Illicit Trade in Ireland

Uncovering the cost to the Irish economy
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Executive summary

Introduction
Although frequently thought of as a victimless crime, illicit trade has a significant impact on the Irish economy. The objective of this report is to provide a detailed assessment of illicit trade in Ireland across a select number of sectors, namely fuel, tobacco, digital media and pharmaceuticals.

With regard to each of these sectors, the report seeks to understand the impacts, identify key drivers behind these illicit trades, and where possible, quantifies the losses to the economy. Ultimately this report proposes an integrated approach to tackling the problem of illicit trade in Ireland.

What is illicit trade?
The most common definition of illicit trade is that used by the World Health Organisation (WHO) which covers many different areas that go beyond the scope of this report. These include money laundering, cash transaction, human trafficking and the trade in illegal drugs. Within the context of this report, the term “illicit trade” is more narrowly defined as:

- Intellectual Property Crime (IPC);
- Contraband; and
- Illegal manufacturing.

Importance of intellectual property
It is widely accepted that the recognition of Intellectual Property (“IP”) plays a vital role in promoting innovation and stimulating the economy in order to foster growth. Therefore, it is vital that appropriate legal recognition, public policies and enforcement is in place to ensure that IP and brands are protected.

<table>
<thead>
<tr>
<th>Importance of IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>- encourages innovation</td>
</tr>
<tr>
<td>- drives economic growth and competitiveness</td>
</tr>
<tr>
<td>- differentiates Irish products in the international marketplace</td>
</tr>
<tr>
<td>- creates and supports jobs</td>
</tr>
<tr>
<td>- incentivises education</td>
</tr>
<tr>
<td>- rewards entrepreneurs</td>
</tr>
<tr>
<td>- helps incentivise the search for solutions to global challenges</td>
</tr>
<tr>
<td>- encourages Foreign Direct Investment (FDI)</td>
</tr>
<tr>
<td>- brand acts as a guarantee to health and safety</td>
</tr>
</tbody>
</table>

Illicit Trade in Ireland
Despite the importance of IP rights and an increased emphasis on IP protection, significant levels of illicit trade remain in operation throughout the Irish economy. Illicit Trade in Ireland is not confined to a single industry but is present in a broad spectrum of activity across the Irish economy. The scale and
Illicit Trade in Ireland

The scope of illicit trade in Ireland has resulted in significant losses to the Irish economy. The losses suffered include a number of important stakeholders such as right holders, retailers, consumers, the Government and the wider economy.

Whilst almost every area of the general economy is subject to losses as a result of illicit trade, this report has narrowed its focus to a number of core areas which are having the most detrimental effect on the Irish economy.

To address any problem, the first step should be to understand the problem and in this report we have attempted to do just this.

The estimates that we have provided in this report show that illicit trade could be costing right holders as much as €547m per annum and the Irish Exchequer as much as €937m per annum. These are summarised in table A below. (It is important to highlight that these figures only include data from four sectors, and these losses are likely to be greater if other illicit trades were included.)

Table A – Cost to the economy

<table>
<thead>
<tr>
<th></th>
<th>Right holders/retailers lost revenues, €m</th>
<th>Government loss to Exchequer, €m</th>
<th>Total loss to the economy, €m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Fuel laundering</td>
<td>€112</td>
<td>€205</td>
<td>€142</td>
</tr>
<tr>
<td>Tobacco</td>
<td>€54</td>
<td>€122</td>
<td>€240</td>
</tr>
<tr>
<td>Digital piracy</td>
<td>-</td>
<td>€220</td>
<td>-</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>-</td>
<td>-</td>
<td>€36</td>
</tr>
<tr>
<td></td>
<td>€165</td>
<td>€547</td>
<td>€418</td>
</tr>
</tbody>
</table>

The analysis of the selected illicit trades has shown that oftentimes the non-financial impacts are as important as the financial and in some cases more important. These non-financial impacts include: health and safety concerns, reputational damage, undermining the rule of law and the growth in organised crime.

Linkage of organised crime across illicit trades

A recurring theme, for all industries reviewed in this report, has been the involvement of Organised Criminal Gangs (“OCGs”). The analysis of the individual areas of illicit trade in Ireland shows that there is considerable linkage between the various illicit trades with these OCGs, frequently involved in a number of illegal activities such as fuel laundering and tobacco. These OCGs have diversified across a wide range of illegal activities. One of key drivers, behind this diversification, apart from the financial incentive, is traced to the supply route, which once established can be used to transport many types of goods.

Key drivers of illicit trade

The analysis performed within this report across a variety of different industries shows that, although these industries may be very different in terms of products, the drivers of the supply and demand of illicit trade across these industries remain largely similar. These are summarised in Table B below.

Table B – Key drivers of illicit trade

<table>
<thead>
<tr>
<th></th>
<th>Supply</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market characteristics</strong></td>
<td>• high unit profitability</td>
<td>• low prices</td>
</tr>
<tr>
<td></td>
<td>• large potential market size</td>
<td>• acceptable perceived quality</td>
</tr>
<tr>
<td></td>
<td>• genuine brand power</td>
<td>• ability to conceal status</td>
</tr>
<tr>
<td><strong>Production, distribution and technology</strong></td>
<td>• moderate need for investments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• moderate technology requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• unproblematic distribution and sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• high ability to conceal operations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• easy to deceive consumers</td>
<td></td>
</tr>
<tr>
<td><strong>Institutional characteristics</strong></td>
<td>• low risk of discovery and prosecution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• weak legal and regulatory framework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• weak enforcement</td>
<td></td>
</tr>
</tbody>
</table>

1 The ITMAC figure of €569 million includes Non-Domestic Legal (NDL) consumption which cannot be classified as illicit trade. The KPMG Star report, 2012 estimated NDL to be 9% of total consumption and therefore the total figure should be split between counterfeit and contraband of €386 m and NDL of €183 m.
Selected industries

Fuel
There are a number of different types of illicit fuel: smuggled, mixed, stretched and laundered. However it is the area of fuel laundering that offers the biggest threat in terms of the supply of illicit fuel to the Irish economy both North and South of the border. Fuel laundering is the illegal process which removes marker dye contained in agri-diesel from red (UK) and green (ROI). Red and green diesel is legitimately available for agricultural purposes and is significantly cheaper than road diesel.

Despite positive efforts from enforcement officials, it has become more difficult for officials to detect fraudulent fuel due to the complexity of the supply chain. Estimates, as to the losses to the Exchequer, range from €140 million to €260 million. In addition to the losses to the Exchequer, legitimate retailers of fuel are struggling to survive as they encounter increased competition from retailers selling adulterated fuel, either knowingly or unknowingly. Consumers are being impacted through the damage that such fuel can cause their engines and the local communities are being affected through environmental damage caused by the laundering process and the subsequent clean-up costs.

Tobacco
The illicit trade in tobacco creates the greatest cost in terms of annual losses of revenue to the Exchequer, with estimates ranging from €250 million by the Revenue Commissioners to €569 million by the industry. At present Ireland currently has the second highest price of tobacco in the EU. At €9.30 for a packet of 20 cigarettes this price is having an impact on levels consumption of counterfeit and contraband tobacco. Whilst Government policy is to be commended in its efforts to reduce the prevalence in smoking, any price increases need to be balanced with increased enforcement and a more severe legislation that acts as a greater deterrent to such illicit trade. Without such a balanced approach it is likely that market failures will continue to occur and illicit trade will continue.

Digital piracy
Digital piracy includes software piracy, audio-visual piracy and the theft of electronically transmittable IP. Fundamentally, digital piracy is different to the other forms of illicit trade contained in this report. It is not always motivated by the monetary ambition of criminals and does not require production and distribution of physical products. Despite these differences the financial implications for both industry and government are significant.

The commercial value of software piracy in Ireland is estimated to be around $144m, while the music industry has declined by €65 million in the five year period up to 2012. Such losses are having a major impact on both creative and retail industries in Ireland, which is evidenced by the large numbers of recent high profile commercial casualties with the trade. In order to protect the audio-visual industry the legislative framework needs to be strengthened and brought in line with EU directives.

Pharmaceuticals
For Ireland, the illicit trade in pharmaceuticals assumes more of an international dynamic. Although there is a certain level of consumption of illicit medication in Ireland, which is estimated to cost the Irish economy more than €86 million annually, it is the increased global consumption of illicit pharmaceuticals that is the greatest threat to the Irish economy.

Currently the Irish share of global pharmaceutical exports is 7.7%. There are over one hundred pharmaceutical and chemical companies operating in Ireland, which includes fourteen of the top fifteen international companies. Additionally there are over 24,000 people directly employed in the sector and a similar amount indirectly employed. This international growth in the consumption of illicit pharmaceuticals therefore has major consequences for existing and potential Foreign Direct Investment in the Irish economy. Ireland therefore needs to be proactive in its international co-operation.

² IPHA, 2008: Response to the EC consultation on counterfeit medicines for human use
**International aspects – IP**

The increasing trend of illicit trade and IP crime is not simply an Irish problem but also a global one. Concerted efforts have been made by the international community through international organisations, such as the World Intellectual Property Organisation (WIPO) the World Trade Organisation (WTO) and other organisations, to bring a more co-ordinated approach to tackling the issues of IP crime.

Increased international co-operation is vital to Ireland in combating the growing problem of IP crime in order to ensure that strategies adopted in Ireland are in line with international best practice. Furthermore, Ireland needs to be at the forefront of this co-operation, in order to ensure that it is “at the table” on international decisions which develop policies to tackle these issues.

**Call to action**

A recurring issue throughout the analysis of the various industries are the weaknesses in enforcement and legislation currently in place to tackle the issue of illicit trade. A more unified and aggressive regime is required.

It is recommended that a committee is established; similar to the joint committee on Environment, Transport, Culture and the Gaeltacht, which has the responsibility for fuel laundering. The committee, comprising of both sector and State interests, will have direct responsibility for illicit trade in Ireland across the spectrum of industries suffering from illicit trade. The objective of the proposed committee would be to facilitate information sharing, and ensure that there is a more proactive and joined up approach taken to tackling all issue of illicit trade.

**Strategic plan to tackle illicit trade**

To tackle illicit trade, a comprehensive legislative framework and enforcement measures is required regarding IP infringements, production, distribution and purchase of illicit products is in place. Through the introduction of a consistent and evidenced based approach to the problem across all industries, we believe that it is possible to more effectively target the drivers behind illicit trades, learn from the lessons from other industries and enable Ireland to become more proactive in the fight against illicit trade. To do this, it is recommended that an 8 step strategy is introduced across all industries. This 8 step strategy is illustrated by the below diagram.

*Figure A – Aligned strategy to tackle illicit trade*
Introduction

Over the past three years the subject of illicit trade and the unregulated economy has come to the forefront of public debate in Ireland. There is growing concern from Government and commercial sectors that illicit trade has gotten out of control and a more integrated action plan is required.

In general terms the on-going effects of the economic crisis have brought Irish citizens into closer proximity with illicit trade and aspects of organised crime. The added financial constraints have made communities more tolerant towards illicit commodities especially counterfeit goods and created perception that it is a “victimless crime”.

From an international perspective the issue of illicit trade is not new, however it appears to be growing in “scope and magnitude”. Increased globalisation, more open economies, the free movement of goods and increased internet penetration have all played a significant factor in facilitating the growth of illicit trade.

Retail Ireland, in association with EPS consulting in their recent report entitled “Tackling the black market in Ireland”, estimated that illicit trade in Ireland is costing the economy €860m per annum. This report has prompted us to prepare this follow-up paper, to further investigate the specific sectors that are exposed to the adverse effects of illicit trade.

Despite the importance of the problem, calculating the associated cost to the economy is inherently difficult and estimates of the damage to the global economy vary greatly. The Organisation for Economic Co-operation and Development (OECD) has estimated that the cost of the illicit trade of “physical goods” to the global economy is around €250bn per annum, whilst Global Financial Integrity and the International Anti-Counterfeiting Coalition (IACC) estimated that the figure is closer to €600bn per annum.

Despite differences in estimates, it is clear that illicit trade is a significant problem globally and one that needs to be tackled as a matter of urgency. The big losers in the face of this illicit trade include government treasuries, legitimate businesses national and local economies, public safety and security concerns.

Scope and objective

The objective of this report is to provide an assessment of illicit trade and IP crime in Ireland. Grant Thornton, in conjunction with Retail Ireland, aims to raise awareness of the growing threat to the Irish economy. Ultimately, the objective of this report is to put forth a realistic and joined up approach to tackle the problem of illicit trade in Ireland across a variety of different sectors.

What is illicit trade?

Illicit trade is a complicated concept. In the context of this report, it is important that there is a common understanding and definition of what is meant by the
term illicit trade. The World Health Organisations (WHO) has broadly defined illicit trade as “any practice or conduct prohibited by law and which relates to production, shipment, possession, distribution, sale or purchase including any practice or conduct intended to facilitate such activity”. 3

This definition is broad and it covers many different areas that go beyond the scope of this report, such as money laundering, human trafficking and the illicit trade in drugs. For this reason the term “illicit trade” within this report will be used when referring to the following specific areas:

- Intellectual Property Crime (IPC)
  
  IPC refers to the piracy or counterfeiting of goods such as digital media, tobacco, luxury fashions, pharmaceutical products, electronic and other manufactured goods.
  
  Counterfeiting – production of products that carry identification signs (trademark) of genuine products without consent of IP rights owner;

- Contraband - smuggling of commodities in a quantity exceeding maximum allowable by individuals or groups of people across the border;

- Illegal manufacturing - type of illicit products that do not meet genuine product specifications and are solely manufactured and distributed for the purpose of illegal profit generation (illicit whites; grey and sub-standard medication).

Measurement

As previously stated, measuring the nature and extent of illicit trade is challenging for a number of reasons. Fundamentally, illicit trade is an illegal activity and illegal traders do not record their transactions. As a result, it has always been a significant challenge for the economists and government officials to estimate the true cost of illicit trade to the economy.

Methodology

To capture the data required in order to complete this study we completed an extensive data gathering and consultation process to compile a wide range of views from a number of different sources. This process involved interaction with various stakeholders selected from a range of sectors across the economy. This included stakeholders from sectors such as the retail sector, the producers in the legitimate markets, consumers, journalists, enforcement agencies and State agencies.

In order to give an accurate assessment of the problem and provide context to the more general analysis of this report, individual sectoral analysis has been included.

The four key sectors were selected on the basis of having the most exposure to the issue of illicit trade:

- Fuel
- Tobacco
- Digital
- Pharmaceuticals

For each of these sectors we then proceeded to analyse and verify all the data gathered in order to:

- assess the nature of the problem;
- measure the size of the problem (where possible);
- identify the non-financial issues; and
- assess current policies, legislation and enforcement measures.

Format and structure of the report

The report structure covers each of the following seven main areas:

Section 2 – Intellectual property crime  
Section 3 – Organised crime  
Section 4 – Illicit trade in fuel  
Section 5 – Illicit trade in tobacco  
Section 6 – Digital piracy  
Section 7 – Pharmaceuticals  
Section 8 – Other activities  
Section 9 – Recommendations

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2. Intellectual property crime

Intellectual Property (IP) contributes enormously to the economy both internationally and domestically. However, the growing threat of intellectual property crime (IPC) is threatening to undermine the benefits of IP. The increasing numbers of IP infringements - copyright piracy and trademark counterfeiting - generate significant financial losses to legitimate industries, the Government and consumers. Beyond the purely financial losses, IPC poses a threat to the welfare of consumers through health and safety concerns and the growth in organised crime.

**Intellectual Property (IP)**

In order to analyse the issue of IPC, it is first necessary to understand the nature of IP and its role in the contemporary economy.

IP refers to the rights owned by individuals and organisations in investing, designs, goods and thought, creations, produced by intellectual activity in the industrial, scientific and artistic fields.\(^1\) IP rights are legal titles permitting their holder to exclude other parties, for a defined period of time, from copying of the protected item. IP rights can come in the form of:

- patents - protection of inventions;
- trademarks - protection of brand names; and
- copyright - protection of creative or artistic works.

\(^1\) The Anti-Counterfeiting Group, 2008

### Importance of IP

Productivity is the key driver of long term economic growth. Throughout history it has been shown that productivity is fundamentally driven by innovation.

> “Intellectual property is the cornerstone of any competitive modern economy, especially in today’s global market”. Programme for the Irish Presidency, 2013

It is widely accepted that IP drives innovation. Where innovation is difficult to copy, or there are large rewards to being first to the market, there is a greater incentive to innovate. IP rights are designed to protect this innovative activity. Where IP do not exist other companies can capitalise unfairly on those who invested valuable resources in research and development. This acts as a disincentive to innovate. For this reason IP rights play a vital role in promoting innovation and stimulating the economy to foster growth. Over the last decade, despite the challenging economic situation, organisations that have embraced innovation have also managed to increase productivity and have been successful in growing their businesses.

- encourages innovation
- drives economic growth and competitiveness
- differentiates Irish products in the international marketplace
- creates and supports jobs
• incentivises education
• rewards entrepreneurs
• helps incentivise the search for solutions to global challenges
• encourages Foreign Direct Investment (FDI)

**Intellectual property crime (IPC)**

When IP rights are infringed it is referred to as IPC. IPC is an important subset of illicit trade. Fundamentally, there are two types of IPC, these are:

• counterfeiting; and
• piracy.

To understand the difference between these two types of IPC we have used the definitions outlined by the Department of Justice and Law Reform:

• counterfeiting involves illegal copying of trademarks on products such as clothing, pharmaceuticals, toys, food and beverages; and
• piracy is illegal copying of content such as music, film, images, television, books etc.

As outlined, IP is an important element to the commercial economic landscape, therefore it should be a priority for the Irish policymakers to facilitate such an IP framework in Ireland which enables individuals and organisations to achieve their rights and entitlements.

### Table 2.1 International estimates of IPC costs to legitimate industries

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Commission</td>
<td>Between 5% and 7% of world trade, representing €200 to €300 billion in lost revenue and the loss of 200,000 jobs worldwide</td>
</tr>
<tr>
<td>World Customs</td>
<td>Around 5% of world trade</td>
</tr>
<tr>
<td>OECD</td>
<td>More than 5% of world trade</td>
</tr>
</tbody>
</table>

**Costs related to illicit trade**

The costs of illicit trade are as broad as they are significant. Piracy and counterfeiting can be found in every country and every sector of the economy. Adverse effects of illicit trade have impact on various stakeholders, including the right holders, retailers, consumers, the Government and the wider economic landscape.

*“This illegal trade is clearly having a devastating impact on retailers, which are already struggling to keep people in jobs”* - Retail Ireland, Tackling the Black Market and Retail Crime, 2012

As will be demonstrated throughout this report there are both financial and non-financial costs resulting from the illicit trade. Whilst it is possible to provide some estimates regarding financial losses as result illicit trade, non-financial costs cannot be precisely evaluated. However, it is important not to underestimate these socio-economic consequences of illegal trade.

The below table which has been extracted from the OECD report on the economic impact of counterfeiting and piracy accurately summarised the costs related to illicit trade.

### Table 2.2 Costs of illicit trade

<table>
<thead>
<tr>
<th>Impact area</th>
<th>Potential effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effects on right holders</strong></td>
<td></td>
</tr>
<tr>
<td>Sales volume and prices</td>
<td>• reduction of right holders sales volumes</td>
</tr>
<tr>
<td></td>
<td>• downward pressure on prices</td>
</tr>
<tr>
<td>Brand values and firm reputation</td>
<td>• erosion of brand and firm value</td>
</tr>
<tr>
<td>Royalties</td>
<td>• diminished flow of royalties to right holders</td>
</tr>
<tr>
<td>Cost of combating</td>
<td>• investigatory work</td>
</tr>
<tr>
<td></td>
<td>• public awareness campaigns</td>
</tr>
<tr>
<td></td>
<td>• technical assistance to governments</td>
</tr>
<tr>
<td></td>
<td>• litigation of right holders</td>
</tr>
<tr>
<td></td>
<td>• modifications to product packaging</td>
</tr>
<tr>
<td>Scope of operations</td>
<td>• downsizing of right holders operations</td>
</tr>
<tr>
<td></td>
<td>• increased risk of going out of business</td>
</tr>
<tr>
<td><strong>Socio-economic affects</strong></td>
<td></td>
</tr>
<tr>
<td>Innovation and growth</td>
<td>• reduction in incentives to innovate</td>
</tr>
</tbody>
</table>
Illicit Trade in Ireland

Criminal activities
- negative effects on growth rates
- increased in flow of financial resources to criminal networks, thereby increasing their influence in the economics

Environment
- substandard infringing products can have negative environmental effects
- disposal of counterfeit and pirated products has environmental consequences

Employment
- shift of employment from rights holders to infringing firms, where working conditions are often poor

Foreign Direct Investment
- small, negative effects on levels of foreign direct investment flows; possible effect on structure of foreign direct investment

Trade
- negative effects on trade in products where health and safety concerns are high

Effects on consumers
Health and safety risk
- substandard products carry health and safety risks ranging from mild inconveniences to life-threatening situations

Consumer utility
- consumers who unknowingly buy counterfeit/pirated products are generally worse off
- consumers who knowingly purchase counterfeit/pirated goods are generally not in a position to properly evaluate the quality of the product; there is substantial risk that utility will fall short of expectations

Effects on government
Tax revenues
- lower tax and related payments (such as social charges) by rights holders
- weak collection of taxes and related charges from counterfeiters/pirates

Costs of anti-counterfeiting
- costs are incurred for enforcement and public awareness initiatives, and for development and maintenance of legal frameworks

Corruption
- bribery and extortion of government officials to facilitate counterfeiting and piracy operations weaken the effectiveness of public institutions charged with law enforcement and related government activities

The EU has seen a rise in the number of registered cases from less than 5,000 in 2001 to almost 90,000 in 2011 a rise of 1800% in just 10 years (see Figure 2.1).

**Figure 2.1 - EU: Number of registered cases and articles seized**


**Key drivers and facilitators**
The drivers of the supply and demand of counterfeit products are influenced by a number of factors, which are summarised in table 2.3 below.

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th>Product characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>high unit profitability</td>
<td>low prices</td>
</tr>
<tr>
<td>large potential market supply</td>
<td>acceptable perceived quality</td>
</tr>
<tr>
<td>genuine brand power</td>
<td>ability to conceal status</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production, distribution and technology</th>
<th>Production, distribution and technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>moderate need for investments</td>
<td>no health concerns/standards</td>
</tr>
<tr>
<td>moderate technology requirements</td>
<td>no safety concerns</td>
</tr>
<tr>
<td>unproblematic distribution and sales</td>
<td>personal budget constraint</td>
</tr>
<tr>
<td>high ability to conceal operations</td>
<td>low regard for IP rights</td>
</tr>
<tr>
<td>easy to deceive consumers</td>
<td>increase internet penetration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
<th>Institutional characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>low risk of discovery and prosecution</td>
<td>weak, non-deterrent or no penalties</td>
</tr>
<tr>
<td>legal and regulatory framework</td>
<td>socio-economic factors</td>
</tr>
<tr>
<td>weak enforcement</td>
<td>availability and ease of acquisition</td>
</tr>
</tbody>
</table>

Source: OECD The economic impact of counterfeiting and piracy

**Global trends**
Internationally, the sale and distribution of counterfeit and pirated goods has been increasing at an alarming rate. The International Anti-Counterfeiting Coalition (IACC) estimates that 5% to 7% of the total world trade is in illegitimate goods with an estimated value of over €600 billion.
Protecting IP

With the increasing importance of IP in terms of value and innovation, it is necessary to ensure that there is a balanced legislative framework and a strong system of enforcement in place to protect IP.

In recent years, substantial efforts have been made by the Government to introduce measures to ensure that Ireland has an appropriate legislative framework to provide necessary protection to IP owners. Apart from China, Ireland and Switzerland were the only two Patent Offices listed to see doubling-digit growth of patents in force between 2010 and 2011. This fact shows the growing importance of IP in the Irish economy, and therefore the increasing necessity to secure IP rights.

Government policy

Extract from Innovation Policy Statement Innovation in Ireland 2006 - 2013

- raise awareness among researchers in academia and industry of the value of IP, and the importance of protecting and managing it;
- identify valuable IP arising from publicly-funded research and ensure that it is exploited commercially;
- make it economically attractive to develop and exploit IP in Ireland; and
- ensure that IP is protected by a strict legal framework.

Legislation

In line with the above policy, substantial efforts have been made to introduce measures to protect IP and ensure that there is an appropriate legislative framework in place. Specific legislation includes:

- Trade Marks Acts 1996;
- Madrid Protocol 2001;
- Patents Act 1992; and
- Copyright and related rights Act, 2000.

In the context of the national innovation agenda, the EU and international obligations, the Irish Government has been proactive in its efforts to ensure that the IP laws are kept as up-to-date as possible.

In line with this objective, in May 2011, the Minister for Jobs, Enterprise and Innovation, Richard Bruton T.D, established the Copyright Review Committee with Dr Eoin O'Dell as a Chairman of the Committee to conduct an independent assessment of the current copyright legislation and provide recommendation on the possible solutions to update the existing Irish copyright legislation. The Copyright and Innovation Consultation Paper was published by the committee in February 2012. At the time of writing this report, the Committee was in the process of reviewing submission prepared by various stakeholders as a response to the consultation paper.

One recent suggestion that has been put forth by the Copyright Review Committee is the establishment of a Copyright Council of Ireland. Ultimately, the Council will protect interests of right owners and ensure that sufficient attention is given to the issues of copyright in the public domain. The Council will also supervise the Copyright Alternative Dispute Resolution Service that will be also established to provide quicker and less expensive means to address copyright related disputes.

For individual companies, protecting their IP rights has traditionally been a time consuming and costly exercise. However, great strides have been made to remove these barriers. Before the introduction of efficiencies into the Commercial Court in 2004 the allocation of a trial date for a case on IP could typically have taken years, it has now decreased to around 5 months.

"Notwithstanding the speed of which the Commercial Court deals with the dispute, the quality of justice dispensed is not adversely affected, rather the new rules mean that case preparation is more concentrated."  1 William Fry Solicitors, 2010

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As with any legislative framework, it is important that the use of IP regulation is balanced. Much of this report focuses on the protection of IP; however it is important to remember that, fundamentally, IP is a monopoly granted for a limited time. Monopolies can be dangerous to an economy, create deadweight losses and significantly reduce the welfare of the consumer and the overall economy. For this reason, it is important that the IP legislative framework remains effective and flexible to promote innovation.

**Enforcement**

An Garda Síochána and the Revenue Customs Service are tasked with ensuring the effective enforcement of the legal framework protecting IP. An Garda Síochána focuses on the investigation of importation and sale of illicit and counterfeit goods. The Customs Service acts as the supervisor of trade flows into the country concentrating mainly on the points of importation into the State.

In an effort to combat the growing levels of illicit trade, An Garda Síochána has established a number of specific units to tackle the issue of illicit trade and the organised criminal elements who are involved in these activities. These include:

- The National Bureau of Criminal Investigation;
- The Anti-Racketeering Unit; and
- The Criminal Assets Bureau.

A more detailed explanation of these units is included in Section 3 of this report – Organised crime.

Between 2005 and 2010 there was a steady rise in the number of registered cases. This steady rise changed to a dramatic increase in 2011 when the number of registered cases of IPC more than trebled (see Figure 2.2). The increase in the number of cases has been driven by the rise in the numbers of illicit articles being sent by the post and couriers, which directly correlates to the rise in internet sales.

**International context**

The global significance of IP and the issues of illicit trade are highlighted throughout this report. Concerted efforts have been made by the international community through organisations such as the World Intellectual Property Organisation (WIPO) and the World Trade Organisation (WTO) to bring a more co-ordinated approach to tackling the issues of IP crime.

Primary amongst these tools has been the Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS) which was introduced in 2001. The TRIPS agreement is one of the foundations of the WTO and has put in place a number of structures to assist in the policing of IP issues such as international trade sanctions and dispute resolution measures.

The basic structures of IP rights are established by international trade agreements and, in particular, TRIPS which has focused on the effective enforcement. The recently drafted Anti-Counterfeiting Trade Agreement (ACTA) could be pivotal in this regard, however it remains un-ratified. It is intended that ACTA will set the standards for IP rights enforcement and although somewhat controversial is a positive move in the fight against counterfeiting and piracy.
Increased international co-operation is vital to Ireland in combating the growing problem of IP crime. Later in this report we have provided further recommendations on how Ireland can foster its international co-operation in order to tackle illicit trade.

**International intellectual property**

World Intellectual Property Organisation (Ireland joined in 1970) is a UN agency that is devoted to stimulation of innovation and creativity through the use of IP. WIPO and its members aim to improve understanding and the respect for IP. It closely co-operates with INTERPOL, World Customs Organisation, the International Chamber of Commerce/Business Action to Stop Counterfeiting and Piracy (ICC/BASCAP Initiative) and the International Trademark Association (INTA) to develop a coordinated solution to combat counterfeiting and piracy.

World Trade Organisation (Ireland joined in 1995) adopted a proactive approach in its fight against counterfeiting. It initiated the creation and currently administers Trade-Related Aspects of Intellectual Property Rights (TRIPS).

- TRIPS is the most comprehensive international agreement on IP rights to date.
- TRIPS provides details of an international framework of principles, rules and disciplines dealing with international trade in counterfeit and pirated goods.

The agreement covers five broad issues:
- how basic principles of the trading system and other international IP agreements should be applied
- how to give adequate protection to IP rights
- how countries should enforce those rights adequately in their own territories
- how to settle disputes on IP between members of the WTO
- special transitional arrangements during the period when the new system is being introduced.

World Customs Organisation (Ireland joined in 1952) is an international organisation that "is the center of excellence that provides leadership in Customs matters at the international level and advises Customs administrations worldwide on management practices, tools and techniques to enhance their capacity to implement efficient and effective cross-border controls along with standardised and harmonised procedures to facilitate legitimate trade and travel and to interdict illicit transactions and activities."

Anti-Counterfeiting Trade Agreement (ACTA)

The agreement aims to establish international standards of enforcement of IPR.

It was signed by nine countries in 2011 - 12 and EU in January 2012 but was later rejected by the European Parliament in July 2012. The Court of Justice of the European Union is in the process of examining the agreement on its compatibility with the Charter of Fundamental Rights.

Other international organisations:

- OECD (Ireland joined 1961)
- World Health Organisation

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**Conclusion**

In recent years there has been a focus on austerity and dealing with the debt burden, however, there are signs that we continue on the road to economic recovery. A renewed focus on innovation and job creation is required. The importance of IP as a key driver to innovation and resulting from it productivity and job creation means that IP rights issues should be at the forefront of the national policy agenda.

“This agenda will be an important element to the Irish recovery through increased productivity to increased corporate profits that drive economic growth and promote job creation.”

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3 Organised crime

Introduction
Illicit trade is by its very nature a criminal activity, but it is the growing involvement and sophistication of Organised Criminal Gangs (OCGs) that is one of the most worrying aspects to this study on illicit trade.

The growth of organised crime has impact on all levels of society and it is a threat to the social well-being of both the State and its citizens. Historically, illicit trades and counterfeiting tended to be on items such as cigarettes and brand name clothing. However, recent years have seen an increased diversification in illicit trade and counterfeiting in terms of sectors, regions and the infiltration of illicit products into the legitimate supply chain. OCGs involvement has spread into areas such as fuel laundering, toys, medicines, food and beverages.

In this section we will assess the current state of organised crime in Ireland, the key linkages between the various illicit trades, the societal impacts of OCGs in Ireland and the current initiatives that are in place to tackle these growing challenges.

Although, the involvement of organised crime can be difficult to document, our research is based on testimonials of key experts in the area such as: An Garda Síochána, the Police Service of Northern Ireland (PSNI), Risk Management International and other knowledgeable and reputable sources.

Criminal organisations in Ireland
According to the Garda Commissioner, at present there is a total of 25 OCGs operating in Ireland, including five with significant international links. While there is a presence of organised criminal gangs throughout the country, OCGs operate predominately in the urban centres of Limerick, Cork, Sligo and Dublin. They have a strong influence within the illicit trade landscape in Ireland.

Cross border activities continue to be a feature of organised crime across the Island of Ireland to include both the North and the South. This is particularly notable in fuel laundering which provides an opportunity for OCGs to capitalise on the different tax rates between different types of fuel.

Frequently, the picture of organised crime that is presented through the media is one of a violent and fractious relationship existing between the OCGs. However, according to the Garda Commissioner there is actually a “high amount of interaction between the various organised crime groups throughout the country”.10

Analysis of the individual areas of illicit trade in Ireland has shown that there are considerable linkages between the various illicit trades and the OCGs are frequently involved across a wide variety of illicit activities. The main driver behind this diversification, apart from the financial incentive, can be traced to the

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10 Martin Callinan, Joint Committee on Justice, Defence and Equality Debate, November 2012.
supply route - “Like anything being smuggled, once you have established a route that you are confident you can use then it does not matter what the commodity is”.11

Drugs continue to be the primary area of focus for criminal gangs; however organised criminals have diversified to follow the areas that offer the highest incentive to make money. Therefore, the illicit trade in tobacco and fuel laundering are significant components of many criminal gangs as they offer the greatest potential for profit given the large price differentials between the price of tobacco in Ireland and other EU counties. Evidence of this linkage across the various illicit trades is apparent from the seizures made by both the PSNI and An Garda Síochána who have encountered multiple products such as tobacco, alcohol, drugs and fuel on a single raid.

“Those involved in fuel fraud may also be involved in other crime, and the profits raised contribute towards illegal activity such as tobacco fraud, bottled gas fraud, drugs and money laundering”. Northern Ireland Affairs Committee12

Links with terrorist organisations

In addition to the established links between illicit trade and organised crime, An Garda Síochána, the PSNI and Interpol have all highlighted the relationship of illicit trade with terrorist organisations. Illicit trade is becoming the preferred method of financing for these terrorist groups, and the thriving illicit market ensures that they continue to exist and remain a problem in Ireland.

Although financing terrorist organisations may not be the only objective of those involved in illicit trade, it remains an important element that needs to be taken very seriously when considering illicit trade in Ireland.

International dimensions

In addition to domestic crime groups, the increased international dimension of organised crime is having an impact here in Ireland. In an international economic survey prepared by the OECD in 2008, over a third of industry surveys indicated a link between organised crime and illicit trade. Our own survey of key industry participants from Retail Ireland has indicated similar pattern.

OCGs have taken full advantage of globalisation and developments in commercial and passenger transport infrastructures. As a result crime routes and destinations have become more diverse and responsive to changes in law enforcement. According to the Gardaí and the PSNI, Ireland has seen an increase in the influence of foreign criminals within the Irish market. Recently, in a presentation to the Joint Committee of Justice, The Gardaí Commissioner, Martin Callinan noted that Holland, Spain and the UK remain the key locations for foreign criminal liaisons. This international element has also seen an influx of OCGs, notably from Eastern Europe and Asia.

Facilitating criminal activities

Potential profits also provide incentives for the OCGs to infiltrate different industry sectors through the legitimate supply chain. The table overleaf illustrates mechanisms that have occurred in the past in Ireland.

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11 Roy Comb, Head of Organised Crime Branch, PSNI
12 Northern Ireland Affairs Committee, Fuel laundering and smuggling in Northern Ireland, Third Report, 2012
13 Minister for Justice, Equality and Law Reform Dermot Ahern in response to parliamentary question 51, 28th October 2010

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Table 3.1 Impact of criminal activities on the private sector

<table>
<thead>
<tr>
<th>Criminal activity</th>
<th>Private sector corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of illegal goods</td>
<td>• Managers of manufacturing/distribution companies could be corrupted into selling products, clearly understanding that they may be traded as contraband</td>
</tr>
<tr>
<td></td>
<td>• Second shift production in which additional quantities are produced for the illegal market</td>
</tr>
<tr>
<td></td>
<td>• OCGs can corrupt staff in legitimate industries to facilitate or engage in the theft of store inventory</td>
</tr>
<tr>
<td>Trafficking of illegal goods</td>
<td>• Drivers or managers of transport companies including international bus, truck companies, and airline staff could be paid off to transport illegal commodities</td>
</tr>
<tr>
<td></td>
<td>• Security staff at sea-ports and airports could be bribed to look the other way or be actively engaged in transporting the illegal commodity</td>
</tr>
<tr>
<td></td>
<td>• The staff at such facilities, which are knowledgeable of the operational details of customs and border posts, could also be bribed into providing such information</td>
</tr>
<tr>
<td>Distribution of illegal goods</td>
<td>• Private security firms could be bribed into allowing OCGs operate inside their facilities, markets, and stores.</td>
</tr>
<tr>
<td></td>
<td>• Sales staff could be bribed into selling stolen/illicit goods</td>
</tr>
<tr>
<td></td>
<td>• Distribution of illegally laundered oil. Although the majority of smuggled oil is distributed through smaller outlets that are willing to collude this could penetrate and ensure the sale through established brand through the corruption of the supply chain</td>
</tr>
</tbody>
</table>

Elements of the supply chain vulnerable to organised crime and corruption include:
- Transport sector;
- Port authorities; and
- Retailers.

**Tools in the fight against organised crime**

**Legislative framework**

Illicit trade is criminalised under a variety of legislative instruments in Ireland. The following is a list of the key elements to the Irish legislative framework.

### Table 3.2 Key legislative instruments

<table>
<thead>
<tr>
<th>Organised crime</th>
<th>Intellectual Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Proceeds of Crime Act 1995</td>
<td>• The Patents Act 1992</td>
</tr>
<tr>
<td>• Proceed of Crime Act 2005</td>
<td>• Trademarks Act 1996</td>
</tr>
<tr>
<td>• Criminal Justice Act 2007</td>
<td>• Copyright and Related Rights Act 2000</td>
</tr>
<tr>
<td>• Criminal Justice (Mutual Assistance) Act 2008</td>
<td>• Industrial Designs Act 2001</td>
</tr>
<tr>
<td>• Criminal Justice (Amendment) Act 2009</td>
<td>• Madrid Protocol 2001</td>
</tr>
<tr>
<td>• Criminal Justice (Surveillance) Act 2009</td>
<td>• Paris Convention</td>
</tr>
</tbody>
</table>

**Enforcement**

As previously stated in Section 2, An Garda Síochána and the Revenue Customs Service are both tasked with ensuring the effective enforcement of the legal framework protecting IP. An Garda Síochána focuses on the investigation of the importation and sale of illicit and counterfeit goods. The Customs Service supervises trade flows into the country and concentrates mainly on the points of importation into the State.

Based on the statistics provided by the Revenue, mineral oil offences continue to bring the highest levels of convictions with 208 in 2012 (see Figure 3.1). Tobacco is the next largest although this figure has been falling over the last number of years.

**Figure 3.1 - Convictions in Ireland**

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Specialist Garda units

As part of the fight against the involvement of organised crime in illicit trade a number of specialist units with a specific mandate to investigate the potential involvement of criminal gangs were established, these include:

- Criminal Assets Bureau
  The Criminal Assets Bureau ("CAB") is the specialist Garda unit which carries out investigations into the suspected proceeds of criminal conduct.

- National Bureau of Criminal Investigation
  The National Bureau of Criminal Investigation ("NBCI") is the specialist Garda unit with the responsibility for tackling serious and organised crime. As part of their remit they are involved in anti-racketeering and IP rights violations.

- Organised Crime Unit
  The Organised Crime Unit works with the NBCI to tackle criminality "that transcends the organisational and divisional boundaries of An Garda Síochána".14

International

The organised crime issues that are encountered by the Irish economy are also being experienced by other members of the international community. For this reason a number of international organisations and agencies have been established to counter the growing threat of OCGs and IPC. For an open, R&D led economy like Ireland’s it is important that there is active engagement with such organisations at the EU and world level.

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14 http://www.justice.ie/en/JELR/Pages/Organised_Crime_Unit
3. Fuel laundering

"Illegal activity in the form of diesel fuel laundering, which takes place mainly in the State, does pose a serious threat to the Exchequer"\(^{13}\)  Michael Noonan Minister for Finance, 2012

This section examines the economic and socio-economic implications of the growing illicit trade in mineral oil products. Similar to the other sections, we identify the major issues, current trends and policy initiatives and offer our opinion as to the best way to proceed for policy makers.

**Background**

The high price of fuel in Ireland has led to increasing illegal activity in this area. Criminal actions in the area of fuel have become a major problem in Ireland, to the extent that the Revenue has made "action against illegal fuel related activities as one of its top priorities" (Deputy John Perry Oireachtas debate 10 July 2012).

In recent years, a general decline has been reported in the number of sites selling fuel below the market price, as the Revenue have become more active in their enforcement measures. This appears to be a positive development, however evidence from the HMRC and the Irish Revenue, suggests that this is not in fact due to a decline in illicit trade of fuel but due to "an increase in sites selling fraudulent fuel at prices similar to supermarkets" and other retail outlets. This has made it increasingly difficult to detect and identify illegal vendors.

Implications of this are that the criminal gangs and fraudsters are making higher margins and fuel has become a more attractive industry.

For the Revenue, the loss in excise duties represents a significant problem however there are a number of other important adverse implications for the economy.

Often been seen as a harmless crime by many members of the public, fuel crime has in fact wider implications and many adverse effects. Below we list the main implications which illegal fuel related activities are having in Ireland:

- lost revenues to the Exchequer mean less money to spend on public services, that have suffered substantial cuts over the last number of years;
- environmental damage;
- higher rates bills, as local counties pay for cleaning up the harmful wastes that are caused by fuel laundering;
- legitimate retailers who cannot compete with lower prices; and
- livelihoods of the workers in these retailers are under threat.

**Types of illegal fuel related activities**

To understand how the illicit trade works we present the main methods of fuel fraud which can occur in the market. At present, illicit trade in road fuels in
Ireland is principally in the diesel sector, which offers the greatest potential for profit.

In its simplest terms illicit trade in fuel occurs as those involved in illicit trade bring in and pass off illegal fuel as legitimate for sale, at discounted rates, to unsuspecting motorists and/or fuel retailers. Illicit trade in diesel fuel is likely to continue as long as there is an incentive for profits and existing deterrents remain inadequate. The four main categories of illegal fuel related activities are:

**Smuggling**
The border between the North and South of Ireland provides opportunities for criminal gangs on both sides of the border to profit from cross border sales. Differentials in the duty rates and exchange rates make smuggling fuel from one side of the border to the other attractive at various times.

At the time of writing this report, the price for regular auto-diesel is approximately 15% higher in the North than in the South\(^{16}\) and therefore smuggling into the South is not a major issue. However, as the price differential fluctuates, this incentive for the criminal gangs to smuggle can change.

**Mixing**
Mixing is the combination of duty rebated fuel with non-duty rebated fuel e.g. mixing of white and green diesel.

**Stretching**
Stretching involves the combination of a cheaper fuel such as kerosene or “tied” oils with lubrication oils to make an illegal road fuel or to dilute road diesel.

**Fuel laundering**
This type of fuel crime provides the greatest threat to the Irish economy of North and South of the border. For this reason, our analysis will focus on this area of the illicit trade in fuels.

Fuel laundering is an illegal process to remove marker dyes from red (UK) or Green (Republic of Ireland) diesel. Red and green diesel is available legitimately for agricultural purposes and is significantly cheaper than road use diesel, due to reduced excise duty.

At the time of writing this report, the price differential between auto-diesel and agri-diesel, was around 38c per litre and provided a strong incentive for the criminal gangs to launder diesel. This price differential is driven by the difference in excise duties and VAT rates on agricultural diesel against auto-diesel. This price differential is illustrated in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Auto-diesel</th>
<th>Agri-diesel</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pump price</strong></td>
<td>€1.53</td>
<td>€1.06</td>
<td>€0.47</td>
</tr>
<tr>
<td><strong>Pre-tax price</strong></td>
<td>€0.74</td>
<td>€0.74</td>
<td>€0.00</td>
</tr>
<tr>
<td><strong>Excise duty (including carbon)</strong></td>
<td>€0.48</td>
<td>€0.10</td>
<td>€0.38</td>
</tr>
<tr>
<td><strong>Nora</strong></td>
<td>€0.02</td>
<td>€0.02</td>
<td>€0.00</td>
</tr>
<tr>
<td><strong>Vat</strong></td>
<td>€0.29</td>
<td>€0.20</td>
<td>€0.09</td>
</tr>
<tr>
<td><strong>Total taxes:</strong></td>
<td>€0.78</td>
<td>€0.32</td>
<td>€0.46</td>
</tr>
<tr>
<td><strong>Tax as %</strong></td>
<td>51.38%</td>
<td>30.20%</td>
<td></td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>€1.53</td>
<td>€1.06</td>
<td>€0.46</td>
</tr>
</tbody>
</table>

\(^{16}\) Michael Noonan, TD, Minister for Finance, 17 January 2012, Dáil Éireann debates – Written answers

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Despite the relatively high price of diesel, compared to our EU counterparts, the price of agri-diesel is significantly less at €1.07 per litre.

**Figure 4.1 Diesel pump prices comparison across the EU**

Despite the relatively high price of diesel, compared to our EU counterparts, the price of agri-diesel is significantly less at €1.07 per litre.

**Figure 4.2 Monthly fuel prices in the Republic of Ireland (2000 – 2012)**

Loss to the Exchequer

Income from excise duties on fuel represents a significant portion of the total excise receipts with around €2bn collected annually, with €1.1bn coming directly from diesel products that are under threat from fuel laundering. Recent years have seen the growth of illegal fuel related activities both in the North and the South of Ireland, which is threatening this income.

**Figure 4.3 Excise receipts by type (2011)**

In 2010 the Irish Petrol Retailers Association (IPRA) estimated that losses to Government revenues were in excess of €150m per annum from fuel fraud.

**Table 4.2 Losses to the Exchequer (IPRA) – estimate 1**

<table>
<thead>
<tr>
<th>Current situation</th>
<th>IPRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of alleged locations selling questionable fuel</td>
<td>120</td>
</tr>
<tr>
<td>Average total sales per location</td>
<td>2.5</td>
</tr>
<tr>
<td>Total volume of questionable fuel</td>
<td>300m</td>
</tr>
<tr>
<td>Total tax lost per litre</td>
<td>€0.5162</td>
</tr>
<tr>
<td><strong>Total Tax losses</strong></td>
<td><strong>€154.86m</strong></td>
</tr>
</tbody>
</table>

Source: IPRA submission to the Joint committee on Environment, Transport, culture and the Gaeltacht, 2012

To corroborate these numbers, we have prepared three additional estimates.
For the first estimate we have used statistics from the UK Revenue, which estimates that non-duty paid market share is around 12%, we have applied this to the Irish market. We believe this to be a realistic assumption giving the similarity in nature of the two markets (profits actually would be higher in the North) and the fact that the same criminal gangs supply the illicit fuel. Using this estimate and the current price differential between agri-fuel and regular fuel, we have estimated that the losses would amount to €142m per annum. For the second estimate we have used information from IPRA, whose members have suggested that “a conservative estimate is that over 20% of the Irish market is currently supplied by agricultural gas oil fuel (diesel)”. This number puts the estimated loss to the Exchequer as high as €237m per annum.

Table 4.3 Losses to the Exchequer – estimate 2

<table>
<thead>
<tr>
<th></th>
<th>HRMC Est.</th>
<th>IPRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market size</td>
<td>2,563,433,000</td>
<td>2,563,433,000</td>
</tr>
<tr>
<td>Non-duty paid market share (%)</td>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>Non-duty paid market share</td>
<td>307,611,960</td>
<td>512,686,600</td>
</tr>
<tr>
<td>Price differential</td>
<td>€0.46</td>
<td>€0.46</td>
</tr>
<tr>
<td>Total tax losses</td>
<td>€142,544,368</td>
<td>€237,573,946</td>
</tr>
</tbody>
</table>

The final estimate of the losses to the Exchequer gives the highest value at approximately €261m. This estimate also provides information regarding the potential losses to the rest of the supply chain. The primary assumption used to calculate this estimate, was taken from the IPRA survey (i.e. that 300m litres of questionable fuel is sold per annum). If it is accepted that this assumption is correct, the estimate is robust and provides an indication of the lost turnovers for both the government and the wider industry.

Table 4.4 Losses to the Exchequer – estimate 3

<table>
<thead>
<tr>
<th>Date</th>
<th>Diesel price</th>
<th>Lost turnover</th>
<th>Lost turnover</th>
<th>Lost tax</th>
<th>Lost turnover to industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Note 1</td>
<td>Note 2</td>
<td>Note 3</td>
<td>Note 4</td>
<td></td>
</tr>
<tr>
<td>May-12</td>
<td>€1.58</td>
<td>25</td>
<td>€39,375,000</td>
<td>€22,050,000</td>
<td>€17,325,000</td>
</tr>
<tr>
<td>Jun-12</td>
<td>€1.54</td>
<td>25</td>
<td>€38,400,000</td>
<td>€21,504,000</td>
<td>€16,896,000</td>
</tr>
<tr>
<td>Jul-12</td>
<td>€1.50</td>
<td>25</td>
<td>€37,475,000</td>
<td>€20,986,000</td>
<td>€16,489,000</td>
</tr>
<tr>
<td>Aug-12</td>
<td>€1.54</td>
<td>25</td>
<td>€38,500,000</td>
<td>€21,560,000</td>
<td>€16,940,000</td>
</tr>
<tr>
<td>Sep-12</td>
<td>€1.60</td>
<td>25</td>
<td>€40,000,000</td>
<td>€22,400,000</td>
<td>€17,600,000</td>
</tr>
<tr>
<td>Oct-12</td>
<td>€1.59</td>
<td>25</td>
<td>€39,750,000</td>
<td>€22,260,000</td>
<td>€17,490,000</td>
</tr>
<tr>
<td>Nov-12</td>
<td>€1.56</td>
<td>25</td>
<td>€39,000,000</td>
<td>€21,840,000</td>
<td>€17,160,000</td>
</tr>
<tr>
<td>Dec-12</td>
<td>€1.53</td>
<td>25</td>
<td>€38,175,000</td>
<td>€21,378,000</td>
<td>€16,797,000</td>
</tr>
<tr>
<td>Total</td>
<td>€466,950,000</td>
<td>€261,492,000</td>
<td>€205,458,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1 - Diesel prices per AA price index
Note 2 - Total volume of questionable fuel 300 m litres using survey from IPRA 2010
Note 3 - Tax as a percentage of price using 2011 figures from the Revenue

Conclusion
Whichever estimates are used it is clear that there are significant annual losses to the Exchequer of between €140 m to €261 m. To put these losses in context the lower amount would account for the full cost of the highly unpopular property tax in 2012.

Other financial costs
Losses to the Exchequer are not the sole financial cost of illicit trade in fuel. The revenue and duty losses are further exacerbated by other financial costs to the economy. Costs such as clean-up, enforcement and the costs to the retailers are all significant and need to be considered when assessing the illicit trade in fuel.

Clean-up costs
There are significant associated costs in removing and cleaning up the harmful waste from dismantled laundering plants or in the remote dumping sites used by fuel launderers. The practice of dumping the toxic waste has become a major issue for the border counties over the last decade. More recently as the prevalence of fuel laundering has grown this issue has started to spread to other areas of the country.
The disposal and clean-up costs can be high and have “become a significant burden on the Environment Fund”18. According to the Department of the Environment, Community and Local Government (the Department), clean-up costs since 2003 have amounted to €4.7m.

<table>
<thead>
<tr>
<th>Costs since 2003</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louth County Council</td>
<td>3.254</td>
</tr>
<tr>
<td>Monaghan County Council</td>
<td>1.395</td>
</tr>
<tr>
<td>Offaly County Council</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.679</strong></td>
</tr>
</tbody>
</table>

Source: Joint committee on Environment, Transport, culture and the Gaeltacht, 2012

**Enforcement costs**

To combat the losses associated with the illicit trade in fuel participation of a large number of agencies, such as the Revenue, An Garda Síochána, the Cross Border Fuel Enforcement Group and the Department of the Environment is required. Additional funds are needed to support this participation.

It can be difficult to quantify the total cost of enforcement, however the Department has stated that it funds local authority waste enforcement staff to the amount of €7.5m annually. It would be reasonable to conclude that the other agencies incur similar costs.

**Cost to retailers**

The private economy sector also bears a financial cost related to the lost revenues. Legitimate retailers are struggling as they face increased competition from retailers selling adulterated fuel. The ultimate consequence of this unfair competition has led to the closure of a number of legitimate retailers which has further impacted on the losses in employment. Others retailers have felt forced to purchase laundered fuel in order to survive. With low levels of deterrents for legitimate retailers the consequences of moving to this cheaper illicit supply are low.

**Costs to consumer**

For consumers the purchase and consumption of illicit fuel is often unknown. However, the use of laundered fuel can damage consumers’ motor vehicles both over the long term and short term.

> “The vast majority of people I know, particularly constituents I represent in the border region, are familiar with several people who have had difficulties driving away from the forecourt and whose engines were destroyed two or three miles down the road”—Deputy Tony McLoughlin TD, Joint Committee, Fuel Laundering

**Non-financial costs**

Financial costs are not the only costs to the Irish economy associated with fuel laundering. The non-financial costs are particularly relevant for this type of illicit trade. These include:

- environmental costs;
- health and safety costs; and
- growth in organised crime.

**Environmental costs**

Apart from the significant financial costs associated with cleaning up, which have been estimated at €7.5m, waste from the dismantled laundering plants or the
remote dumping sites used for fuel laundering, offers significant environmental damage to our country. The materials used may include sulphuric acid wash, cat litter and bleaching earth. They are highly toxic and can cause lasting damage to the Irish landscape.

Health and safety
Added to the environmental concerns is the serious risk that dumped materials can endanger the welfare of humans. It is especially hazardous if left close to watercourses which can lead to the pollution effects being transported for miles.

"Monaghan County Council in the past had to take appropriate measures to protect the watercourses and previously we have had to temporarily turn off public water supplies" Kieran Duffy, Monaghan County Council

Growth in organised crime
Together with drug trafficking and illicit trade in tobacco, fuel laundering is one of the cornerstones of organised crime activity. It has been regularly highlighted by enforcement officials from both An Garda Síochána and the PSNI that there is a high level of involvement from OCGs. A full assessment of the involvement and consequences was outlined in Section 3 of this report.

"Paramilitary groups, both republican and loyalist, have historically been involved in fuel fraud. The twenty-third report of the Independent Monitoring Commission (IMC), published in May 2010, observed that former paramilitary groups remained engaged in fuel fraud. The same groups take part in a range of criminal activity, such as tobacco smuggling and extortion rackets against both other criminal gangs and entirely legitimate businesses." Northern Ireland Affairs Committee

Revenue strategy
According to the Revenue they are “giving priority to business programmes and measures that are specifically focused on tackling the illegal trade in mineral oils”21. This multi-faceted approach includes seven strategic actions:

1 rigorous enforcement;
2 increased prosecutions;
3 to maintain compliance of legitimate trade;
4 enhanced co-operation;
5 enhance IT capability;
6 strengthen the law; and
7 improve marking of mineral oils.

The continued high levels of illicit trade in fuels suggest that implementation of the above plan may be falling behind and little progress has been made to tackle this important issue.

"We (the IPRA) believe this is a result of limited manpower, finance and resources required to adequately tackle this problem and in no way reflects negatively on the dedicated officers who we have met with. It is the industry’s view that despite assurances by Revenue that the problem of fuel abuse is being tackled, that the situation continues “out of control” without sustained action, prosecution or prevention”. Irish Petrol Retailers Association, January 2012

Specific recommendations to tackle fuel laundering

1 New marker technology: Although the Revenue has stated that it is looking at new marker technologies slow progress has been made in implementation. It is recommended, that in conjunction with Northern Ireland, a pilot scheme is introduced in the short term, which is likely to “double the cost of removing the dyes used”.

2 Equalisation of prices: The high differential of taxation between green and road diesel provide high incentive both for suppliers and consumers to continue to launder fuel. This could be avoided by equalising the tax rates which would eliminate financial incentive.

3 Essential user fuel rebate: If fuel prices were equalised it would eliminate any benefit to the agriculture sector that currently exists with the lower levels of fuel prices. To ensure that farmers continue to benefit from the lower rates of duty, a rebate system could be introduced which would register end

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users and eliminate any opportunities for launders and refund part of the diesel tax to farmers.

4 **Registration system:** With a complicated and diverse supply chain there is increased need to “track and trace” the origins of fuels.

5 **Audit scheme:** To support the above registration system it will be necessary to introduce a “rigorous audit scheme”\(^{(23)}\) to effectively track the movement of fuel from terminal to end user. By introducing such a scheme it will ensure that the whole supply chain is effectively managed preventing illicit fuel entering it at any stage of the process.

6 **Penalties:** More punitive penalties, including loss of trading licences, should be introduced for both retailers and suppliers who distribute illegal fuel.

\(^{(23)}\) IPRA – Report into the sale of fuel in Ireland on which appropriate duty has not been paid and the distortion of trade that results, 2012
4. Tobacco

Introduction – illicit trade in tobacco
At the outset it is important to recognise the social, health and economic cost of smoking and that this report supports the Government’s duty to reduce smoking prevalence amongst adults and to prevent young people starting.

For many years Ireland was seen to be at the forefront in the fight against tobacco. However this reputation has increasingly been damaged by the high rates of illicit trade in this commodity. At present Ireland is one the worst ranked countries (4th) in the EU in terms of the consumption of counterfeit and contraband tobacco.

Figure 5.1 - Counterfeit and contraband consumption of tobacco in Ireland

Source: KPMG Star Report 2012

Tackling the problem of illicit trade in tobacco remains one of the key government objectives. Despite this, illicit tobacco is freely available across a variety of casual trading markets within Ireland and more tobacco products are seized by customs than any other type of commodity.

Although often seen as being a victimless crime, the issue of illicit trade in tobacco has substantial consequences for the Irish economy. From a financial perspective, the implications of this illicit trade are significant. Estimates from the Revenue put the loss to the Exchequer at around €250m, while the industry has put the figure at €526m.

The impact of illicit trade in tobacco goes beyond the purely financial losses. It undermines efforts to reduce smoking prevalence, harms honest retailers and undermines the rule of law. It has also been reported that the criminal gangs and paramilitary organisations are increasingly involved in the smuggling of illicit tobacco.

In this section we will look at the types of tobacco related illicit trade, the cost to the economy, how illicit tobacco is being brought to the market and the current Government strategies to reduce the escalating problem. Ultimately, the objective of this section of the report is to put forth realistic and actionable
policy options for the Irish Government to tackle the problem of the illicit trade in tobacco. Any recommendations contained in this report relating to tobacco are based solely on the urgent need to reduce the scope of the illicit trade in tobacco and to ensure that, where a demand for tobacco amongst adults exists, this demand is met through legitimate retail channels.

**Types of illicit tobacco**

Across the world, tobacco is subject to various country specific excise taxes. These different taxation policies across jurisdictions give rise to opportunities for smugglers to make profits by not paying the domestic rates of duty. Illicit trade in tobacco manifests itself in a number of ways:

- **contraband** (also known as bootlegging) is the smuggling by individuals or small groups of quantities of cigarettes but exceeding the legal border limits. Often the cigarettes are bought in low-tax jurisdictions and re-sold in high tax jurisdictions such as Ireland;
- **counterfeiting** (also known as illegal manufacturing) is the making of fake tobacco products that carries a trademark without the consent of the trademarks owner; and
- **illicit whites** are cigarettes that are manufactured for the sole purpose of being smuggled into and sold illegally in another country where they would not be found at legal points of sale.

**Economic drivers of illicit trade: price and taxation**

Traditionally excise duties and other taxation measures have been used by policy makers to reduce negative impacts of tobacco consumption in society. Despite the positive intentions of price increases, driven by public health concerns and the desire to reduce the demand, recent evidence suggests that this may no longer be the optimum strategy and has only served to exacerbate the problem of illicit trade in tobacco in Ireland.

Illicit trade in any form is fundamentally driven by the principles of the economics of supply and demand. Supply from criminals with the incentive to make large profits and demand from consumers who want to save money and thus substitute to lower priced alternatives.

Ireland currently has the second highest selling price of tobacco in the EU. This high price has been the result of increases in the rate of excise between 2003 and 2012. Between 2001 and 2012, total price of a packet of cigarettes increased by 190% from €4.88 to €9.30.

*Figure 5.2 – Retail price differentials*

The impact of these price increases has been significant both on the supply and demand side.

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### Supply

#### Table 5.1 Supply drivers for tobacco

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High unit profitability</td>
<td>The potential profit margin can be quite large, due to the high excise and other taxes imposed on tobacco products. This is highly relevant in Ireland.</td>
</tr>
<tr>
<td>Large potential markets</td>
<td>Around 23.55% of the Irish population smoke around 5.7 billion cigarettes a year. There is probably no other single product that is regularly consumed on such a large basis. Thus, the market opportunities are enormous.</td>
</tr>
<tr>
<td>High level of brand recognition</td>
<td>Many tobacco brands (especially cigarettes) are widely recognised throughout the country.</td>
</tr>
</tbody>
</table>

#### Production, distribution and technology

| Simple, low cost equipment | Once the investment has been made in cigarette manufacturing and packaging/labelling equipment, the cost of production is quite small (around USD 3.00 per carton). Manufacturing equipment is relatively compact, and thus the investment in production facilities is likely to be moderate. |
| Not sophisticated easy to acquire | Because of the simple nature of tobacco products, it is not necessary to invest in sophisticated technology. |
| Simple and cheap logistics | Tobacco products are small items that do not need special handling and can be transported using normal means. However, arrangements to either smuggle or bypass customs/excise attention would require special attention, and may require the participation of well-organised groups. |
| Easy to / stability of infiltrate distribution channels | Branded products are well-known and have a ready market. Cigarettes can be sold in packets, or even individually, to increase their appeal in low-income markets. The use of the Internet is becoming increasingly important. |
| Easy to conceal illicit operations | While some moderately bulky equipment is necessary for the production of counterfeit tobacco products, concealment would not be too difficult. Obtaining raw materials (especially tobacco), and moving stock in and out of premises is likely to be most difficult aspects to conceal. |
| Easy to deceive consumers | For the average consumer it is practically impossible to detect counterfeit tobacco products, especially when the buyer is not familiar with the taste of the product. This is because it is very simple for counterfeiters to copy the look and packaging of the tobacco product. In some cases, counterfeiters can charge prices that are close to those of the original items. |

#### Institutional characteristics

| Low risk of detection | Despite considerable customs/excise and industry efforts to apprehend smuggled and counterfeit tobacco products, in practice, the actual risk for smugglers seems to be acceptable to them, mainly due to the large volume of trafficking that takes place and the sophisticated methods used to avoid, or at least minimise, detection. |
| Risk of prosecution | Given the illicit nature of the trade, and the fact that these are excisable goods, the likelihood of prosecution if apprehended would be very high. |
| Penalties | Penalties, including heavy fines and jail sentences, could be expected by those found guilty of counterfeiting and smuggling. |

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On the supply side, even in countries with perceived low rates of taxation on tobacco, the smuggling of tobacco can be seen as very profitable for criminal gangs. In Ireland, which has the second highest price of tobacco, the incentive is even greater.

> “There is a direct relationship between the level of excise tax and the black market sales of smuggled tobacco” 20, Michael Noonan, Minister for Finance, 21 September 2011

Whilst the incentive to buy illicit tobacco is driven by the price and affordability, the incentive to supply illicit tobacco is driven the margin of profit available for the suppliers. At present with taxation as a percentage of total prices at 78.6% 30 (as shown in the below table), suppliers can avoid the high rates in Ireland and purchase cigarettes at a fraction of the cost in lower tax jurisdictions.

#### Table 5.2 - 20 cigarettes - who gets what?

<table>
<thead>
<tr>
<th></th>
<th>Costs and margins</th>
<th>VAT</th>
<th>Excise</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split</td>
<td>€1.99</td>
<td>€1.74</td>
<td>€5.57</td>
<td>€9.30</td>
</tr>
<tr>
<td>Percentage</td>
<td>21.4%</td>
<td>18.7%</td>
<td>59.9%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: ITMAC

To put this incentive for smugglers into context, criminal gangs can buy a container of contraband tobacco (which has 475,000 packets) for €1.5m 27 in Poland while to buy a similar container at Irish retail prices would cost in the region of €4.4m. The price differential gives smugglers potential profits of €2.9m which represent a 65.9% return on investment. It is important to note that this potential profit of €2.9m is unrealistic, as typically these smuggled cigarettes are sold at well below the market price.

Market research suggests that current prices of illicit tobacco in markets across Ireland is anywhere between €3.50 and €5. Using the midpoint of €4.5, we estimate that the same container of contraband tobacco from Poland would return an actual profit of €641k. Using a similar methodology we have also

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21 ITMAC
22 Production, distribution, manufacturers margin, trader's margin
23 Euromonitor International
calculated the potential profits from counterfeit and illicit whites which although currently not as prevalent as contraband are becoming more readily available.

**Table 5.3 Potential profit from various illicit trades**

<table>
<thead>
<tr>
<th></th>
<th>Counterfeit</th>
<th>Contraband</th>
<th>Illicit Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>€0.18</td>
<td>€3.15</td>
<td>€0.20</td>
</tr>
<tr>
<td>Cost per container</td>
<td>€84,075</td>
<td>€1,496,250</td>
<td>€95,000</td>
</tr>
<tr>
<td>(475,000 packets per container)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illicit selling price (IRL)</td>
<td>€4.50</td>
<td>€4.50</td>
<td>€4.50</td>
</tr>
<tr>
<td>Illicit turnover</td>
<td>€2,137,500</td>
<td>€2,137,500</td>
<td>€2,137,500</td>
</tr>
<tr>
<td>Profit</td>
<td>€2,053,425</td>
<td>€641,250</td>
<td>€2,042,500</td>
</tr>
</tbody>
</table>

Source: Grant Thornton analysis

From the above table we can see that the potential profits from both counterfeit tobacco and illicit whites are higher that contraband tobacco with potential profits as high as €2m per container. These high profits demonstrate why counterfeit cigarettes and illicit whites are increasingly available in the Irish market.

With high potential profits, the incentives exist for smugglers to continue to supply the demand that exists in the Irish market.

**Affordability**

An analysis of the affordability of cigarettes in Ireland shows the increase of income inequalities and the contribution of cigarettes prices to it. Indeed, according to cigarettes prices and the recently published study of UBS on prices and earnings33, cigarettes became cheaper for higher social classes whereas lower incomes bear the heavier burden on cigarette price increases.

**Table 5.4 Cigarettes price and earnings comparison**

<table>
<thead>
<tr>
<th></th>
<th>Department head</th>
<th>Skilled industrial worker</th>
<th>Primary school teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
<td>Var</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
<td>Var</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
<td>Var</td>
</tr>
<tr>
<td>MPCC34</td>
<td>24.59</td>
<td>22.03</td>
<td>10%</td>
</tr>
<tr>
<td>Lowest</td>
<td>22.28</td>
<td>19.07</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>29.54</td>
<td>35.11</td>
<td>-24%</td>
</tr>
<tr>
<td></td>
<td>32.59</td>
<td>40.56</td>
<td>-24%</td>
</tr>
<tr>
<td></td>
<td>23%</td>
<td>26%</td>
<td>-12%</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>23%</td>
<td>-7%</td>
</tr>
</tbody>
</table>

Source: UBS – Prices and earning, CIO Wealth management research, September, 2012

With a 24% increase on the working time needed to buy a pack of Marlboro, skilled industrial workers are the most penalized. This differential impact on social classes with lower disposable income seems to be one of the roots of the down-trading trend to cheaper brands or other tobacco products as well as a motor for the rise of illicit cigarettes.

**Demand**

**Table 5.5 Demand drivers for illicit tobacco products**

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>Price may be a very strong contributing factor, and may encourage consumers to buy them, even if there is a suspicion that the cigarettes may not be genuine. This may be especially so in low-income markets where original bands price may be too high for consumers.</td>
</tr>
<tr>
<td>Quality and nature of product</td>
<td>The appearance of counterfeit cigarettes can be very close to that of originals. While taste may differ, many consumers may not be able to make comparisons.</td>
</tr>
<tr>
<td>Ability to conceal status</td>
<td>Some consumers may buy counterfeit brands as status symbols, and the concealment of counterfeits could be relatively easy in unsophisticated markets. In such cases, the close outward appearance of the counterfeit items to the originals would certainly be a factor in consumption.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health risks</td>
<td>Very high, but this has not generally deterred smokers. However, for known counterfeit products, there may be strong reluctance to use them, unless other factors (such as image or price) override health concerns.</td>
</tr>
<tr>
<td>Safety concerns</td>
<td>None obvious.</td>
</tr>
<tr>
<td>Personal income</td>
<td>Low personal income drives consumers to purchase counterfeit products.</td>
</tr>
<tr>
<td>Personal values</td>
<td>Indications are that consuming counterfeit cigarettes is not considered to be a serious crime.</td>
</tr>
</tbody>
</table>


34 MPCC – Most Popular Consumer Category
Demand for illicit tobacco is driven by price and affordability. A recent international survey\(^\text{35}\) suggests that Ireland is the fourth least affordable in terms of cigarette prices in Europe when compared to consumer’s disposable income. This low affordability has a strong impact on demand and has caused consumers to substitute to the lower taxed illicit alternatives. This is evidenced by the high market share of counterfeit and contraband products which is estimated to be in between 18% and 26%\(^\text{36}\).

**Figure 5.3 Disposable income**

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**Financial costs: loss to the Exchequer**

With increases in the price of tobacco in Ireland of 190% from 2001 to 2012, driven primarily by excise and VAT increases, we would expect that if smoking prevalence only fell marginally that excise receipts would rise accordingly. Despite this, receipts have remained relatively static over the same period at around the €1.1 billion mark\(^\text{37}\), which we can conclude to be a result of illicit trade.

This has resulted in significant losses to the Exchequer over the last number of years. Revenue estimates that this figure is around €250m per annum, whilst the tobacco industry estimates that this figure is considerably higher. For 2012 alone, the Irish Tobacco Manufacturers Association (ITMAC) has estimated that the revenue lost as a result of the trade of counterfeit and contraband tobacco in the market, amounts up to €569m. Since 2009, the total estimated losses would amount to €2.2bn.

<table>
<thead>
<tr>
<th>Table 5.6 Estimated losses to the exchequer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue losses</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Excise and VAT losses</td>
</tr>
</tbody>
</table>

Source: ITMAC

With such a wide variation in the Revenue and ITMAC estimates, we have performed an independent assessment of the methodology used by the tobacco industry to calculate the losses to the Exchequer and conclude that their approach appears to be robust. A simple comparison of the three most significant variables (price; receipts; and the prevalence of smoking in Ireland), would suggest that the Revenue figure of €250m is likely to be undervalued.
The table below shows how as price has risen, excise receipts have remained static.

![Figure 5.4 Excise receipts versus price](image-url)

**Figure 5.4 Excise receipts versus price**

Despite the variation on exact losses to the Exchequer, both estimates are extraordinarily high and the illicit trade in tobacco needs to be addressed as a matter of urgency.

For an economy the size of Ireland the estimates of this size have significant implications and it is necessary to put them in to context. The receipt of €526m in revenues would account for half of the Irish Governments targeted additional savings in 2014 under the EU-IMF bailout (€1.1 bn) or enough to cover the much criticised Property Tax that was announced in Ireland in Budget 2013 which is expected to raise €250m in 2013, increasing to €500m by 2014.

Given the high levels of illicit trade and extensive losses to the Exchequer it is apparent that the taxation policy of continuous excise duties has not acted either as a deterrent or a successful revenue generating measure for the Government, but has only served to perpetuate the market demand for illicit products in Ireland.

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34 Financial statement of the minister for finance 5 December 2012

39 Retailers against smuggling – Pre-Budget Submission

41 Retail Ireland

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Other financial costs

Retailers

Beyond the lost revenues to the Exchequer, illicit trade in tobacco has a huge impact on the economic and social fabric of society. For retailers, who are suffering from a challenging operating environment, the high rates of substitution to untaxed and illegal alternatives is having a devastating effect. With tobacco sales traditionally making up to 30% of the average newsagent turnover, the loss of this revenue has been a strong contributing factor to the decline of the industry. Retail sales in Ireland are down by 30% since their peak in 2008. Estimates show that lost turnover for retailer’s amounts to €721m, which amounts to the lost profit margin of circa 5% or €40m per annum to these retailers.

<table>
<thead>
<tr>
<th>Table 5.7 Retail sales losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail losses</td>
</tr>
<tr>
<td>Retail sales losses</td>
</tr>
</tbody>
</table>

Source: Retail Ireland, Tackling the Black Market in Ireland 2012

In addition to the loss of the direct revenue from tobacco sales, the sale of tobacco products generate footfall for retail outlets. Customers who enter a shop to buy cigarettes will almost invariably make ancillary purchases. When these customers are lost to the illicit trade, the impact on revenue is multiplied.

“This illegal trade is clearly having a devastating impact on retailers, which are already struggling to keep people in jobs” - Retail Ireland, Tackling the Black Market and Retail Crime, 2012

The threat to the long term sustainability of the small retailer has led to a number of retail groups becoming extremely vocal on this point. Retail Ireland, the NRFN, the Advisory Group for Small Business, Retailers against Smuggling and the Convenience Stores and Newsagents Association has highlighted this as a significant issue for their members.
Employment
With the continuing substitution to illicit tobacco it is inevitable that employment in legitimate retailers has been and will continue to be affected. Although redundancies in retail are not solely due to the growth in illicit trade, it has been a strong contributing factor. The lost revenues are having a notable impact on retail employment figures. Employment in the retail sector is down by 47,000 from a peak of 314,000 in 2008. Although excise increases should remain part of the Government policy, without a more balanced strategy of enforcement and penalties, the continued rise in the price of tobacco is likely to have further impact on employment in the sector.

Non-financial costs
Growth in organised crime
Increased substitution to illegal alternatives has the effect of increasing losses to both the Exchequer and retailers alike, at the same time benefiting unregulated parts of the society, such as OCGs. The OCGs and paramilitary organisations that provide the supply of counterfeit and contraband tobacco into Ireland have profited significantly. Recent reports have suggested that Irish gangs may be earning as much as €3 m per week from illegal tobacco sales41.

In addition to the cost to the economy, from a broader policing and criminal perspective, illicit cigarettes are replacing cocaine as a major source of criminal income and feeding into gangland turf wars42. In 2009 cocaine seized had an estimated value of €8.2m compared to 2008 where it had a value of €118m43. At the same time, cigarette seizures in Ireland have increased from €49m in 2008 to €92m in 2009 as gangland criminals have shifted their focus to find ways to make up their losses in the now lucrative illicit cigarette trade44. The organised criminal gangs are not limiting their criminal activities just to tobacco smuggling as they are often involved in other criminal activities such as drugs cultivation, smuggling of other goods, fuel laundering, money laundering and human trafficking.

Information suggests that money from organised crime is being used to fund other activities and the 23rd IMC report45 commented on the involvement of paramilitary groups in organised crime (including tobacco). The growing involvement of criminal elements in the illicit cigarette trade has been highlighted by a number of government officials in both the North and South of Ireland.

“It is clear that the paramilitary groups that wish to undermine the peaceful intent of the majority of people on this island have inextricable links to organised crime. Many of their activities, including drug smuggling, tobacco and fuel fraud and extortion, are plain, unvarnished criminality” - Deputy Alan Shatter, Minister for Justice and Equality, December 2012

When considering the growing influence of criminal gangs in Ireland, it is not simply the lost revenues to the Exchequer but also the associated socio-economic factors. Spill over effects, such as the need for increased protection, loss in normal economic activity, violence and safety concerns, are all more likely to occur in organised crime territory. These issues cannot be underestimated when considering potential increases in taxes on trades already connected to organised crime.

Health and safety
In the context of health and safety, counterfeit cigarettes have a series of detrimental effects on public health. Although all cigarettes are toxic, counterfeit cigarettes oftentimes are more toxic and dangerous than those that have been legally imported and sold here legitimately through normal and recognised outlets46.

One study found that in fake cigarettes, lead content was 17 times higher than that found in the genuine product. This means that someone smoking 20 counterfeit cigarettes would have smoked the equivalent of 340 genuine

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41 Irish Times, Elaine Keogh 27th August 2010
42 Fine Gael Spokesperson for Justice Charles Flanagan TD Press Release - 5th March 2010
43 Brian Lenihan, Minister for Finance, in response to Parliamentary Question from James Reilly TD - 27th October 2010
44 Minister for Finance Brian Lenihan in response to parliamentary question from Deputy Phil Hogan - 18th May
46 Caoimhghin O’Caoláin, TD, Sinn Fein, Dáil Debate on Public Health (Tobacco) (Amendment) Bill 2010 - 16th December 2010
cigarettes\(^{47}\). This has been described as a potential “health time-bomb” by Professor Robert West in a BBC television documentary.

The current Minister for Social Protection Joan Burton has previously warned that the capacity of smuggled cigarettes to damage an individual's health relative to ordinary cigarettes, which are properly manufactured and vouched for by the manufacturers, is very considerable\(^{48}\).

**Underage smoking**

By its very nature illicit trade is unregulated. This has the direct consequence of ignoring the restriction for following Government regulations such as the age limit of smokers. This is leading minors, who are more likely to be motivated to substitute to lower taxed alternatives due to affordability and access, to seek illicit traders who are not concerned by such regulation.

**Revenue strategy**

In 2011 the Revenue published its “Strategy on combating the illicit tobacco trade (2011 - 2013)”. The main aim of this strategy was to “target and confront those who do not comply with current regulations”. There are five main elements to this strategy namely:

- maintain compliance of legitimate trade;
- more effective and visible interventions;
- increase co-operation;
- increase prosecutions; and
- reduce demand for contraband tobacco.

Despite having some success in reducing the incidence of illicit trade in Ireland\(^{49}\), high levels of trading in counterfeit and contraband tobacco remain.

**Seizures**

In terms of seizures of counterfeit and contraband tobacco in Ireland, the numbers show a positive trend having steadily declined since 2009. However, it is important to note that these figures are certainly skewed by the fact that both 2009 and 2010 saw instances of extraordinarily large seizures. For example, in late 2009 the single biggest seizure anywhere in Europe occurred in County Louth, when a shipment of 120m counterfeit cigarettes was found in one vessel from the Philippines.

![Figure 5.5 Seizures versus tobacco market in Ireland](source: Grant Thornton analysis (source data: Revenue and ITMAC))

**Convictions**

Prosecutions for cigarette smuggling in Ireland are primarily taken under Section 119 of the Finance Act, 2001 which deals with evasion of excise duty. This act imposed punishments:

- on summary conviction of a fine up to €1,905 and/or a maximum jail sentence of 12 months at the discretion of the court; and

- conviction on indictment, the court may impose a fine of three times the value of the excisable products concerned, including any duty or tax, or €12,700, whichever is the greater, and/or imprisonment for a term not exceeding five years at the discretion of the court.

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\(^{47}\) BBC Scotland, TV1 “Smoking and the Bandits” - 19th January 2011

\(^{48}\) Joan Burton, TD, speaking on Parliamentary Debate - 26th November 2009

\(^{49}\) KPMG Star Report 2012
Illicit Trade in Ireland

The penalties allowed under this section were increased in Finance Act, 2010:

- summary prosecution can now result in a fine of €5,000.
- conviction on indictment now carries a fine of €126,970 or if the value of the goods involved in the offence is greater than €250,000, the court can impose a fine not exceeding three times their value.
- convictions from the sale and smuggling of illicit tobacco show conflicting trends.

These increases in the fines appear to have an impact on the number of convictions in the area of smuggling, with convictions having steadily fallen since 2009. However, despite this positive indicator there has been a rise in the number of convictions for cigarette selling. The contradiction in these two numbers could suggest that that the organised criminal gangs are becoming more adept at avoiding the presents of law enforcement.

**Future policy**

Despite a number of proactive measures by the Government to tackle the problem of illicit trade in tobacco, it has been shown that high levels of counterfeit and contraband trade remain in Ireland compared to its European counterparts.

One potential strategy that has been put forth by a number of European governments including Ireland and UK is the introduction of plain packaging for tobacco products which in case of success can be further introduced to other products such as alcohol. It has been suggested that this measure will remove a “fashion” element from the culture of smoking and reduce demand for cigarettes. The danger remains that such a measure could eliminate the distinction between licit cigarettes and illegal products regardless of protective measures developed. It will become even more difficult for normal consumers to distinguish between a genuine product and a fake.

In the coming months the Government will be drafting its follow-up strategy to tackle the issue of illicit trade in tobacco and a number of potential measures have been identified. It will therefore be important to draw on international experience when developing a strategy to combat illicit trade. One such example is in Germany which has been extremely successful in tackling youth smoking. Since the introduction of “Smoke Free” strategy in 2002, Germany has successfully reduced consumption of illicit tobacco from 25% to 11.7% in 2011.

**Case Study: German initiatives to reduce youth smoking**

Germany has had continued success in tackling the issue of youth smoking through the introduction of “Smoke Free” youth campaigns.

Whilst Germany have introduced similar measure to Ireland such as regular tax increases, bans on advertising, a public smoking ban and the introduction of minimum age laws it has had greater success in reducing smoking prevalence. The key difference has been the targeted education campaigns aimed at schools. The graph below demonstrates the success that Germany has had in reducing youth smoking and it is a potential measure that could be successful in Ireland.

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Illicit Trade in Ireland

Specific recommendations

1 **Increase enforcement on those smuggling the cigarettes:** It is evident that there are two types of smuggling of cigarettes, those done on a small scale by individuals and the larger scale operations performed by organised criminal gangs. Although the analysis shows that convictions have increased in the sale of counterfeit and contraband tobacco, there have been relatively few larger seizures or convictions for those smuggling on a large scale which is presently occurring. Increased resources are required to be assigned onto the OCGs that are driving the illicit trade in Ireland.

2 **Penalties:** More punitive penalties, including loss of licence should be introduced for both retailers and smugglers who sell illicit tobacco.

3 **Plain packaging:** The potential effects of plain packaging could have negative effects on the already substantial issue of illicit trade in tobacco. There are significant concerns by many stakeholders, notably in the retail sector, about its introduction. As with any policy decision, illicit trade decisions should be based on the evidence of the effectiveness of plain packaging to reduce the consumption of tobacco, which at this stage is at best inconclusive.

“The implementation of the plain packaging initiative would also encourage counterfeiting and other forms of illicit activity.” US National Association of Manufacturers in letter to Taoiseach reported in January 2013

4 **Taxation:** Excise tax rates should be set to optimise tax receipts over the long term. At present in Ireland, with the current high levels of taxation and static Exchequer receipts, the policy of excise increases have resulted in high levels of illicit trade. Without the appropriate enforcement and legislation in place, it is likely that further large excise increases will have a negative impact on illicit trade of tobacco in Ireland. For this reason, any excise increases should be measured and taken upon advice and evidence from the Revenue.

“Higher cigarette taxes in Ireland will no longer produce a win-win situation of public health benefits (lower rates of smoking) and benefits to the public finances (higher levels of tax revenue) Reidy & Walsh, (2011)”

5 **Targeted youth anti-smoking campaigns:** Through the increased use of anti-smoking campaigns within schools, it is believed that Ireland may have similar success to that of Germany.

6 **Digital tax verification:** The current system of control of tobacco revenue is to use paper stamps. These paper stamps used to allow revenue and customs offices to monitor the manufacture of tobacco products and to verify whether these products paid excise tax.

However, criminal gangs have nowadays access to state of the art replication technology and features used (e.g. special ink and holograms); as a consequence, stamps become more and more susceptible to counterfeiting - no matter how sophisticated the security features. This substantially lowers the effectiveness of such paper-based stamping solutions and creates a false sense of security among the trade and consumers. As a consequence, every

Reidy & Walsh, (2011), Economics of Tobacco: Modelling the Markets for Cigarettes in Ireland, Revenue
fiscal stamp that has been devised can be copied as long as there is an interest by organized crime to do so and therefore is no longer an effective deterrent.

One solution that has been suggested internationally is to introduce a fully digital, paperless tax verification system. This approach uses highly encrypted digital coding instead of stamps; the coding could be printed during production and under online government supervision directly on tobacco packs and virtually any other excisable goods such as alcohol.

One benefit of such a system is the seamless, real-time control and transparency of volumes produced and taxes paid while reducing the administrative burden known from stamp systems (handling, secure transport etc.).

Furthermore, such a coding solution is almost impossible to counterfeit and enables mass authentication by anyone, anywhere in the supply chain. This can be done through the use of existing, robust technologies such as smartphone apps, web portal, or SMS without the need to rely on proprietary devices. This substantially increases the ability of law enforcement to early-on spot emerging illicit trade patterns and engage resources more efficiently.

Last but not least, the very same system can also be used to effectively track and trace products throughout the supply chain to comply with existing or upcoming international obligations such as the FCTC protocol against illicit trade of tobacco products.
5. Digital piracy

“Even in a digital marketplace replete with attractive legal services, illegal ‘free’ continues to be an irresistible magnet for consumers” International Federation of Phonographic Industry (IFPI) 51

Fundamentally, digital piracy is different from the other forms of illicit trade analysed in this report. It is not always fuelled by the monetary ambitions of criminals and frequently does not require production and distribution of physical product. Digital piracy is often community based with small numbers of private individuals making goods, which were previously available only through payment, available for free to the wider public online.

Digital piracy is often perceived as a victimless crime because little or no financial gain arises from the distribution of pirated products via internet. Yet the impact of piracy on the retail sector is substantial. This is evidenced by a number of high profile companies who have become victims of digital pirates, including HMV, Golden Discs and Game.

In this section we will analyse digital piracy both in Ireland and internationally, what drives the marketplace, the impact on retailers in Ireland and suggest potential policy measures that could be utilised to counteract digital piracy.

Digital piracy

The scope of digital piracy includes a range of infringements on IP rights. It includes audio-visual piracy, software piracy and the theft of other electronically transmittable IP. It is important to note that there are additional elements of digital crime such as identity theft or online payments fraud which are outside the scope of our report.

“Digital Intellectual Property (IP) crime is ….content protected by copyright that is stored in electronic form and is capable, for example, of being sent, shared or distributed over the internet.” - IP Crime Group 52

The overall development of the digital market is evolving at a rapid pace and likewise the methods for digital piracy. There has been a shift from Peer-to-Peer sharing to cloud based facilities. Those who are making pirated digital goods readily available for free are changing the way they operate at a quicker pace than policy makers and owners can adjust to.

The industry has played an important part in the contemporary entertainment culture. With the introduction of internet and increased access to this distribution channel, physical film, music and software sales have moved to the digital format. This logically should have resulted in the decrease of physical sales being

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51 IFPI – Digital Music Report 2012
offset by the increased online sales. Yet, research has shown that this is not the case.

**Audio visual piracy**

"Ireland, with its rich musical tradition, is also a lucrative market for piracy, with music industry losses running to €3.8m annually" Irish Recorded Music Association

In the audio-visual industry, which covers the music and film industries, there has been significant change in the consumer patterns with customers switching from traditional physical products to digital products.

The music industry is increasingly relying on digital sales as their source of revenue. In 2012, in both the US and the UK, digital music sales overtook physical formats to become the dominant revenue stream. It is estimated that this trend will continue in 2013.

Despite the increase in digital sales, the rise in digital music sales is unlikely to replace the loss in the sale of physical formats. Between 2005 and 2010 the value of physical music sales decreased by approximately €90m, while during the same period digital sales only increased by €11m. Consequently either the value of the Irish music market decreased by €79m or that Irish consumers’ behaviour changed significantly.

This is further evidenced by the more recent numbers submitted by Phonographic Performance Ireland (PPI) in 2012 to the International Federation of the Phonographic Industry (IFPI) which indicate that the total decrease in physical retail music sales between years 2006 and 2012 was over €108m, while digital sales increased by approximately €17m. The gap in this case is over €91m.

There are two key reasons for the existence of this gap: the “singles effect” and increase in digital IP crime. It is difficult to separate the impact of the above two factors. Figure 6.3 above illustrates the value change in the physical and digital Irish music market in 2005 – 2010 according to PPI music.

"At the core of HMV’s troubles lie these dramatic shifts in consumer behaviour...In 2002 just 6.5% of film and music was purchased online...By last year this figure had risen to 73.4%" - Financial Times

In the Audio-visual sector alone, over 100,000 movies are downloaded illegally in Ireland each week. In the film industry, the Irish Film Board estimates that the total direct and indirect employment generated from the copyright based industries in Ireland is estimated at 116,000, which represents 6.4% of total employment. The sector includes approximately 500 Irish owned audio-visual content production companies. Thus, combating digital piracy in Ireland is...
Digitalisation of traditional hard copy products such as books, has led to the creation of a new sector of pirated products. According to a Daily Mail report, in 2010, over 20% of eBooks were sourced from illegal sites.61

Software piracy

Software piracy refers to the unauthorized copying or distribution of copyrighted software. Users who purchase software legally purchase a license to install the software on specific terms and conditions. Pirated software is software that is installed a number of times exceeding permitted.62

In 2010, the worldwide commercial value of pirated software was estimated at $58.8bn in 2010 which has increased to $63.4bn in 2011. With over 55% of the world’s personal computer users admitted to owning pirate software, it is clearly an issue requiring international attention. In Ireland over $140m worth of software was downloaded illegally in 2011 and 34% of computer users admitted they downloaded pirated software.63

The graph below illustrates changes in software piracy rates in 2007-2011 for some countries. Similar patterns of high rates of piracy are observed across the world. The existing high rates of piracy that first occurred in the early 2000’s have not been yet been effectively tackled.

Figure 6.2 Software piracy rate

Source: BSA, Global Software Piracy

In Ireland the software piracy rate (34%) is slightly below the European average, however they are notably higher than the UK and the US.64

Figure 6.3 Average piracy rates (2007 – 2011)

Source: BSA, Global Software Piracy

Supply and demand analysis and drivers of digital piracy

There are a number of drivers of digital piracy which we will look at further in this section. Our analysis shows that the three most important drivers of digital piracy in Europe and Ireland are:

61 Daily Mail 2/01/2012 eBook pirated cash in on Kindle sales boom as thousands turn to rogue sites for cheap downloads
62 BSA, The software alliance
63 BSA, Global Software Piracy
64 BSA, Global Software Piracy

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increased use and penetration rates of fixed-line and mobile broadband;
• the increase in techniques being used to make digital products available to
consumers for “free”; and
• the increase digitisation of products that are traditionally bought directly from
retailers i.e. books, video games and music.

Supply
As already outlined in other areas of this report to assess the drivers of supply we
have used three specific factors that drive supply of pirated digital products:
• the market potential including personal motives;
• distribution and technological; and
• institutional environment including public attitudes and market risk.

These are summaries in the table below.

Table 6.1 Digital piracy – supply drivers analysis

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards piracy</td>
<td>Piracy is generally socially accepted; social recognition, collectivism</td>
</tr>
<tr>
<td>Reciprocal mechanism</td>
<td>Network mechanism imposing reciprocal behaviour</td>
</tr>
<tr>
<td>Market size</td>
<td>Potential market is large; The commercial value of software piracy in Ireland is $144m;</td>
</tr>
<tr>
<td>Unit profitability</td>
<td>None or very little profit arises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production, distribution and technology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production investments</td>
<td>No investment required</td>
</tr>
<tr>
<td>Technology</td>
<td>Easy to reproduce digital content regardless of protection technologies developments</td>
</tr>
<tr>
<td>Logistics</td>
<td>Internet is a free and fast distribution channel</td>
</tr>
<tr>
<td>Marketing and sales of product</td>
<td>No marketing or sales cost as a product is desired by customers</td>
</tr>
<tr>
<td>Ability to conceal operations</td>
<td>Easy to conceal</td>
</tr>
<tr>
<td>Ability to deceive</td>
<td>Customers are normally aware of the nature of a product</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of discovery</td>
<td>Low risk of discovery</td>
</tr>
<tr>
<td>Legal and regulatory Framework</td>
<td>Weak in majority of countries. No penalties in Ireland. Right owners have very limited rights to pursue those who distribute the product illegally.</td>
</tr>
</tbody>
</table>


The market for digital products is now global due to worldwide availability of
internet access. Internet technology allows users to overcome any restrictions
which apply to physical products including geographical barriers and the majority
of legal controls. The internet was a major technological development that makes
distribution of digital content fast and easy.

Various technological solutions within the internet, which were originally
developed for legitimate purposes such as Peer-to-Peer networks, help to share
digital content without additional costs. Peer-to-Peer sharing is the basis of
various torrent web sites. In order to download content a user needs to share
some content. The technical construction of these networks allows users who
upload popular content (music, video files and video games) to have better
access to the services provided by the web-site. This facilitates both the supply
and the demand sides of digital piracy.

It is evident that the institutional environment designed to combat digital piracy
is in need of major improvement in order to keep up with the fast moving
developments of technology.

Digital piracy is perceived by the majority of users as a socially acceptable
“sharing” and in most of the cases users do not realise that distribution of
pirated copies is an illegal action. Digital content is made freely available to all the
users in order to receive some level of recognition or receive another product in
exchange. Legal and regulatory framework regarding digital piracy remains weak
across the majority of countries. It is clear that distribution of pirate copies is
illegal, yet is difficult to identify who should be responsible for it, and what
penalties should be applied. Therefore, the risk of being prosecuted for
distribution or download of pirate digital products is extremely low. This drives
both supply and demand up.

Demand
Some of the factors that facilitate supply of pirate digital products also drive
demand. These factors include internet technology and institutional
considerations. In addition to this, the OECD has identified product-specific,
individual-specific and market-specific factors that drive demand\textsuperscript{67}. The table below summarises these key factors.

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th>Price</th>
<th>Free or very cheap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality and nature of product</td>
<td>High quality attractive content that is easy to store and transfer</td>
<td></td>
</tr>
<tr>
<td>Ability to conceal status</td>
<td>Consumers are aware of the nature of a product</td>
<td></td>
</tr>
</tbody>
</table>

**Table 6.2 – Digital piracy – demand analysis**

<table>
<thead>
<tr>
<th>Consumer characteristics</th>
<th>Health &amp; Safety concerns</th>
<th>Generally no risk &amp; safety concerns; lack of parental control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal income</td>
<td>Low disposable income of young users</td>
<td></td>
</tr>
<tr>
<td>Personal values</td>
<td>Permissive attitude towards digital piracy; perceived as victimless crime</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
<th>Risk of discovery</th>
<th>Low risk of discovery in Ireland. In France - high risk of discovery - “three strokes policy”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk of prosecution</td>
<td>Low risk of prosecution in Ireland; High risk of prosecution in France</td>
</tr>
<tr>
<td>Penalties</td>
<td>No penalties in Ireland; Penalties up to €1,500 for three illegal downloads in France</td>
<td></td>
</tr>
<tr>
<td>Availability and ease of acquisition</td>
<td>Product is freely available online</td>
<td></td>
</tr>
</tbody>
</table>


Another important factor is convenience. A pirated copy of a music track can be copied multiple times on to the user’s computer, MP3 player, iPad or iPhone and can be used anytime and anyplace without any additional costs or restrictions.

“One-third of the evidence we gather each year comes directly from customers who were fooled into thinking they bought a real thing” - Donal Keating, Microsoft\textsuperscript{68}

In some instances consumers are made to believe that the product they purchase is genuine. Despite this, intentional piracy still dominates. The following chart presents the survey responses from the 2011 BSA Global software piracy study, which comprised of 15,000 computer users in 33 countries. The users who say they illegally download are disproportionately young and male. With the Irish piracy rate being just below the European average we can assume the same demographic for those who are involved in digital piracy in Ireland.

**Figure 6.4 How often do you acquire pirated software or software that is not fully licensed?**

<table>
<thead>
<tr>
<th>Always</th>
<th>Mostly</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>9%</td>
<td>17%</td>
<td>26%</td>
<td>38%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: BSA, Global Software Piracy Study, 2011

**Economic impact**

The commercial value of software piracy in Ireland is estimated to be around $144 m; $1,943 m in the UK; $2,754 m in France and $9,773 m in the US\textsuperscript{70}. These numbers are significant, especially when we consider these on a per capita basis, which is illustrated in Figure 6.5 below. From this we can see that Irish data figures are just slightly below the US and UK figures. This means that the

\textsuperscript{67} OECD, Piracy of Digital Content

\textsuperscript{68} War On Counterfeiters, 3/3/2011 http://www.siliconrepublic.com/business/item/20691-war-on-counterfeiters

\textsuperscript{70} BSA, Global Software Piracy
issue of digital piracy in Ireland is at the same level relative to country size as in the US and UK. However, what is more significant is the magnitude of piracy. Per annum each person downloads an average of $2,800 worth of illegal software.

**Figure 6.5 Monetary value of software piracy per capita ($’000)**

Total direct employment by the audio-visual sector was over 5,400 and the turnover of the sector exceeded €500m in 2008\(^7\). A number of Irish based companies operating in the digital sector have experienced significant problems in the past few years that resulted in closure of the stores and employees being made redundant.

With further digitalisation of the audio-visual market and clear difficulties experienced by the digital sector in Ireland it is important to assess the impact of digital piracy on the Irish economy and society.

**Economic impact: retailers and Exchequer**

In 2012 over 73.4% of musical and audio-visual content was purchased online and is projected to surpass 90% by 2015. With the closure of HMV this January, approximately 300 Irish jobs are reported to be lost and this is becoming an increasingly common occurrence. The figure below graphically represents the cumulative job losses in the audio-visual and software industries in Ireland since 2008 and projected job losses to 2015.

HMV is not the only high profile retailer to be affected by digital market change, in the UK recently, Blockbuster is set to close 129 of its 528 stores and cut 760 jobs, whilst electronic goods retailer, Comet, has 236 stores facing closure after being placed into administration in January 2013. In Ireland there have been recent closures of music retailers Golden Disc, Zavvi, HMV and video and media retailer Xtravision went in and out of examinership.

It is estimated that by 2015 the cumulative job losses in the creative industries sector in Ireland could be as high as 7,376 with an estimated loss to the Exchequer of €70.7 m in tax (see the Figure 6.6 below)\(^7\).

**Figure 6.6 Cumulative job losses – Ireland**

Additional Exchequer losses can be attributed to the fact that the State provides significant support through s.481 tax relief and funding to the Irish Film Board. Yet, as a result of weak IPR protection systems, this cost to the state can be considered wasted as no revenues result from it. All principal subsidised IFB projects are currently available online for illegal download.

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\(^7\) PWC, Creative capital Report, Dec 2008

\(^7\) Grant Thornton estimates based on TERA Consultants 2010
The following chart shows projected losses to the retail sector in Ireland and the potential loss to the Exchequer (VAT payments) due to the reduction of jobs in the creative industries. These figures do not include additional costs incurred by the government such as additional social welfare payments. The estimated VAT loss in 2008 alone was €21.21m.

**Figure 6.7 Retail and VAT loses (€’m) (2008 – 2015)**

<table>
<thead>
<tr>
<th>Year</th>
<th>VAT loss to Exchequer</th>
<th>Retail loss (Ex-VAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>21.21</td>
<td>25.72</td>
</tr>
<tr>
<td>2009</td>
<td>25.72</td>
<td>31.81</td>
</tr>
<tr>
<td>2010</td>
<td>31.81</td>
<td>40.29</td>
</tr>
<tr>
<td>2011</td>
<td>40.29</td>
<td>46.69</td>
</tr>
<tr>
<td>2012</td>
<td>46.69</td>
<td>57.44</td>
</tr>
<tr>
<td>2013</td>
<td>57.44</td>
<td>66.28</td>
</tr>
<tr>
<td>2014</td>
<td>66.28</td>
<td>70.70</td>
</tr>
<tr>
<td>2015</td>
<td>70.70</td>
<td>100.98</td>
</tr>
</tbody>
</table>

Source: Grant Thornton estimates based on TERA Consultants data 2010

**Non-financial impact: Innovation**

Throughout this report much of the focus has been on the negative impact of illicit trade, however it is important to acknowledge that there are some positive effects on certain types for innovation, notably in the digital sector.

As outlined in the IP section of this report, illicit trade has generally negative impact on innovation, however in some instances it encourages competition between innovators and pirates and results in innovative products.

Innovation that is driven by an intention to protect a product from being pirated is referred to as forced innovation. Firms innovate to combat piracy, to differentiate their product and to create the experience.

For instance, software producers have to constantly develop more innovative ways to stop people from copying their products without purchasing a licence. Introduction of a new barrier to copy a product encourages pirates to take on a challenge of finding a way to overcome this barrier. This can be also considered innovation as it creates yet unknown technology to “crack” new protection measures. The most common example is digital verification codes used by software producers. In order to install software on a personal computer, consumers have to enter a code provided by the software producer. However, a small app that followed algorithm adopted by software producers in issuing the code was developed quite fast and could generate an authentication code for those unwilling to pay for an original version. In most of the cases this code will not give a consumer access to full functionality of a product, but allow using basic functions. Anecdotal evidence shows that for some early versions software producers sometimes tolerate this practice in order to capture a wider market share. Only to follow up with significant increase in security and enforcement measure that will force consumers used to a product to purchase a genuine version.

Digital piracy also stimulates innovation in creative industries by challenging producers to create products that would results in creation of experience that people would pay for. For instance, James Cameron, director of Avatar, believes that the key to combating digital piracy in the movie sector is innovation and consumer experience. High definition three hour long 3D version of Avatar is impossible to distribute over internet without damaging the quality. Thus, Cameron believes that people are willing to pay for a rich cinema experience.

Regardless of the extra competition brought into the industry by digital piracy and resulting from it innovation, new legislative measures taken to protect IP may restrain opportunities for innovation. A rapidly evolving technological landscape with an overwhelming amount of digital content available online has resulted in the creation of new innovative forms of products that did not exist before. Hence, in order to protect innovation it is important that any new legislative instruments introduced to combat digital piracy are flexible and would allow for new types of innovative products.

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73 Thierry Rayna, 2004, Industrial dynamics, innovation and development
Enforcement and regulatory measures

Currently there are no financial penalties in Ireland for the illegal provision or downloading, without permission, of digital content. In the United States, downloaders and illegal providers can be jailed for up to five years and face a fine of up to $250,000. In Australia maximum imprisonment is two years, and a fine may be as high as $250,000. There are no similar set penalties in Ireland for digital piracy.

There have been policies proposed such as the Anti-Counterfeiting Trade Agreement (ACTA), designed to enforce IP rights and combat trade of counterfeit goods. The ACTA was originally backed by The European Commissioner for Trade, Karl De Gucht, and had been previously approved by all EU countries as well as Canada, Japan and the United States. However, the treaty was unanimously rejected in 2012 which now leaves the Treaty and its policy options under threat in the foreseeable future.

Some Irish internet providers, such as Eircom, have voluntarily implemented a so called ‘three strikes and you’re out’ system. A user who downloads three pirated products consequently loses internet access for a week. After four breaches the user loses access completely. Similar systems have proven to be effective on a country scale in France (see future policy considerations section).

Some multi-national companies, such as Microsoft or Google have their own anti-piracy departments and polices. Google removes from its search links to websites that provide pirated products following a request by either the copyright owner or other stakeholders. In February 2013 almost 14.5m URLs were requested to be removed. Microsoft scans the web for suspicious links and sends takedown requests to web service providers. Microsoft also carries out its own forensic investigations to track the origins of counterfeit CDs.

Irish National Federation against Copyright Theft (INFACT) is an Irish website that provides links for consumers to build up their awareness of the impacts of piracy and how to avoid/report illicit sites that provide downloadable content illegally.

EU compliance

As a member state of the EU, Ireland is required to comply with requirements of the Directive 2001/29/EC of the European Parliament and of the Council. According to this directive member States should:

- “provide appropriate sanctions and remedies in respect of infringements of the rights and obligations set out in this directive and shall take all the measures necessary to ensure that those sanctions and remedies are applied. The sanctions thus provided for shall be effective, proportionate and dissuasive.

- each member state shall take the measures necessary to ensure that right holders whose interests are affected by an infringing activity carried out on its territory can bring an action for damages and/or apply for an injunction and, where appropriate, for the seizure of infringing material as well as of devices, products or components referred to in Article 6.2.

- member states shall ensure that right holders are in a position to apply for an injunction against intermediaries whose services are used by a third party to infringe a copyright or related right.”

Existing Irish legislation fails to comply fully with the above requirement. The main document regulating IP in Ireland is the Copyright and Related Rights Act, 2000. The Irish High Court Judgement on EMI v UPS76 case ruled that “Irish

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74 © 2013 Grant Thornton. All rights reserved.
75 The New York Times, 6 November 2010, Chasing Pirates: Inside Microsoft’s War Room
76 EMI (plaintiff) v UPC (defendant) – October 2010, Irish High court.
copyright legislation currently does not provide appropriate remedies for copyright owners in respect of on-line infringement of their rights.”

**Future policy considerations for Ireland**

In failing to provide legislative provisions for blocking, diverting and interrupting internet copyright theft, Ireland is not yet fully in compliance with its obligations under European law. Instead, the only relevant power that the courts are given is to require an internet hosting service to remove copyright material. Respecting, as it does, the doctrine of separation of powers and the rule of law, the Court cannot move to grant injunctive relief to the recording companies against internet piracy, even though that relief is merited on the facts, Mr Justice Charleton

As previously mentioned in the second section of this report the Copyright Review Committee is currently in the process of preparing a second consultation paper on Copyright and Innovation. The ultimate outcome of this consultation paper will be a set of recommendation regarding improvement of the existing IP legislation which should have significant implications for digital piracy. Whilst these solutions, when implemented, will affect IP industry in general, we suggest some specific actions that can be taken to address the issue of digital piracy:

**Specific recommendations**

1. **Align IPR protection legislation and enforcement policies to Directive 2001/29/EC:** Existing Irish legislation does not provide a right for IP right holders or other authorities to access information regarding users who access pirated products. As a result right owners cannot bring an action for damages or apply for injunction of those infringing their IP right. This situation directly contradicts requirement of the Directive 2001/29/EC. Irish Government takes steps to meet the requirements of the Directive. In February 2012 Statutory Instrument No.59 was introduced to amend the Copyright and Related Rights Act 2000 (No. 28 of 2000) and allow right owners to apply for injunction against intermediaries (i.e. Internet Service Provider) “whose services are used by a third party to infringe a copyright or related right”. As a result of this change a number of court cases are due to be heard in the Court later this year.

   Introduction of the above instrument would be a start of the harmonisation process, however more radical changes are required to ensure that IP right are fully protected and Irish legislation complies with the EU requirements.

2. **Any changes in IP legislation must be flexible and adapt to current digital landscape:** In the current state of the digital environment existing tools of IP protection may act as deterents for innovation. Ease of editing and access to different types of information online, including audio-visual content provides an opportunity to design new creative products. However at present, the existing IP rules make it difficult for innovators to ensure that their creation does not infringe any existing IP rights. An innovator has to contact right owners of the content that was used to create a new product, yet in many instances it is impossible to identify the owner of digital content. A dynamic, flexible IP legislation that will include such instances needs to be developed in order to ensure that IP and innovation support and foster each other.

   In this case, France is a good example for Ireland to follow when designing a strategy for fighting digital piracy. France became the first European country to implement legislation with a graduated response to combat digital piracy. A new agency, Hadopi, was established through the “Creation and Internet Law”. Hadopi sends notices to internet subscribers whose accounts have been used to infringe copyright through the internet.

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7 European Communities Trade Mark Association, EMI v UPC
8 Mr Justice Charleton, 11/10/2010 Record companies of Ireland vs. UPC

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In the last four years, reported piracy rates in France decreased from 42% to 35%. This is the largest decrease for all European countries.

The graduated response has a three strikes/infringement policy. If a subscriber has ignores two notices within six months and infringes copyright law for a third time in a year, Hadopi can notify a criminal court. The Court can suspend the internet account for up to a month and levy a fine up to €1,500. According to the International Federation of the Phonographic Industry (IFPI), to date there have been 700,000 notices sent, which IFPI estimates to have reached around 10% of Peer-to-Peer (P2P) users in France. A study commissioned by Hadopi in May 2011 found that of those who received a notice or knew someone who had received one, 50% stopped their illegal activity and an additional 22% reduced their illegal consumption.

The three strikes policy is already adopted by individual internet providers. However, its impact cannot be precisely assessed unless the policy is implemented on a national scale.

3 Consumer awareness campaign: consumption of pirated digital products neither threatens consumers’ health nor does it result in any physical damage unless a pirated product contains a virus that can harm computer system. As a result consumer education campaigns tend to focus on the impact of digital piracy on the overall industry, innovation and creativity.

An Irish led campaign - You Make the Movies is funded by the Industry Trust for Intellectual Property Awareness – takes a different approach to the issue of piracy. Instead of emphasizing negative impact of piracy, the developers of the campaign thank people for purchasing legal copies and supporting the movie industry.79

However, the current piracy rates indicate that existing consumer awareness campaigns that focus on digital piracy have little impact. We suggest that new consumer awareness campaigns should be complimentary to increased penalties and enforcement. These campaigns should inform consumers about real fines imposed on people consuming pirated products. As a result consumer will know the potential cost of buying pirated product on their personal finances.

79 http://www.youmakethemovies.ie/You-make-the-difference.html
6. Pharmaceuticals

“Counterfeiting of medication is an opportunistic activity which violates intellectual property, health and safety and criminal laws, amongst others, places patients’ health at risk”. OECD

Falsified medicines range from completely innocuous to fatal. They range from lifestyle drugs such as weight-loss medicines to lifesaving drugs used to treat cancer and heart disease.

There has been a significant increase in the number and type of illicit pharmaceuticals reaching the Irish consumer often through illicit entry of products via the illegal internet pharmacy supply-chain. However, positively, no falsified medicines have been detected within the legitimate supply chain, but this demands continuous vigilance in monitoring of the market place.

The Cross-Border Organised Crime Assessment 2012 cites the EU report on customs enforcement of intellectual property rights results. It is reported that counterfeit medicines account for 24% of all goods seized at EU borders in 2011. Of these seized goods, 28.6% were deemed hazardous to the health and safety of consumers.

In this section we will examine what constitutes illicit medicine, what drives them in the market place, why they appeal to consumers and how they are being accessed by the public. We will also analyse the economic and socio-economic impact of illicit drugs and the impact they may have on retailers.

Background/definition


a its identity, including its packaging and labelling, its name or its composition as regards any of the ingredients including excipients and the strength of those ingredients;

b its source, including its manufacturer, its country of manufacturing, its country of origin or its marketing authorisation holder; or

c its history, including the records and documents relating to the distribution channels used.

Other definition, by the World Health Organisation (WHO) defines a counterfeit medicine in terms of Spurious/falsey-labelled/falsified/counterfeit (SFFC)

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8 OECD, The economic impact of counterfeiting and piracy, 2008

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medicines as medicines that are deliberately and fraudulently mislabelled with respect to identity and/or source\textsuperscript{81}.

The definitions above while talking about a similar phenomenon provide different classifications, which causes confusion and can act as a barrier to tackles illicit activities.

**Types of illicit medicines**

Internationally there are different regulations in place with regard to manufacturing, pricing, packaging and distribution of medicines. This provides an opportunity and an incentive for those involved in illegal trade.

There are various ways a medicine can be classified as falsified. A falsified medicine may be counterfeited; or it may be authentic, but the packaging, labelling could be falsified. It may be supplied without a valid prescription. The medicine could contain too much, too little, or no active substance. This affects both branded and generic medicines.

The definitions presented in the previous section demonstrate that there is an overlap in understanding what constitutes a counterfeit and falsified medication.

For the purpose of this report the following understanding applies:

**Counterfeit**

This category includes medication which had its documentation or packaging altered in order to hide the medicine’s identity and introduce it to an illicit market as not what it is, or medication that is falsely described.

**Substandard**

Substandard medicines are “genuine medicinal products which do not meet quality specifications set for them by reason of an unintentional manufacturing defect”. They fail regulatory standards for Good Manufacturing Standards set by the EU Directives. These medicines are not falsified or counterfeit unless the act is intentional and they were sold to the final consumer knowingly.

**Grey**

Grey pharmaceuticals are genuine medicines being marketed without marketing authorisations, and are marketed through illicit distribution channels, i.e. internet and street vendors. They may fall within the definition of a falsified medicine where deliberately sold.

**Key drivers and facilitators**

The actions of any person engaged in illicit trade are supporting or perpetrating illegality. This includes both the supplier and the customer. Therefore it is important to identify what motivates people to get involved in illegal medicines.

**Demand**

The costs of legitimate medicines, both original and generic, may be perceived to be too high for patients, causing them to seek high-risk “bargains” in unregulated markets (e.g. street vendors or the internet). 70% of people surveyed by Pfizer stated that they purchase medicine online because it is cheaper than getting a prescription from their doctor and then getting it filled in a brick and mortar pharmacy (see Figure 7.1).

**Figure 7.1 Motives for online purchases**

While the exact percentage may be disputed by different authorities, the lack of awareness illustrated by the figures above indicate that general public underestimate the threat illicit medicines from illegal online pharmacies may pose to their health. Consumers are willing to purchase medication online because they believe that no significant damage can be done by these medicines or think

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that products purchased online are always original. The level of sophistication of these illegal online pharmacies makes it difficult for consumers to distinguish from genuine and licensed internet pharmacies in other countries. In no case Internet pharmacies are permitted to sell prescription only medicines in, into or outside of Ireland. Counterfeit packaging also makes identification of counterfeit products by consumers a much tougher task.

Almost 75% of the Irish survey participants admitted to purchasing prescription only medicine via the internet without a prescription. This problem may stem from a lack of public awareness as to what constitutes a prescription drug.

**Figure 7.2 Prescription only drug perceived by public as over the counter drugs**

The above chart (figure 7.2), provided in Pfizer’s report “Cracking Counterfeit” demonstrates some example of how some prescription only pharmaceuticals which the survey participants incorrectly believed do not require a prescription. While the exact percentage may be disputed by different authorities, the lack of awareness illustrated by the figures above indicate that general public underestimate the threat illicit medicines from illegal online pharmacies may pose to their health.

|Table 7.1 Pharmaceutical – Demand driver analysis|

<table>
<thead>
<tr>
<th>Driving factor</th>
<th>Irish conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>In developed countries price of a counterfeit product is somewhat similar to the genuine one as a counterfeit product either enters legitimate supply chain or is sold over internet as a genuine products. In developing countries counterfeit medication has a lower price and lack of knowledge of the difference between fake and genuine products increases demand. 70% of Pfizer survey participants admitted that they purchased medication online because it is cheaper.</td>
</tr>
<tr>
<td>Quality and nature of product</td>
<td>Consumers expect a product to have the intended therapeutic effect.</td>
</tr>
<tr>
<td>Ability to conceal status</td>
<td>Easy to conceal status, and generally not necessity to do so.</td>
</tr>
<tr>
<td><strong>Consumer characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Health and safety concerns</td>
<td>Counterfeit medication possesses a major health risk. Yet many consumers are not aware of the health hazards or not able to identify a counterfeit product.</td>
</tr>
<tr>
<td>Personal income</td>
<td>Lower incomes drive consumers towards cheaper sources of medication.</td>
</tr>
<tr>
<td>Personal values</td>
<td>Convenience and embarrassment were another two factors identified by Pfizer that drives consumers towards online purchases.</td>
</tr>
<tr>
<td><strong>Institutional characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Risk of discovery</td>
<td>Little risk of discovery unless the product was purchased online and imported from abroad</td>
</tr>
<tr>
<td>Risk of prosecution</td>
<td>Consumers are not prosecuted in Ireland</td>
</tr>
<tr>
<td>Penalties</td>
<td>Depending on legislation, yet in Ireland consumers are not liable to any penalties</td>
</tr>
<tr>
<td>Availability and ease of acquisition</td>
<td>Illicit medication is widely available via internet channels</td>
</tr>
</tbody>
</table>

**Supply**

Counterfeit drugs are high value items in relation to their size. Small packages of medicines are easy to hide and transport. Over 1,500 tablets can fit in a shoe size box and if these tablets are expensive prescription drug, counterfeiters are guaranteed to receive a significant profit.

Production of counterfeit drugs does not require an expensive infrastructure and it is extremely difficult even for licensed distributions and pharmacists to
recognise a counterfeit drug. Relatively little investment in production and distribution of counterfeit drugs can guarantee counterfeiters lucrative margins.

The attractiveness of illicit medicines market to counterfeiters has been further facilitated by the development of internet technology. In many countries, internet-based sales of medicines are a major source of revenue for counterfeiters, targeting those who seek cheaper, stigmatized or unauthorised treatments.

It is important to note that in some countries internet pharmacies may be in fact legal operators when licensed by the government regulator. They may, offer clients convenience and in some cases savings, though often there is no price difference. They require doctor’s prescriptions and deliver medications from government licensed facilities that are also usually registered physical pharmacies.

Illegal internet pharmacies conceal their real identity, are operated internationally, sell medications without valid or genuine prescriptions, and deliver products with unknown and unpredictable origins or history.

### The internet as a global facilitator
- provides access to global market place of consumers and patients.
- allows access to business to business forums where counterfeit goods can be advertised in large/bulk orders.
- greater freedom of communication between counterfeiters and their suppliers.
- ability to advertise to customers through SPAM and also retain a large degree of anonymity.
- access to personal computers and personal information through online payment facilities.
- ability to monitor, in real time, changes in law enforcement policy and measures in illicit trade.

### Production, distribution and technology

<table>
<thead>
<tr>
<th>Production investments</th>
<th>Depends on the level of sophistication of the products: bulk ingredients; production, packaging, labelling and distribution costs. Yet no R&amp;D, including clinical trials, or safety costs are incurred.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Mostly easily accessible, even most advanced technologies can be copied in quite a short time.</td>
</tr>
<tr>
<td>Logistics</td>
<td>It is hard to inject counterfeit products into legitimate supply chains especially in highly regulated regions; internet facilitates penetration of counterfeits in all jurisdictions</td>
</tr>
<tr>
<td>Marketing and sales of product</td>
<td>Internet provides a separate supply chain that facilitates sales; While it is difficult to enter legitimate supply chains in developed countries in developing countries it is much easier.</td>
</tr>
<tr>
<td>Ability to conceal operations</td>
<td>Production of counterfeit medication generally does not require a large scale manufacturing facilities; it is easier to conceal operations in countries with weaker regulations</td>
</tr>
<tr>
<td>Ability to Deceive</td>
<td>Counterfeiting technologies are becoming more advanced allowing more sophisticated fakes to be produced that are hard to identify. It is usually impossible to identify the origins of a product when purchasing online.</td>
</tr>
</tbody>
</table>

### Institutional characteristics

| Risk of discovery | It depends on the scale of production, yet risk of discovery is generally higher in highly regulates jurisdictions; internet as a distribution channel reduced the risk of discovery |
| Legal and regulatory framework | Legal and regulatory framework is very complicated including regulatory element, IPR, criminal and penalty activities, customer protection etc. Two regimes regulating pharm industry in Ireland: the Irish trademark and customs legislative regime and medicinal products legislative regime which have been enacted pursuant to EU Directives. Sale of prescription only medication by mail order is prohibited in Ireland, sale of non-prescription medication is not prohibited but must comply with general regulations. |
| Enforcement | Customs seizures have increased by 239 seizures since 2009; the value of medication seized increased by €200k. |
| Penalties | In Ireland a person, who violates the regulations outlined in IMB Acts 1995-2006 shall be guilty of an offence and shall be liable: a) On summary conviction, to a fine not exceeding €2,000 or imprisonment for a term not exceeding one year or both, b) On conviction on indictment – i. In case of a first offence, to a fine not exceeding €120,000 or imprisonment for a term not exceeding 10 years or both. ii. In the case of any subsequent offence, to a fine not exceeding €300,000 or imprisonment for a term not exceeding 10 years or both |

### Table 7.2 Pharmaceuticals – Supply driver analysis

<table>
<thead>
<tr>
<th>Market characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit profitability</td>
<td>While the cost of a unit may vary with the sophistication of a counterfeit product, there is still a significant profit margin achievable.</td>
</tr>
<tr>
<td>Market size</td>
<td>There is a constant demand for medication especially in developing countries with weak legislation. Ireland as a major exporter of pharmaceutical products may suffer Exchequer losses of over €59m a year.</td>
</tr>
<tr>
<td>Genuine brand power</td>
<td>Brand power is very strong in developed countries especially in the case of lifestyle drugs; less important in developing countries -</td>
</tr>
</tbody>
</table>
**Institutional drivers**

If there is a lack of correct legislative control, manufacturing regulation, and import and distribution control of healthcare products, or even a lack of enforcement measures, counterfeitors will avoid penalties and convictions with relative ease compared to other sources of illicit revenue. However, this is not the case in Ireland where EU Directives on medicines are implemented and enforcement is vigorously conducted. The key facilitators for counterfeitors are:

- Ineffective cooperation amongst stakeholders: health authorities, customs, police, industry and trade need to establish effective cooperation and exchange of information in order to detect and stop counterfeitors.

- Lack of political will: in some countries authorities are not prepared to recognise the existence of the problem (of illicit medicines), to implement effective measures to combat or to pursue counterfeitors. There may be inadequate consideration given to the public health of the value of medicines compared to considerations of export interest.

- Transactions involving many intermediaries increase opportunities for counterfeitors to infiltrate the regulated distribution system.

- Lack of common understanding of the nature of illicit trade in medicines. A common terminology needs to be developed.

- Many illicit and /falsified/counterfeit medicines are produced in areas that are not subject to strict regulation related to manufacturing, wholesaling, marketing, advertising, import, export, clinical trials and enforcement particularly in the developing countries such as Southeast Asia. These medicines can then be sold through Internet to the EU consumers.

- Expansion and deregulation of trade offer great opportunities, especially through “free trade zones”, to introduce falsified/counterfeit products into unofficial channels. (e.g. internet and street vendors)

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**The infiltration of illicit pharmaceuticals into the legitimate supply chain**

“Both licit and illicit products are integrated into the legitimate supply chain through freight forwarders, shipping companies, importers, diveters, tertiary and secondary wholesalers, and individual and online purchasers. Products … may be marketed directly to consumers via phone and internet pharmacies or through personal black markets. Patients may either unknowingly purchase a counterfeit from a legitimate retailer, or knowingly purchase illicit product at cut rate prices through the black market”. Brian D. Finaly, Stimpson

Counterfeitors can enter the legal supply chain through authorised wholesaler. Breaching this chain leaves the entire system vulnerable. Counterfeitors produce poor quality Active Pharmaceutical Ingredients (API) or excipients and inject them into legitimate production. They can manufacture medicines or repackage medicines that did not meet quality standards and were supposed to be disposed of. The main market entry points for counterfeitors are distribution and retail, with online market currently being the main channel of illicit medication distribution or direct to consumers.

It is very difficult for consumers to differentiate a legitimate online retailer from an illegitimate one. Therefore it is imperative for patient safety, that the strict regulations are maintained in place to monitor pharmaceutical distribution and are enforced, especially against those illegally supplied through the internet.

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82 Stimpson, Counterfeit Drugs and National Security
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It is vital that the integrity of the legitimate supply chain be maintained due to the previously outlined health risks to the consumer. A collaborative effort between Interpol and WHO calculated that 50% of medications for malaria are counterfeit and 10% of tuberculosis medicines are counterfeit. It is reported that these infringements on the legitimate supply chain could kill up to 700,000 people per annum.\(^83\)

**Seizures**

According to annually published Revenue Commissioners Headline Results there was no significant change in the number of seizures of counterfeit medicines. The value of seized drugs has reached its maximum in 2010 when the average value per seizure was approx. €394. In 2012 Customs detained €2.1m worth of medicines with an average value of €345.8 per seizure\(^84\).

**Figure 7.4 Numbers of seizure and market value of seized goods**

![Figure 7.4 Numbers of seizure and market value of seized goods](image)

Source: Revenue Commissioners Headline results 2009-2012

**Operation Pangea**

On an international level, Interpol coordinates with National authorities an international enforcement operation Pangea against illegal online pharmacies with a view to protecting public health. This operation first started in 2008.

**Operation Pangea results: Worldwide**

In 2011, Operation Pangea IV seized an estimated $6.3m in illicit and counterfeit medicines in 80 participating countries. In 2012, Operation Pangea V seized an estimated $10.5m/€8.1m worth of illicit medication in 100 participating countries.

**Operation Pangea results: Ireland**

Ireland first participated in the Operation Pangea in 2008. Since then accumulated value of the products seized is over €1m\(^83\). In the last year of operation over €370k worth of medication was seized in Ireland during the period of only one week which solely concentrated on the internet channel (See table 7.3).

**Table 7.3 Operation Pangea Irish operations**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of units (tablets)</th>
<th>Value, €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pangea II</td>
<td>2009</td>
<td>42,000</td>
</tr>
<tr>
<td>Pangea III</td>
<td>2010</td>
<td>262,000</td>
</tr>
<tr>
<td>Pangea IV</td>
<td>2011</td>
<td>51,621</td>
</tr>
<tr>
<td>Pangea V</td>
<td>2012</td>
<td>121,026</td>
</tr>
</tbody>
</table>

Source: IMB press releases Pangea II - V

**Costs of illicit trade: economic costs**

The variety of information sources makes compiling statistics a difficult task. Sources of information include reports from national medicines regulatory authorities, enforcement agencies, pharmaceutical companies and other interested parties. The different methods and definitions used to produce reports and studies also make compiling and comparing statistics difficult.\(^86\) Studies and surveys can only give snapshots of an immediate situation. The channels and method used by counterfeiters to access consumers are very flexible and can change quite rapidly.\(^87\) Hence it is extremely problematic to detect all these

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\(^{83}\) The Global Enabling Trade Report, 2012

\(^{84}\) Revenue Commissioners Headline results 2009-2012

\(^{86}\) IMB press releases Pangea II - V

\(^{87}\) WHO (2012) Medicines: spurious/falsely-labelled/falsified/counterfeit (SFFC) medicines

\(^{87}\) WHO (2012) Medicines: spurious/falsely-labelled/falsified/counterfeit (SFFC) medicines

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channels and give an objective assessment of the volume of counterfeit goods that pass through them.

For example, in 2005 WHO estimated that internationally counterfeiters could account for between five and eight per cent of the estimated €550bn in medicines sold each year\(^8\). Although the WHO has stated that this estimate was based on incomplete information and the actual amount could be higher. Another important international organisation, the European Federation of Pharmaceutical Industries and Associations (EFPIA), estimated that the value of world pharmaceutical market was closer to €614.5bn in 2011\(^9\). Either way whichever estimates are used, from an international perspective, the figures are substantial. The following table summarises the potential cost of illicit trade.

<table>
<thead>
<tr>
<th>Table 7.3 Estimate value of world illicit trade in pharmaceuticals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated of value of world pharmaceutical market</td>
</tr>
<tr>
<td>WHO, 2005</td>
</tr>
<tr>
<td>EFPIA, 2011</td>
</tr>
<tr>
<td>Peter Pitts</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Low end - 5% High end - 8%</td>
</tr>
<tr>
<td>Value of illicit trade</td>
</tr>
</tbody>
</table>

To UN Comtrade statistics, the Irish share in global pharmaceutical exports is currently 7.7\%, up from 6.2\% in 2008\(^{93}\).

![Figure 7.5 Pharmaceuticals share of Irish exports](source: UN Comtrade)

There are over one hundred pharmaceutical and chemical companies operate. This includes fourteen of the top fifteen international pharmaceutical companies\(^{94}\). Additionally, the sector employs 24,000 people directly with equivalent numbers employed providing services to it.\(^{95}\)

Even though only 30\% of pharmaceutical export counts toward GDP, due to high corresponding costs relating to intellectual property (royalties and licence fees are counted as services import)\(^{96}\), the contribution of export of pharmaceutical products to GDP is still approx. €15.6bn\(^{97}\).

In 2010, €800m in corporation tax was paid to the Exchequer by pharmaceutical companies\(^{98}\).

If we apply the reported losses to the world pharmaceutical industry to the Irish production for the international market, the losses suffered by the Irish Exchequer and exporters are significant.

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\(^8\) UN Comtrade, Commodity Pages, 542 Medicaments (including veterinary medicaments))
\(^9\) IPHA, 2008b: Response to the EC consultation on counterfeit medicines for human use
\(^{94}\) Davy, 2012 Ireland and the Pharma patient cliff
\(^{95}\) CSO. March 2012, Goods exports and imports
\(^{96}\) Davy, 2012 Ireland and the Pharma patient cliff

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Using the Ireland’s share of global pharmaceutical exports, (7.7% - see Figure 7.5), we have estimated that Irish exporters have potentially suffered losses in revenue in the region of €2.3bn in 2011. These losses in turnover would represent a loss in corporation tax of between €36.2m and €57.9m, with a loss of 1,014 jobs. Similar to other estimates, this estimate is based on incomplete information the actual losses may be significantly higher.

Health and safety risks
Illicit and counterfeit medicines have a range of detrimental impacts on consumers/patients, minor inconveniences up to fatal consequences. Adverse effects may happen for a variety of reasons, dependent on how much of the active ingredient is contained or by other undeclared contaminants from illegal manufacturing processes. They may contain none of the active ingredient, or even a completely different active ingredient which is intended for a different purpose. By consuming a counterfeit medicine knowingly or unknowingly, people are putting their health, even their life, at risk.

‘Lifestyle’ drugs, such as erectile dysfunction and weight loss medicines, are not the only counterfeit drugs readily available to consumers. Counterfeit medicines used to treat cancer and heart diseases are becoming more common, particularly in developing economies.

We have discussed this issue with the Irish Pharmacy Union (IPU) and the IMB who confirmed that the main concern for pharmacists is the health of a patient. Members of IPU have been consumed by customers seeking advice on side effects of falsified/counterfeit medicines.

On a global scale criminals responsible for the manufacture and distribution of counterfeit medicines range from individuals to criminal groups, organised crime syndicates, corrupt local and national officials and terrorist organisations.

While the main objective of illicit activities is profit, in some cases secondary objectives can include funding of political aims, such as terrorist activities.99

Regulatory framework
The growing danger of trade in illicit medicines is understood to represent a major threat to public health, national security and economic growth. The key international bodies are WHO, Interpol, the Permanent Forum on International Pharmaceutical Crime (PFIPC), the Heads of Medicines Agencies Working Group of Enforcement Officers (HMA WGEOP) in the EU, Europol and the World Customs Organisation.

The problem of counterfeit medication is recognised across the world. The scale of it however may differ. In Ireland estimates of the value of counterfeit pharmaceuticals range from just a few million to almost a hundred million euro a year. Hence the system that is currently in place to control and restrict the flow of illegal products is in a need for a major improvement.

Legislation regarding falsified/counterfeit medicines in Ireland
Counterfeiting of pharmaceutical products can be criminalised under two separate legislative regimes: the Irish Trademark and Customs legislative regime and the medicinal products regulatory regime to implement EU Directives.

The Irish Medicines Board Acts 1995-2006 establishes regulations with regard to manufacture, distribution, sale and supply, marketing, and advertising, etc. of medicinal products for human use. According to the Acts a person who violates the regulations outlined shall be guilty of an offence and shall be liable:

99 OECD The economic impact of counterfeiting and piracy
100 Grant Thornton Interview with Jim Curran
101 Irish Medicines Act, 1995, Section 32
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a on summary conviction, to a fine not exceeding €2,000 or imprisonment for a term not exceeding one year or both,

b on conviction on indictment –
   i in case of a first offence, to a fine not exceeding €120,000 or imprisonment for a term not exceeding 10 years or both,
   ii in the case of any subsequent offence, to a fine not exceeding €300,000 or imprisonment for a term not exceeding 10 years or both.102

The sale of prescription-only medicines by mail order is illegal in Ireland. Yet the results of Pfizer survey clearly indicate that mail order is widely used across the country, but that these are supplied from outside the country.

“[There are two elements to the problem: a criminal who is selling a medicine and a buyer who buys an illegal medicine. The buyer is participating in an illegal activity just as much as the seller. This message should be clearly communicated to the general public].” Jim Curran, Director of Communications & Strategy, IPU103

It is important that a comprehensive legislative framework and enforcement measures regarding IP infringements, production, distribution, and purchase of illicit medication is in place. Consumer awareness will play a vital part in the combating counterfeiters. A clear message should be delivered to the public that illicit trade in medication damages the economy, offers significant threats to the health and safety of consumers. Every individual including the customers involved in counterfeit pharmaceutically is contributing to criminality.

Specific recommendations applicable

1 strengthen the supply chain: The main entry point to the legitimate supply chain for counterfeit/falsified medicines is the licensed distribution stage. In order to ensure that illicit medicines do not infiltrate the legitimate supply chain continued compliance and enforcement measures need to be maintained in Ireland. It needs to be supported by legislative impairments as the counterfeiters develop to evade regulatory controls. Much of the legislative development in Europe to date has been provided by the EU in the Falsified Medicines Directive 2011/62/EU, and the Council of Europe’s Medicines Convention as a criminal law instrument developed with the primary purpose to protect public health from counterfeit medicines and similar crimes. As the Irish regulations are transposed EU directives there are some limitations on the regulatory aspect that might not be supported by the European Commission. As regards enforcement, Ireland’s enforcement regime and penalties are among the strictest anywhere in the world.104 The area that requires increase in enforcement is online sales and sales by mail order.

2 cross border regulation with regard to online sale of medication: It is prohibited by law to sell prescription medication by mail order in Ireland. However, recent surveys indicate that it is a common practice for consumers to purchase medication online and receive it by post. It is necessary to ensure that the rule restricting sale of medication by mail order is continued to be enforced and that customs officers continue to seize parcels containing medication at the point of importation.

3 consumer awareness campaign: Lack of awareness amongst consumers about dangers of counterfeit medication and in particular medication purchased online is one of the facilitators of illicit trade in pharmaceutical products. Currently, manufacturers of pharmaceutical products are most active in anti-counterfeit consumer education campaigns. Examples of such campaign can be found across Europe:

   a The Real Danger national campaign launched by Pfizer in the UK: http://www.realdanger.co.uk/. The aim of the campaign is to ensure the public have sufficient information about counterfeit medicines and recognise the risk of purchasing medicines online.

102 Irish Medicines Board (Miscellaneous Provisions) Act, 2006
103 Grant Thornton Interview with Jim Curran
104 Sec 32 of the Irish Medicines Board Acts 1995-2006

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b “Beware of fake drugs!” - The Sanofi information campaign for Air France passengers.

Yet, joined efforts from the Government and the industry are required to reach a wider audience. The Irish Government and the industry should cooperate to launch a nationwide consumer awareness campaign which should focus on the consequences of illicit trade and dangers of counterfeit/falsified medication consumption.

4 **digital verification system** can be adopted to allow the Authorities, retailers and even end user consumers to authenticate the medicines to ensure their authenticity. Online websites selling counterfeit/falsified medication do not provide any evidence regarding taxes paid as part of their activities. The digital verification system will help to identify the products which were produced illegally and/or avoided tax payment.
7. Other activities

All industries to a certain extent are exposed to illicit trade. In the previous sections we have discussed the industries and sectors that we believe have the most significant impact on the Irish economy. However, it is important to acknowledge that there are a number of other industries that are also affected by illicit trade. We will review and analyse (although in less detail) the following sectors:

- The toy industry;
- Fragrances and beauty products;
- Food and beverage; and
- Clothing, accessories and bags.

In this section we will describe the phenomenon of illicit trade within the selected sectors, the key characteristics of illicit trade in each specific sector and the impact of illicit trade.

**Counterfeit toys and games**

- 78 m children in the EU (1 m in Ireland)
- over 5,000 companies operate in the sector, 99% are SME’s
- over €16m of toys seized in 2011, 85% from China
- counterfeit toys pose major health risks
- estimated value of counterfeit toys imported from non EU countries to Ireland is over €500k

*The toy market in Europe is the largest in the world, meeting the diverse and evolving demands of the European Union’s 78 m children*, Toy Industries of Europe, 2012

According to TIE (Toy Industries of Europe) one of the key challenges encountered by the toy industry is intensified competition from illegal and fake products. In 2011, the total value of counterfeit toys detained by EU Customs was over €16m with almost 88% of this amount coming from China. Over €20m worth of electronic games and game consoles were also seized, 85% of which were imported from China. Unfortunately, this number only represents a minority of goods. Much larger amounts of counterfeit toys may have passed through customs undetected.

The key characteristic of the toy market is its fast moving nature: new trends emerge with every new children’s cartoon toy launched. Therefore, legislation that provides comprehensive and easily attainable protection of IPR is required to ensure efficiency of the toy market.

There are three groups of IP rights that apply to the toy industry:

- trade mark;
- design; and
- copyright.

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106 TIE, The European toy industry key facts and figures
107 Report on EU customs enforcement of IP rights, 2011
With exception of trademarks which arises automatically, design and copyright require a lengthy and costly process. Therefore, innovative toy products may remain unprotected for a long period of time due to unsuitable legislation.

The table below summarises the main drivers for supply and demand for counterfeit toys.

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market potential</td>
<td>European market is the largest toy market in the world</td>
</tr>
<tr>
<td>Personal motives</td>
<td>High margins: with no health &amp; safety standards followed production costs remain low; in case of counterfeit toys additional profit can be made based on brand value</td>
</tr>
<tr>
<td>Distribution</td>
<td>Toys are imported in large containers mainly for China; OCG may use their established secure channels</td>
</tr>
<tr>
<td>Institutional environment</td>
<td>Legal and regulatory framework</td>
</tr>
<tr>
<td></td>
<td>Current legislation regarding IPR in the toy industry provides counterfeiters with wide opportunities to benefit from illicit trade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>Product-specific</td>
</tr>
<tr>
<td></td>
<td>Counterfeit toys are much cheaper than original products</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Parasitic toys that appear to look similar to genuine toys may mislead customers into believing that they are of a high quality</td>
</tr>
<tr>
<td></td>
<td>Individual-specific</td>
</tr>
<tr>
<td></td>
<td>Personal situation</td>
</tr>
<tr>
<td></td>
<td>Genuine toys tend to be quite expensive, hence in the context of tight economic situation consumers may choose more affordable counterfeit products</td>
</tr>
<tr>
<td></td>
<td>Risks</td>
</tr>
<tr>
<td></td>
<td>Consumers do not realise health and safety risks of counterfeit toys</td>
</tr>
<tr>
<td></td>
<td>Market-specific</td>
</tr>
<tr>
<td></td>
<td>Product availability</td>
</tr>
<tr>
<td></td>
<td>Legitimate producers have to protect IPR before launching a new product; counterfeiters use this delay and introduce a similar fake product to the market, thus capturing the demand first.</td>
</tr>
</tbody>
</table>

Counterfeit toys are found in many places, with most of them being sold at discount stores, market stalls and internet auctions. Many of these toys may not directly infringe IP rights and cannot be immediately detained by Gardaí or Customs. These are so-called parasitic toys: these products are similar to the original; they imitate many but not all distinctive features of a brand. As result the appearance of a toy is similar to original which misleads the customer into believing that the toy is of a high quality.

**Cost to the economy**

The impact of counterfeit trade in this sector on the Irish economy can be estimated by extracting the share of seized counterfeit goods that were supposed to enter the Irish market. Total Irish toy imports from non EU countries in 2011 were €137m. This would account for 2% of total toys imported by EU countries from non EU countries. Hence, potentially 2% all the counterfeit toys seized by EU Customs are to enter the Irish market. The value of these toys will reach almost €500,000. Yet, it is important to note that these are only seized goods that originated outside EU. Therefore, the total amount is potentially much higher as it includes counterfeit toys produced within EU and toys that were not detected by Customs.

Apart from losses to manufacturers, retailers and Exchequer, counterfeit toys pose major health and safety risks.

Counterfeit toys are a serious source of health and safety threat for children as they are not required to follow any toy safety requirements. Toys may be made...
from non-regulation materials, such as lead paint\textsuperscript{111}. Toys that claim to be designed for infants may contain small parts that could be hazardous to the health of a child; soft toys may have poor stitching so that the toy falls into pieces. Electronic games and counterfeit game consoles may not work or even result in electrocution and death.

It is important for consumers to realise that it is the health and safety of their children they risk when buying counterfeit toys and a saving of few euro can lead to significant consequences such as permanent health damage.

The toy industry is highly exposed to the threat of illicit trade. It is a lucrative market for counterfeiters due to high demand for toys and loopholes in IPR legislation regarding toys. It is vital for policy makers to address this issue along with development of consumer awareness about risks brought about by illicit toys.

\textbf{Fragrances and beauty products}

\textbf{Fragrances and beauty products – key facts and figures}

- almost €38m worth of fragrances and beauty products seized by EU customs in 2011
- China is the major source of counterfeit products
- main distribution channels: internet, markets, small retailers
- estimated value of counterfeit fragrances and beauty products imported from non EU countries to Ireland is over €400k

Counterfeit branded fragrances, make-up and other beauty products are another prime targets for counterfeiter. These luxury goods can cost €50 to €500 at a legitimate retailer, while counterfeiters on the other hand sell them for as little as €10.

Counterfeitors are now capable of producing quite sophisticated imitations of almost all the leading brands of perfume and make-up products\textsuperscript{112}.

Most of online perfume buyers report that they purchased counterfeit products from a seller with a good rating and believed it was a “good deal”. The packaging of the product was spotless and it looked real. Yet, the bottle itself and the product were of a very poor quality\textsuperscript{113}.

According to EU Customs, in 2011 almost €38m worth of counterfeit perfumes, cosmetics and other body care items were seized at the EU borders. 43.9% and 34.4% of detained perfumes and cosmetics were brought from China and Turkey respectively. Over 65% of other body care items were imported from China\textsuperscript{114}.

The table below outlines the key drivers for supply and demand for counterfeit fragrances and beauty products.

\textbf{Table 8.3 Fragrances and beauty products - Demand analysis}

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market potential</td>
<td>there is high demand for luxury and lifestyle products.</td>
</tr>
<tr>
<td>Personal motives</td>
<td>high margins: with no health &amp; safety standards followed production cost remains low e.g. in case of counterfeit fragrances, perfumed mix can be replaced with water internet is a major channel along with OCG channels.</td>
</tr>
<tr>
<td>Distribution</td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Production, distribution and technology}

- Product investments simple, low cost equipment
- Technology requirements not sophisticated easy to acquire
- Logistics simple and cheap logistics
- Marketing and scale of products easy to infiltrate distribution channels
- Ability to deceive easy to hide illicit operations
- Ability to conceal operation easy to deceive consumers

\textbf{Table 8.4 Fragrances and beauty products - Supply analysis}

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>superscript\text{counterfeit products are normally cheaper. Products bought online may have the same price as genuine, yet the consumer is not aware that it is fake}</td>
</tr>
<tr>
<td>Quality</td>
<td>package of a counterfeit product is of high quality that makes a consumer believe that a product is genuine</td>
</tr>
</tbody>
</table>

\textsuperscript{111} Authentic Foundation, Toys  
\textsuperscript{112} The Anti-Counterfeiting Group Facts about Fake Fragrances  
\textsuperscript{113} Boards.ie  
\textsuperscript{114} Report on EU customs Enforcement, 2012
Counterfeit and fraud in the food and beverage sector poses a serious health threat. In the best case scenario the fake cream will have no effect at all or the perfume won’t last more than an hour; in the worst case scenario it may cause severe allergic reaction and even permanent skin damage.

Cost to the economy
To assess the economic impact of illicit trade in fragrances and beauty products we estimated the share of counterfeit products seized that could have reached the Irish market. In 2010 total EU import of perfumes and beauty products from non-EU countries was €6.1bn\textsuperscript{116}; Irish import from non EU countries was €52m\textsuperscript{117} and accounted for 1% of total EU imports in this sector. Hence, we suggest that potentially, 1% of seized counterfeit perfume and beauty products could have been delivered to the Irish market. The total amount seized by the EU Customs in 2010 was €45m\textsuperscript{118}; therefore the potential Irish share would be almost €400,000\textsuperscript{119}. Yet, this amount only reflects the value of goods seized; therefore the actual value may be much higher. It is not possible to provide more specific information as to the actual size of the Irish illicit market in fragrances and beauty products.

Food and beverages

Food and beverages: Key facts and figures
\begin{itemize}
\item the turnover in the Irish food and beverage sectors is €24bn
\item over €9bn worth of exports in 2012
\item total employment in the sector is approximately 230,000 people
\item new fraud techniques being used by organised crime groups are being discovered
\item counterfeit and fraud in the food and beverage sector poses a serious health threat
\end{itemize}

The food and drink industry is particularly exposed to fraud and counterfeit activity. The ease of access to poor-quality ingredients which can be used in products produced for human consumption offers huge opportunities for illicit traders.

The food and beverages industry is an indigenous industry to Ireland and it accounts for a significant share of Irish exports. Ireland is the largest net exporter of dairy ingredients, beef and lamb in Europe\textsuperscript{120}.

According to Food and Drink Industry Ireland, the importance of the food and beverage industry to Ireland is greater than to any other EU country. This sector accounts for over 65% of total exports by indigenous producers\textsuperscript{121}.

\begin{itemize}
\item \textit{The sector employs in the region of 230,000 (120,000 directly on farms, 60,000 in food processing and 50,000 in ancillary and support services) people. One in eight jobs in Ireland are linked to the F&B industry. The sector accounts for two-thirds of exports by indigenous businesses in Ireland.} Grant Thornton, Food 4.0 The dynamics of supply and demand\textsuperscript{122}
\end{itemize}

\begin{table}
\begin{tabular}{|l|p{12cm}|}
\hline
Individual-Specific & \\
\hline
Personal situation & consumers choose internet channel due to its convenience; counterfeit products are more affordable due to lower price. \\
\hline
Risks & consumers do not realise health and safety risks of counterfeit fragrances and beauty products \\
\hline
Market-specific & \\
\hline
Product availability & counterfeit products can be found in markets, small retailers or online. In many instances consumers are not aware that the product is not genuine. \\
\hline
\end{tabular}
\end{table}

\textit{“Active ingredients found in counterfeit fragrance include things like urine, bacteria, antifreeze”}

Valerie Salembier, Harper’s Bazaar\textsuperscript{115}

\textsuperscript{115} Abbottnews.com Fake Fragrances: What is really in them?
\textsuperscript{116} External and Intra EU trade A statistical yearbook 1958-2010
\textsuperscript{117} CSO, Trade statistics, 2011
\textsuperscript{118} Report on EU customs Enforcement, 2012
\textsuperscript{119} Grant Thornton estimate
\textsuperscript{120} Food and Drink Industry Ireland, http://www.fdi.ie/Sectors/FDIit/FDIit.nsf/Pages/Food_Industry_in_Ireland-sector-profile?OpenDocument
\textsuperscript{121} FDI, Sector Profile
\textsuperscript{122} Grant Thornton, Food 4.0 The dynamics of supply and demand
Illicit Trade in Ireland

Illicit trade offers a very real threat to the industry and corruption of the supply chain would have very serious consequences on food and beverage producers, consumers and the economy overall.

In this part of the report we will review separately the food and alcohol sectors due to significant differences in the nature of illicit trade in these sectors.

**Food**

According to OECD, products that are most exposed to the threat of counterfeiting are those that can be easily replaced with similar substances, and which will not be easily detected by consumers. Food is a perfect target for those involved in illicit trade.

Food Standards Agency UK defines food fraud as the deliberate placing of a product on a market for financial gain with an intention of deceiving a customer.

There are three main types of food fraud:

1. The sale of food that is no longer suitable for human consumption. This type of fraud includes recycling animal by-products back into human food chain, sale of meat products with an unknown origin and sale of out-of-date products.

2. Deliberate and misleading descriptions of food. In this case, ingredients may be replaced with cheaper substitutes or false statements about the origins of ingredients may be made.

3. Sale of meat from stolen or illegally slaughtered animals.\(^{123}\)

The tables below summarise the key facilitators of supply and demand for counterfeit foodstuffs.

<table>
<thead>
<tr>
<th>Counterfeit or pirate supply driving factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market characteristics</td>
</tr>
<tr>
<td>Unit profitability</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Market size</td>
</tr>
<tr>
<td>Genuine brand power</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production, distribution and technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production investments</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Technology</td>
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<tr>
<td></td>
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<tr>
<td>Logistics</td>
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<tr>
<td></td>
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<tr>
<td>Marketing and sales of product</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td>Ability to conceal operations</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Ability to deceive</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of discovery</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

"Counterfeiting Group worldwide now make every conceivable household product, without safety tests or quality controls, including sweets, baby food, instant coffee and many other". The Anti-

Counterfeiting Group\(^{124}\)

\(^{123}\) Food Standards Agency, UK

\(^{124}\) The Anti-Counterfeiting Group, The Dangers Of Fakes
### Table 8.6 – Counterfeit food products - Supply analysis

<table>
<thead>
<tr>
<th>Driving factor</th>
<th>Market characteristics</th>
<th>Consumer characteristics</th>
<th>Institutional characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td>price of counterfeit products is only marginally lower.</td>
<td>Health &amp; Safety concerns</td>
<td>Risk of discovery &amp; prosecution</td>
</tr>
<tr>
<td><strong>Quality and nature of product</strong></td>
<td>perceived by consumers as genuine products or closely resemble genuine products, hence quality is expected to be acceptable.</td>
<td>personal income</td>
<td>risk of discovery is low as consumers are generally treated as victims</td>
</tr>
<tr>
<td><strong>Ability to conceal status</strong></td>
<td>is not an issue unless it is a luxury product (some sorts of alcohol, caviar)</td>
<td>personal values</td>
<td>even if detected and prosecuted, penalties are low</td>
</tr>
<tr>
<td><strong>Consumer characteristics</strong></td>
<td></td>
<td></td>
<td>availability and ease of acquisition</td>
</tr>
<tr>
<td><strong>Health &amp; Safety concerns</strong></td>
<td>illicit products are a source of health risks due to use of poor quality or contaminated ingredients. Yet, consumers are not generally aware of it.</td>
<td>is not a major factor, as price difference is marginal</td>
<td>not obvious as sold through legitimate supply chains; unless sold on markets</td>
</tr>
<tr>
<td><strong>Personal income</strong></td>
<td>is not a major factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal values</strong></td>
<td>not a major factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Institutional characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk of discovery &amp; prosecution</strong></td>
<td>risk of discovery is low as consumers are generally treated as victims</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk of prosecution</strong></td>
<td>even if detected and prosecuted, penalties are low</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Availability and ease of acquisition</strong></td>
<td>not obvious as sold through legitimate supply chains; unless sold on markets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The scale of illicit trade in foodstuffs is smaller compared to other industries due to significant challenges related to the production, storage and distribution of goods. The value of illicit foodstuffs seized by EU customs in 2011 was just below €1.5m. 68.58% of these items were imported from Turkey, 28.37% from Tunisia and 2.5% from UAE.\(^{125}\)

Irish food imports accounted for 6% of total EU food imports from non EU countries.\(^{126}\). Therefore, we estimated that 6% of products seized by EU customs could have been potentially brought to the Irish market. These goods are worth almost €100k.\(^{127}\)

Yet, as it was recently discovered, imported counterfeit foodstuffs may not be the main threat to the EU food sector. The intra EU food supply chain could also have been used to organise an illicit network of meat supplies. We acknowledge the issue, however due to the emerging nature of the problem and lack of reliable and unbiased information we did not include it in our industry analysis.

**Impact of commoditisation**

Food is a necessity product, therefore consumption patterns of consumers are more difficult to change. The current trends of commoditisation of many products (e.g. coffee, fruit, meat, cocoa beans) have led to dilution of the final product quality. The same supplier is now providing food ingredients to a wide variety of food manufacturing plants both branded and not. Raw ingredients are all assumed to be equal. This has resulted in the emergence of a very complex supply chain. It is impossible to trace the origins of every single ingredient in a final product (e.g. lasagne – pasta, cream, and beef).

This information asymmetry means that the consumer at the end of the supply chain does not have complete information about the ingredients in a selected product. Consumer access to information is limited by the label on the package. This may result in a “moral hazard” as all the health & safety risks are borne by the final consumer while those involved in the fraud remain unidentified. Negative externality of food fraud relates to the increase in health and safety costs borne by society.

**Alcohol**

Alcohol is another area in the Food and Beverage sector that faces challenges from illicit trade. Internationally illicit trade in alcohol is a big problem, yet in Ireland it appears that we are avoiding many adverse conditions that other EU countries may face. WHO study has shown that Ireland has one of the lowest levels of unrecorded alcohol consumption in Europe (see figure 9.1).\(^{128}\)

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\(^{125}\) Report on EU Customs Enforcement  
\(^{126}\) CSO Trade Statistics, December 2011; External and Inter EU trade Statistical Yearbook 1958-2010  
\(^{127}\) Grant Thornton Estimate  
\(^{128}\) WHO, 2011 Global Status Report on Alcohol and Health
For the purposes of this report, illicit alcohol products include smuggled alcohol, commercially manufactured counterfeit alcohol, domestic brewing and distilling, surrogate alcohol (e.g. methanol, antifreeze and aftershave), alcohol fraud and cross-border shopping\(^{129}\). Although important, the sale of alcoholic products to minors has been excluded from this report as it goes beyond the scope of the report.

Alcohol products are prime targets for counterfeiters in the European market due to their brand value, high tax and the excise component of the final price. All add to the price that can be charged by counterfeiters.

According to the Revenue Commissioners, the number of seizures of counterfeit and contraband alcohol in Ireland has increased from just above 100 in 2008 to over 350 seizures in 2012. The market value of seized alcohol has doubled. The majority of seizures are made at the point of importation\(^{130}\).

These numbers indicate that there has been a significant increase in illicit traders’ activity in Ireland with regard to counterfeit/contraband alcohol.

### Supply

The key incentive for counterfeiters to engage in illicit alcohol trade is the possibility of achieving high margins. Within Europe we can identify two groups of countries that may be more vulnerable to illicit trade in alcohol:

- Countries with low income (e.g. Eastern Europe); and
- Countries with high alcohol duty (e.g. Scandinavia, Ireland). Smugglers can purchase generic alcohol products in low excise duty countries and then sell them in countries with high excise duty rate, hence making a profit based on the difference between excise duty rates.

According to the European Commission in 2011, Sweden, Ireland, England and Finland had the highest excise duty rates per hectolitre of an alcoholic product\(^{131}\). Given these numbers, we would expect these countries to have high level of unrecorded alcohol consumption and illicit trade in alcohol.

However, research carried out by World Health Organisation in 2011 shows that countries with the highest unrecorded alcohol consumption are those of Eastern Europe. The explanation to this phenomenon lies on the demand side.

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\(^{129}\) IEA, 2012 Drinking in the shadow economy

\(^{130}\) Cross border organised crime assessment 2008

Demand
Demand for alcohol is relatively inelastic, which means that price changes do not have significant impact on alcohol demand. There is no close substitute for alcohol. Therefore, when the government increases excise duty and the price of legal alcohol, the public then has few options: drink less, cut household budget elsewhere, shift to cheaper drinks, shop abroad, brew or distil their own alcohol, consume surrogate or buy counterfeit and smuggled alcohol\(^\text{132}\). These side effects can be especially robust in the economies which have lower levels of income.

An analysis of the reasons behind high levels of illicit consumption in the top ten countries show that Finland and Sweden have high levels of GDP per capita with excise duty rates at the highest level in Europe. Romania, Hungary Poland, Latvia, Slovakia, Slovenia and Lithuania have low excise duty rates and their GDP per capita levels are in the lowest 30% in Europe. In the first case, counterfeiters are incentivized by an opportunity to generate high margins by selling illicit alcohol at prices slightly lower than the price of licit products. In the second instance demand is generated by low income customers driving counterfeiters into the market.

Phenomenon of Ireland
Currently Ireland has one of the highest levels of excise duty and a relatively high GDP per capital. Although there has been a recent decrease in the level of alcohol consumption, consumption remains marginally above the EU average, which when considering the high levels of excise duty and GDP per capita would suggest that there is a high incentive for counterfeiters to enter the Irish beverage market. Despite this Ireland has the fourth lowest level of unrecorded alcohol consumption in Europe\(^\text{133}\). In 2011, WHO estimated that the average adult in Ireland consumes one litre of illicit alcohol per year, the same as consumers from Germany, Cyprus, Belgium and Luxemburg.

A major issue for counterfeiters and smugglers of alcohol is logistics. Alcohol needs to be transported in bottles, containers or other items which are able to store liquid. It is difficult to smuggle large size containers across borders. Therefore, in many instances counterfeit alcohol is likely to be produced locally\(^\text{134}\). The only way to smuggle alcohol into Ireland is either by sea or across the border from Northern Ireland.

Costs of illicit alcohol: economic costs
Excise duty on alcohol products is a major source of revenue to the Exchequer. Total excise duty receipts from alcohol products in Ireland in 2011 were over €829m, which accounts for approximately 20% of total excise duty receipts. Of those, import duties were accountable for over €461m.

According to Alcohol Beverage Federation of Ireland the drinks industry supports 62,000 full or part-time jobs in both on - and off - licensed outlets in Ireland. The Irish drinks sector also supports almost 5,000 farming families.

Ireland is the 13th top alcohol products exporting country in the world, and the 7th in Europe. Irish share of the global alcohol exports was almost 2% in 2011\(^\text{135}\). Irish alcohol exports in 2011 were valued at €1.1 billion, 1.5% of the total being country’s exports\(^\text{136}\). Therefore, high unrecorded alcohol consumption in the other countries means significant losses to Irish exporters, the Exchequer and society in general. However, it is not possible to estimate precisely the total losses bared by Irish retailers, Exchequer and other stakeholders.

Non-economic costs: Health and Safety
Counterfeit alcohol is a big threat to consumers’ health. It may contain harmful substances such as methanol, isopropanol and other chemicals the consumption of which can cause toxic hepatitis, blindness and death\(^\text{137}\).

\(\text{\textsuperscript{132} IEA, 2012 Drinking in the shadow economy}\)
\(\text{\textsuperscript{133} WHO, 2011}\)
\(\text{\textsuperscript{134} OECD, 2008, The economic impact of counterfeiting and piracy.}\)
\(\text{\textsuperscript{135} UN Comtrade, 2011}\)
\(\text{\textsuperscript{136} Alcohol Beverage Federation of Ireland}\)
\(\text{\textsuperscript{137} IEA, 2012 Drinking in the shadow economy}\)
Illicit Trade in Ireland

Retailers
Only small quantities of counterfeit alcohol had been detected in pubs and off-licences. Larger quantities had been seized from individuals seeking to sell the products to the trade or in local markets.138

Enforcement
Under the Finance Act 2003 s. 79 a person who is owner or occupier of premises or land where prohibited goods were found can be convicted of an offence and is liable:
- on a summary conviction to a fine of €1,900 or, at the discretion of the court, to imprisonment for a term not exceeding 12 months, or both, or
- on a conviction on an indictment, to a fine of €12,695 or, at the discretion of the court, to imprisonment for a term not exceeding five years or both.

Despite the relatively low levels of illicit trade in alcohol in Ireland, characteristics of the alcohol sector in Ireland indicate that there may be a high risk of illicit products being produced in the industry and continuous control by enforcement and legislators is required within the sector.

Clothing, accessories and bags
The sale of counterfeit clothing, clothing accessories such as belts, gloves, watches, shoes, glasses and jewellery is an extremely lucrative proposition for counterfeiters.

For example, it costs as little as 27 cents to make a fake watch, which can be sold to wholesalers and street vendor for up to €35. Internet dealers can sell fake watches for as much as €250 each.139

### Table 8.7 EU: Retail value and origin on counterfeit clothing and accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Retail value original goods, €</th>
<th>Main Importer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing (ready to wear)</td>
<td>123,540,677</td>
<td>China 81.18%</td>
</tr>
<tr>
<td>Clothing accessories (belts, gloves etc.)</td>
<td>41,075,332</td>
<td>China 86.22%</td>
</tr>
<tr>
<td>Shoes</td>
<td>172,731,159</td>
<td>China 82%</td>
</tr>
<tr>
<td>Sunglasses and other eye-glasses</td>
<td>22,049,640</td>
<td>China 82.65%</td>
</tr>
<tr>
<td>Bags, wallets, purses and cigarette cases etc.</td>
<td>99,602,012</td>
<td>China 91.97%</td>
</tr>
<tr>
<td>Watches</td>
<td>289,237,218</td>
<td>China 54.49% and Hong Kong 44.01%</td>
</tr>
<tr>
<td>Jewellery and other</td>
<td>58,593,073</td>
<td>China 89%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>806,829,111</strong></td>
<td>n/a</td>
</tr>
</tbody>
</table>


Whilst it is impossible to quantify the value of goods sold in the Irish market, Gardaí indicates that clothing, shoes and accessories are some of the most common counterfeit goods seized in 2011.140 Watches are being reported as being the most lucrative product. Based on the share of Irish imports we estimated the market share of seized counterfeited shoes, clothing and bags that could have potentially been brought to the Irish market. Over €10m worth of fake shoes, clothing and accessories and bags may have been introduced to the Irish market in 2010 (see table below).

### Table 8.8 – Irish share of EU counterfeit imports

<table>
<thead>
<tr>
<th>Description</th>
<th>Irish import, €, 2010</th>
<th>EU import, €, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel goods, handbags and similar goods</td>
<td>98,049,000</td>
<td>6,667,000,000</td>
</tr>
<tr>
<td>Clothing and clothing accessories</td>
<td>1,647,356,000</td>
<td>66,981,000,000</td>
</tr>
<tr>
<td>Footwear</td>
<td>351,779,000</td>
<td>14,779,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,097,184,000</strong></td>
<td><strong>88,427,000,000</strong></td>
</tr>
<tr>
<td>Irish share in EU import</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Goods seized (shoes, clothing, bags)</td>
<td>436,949,180</td>
<td></td>
</tr>
<tr>
<td>Irish Share @ 2%</td>
<td>10,362,930</td>
<td></td>
</tr>
</tbody>
</table>

138 hpp://www.irishexaminer.com/ireland/health/fake-drink-can-kill-or-cause-blindness-warns-revenue-181207.html
139 ACG, Consumer Survey – Watch Sector
141 CSO Trade Statistics, December 2011
8. Recommendations

Significant strides have been made over the last number of years in the prevention of illicit trade, however, the problem does not appear to be subsiding. Throughout this report it was apparent that the problem of illicit trade and IP crime exists across a variety of industries and is causing significant issues across the Irish economy. Illicit trade is affecting the consumers, right holders, the Government, and is having a negative impact on socio-economic issues.

In each section of this report we have identified a number of measures that may help in the eradication of illicit trade. Each recommendation would be a positive step in combating illicit trade, but a more comprehensive and multi-layered strategy is required.

By implementing a more consistent and evidenced based approach to the problem across all industries, we believe that it is possible to more effectively target the drivers behind illicit trades, learn from the lessons from other industries and enable Ireland to become more proactive in the fight against illicit trade.

### Specific measures

**Fuel laundering**
- new marker technology
- equalisation of prices
- essential user fuel rebate
- registration systems
- increased penalties

**Tobacco**
- digital verification system
- establish inter-department committee on illicit trade (similar to Committee on Fuel)
- excise tax rates should be set to optimise tax receipts over the long term
- increased enforcement at smuggler level

**Digital piracy**
- flexible IP system is required to adapt to current digital landscape
- align IPR protection legislation and enforcement policies to Directive 2001/29/EC.
  - develop mechanism to identify and prosecute offenders
- appropriate levels of penalties and enforcement
- increased consumer education

**Pharmaceuticals**
- strengthen the supply chain
- cross border regulation in regards to online sale of medication
- digital verification system
- consumer awareness campaigns
1 Understanding the size and nature of the problem
The first step in addressing any problem is to understand the problem. It has been demonstrated throughout this report, that there are multiple issues and difficulties with gaining reliable estimates as to the size and nature of the problem.

For this reason we believe that it is of paramount importance for the Irish government to publish on an annual basis the tax gaps that occur due to illicit trade. A good example is the approach taken by HMRC in the UK, which publishes an annual Tax Gap report which allows the Government and interested stakeholders to measure the progress made in combating illicit trade. Information is most important factor in resolving any issue. Publication of such a report will help ensure that a more evidence based approach to resource allocation is taken and would increase awareness of the dangers of illicit trade.

It is acknowledged that such a report will be incomplete but it will at least give more information than is presently available.

One recent example of an initiative towards a more evidenced based approach which was implemented by the Government is the introduction of requirements for all fuel traders to make electronic monthly returns to Revenue of their fuel transactions. This measure has only been in operation from 1 January 2013 and it is too early to tell how successful it has been, but it is a positive step in the move to a more evidence based approach.

2 Evaluation of the drivers of illicit trade
In order to develop an effective strategy it is necessary to critically assess the causes of the problem. Throughout this report we have identified the key drivers for the most vulnerable sectors to illicit trade. It is important that any strategy incorporates and performs its own impartial evaluation of drivers to assess the current trends. Only thorough identifying drivers and causes can we accurately assess where we need to improve.

By using key drivers outlined by the OECD (see Table 9.1 below) as a starting point for an assessment we believe that the Government can get a complete evaluation of local drivers. This will provide a sound starting point to build a balanced and structured approach to tackling illicit trade across the sectors.

<table>
<thead>
<tr>
<th>Table 9.1 – Supply and demand drivers of illicit trade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply</strong></td>
</tr>
<tr>
<td>Market characteristics</td>
</tr>
<tr>
<td>• high unit profitability</td>
</tr>
<tr>
<td>• large potential market supply</td>
</tr>
<tr>
<td>• genuine brand power</td>
</tr>
<tr>
<td>Production, distribution and technology</td>
</tr>
<tr>
<td>• moderate need for investments</td>
</tr>
<tr>
<td>• moderate technology requirements</td>
</tr>
</tbody>
</table>
Illicit Trade in Ireland

- unproblematic distribution and sales
- high ability to conceal operations
- easy to deceive consumers

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>low risk of discovery</td>
</tr>
<tr>
<td>legal and regulatory framework</td>
</tr>
<tr>
<td>weak enforcement</td>
</tr>
<tr>
<td>non-deterrent penalties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>low risk of discovery and prosecution</td>
</tr>
<tr>
<td>weak or no penalties</td>
</tr>
<tr>
<td>availability and ease of acquisition</td>
</tr>
<tr>
<td>socio-economic factors</td>
</tr>
</tbody>
</table>

Although each above area is important, the areas that require focus are those that have the potential to produce high unit profitability for suppliers, affordability for consumers and insufficient deterrents due to weakness in the Irish system. Each of these weaknesses needs to be properly evaluated.

3 **A balanced and effective tax collection system**

Due to increased sophistication of counterfeit products it has become more difficult for customs officials and Revenue to identify counterfeit products and keep record of taxes paid. Currently, customs employ a fiscal markers system to track tax payments on products susceptible to illicit trade. The same system is adopted by other countries for alcohol as well (e.g. Russian Federation). And it is based on paper stamps (or fiscal markers). Paper stamps allow revenue and customs officials to audit receipts and as a means of tracking tax payment. As criminal gangs have become more sophisticated stamps are becoming more susceptible to counterfeiting and thus less effective.

One potential solution, which we raised in the tobacco section that could be used across various industries is the introduction of a digital tax verification system, similar to that of the pharmaceutical industry. This system uses encrypted digital code that can be printed directly on the product packaging. Such a code would be almost impossible to counterfeit and serve as a more secure manner of verifying product identity, its origins and controlling tax collection. As an added benefit this system will provide the Government with real time and secure information to enable increased transparency and more informed decision making in combating illicit trade. Although originally suggested as a measure to protect tobacco products, digital stamps may be beneficial for alcohol, pharmaceutical and other sectors by providing an easy and efficient way to identify products.

The introduction of such a system will involve a high level of co-operation between various stakeholders: policy makers, customs, industry and the technology sector. When implemented, the digital tax verification system will allow officials, industry and ordinary consumers to access information about origins, tax history and other relevant information about a product.

4 **Legislation and regulation**

Weak enforcement systems are one of the major facilitators of illicit activities. In order to ensure adequate level of enforcement activities law enforcement agencies should be provided by legislative and regulatory instruments with sufficient authority to take actions against illicit trade.

Our analysis has shown that at present the current penalties in place, across almost every sector in this review, are not sufficient to act as a real deterrent.

It is important to protect IPR which remain a valuable asset to those who have invested in its development. This is particularity important for pharmaceutical and digital industries, where R&D costs significantly exceed many other expenses.

Currently, sector has its own legislation which includes regulations on infringement of regulations (such as licencing, quality, misuse etc.). Fines and penalties vary significantly across the sectors.

For sectors, such as fragrance and beauty products, tobacco, alcohol, clothing and accessories it is vital to protect image and brand. Companies invest significant amounts into their brand and customer recognition. To protect this investment companies introduce various elements to make copying the branding more difficult. Despite these efforts counterfeiters are getting more and more sophisticated with technologies being used to perfect the production of imitations of these distinctive brand features. In some cases the production of
these fake goods can be of better quality than the original as the production plants and technologies used are actually more advanced than the existing right holder.

Another issue regarding in the area of IP protection relates to the fact that the existing system is rather inflexible and improvements could be implemented to enable innovators to obtain appropriate protection for their creations which is especially important in the context of rapidly developing technologies. The Copyright Review Committee in its Consultation Paper suggested that a Digital Copyright Exchange service may be established to facilitate “speedy, effective and comprehensive copyright licencing”. This service will be presented as a consolidated database of licensable rights; it could also be further enhanced by introduction of online automated digital permission and payment systems.\textsuperscript{142} Introduction of a similar system is currently being considered in the UK. If both countries decide to proceed with introduction of Digital Copyright Exchange, a joined service between Ireland and the UK could be established as a starting point for development of the EU wide digital copyright exchange network.

Additionally, from an IP perspective, a lower IP court division maybe considered. This court would require appropriately trained judges and fast track procedures. A feasibility study should be undertaken to assess whether there is the critical mass in Ireland to support this court and identify where the resources might come from.

5 Enforcement

The current legislative and enforcement systems in the area of illicit trade do not act as a strong disincentive to commence illicit trade. In many instances the benefits of carrying on illicit activities are considerably higher than the penalties and risks of being prosecuted. Therefore, policymakers need to co-ordinate efforts to develop a comprehensive enforcement system which will ensure that penalties are imposed appropriate to the level of illicit activity and are sufficient to cover all types of losses borne by the government, society and other stakeholders.

Enforcement agencies should report to an interdepartmental committee on illicit trade and co-operate all action within the committee. This will help to establish a single reporting structure and ensure that the standards are applied across the sectors.

6 Educate the public

Illicit trade in consumer products is often seen as being a victimless crime and is simply a method of avoiding paying taxes.

By educating consumers about the losses caused by illicit trade to public finances, the risks to the individual’s health and the involvement of organised crime the Government will help to restore a social stigma associated with the illicit trade and delegitimise illegal products.

As was outlined in the previous section, consumers are frequently unaware of the dangers of counterfeit goods or cannot distinguish between a genuine and a counterfeit product. Government and industry should launch a series of consumer education campaigns that focus on various aspects of illicit trade:

- it should be emphasised that consumption of illicit products can cause serious health damage and could result in permanent injuries. It should be clearly stated that no one but the consumer of fake product will be responsible for it, because only legitimate producers can guarantee safety of their products.

- the fact that piracy and counterfeiting are not victimless crimes should be communicated to the public. Apart from health risks, customers need to realise that they pay higher taxes to cover the Exchequer losses related to illicit trade and that clear linkages exist between illicit trade and OCG and terrorists’ activities.

- public awareness campaigns should be tailored to different sectors and where possible incorporate general problems of the sector. For instance, a campaign to target illicit trade in medication should focus on internet sales and health...
risks but also emphasise the general problem of “self-treatment”\footnote{Refers to a situation when patients consume medication without prior consultation with a specialist}. In tobacco sectors, implications of smoking should be put to the forefront of the campaign and significant increase of health risks when consuming fake products should be illustrated.

- consumers should be encouraged to use common sense when shopping in markets and online. Legitimate producers, especially luxury products suppliers will not sell products on suspicious websites or on the street markets. High discounts and price reductions are also rare for legitimate producers.

The main objective of these campaigns should be to decrease demand for illicit products resulting in decrease profits attainable by those involved in illegal activities.

### 7 International Co-operation

Illicit trade is a global problem which covers all continents and countries both developed and developing. It is driven by technological progress and increased globalisation. Single countries and customs alone cannot defeat counterfeiters, cooperation and coordinated efforts are required from the authorities of all countries. Strengthening of international cooperation is one of the main components of an effective strategy to protect various stakeholders from counterfeiting.

The importance of international co-operation

The problem of illicit trade is being addressed on various levels, including international, regional and country levels. International cooperation facilitates information and expertise sharing across border, which in turn enables countries to produce statistical data regarding illicit trade in various sectors. This data allows for better understanding on the scale of the problem, highlights current trends, industries and regions most affected. As a result this helps to enhance evidence based decision making both at a country and international levels regarding future actions to combat illicit trade.

International cooperation aims to develop an integrated common legal framework which would eliminate significant variations between countries’ legislation and reduce opportunities for utilisation by counterfeiters. The existing differences between international legislations, regulations, enforcement and economic levels allow for the continuing existence of illicit activities. Weak regulations regarding manufacture of counterfeit products facilitate illicit production in that country, which can be then exported to the other states.

**Harmonisation of rights**

Through various international bodies efforts have been made to harmonise IP legislation and agreements. Ireland needs to continue to actively engage with these international bodies that promote harmonisation. The table below sets the most important organisations driving harmonisation of IP legislation.

<table>
<thead>
<tr>
<th>Key international IP related organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• World Intellectual Property Organisation (Ireland joined in 1970)</td>
</tr>
<tr>
<td>• World Trade Organisation (Ireland joined in 1995)</td>
</tr>
<tr>
<td>• Trade-Related Aspects of Intellectual Property Rights (TRIPS)</td>
</tr>
<tr>
<td>• World Customs Organisation (Ireland joined in 1952)</td>
</tr>
<tr>
<td>• Anti-Counterfeiting Trade Agreement (ACTA)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other international organisations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• OECD (Ireland joined 1961)</td>
</tr>
<tr>
<td>• OLAF</td>
</tr>
<tr>
<td>• World Health Organisation</td>
</tr>
<tr>
<td>• INTERPOL</td>
</tr>
<tr>
<td>• EUROPOL</td>
</tr>
<tr>
<td>• ICC/BASCAP</td>
</tr>
<tr>
<td>• INTA</td>
</tr>
</tbody>
</table>
EU Level
The European Commission and EU Customs actively engage with other international stakeholders to develop an “overarching approach” to tackle counterfeiting.

The table below describes the key initiatives of the European Commission and EU Customs in the process of enhancing IPR enforcement system144.

| EU Customs Action Plan to Combat Intellectual Property Infringements for the years 2013 – 2017 |
| The strategic objectives of this Action Plan are the following: |
| • Effectively implementing and monitoring the new EU legislation on customs enforcement of IPR; |
| • Tackling major trends in trade of IPR infringing goods; |
| • Tackling trade of IPR infringing goods throughout the international supply chain; and |
| • Strengthening cooperation with the European Observatory and law enforcement authorities on infringements of IPRs. |

| EU-China Action Plan on IPR Customs Enforcement |
| • In 2004 a Customs Cooperation and Mutual Administrative Assistance Agreement (CCMAA) was signed by both parties. |
| • EU-China Action Plan on IPR customs enforcement was signed in Brussels on 30 January 2009 and was extended until December 2012. |

Free Trade Agreements
• e.g. EU-Chile Association Agreement and EU-Korea Free Trade Agreement

For instance, Microsoft in the digital sector and Pfizer in the pharmaceutical sector have their own strategies to reduce counterfeiting of their products. It is vital to ensure that appropriate legislation and Government support is provided for these actions.

It is however important that this co-operation should be fully transparent and open to ensure that relationships are in the public interest.

Call to action
A recurring theme throughout the analysis of the various industries is the weaknesses in terms of enforcement and legislation to tackle the issue of illicit trade and a more unified and aggressive regime is required.

It is recommended that a committee is established; similar to the joint committee on Environment, Transport, Culture and the Gaeltacht, which has the responsibility for fuel laundering. The committee, comprising of both sector and State interests, will have direct responsibility for illicit trade in Ireland across the spectrum of industries suffering from illicit trade. The objective of the proposed committee would be to facilitate information sharing, and ensure that there is a more proactive and joined up approach taken to tackling all issue of illicit trade.

8 Co-operation with the legitimate industry
Industry and Government tend to have different information regarding illicit activities due to variety of sources, differences in the levels of in-depth investigations and measuring techniques. Therefore, it is vital that combined efforts are made to align strategies and information sharing is used to assess the scale of the problem and combat it.

144 http://ec.europa.eu/taxation_customs/customs/customs_controls/counterfeit_piracy/international_cooperation/index_en.htm
Notices

The information in this report is based on publicly available information and reflects prevailing conditions and our views as of this date, all of which are accordingly subject to change. In preparing this report, we have relied upon and assumed, without independent verification, the accuracy and completeness of any information available from public sources.

The information in this report is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no such guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

This report and the associated conference provides recommendations based on an analysis of certain publicly available information, the inclusion or exclusion of certain factors and/or issues should not be viewed as a definitive recommendation for or against any actions and we would recommend that thorough due diligence is performed prior to making any decisions.

This report has utilised a combination of information and data from previously published reports together with unpublished data and consultations. We would like to thank the many individuals, organisations and companies for their support and contribution in putting this report together. We have accredited source data where possible and apologise if omissions have occurred in error.

In particular we would like to acknowledge the support and contribution from the following: An Garda Síochána, Brown Thomas, Business Action to Stop Counterfeiting and Piracy, Crime Stoppers UK, EMI Music, the Food and Drink Industry Ireland, IBEC, the Irish Medicines Board, the Irish Petrol Retailers Association, the Irish Pharmacy Union, the Irish Software Association, Matheson solicitors, Microsoft, the Organised Crime Task Force, Phillip Morris International, Retail Ireland, Risk Management International, the Anti-Counterfeiting Group, the British Brand Group, Tipperary Crystal, Topaz, Toy Industries of Europe, Transcrime, and Xtra-vision. While the information presented and views expressed in this report and oral briefing has been prepared in good faith, Grant Thornton accepts no responsibility or liability to any party in connection with such information or views.