market Research  
RSG Marketing Research GmbH  
Schaefer Marktforschung GmbH  
Schmiedl Marktforschung GmbH  
Schöttmer Institut für Verbraucherbefragung GmbH  
sensus Markt- und Sozialforschung GmbH  
SIGMA GmbH  
SINUS Sociovision GmbH  
SKOPOS  
SMH Marktforschung BVM, DMV  
Sommer Research  
Spiegel Institut Mannheim  
Target Group GmbH  
theMa Marktforschungsgesellschaft mbH  
TIP Biehl & Wagner  
TNS EMNID  
Transferresearch  
TransMarket GmbH  
trend & motives GmbH  
Dr. von Keitz GmbH

## Greece

ACNielsen SA  
Centrum SA Strategic Marketing Research  
Edge, Research & Consultancy  
Explorer Worldwide Research  
Focus Athenian Marketing Research Centre  
Global Link International Marketing Research  
Hellenic Research House  
ICAP AE  
KEME/MEMRB Greece  
Market Analysis Ltd  
Marketeck Co Ltd  
Medi-Mark Ltd  
Metron Analysis SA  
MRB Hellas SA  
MRC - The Market Research Centre Ltd  
ORCO S.A. - Operational Research Consultants

Prisma Options Ltd  
Prognosis SA  
qed think tank Ltd  
Research International  
STOHOS Ltd  
VPRC SA

## Ireland

ase  
Behaviour & Attitudes Limited  
Irish Marketing Surveys Limited  
Lansdowne Market Research Ltd  
Market Research Bureau of Ireland Ltd  
Quota Search Ireland  
Research Centre Limited

## Italy

Abacus SpA  
ACNielsen CRA  
Adacta  
ALES Srl  
AMT Consulting Srl  
ARCHE' Srl  
aRES Automotive Research Srl  
ARETE' Srl  
ArkeII Rush Associates  
ART sas  
ATESIA SpA  
B and B Srl  
B&C Srl  
CFI Group & GPF Srl  
CIRM Market Research SpA  
Creativity di Graziella Messina  
Creatività Nuova Srl  
Criterion  
Databank Group  
Datamedia SpA  
Delfo Srl  
Directa Srl  
Doxa SpA

Egeria Srl  
Eurisko SPA  
Evolvere Srl  
Field Service Italia Srl  
Future Concept Lab Srl  
GfK - ASM Srl  
Goldfarb Marketing Research  
GPF & Associati SpA  
Grandi Numeri SR Teleperformance Group  
InraDemoskopea SpA  
Inter@ctive Market Research  
Ipsos-Explorer  
Isida  
Iterion Srl  
Kronos Srl  
Leader Field Srl  
Lexis ricerche Srl  
LIBRA  
Makno & Consulting  
Marcam Market Response  
marea\_marketing research & analysis  
Market Dynamics International Srl  
Marketing & Trade Srl  
Marketing Lab  
Marketing Management SI  
Marketing Solutions Italy  
Marpool Srl  
MC International Srl  
Medi-Pragma SrL  
Mesomark Group Srl  
Millward Brown Italy Srl  
MK-Market Key Srl  
Monitor Team Srl  
MPS - Marketing Problem Solving Srl  
Müller & Associati Srl  
NFO Infratest  
Nico snc  
NOMESIS



Numero Blu SpA  
PEOPLESWG Srl  
Percorsi Srl  
Periscope  
PiTRE Consumer Srl  
PiTRE Srl  
Pragma Srl  
Probe Srl  
QT Srl  
RCI - Research & Consulting International  
Research International SpA  
Ricerca SpA  
Rimarko Srl  
RQ Ricerche Qualitative  
SGR International Srl  
Simulation Intelligence Srl  
Sinaptica Srl  
SINERGI  
SINETICA Srl  
Studio R P M  
TESEO Srl  
TMT Pragma SrL  
UBM Consulting Srl  
Unicab Italia SpA

## Luxembourg

ILReS Market Research

## Netherlands

Analyse Research & Strategy  
ARS Group of rsc  
Blauw Group BV  
Branches & Trends BV  
Censydiam Nederland BV  
Centrum voor Marketing Analyses  
Forum Marketing Research  
Interview-NSS  
Intomart BV  
IOG Marketing Research BV  
IPM

ISEO Marketing Research BV  
isk/NOVA  
ITC International BV  
Ithaka Media Consult  
KNOTs Europe BV  
Landscape Marketing Research Services BV  
M4 Marktonderzoek BV  
Mare Holland BV  
Market&More The Netherlands BV  
MarketResponse International Group  
Mobiel Centre Marktonderzoek BV  
Morph Research  
Motivaction Amsterdam BV  
MRC Onderzoek & Advies BV MRC Onderzoek  
MSA Groep BV Buro voor Marketing Research  
NFO Trendbox  
NIPO The Market Research Institute  
PMR - Partners in Marketing Research  
PQR - Plasschaert Quality in Research  
Psyma BV  
R&M, Research and Marketing BV  
Research International  
Rie Schouten Veldwerk Organisatie BV  
Signicom Marketing Research BV  
SKIM Analytical  
Team Vier BV  
Telder Research Data & Facilities BV  
TWM / Qualitative Market Research  
Veldkamp / Marktonderzoek  
VLC Van Leeuwen Consulting BV  
VWB intermedical BV  
WEMAR International Research BV

## Portugal

ACNielsen  
APEME  
CEMASE Lda  
Consulmark  
Euroexpansao SA

GfK Portugal Marketing Services  
Indicator Ibérica SA  
Intercampus  
Ipsos (Portugal)  
Metris  
Millward Brown Portugal  
Motivacao Estudos Psico-Sociológicos Lda  
Multivaria  
Quadrante, Lda  
Quaestio  
QualiQuanto  
Sigma Dos Portugal  
Taylor Nelson Sofres Euroteste

## Spain

ACNielsen  
Análisis e Investigacion SL  
Análisis y Servicios de Marketing, SA  
Append - Marketing Research  
Area Investigacion, SA  
ARPO Research Consultants  
Bernard Krief, SA  
Block de Ideas, SA  
Censydiam España  
CIES, SL  
Conecta Research and Consulting  
Cuanter, SA  
Delta Marketing Research  
Demométrica  
Demoscopia SA  
Ergo Advanced Research, SA  
ERYBA SL Estudios de Mercados  
Escario & Associates  
Estudio Silvia Roca SL  
Fieldwork, SL  
GfK + EMER Marketing Research, SA  
GIMARK  
Grupo Gallup España  
IDEA Strategic Research Solutions

IMS Health, SA  
Inner Line SA  
INNER Strategic Research, SA  
INRA España SA  
Instituto DYM, SA  
Intercampo SA  
Invymark, SA  
Ipsos-Eco Consulting  
Link + Partner España SA  
Market AAD  
Market Arena  
Metra Seis, SA  
Millward Brown Alef SA  
NFO Infratest  
Nueva Investigación  
QUID  
Quota Unión SA  
Qíndice SL  
RANDOM  
Research International  
Schmitow, Ubeira, SL  
Sigma Dos Interactiva  
Sigma Dos, SA  
SMART Research SL  
Strategic Meth & System  
Strategic Research 2000 SA  
SynErgic Investigación y Marketing  
Taylor Nelson Sofres  
Taylor Nelson Sofres Healthcare Spain  
Vox Publica

## Sweden

AAA Analysexperten  
AB Marknadsforskning  
AB Stelacon  
Alert Marknadskonsult Tommy Eklund AB  
Amarillo Research & Consultancy AB  
Andreas Lund & Co AB  
Askus AB

Borell Market Research AB  
Demoskop AB  
Eureka Marknadsfakta AB  
GfK Sverige AB  
IMA Market Development AB  
IMAB Industriell Marknadsanalys AB  
IMM / Demoskop AB  
IMRI  
Infactum AB  
Intermetra Business & Market Research Group AB  
Kommunicera Marketing Consultation Ltd  
Kundskaparna AB  
MarketWatch Scandinavia  
Marknads Systematik AB  
Medical Radar  
MOA Group AB  
Movement Research & Consulting Nordic KB  
Navigare Medical Marketing Research AB  
Netsurvey Bolinder AB  
New Media Research AB  
NFO Infratest  
Norstat Sverige AB  
NUI AB Business Research Institute  
Orange Interactive Research AB  
Philipson Marknadsstrategi  
Research International Sweden AB  
Research RBM AB  
ScandInfo Marketing Research AB  
Survey Sweden AB  
Svenska Gallup  
TEMO AB

## United Kingdom

2cv:research  
AAA Research  
ACNielsen Research International  
Added Value  
Adelphi International Research  
Albemarle Marketing Research

Andrew Lester & Associates  
Arnold & Bolingbroke Limited  
ase  
aura Corporation UK Ltd  
B&MR  
B2B International  
BDRC  
Benchmark Research Ltd  
BMRB International  
BPRI Business Planning & Research International  
Buckingham Research Associates  
Censydiam Ltd  
Citigate DVL Smith Ltd  
CJMR - Carrick James Market Research  
Conquest Research Ltd  
Consumer Profile Ltd  
Context Research International Ltd  
Continental Research  
Corporate Edge  
Counterpoint Research  
CRAM International Ltd  
Decision Shop  
Define Research & Marketing International  
Diagnostic Research International  
Discovery Research Ltd  
Drummond Madell  
EGG Research & Consultancy Ltd  
ESA Market Research Limited  
Europe Japan Centre plc  
Euroquest  
Evo Research and Consulting Ltd  
Facts International Ltd  
Fathom  
FDS International Ltd  
Field Facts Worldwide  
Fieldwork Services  
Fiori Nash Ltd  
Flamingo International

Gallup Organization  
Global Market Research  
Goldfarb Consultants  
Green Light Research  
Happy Dog Group  
Hauck Research International  
HPI Research Group  
Hugh Bain Research Limited  
ICM Research  
icon brand navigation (UK) Ltd  
IFF Research Ltd  
Incite Market Planning  
Independent Fieldwork Company  
Insight International  
Interbrand  
International Field and Tab Solutions Limited  
Intimations  
Ipsos UK Ltd  
Ipsos-Insight Limited  
Ipsos-International CatiCentre  
Ipsos-Novaction (UK) Limited  
Isis Research plc  
JD Power and Associates  
JRA Research  
Kadence (UK) Ltd  
Laser Marketing Research (Europe) Ltd  
Lumina Business Solutions Limited  
Managing the Service Business (MSB) Ltd  
Maritz Research  
Market Research Solutions  
Marketing Direction International  
Marketing Sciences Ltd  
Martin Hamblin GfK  
MASMI Research (UK) Ltd  
Michael Herbert Associates Ltd  
Millward Brown UK Ltd  
MMR Food + Drink Research Worldwide  
MOA Group

Mobile Sensory Testing Services Limited  
MORI (Market & Opinion Research International)  
MORPACE International Ltd  
MRM Projects Limited  
Mulholland Research & Consulting  
NFO WorldGroup  
NFO WorldGroup  
Nikkei Europe  
NOP Research Group Ltd  
NOP World  
Nunwood Consulting Ltd  
Opinion Research Business Ltd  
Opinion Research Corporation - UK  
Pegram Walters  
Planning Shop International  
Plus Four Market Research Limited  
Prescient Ltd  
Quaestor Research & Marketing Strategist  
QualiQuant International Ltd  
RDSi  
Recom Research in Communications  
Red Sheriff  
Research Business International  
Research Europe  
Research In Focus Ltd  
Research Insight Ltd  
Research International Group  
Research International (UK)  
Retail Marketing In-Store Services Ltd  
Ronin Corporation  
Roper ASW Europe  
Rosslyn Research Limited  
RS Consulting  
Sadek Wynberg Research  
Sagitta Consultancy Limited  
Sample Surveys Research Group  
Scantel International  
Scott Porter Research and Marketing Ltd



Second Sight International Ltd  
Serendipity Brand Makers Limited  
Simons Priest & Associates  
Simpson Carpenter Ltd  
Sports Marketing Surveys Ltd  
Survey & Marketing Services Ltd  
Taylor Nelson Sofres Healthcare  
Taylor Nelson Sofres plc  
Topflight Research Ltd  
Total Research Limited  
Tramor International Research  
VAR International Ltd  
Viewpoint  
Virtual Surveys Limited  
Wardle McLean Strategic Research Consult  
WDG Ltd  
Wirthlin Europe Ltd

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## APPENDIX 4. SELECTED BIBLIOGRAPHY

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