



# Project Stella

**Illicit cigarette manufacturing in the EU**

November 2019

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# Introduction

**This presentation of key findings (the 'Report') has been prepared by KPMG LLP, the UK member firm ("KPMG") for Philip Morris Products SA, described in this important notice and in this report as 'the Beneficiary', on the basis set out in a private contract dated 07 March, 2019 agreed separately with the Beneficiary (the 'Contract').**

**Information sources, the scope of our work, and scope and source limitations are set out in the introduction and footnotes contained within this Report. The scope of our work, information sources used, and any scope and source limitations were fixed by the Beneficiary and reviewed and critiqued by the Expert Panel. We have satisfied ourselves, where possible, that the information presented in this Report is consistent with our information sources, and have sought to cross-check the reliability of the information sources by reference to other evidence where available.**

## About this report

This report is the second report for Project Stella - A Study of the illicit cigarette market in the EU. The purpose of the second report is to further investigate some of the key issues highlighted in the initial report and provide further insights and commentary.

As for the first Stella report, the same expert panel was engaged, with a background in law enforcement, brand protection and tobacco control.

Whereas the expert panel in the first report provided an independent and critical review of KPMG's approach and methodology and made recommendations to improve the report, in the second report they recommended data sources, provided information and insights and jointly undertook a review of the report and modifications.

## Project Overview

The first report highlighted the growth of counterfeit and illicit whites with no country specific labelling within the EU, whilst other categories of illicit consumption declined. The lack of legitimate and identifiable labelling on these products meant that their manufacturing locations were unknown. The volume of these products was 15 billion cigarettes, over one third of total counterfeit and contraband. Initial interviews with key stakeholders (such as local law enforcement and customs) indicated that some of this manufacturing took place within the EU, rather than being smuggled across borders.

This report provides an estimate of the proportion of this 15 billion cigarettes that were manufactured within the EU. It also seeks to provide insights to explain the supply chains and methods adopted by smugglers who are part of this illegal activity.

The methodology used to provide this estimate comes from a variety of public and private sources, including seizures reports, forensic analysis of the cigarette packs and detailed reports of prosecutions.

# Expert Panel Foreword

As an expert panel from disparate backgrounds we share a common interest in shedding light on how illicit trade flourishes. The mandate of the expert panel was to review and comment on the methodology used in producing both the Phase 1 Project Stella report and this report and included commenting on the data sets used to measure illicit cigarette consumption in the 28 EU member states plus Norway and Switzerland.

The expert panel is united in the view that both the KPMG Phase 1 and this new report will provide significant benefit in enhancing the understanding of the illicit tobacco trade in Europe. We believe that the reports will provide readers with an up to date and valuable foundation on which to build enhanced strategies and policies to ensure that the focus on reducing the impact of illicit trade on the wider European economy remains an important goal.

We have been keen to ensure transparency in the data collection process and have asked searching questions throughout this project, which has involved us in face to face full day meetings and many joint calls.

KPMG has provided us with in-depth presentations of the methodology and the source of data used to compile the report. It has been important for the expert panel to have been able to freely question all aspects of the conditions of data collection and the validity of the data we were presented with and especially to review and critique the various assumptions that have been made.

As a panel, we agreed that the empty pack survey (EPS) is the most reliable and objective approach to data collection available but we also identified that this practice has gaps. We did not at any time independently audit the data provided, but we have scrutinized its accuracy and relevance and in so doing we acknowledge that measuring cross-border flows and estimates is a challenging task that can never be an exact science.

The expert panel has always remained independent and has been free to make suggestions for improvement in the data collection. Throughout our involvement, we have critically examined the process and have forwarded a series of recommendations for improvement that we suggest need to be addressed in the immediate and medium-term future.

As an example, the expert panel has recommended that audits are done to ensure that a unified sampling methodology is enacted consistently by the collection agencies in the field across all countries. This will ensure that the findings are based on the best scientific knowledge available, with consistent application by geography every year to develop a more reliable assessment for quantifying the share of illicit products reported in the EPS data. The panel has also noted that both reports are based on a number of assumptions and it has recommended that all assumptions made (together with justifications) should be clearly mentioned in the reports.

The panel has always appreciated that there will be some short comings of analysis when trying to understand the wider context of illicit trade in tobacco products, but we believe the use of a cross-border travellers flow model is the most appropriate tool to separate the legal importation of cigarettes from contraband, which could further be improved if not only cross-border traveller flows and smoking prevalence are considered but also the extent of the price differential between countries. KPMG have agreed to review and incorporate such an approach for the 2019 Report.

KPMG have remained the owners of both this report and the first Stella report and it has not always been possible for them to respond to the suggestions of the expert panel given the life cycle of the EPS project. Nonetheless we feel that our scrutiny and our inputs have added value to both reports, and we hope that our recommendations will have a positive impact in strengthening the findings of future reports.

At the conclusion of this exercise, the expert panel is clear that illicit trade is a complex and ever-changing challenge which merits continuous focus and attention from all stakeholders who are active in the EU environment.

Jill Battley  
Michael Ellis  
Claude Jeanrenaud  
Karl Lallerstedt  
Meena Sayal

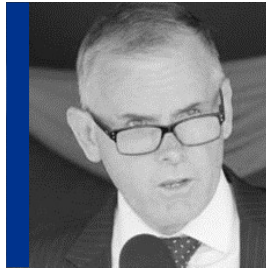
8 November 2019

# The Expert Panel



**Jill Battley**

Jill is former Head of Intelligence at New Scotland Yard for the Organised Crime Directorate. She has extensive UK and international investigative expertise working in Europe and overseas in a high-risk environment.



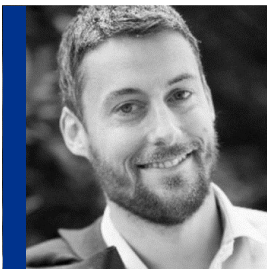
**Michael Ellis**

Michael Ellis MSc is career major crimes investigator, and is globally recognized as an expert on International crime assessments, especially related to organized crime engagement in illicit trade.



**Claude Jeanrenaud**

Prof. Claude Jeanrenaud is a professor emeritus at the Faculty of economics, University of Neuchâtel Switzerland. He has more than 30 years of experience as an academic, consultant and researcher in fields including public finance, economic governance and economic instruments of public bodies.



**Karl Lallerstedt**

Karl Lallerstedt is senior advisor for security policy at the Confederation of Swedish Enterprise. He is also the co-founder of Black Market Watch and member of the OECD Task Force on Countering Illicit Trade.



**Meena Sayal**

Meena Sayal is a qualified barrister and has worked in private practice, as a government prosecutor and in-house at companies as diverse as Diageo, Sony PlayStation and Unilever. During her eleven years at Unilever, Meena was responsible for developing and delivering Unilever's first global strategy for brand protection.





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## **Important Notice**

This Report has not been designed to benefit any specific organisation other than the Beneficiary. In preparing this Report we have not taken into account the interests, needs, or circumstances of any specific organisation, other than the Beneficiary. This Report is not suitable to be relied on by any party wishing to acquire rights or assert any claims against KPMG LLP for any purpose or in any context. As such, any person or entity (other than the Beneficiary) who reads this Report and chooses to rely on it (or any part of it) will do so at its own risk. To the fullest extent permitted by law, KPMG LLP does not assume any responsibility and will not accept any liability in respect of this Report.

In particular, and without limiting the general statement above, although in light of the fact that we have prepared this Report for the Beneficiary, this Report has not been prepared for the benefit of any other manufacturer of tobacco products nor for any other person or entity who might have an interest in the matters discussed in this Report, including for example those who work in or monitor the tobacco or public health sectors or those who provide goods or services to those who operate in those sectors.





# Executive Summary

# Background to report

Counterfeit and illicit whites are a growing proportion of illicit cigarette consumption in the EU. In many cases their manufacturing location is unknown.

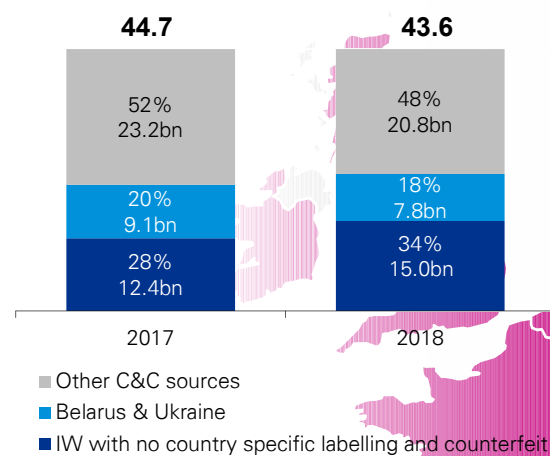
The 2018 Stella report identified 15 billion of these cigarettes - just over one third of total illicit cigarette consumption. A lack of evidence on the sources of these products has made it harder for law enforcement agencies to prevent such flows.

Our research indicates that this growth is driven by EU-based illegal manufacturing, replacing flows from countries on the Eastern EU border

## EU illicit consumption key themes

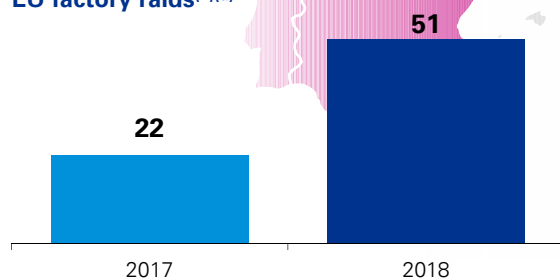
- The share of flows from historical illicit cigarettes source countries on the Eastern EU border, such as Belarus and Ukraine, is declining

## EU Counterfeit and Contraband by origin<sup>(1)</sup>



- EU factory raids, an indicator of the presence of illegal manufacturing, are increasing. Poland, Czech Republic and Greece had the highest factory raids in 2018

## EU factory raids<sup>(2)(a)</sup>



- The general trend is for illicit cigarettes to be smuggled from East to West – mainly driven by price differences<sup>(2)</sup>

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them.  
 (b) It has not been possible to confirm if IW brands are genuine or counterfeit with their manufacturers  
 (c) Counterfeit and Contraband  
 Sources: (1) EPS, LDS and KPMG flows model.  
 (2) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates, e.g. news articles, customs sites etc.



# Key Findings

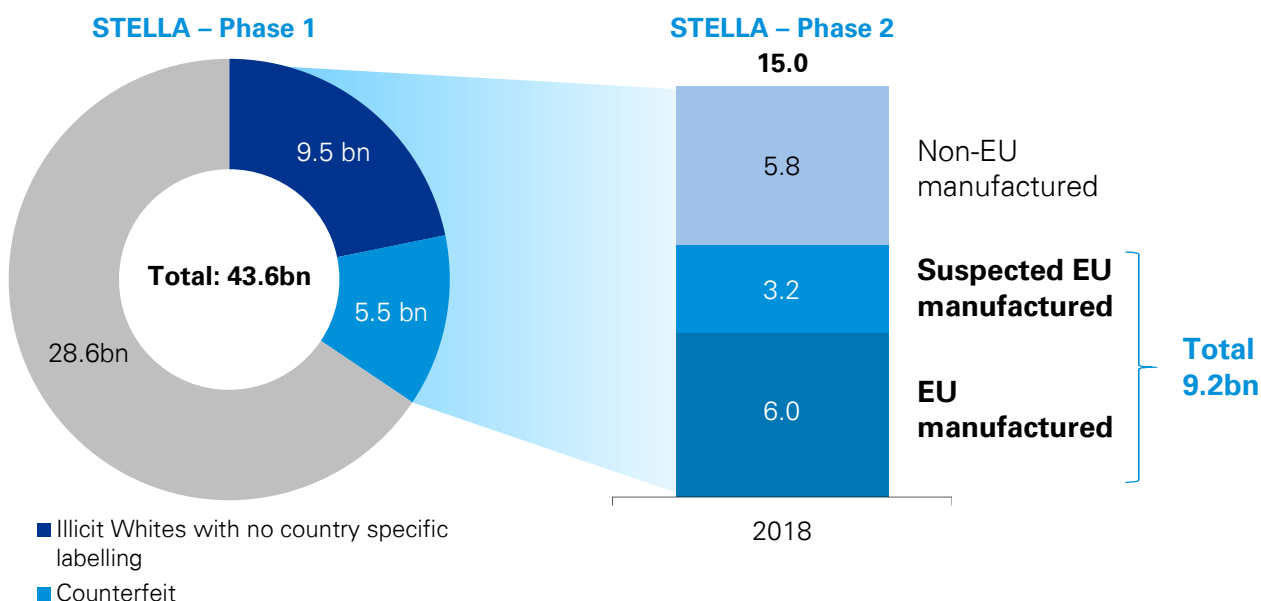
Counterfeit and Illicit Whites are a growing problem in the EU and many of appear to be manufactured inside the EU

**Of the 15.0 billion cigarettes with no identifiable origin in 2018, our research estimates at least 6.0 billion and up to 9.2 billion cigarettes were manufactured illegally in the EU**

- Our research indicates that **this volume has grown**, as the raids of factories producing illicit cigarettes increased from 22 to 51 between 2017 and 2018
- If consumed legally these cigarettes would have raised an **additional €2billion in taxes** across the EU<sup>(a)</sup>
- These illicit cigarettes were not just consumed in the market where the raids took place. Half of EU manufactured counterfeit cigarettes identified in the 2018 EPS were from factories raided in **other EU countries**

**Whilst overall EU illicit cigarette consumption remained stable at 8.6%, this research indicates a change in behaviour of illicit cigarette traders with EU-based Illicit White and counterfeit manufacturing replacing cross-border smuggling**

**Suspected origins of EU counterfeit and IW with no country specific labelling (bn sticks) – Breakdown based on Phase 2 assessment<sup>(1)(2)(b)</sup>**



Note: (a) Tax loss based on excise rate of the market where the illicit cigarettes were produced.

(b) It has not been possible to confirm if IW brands are genuine or counterfeit with their manufacturers.

Sources: (1) EPS, LDS and KPMG flows model.

(2) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission.





# Supporting analysis to key findings

# Illicit trade is a growing problem within the EU across many products

In the first Project Stella report published in June 2019, illicit consumption accounted for 8.6% of total cigarette consumption in 2018. Illicit consumption is not isolated to cigarettes, and represents an increasing share of all EU imports

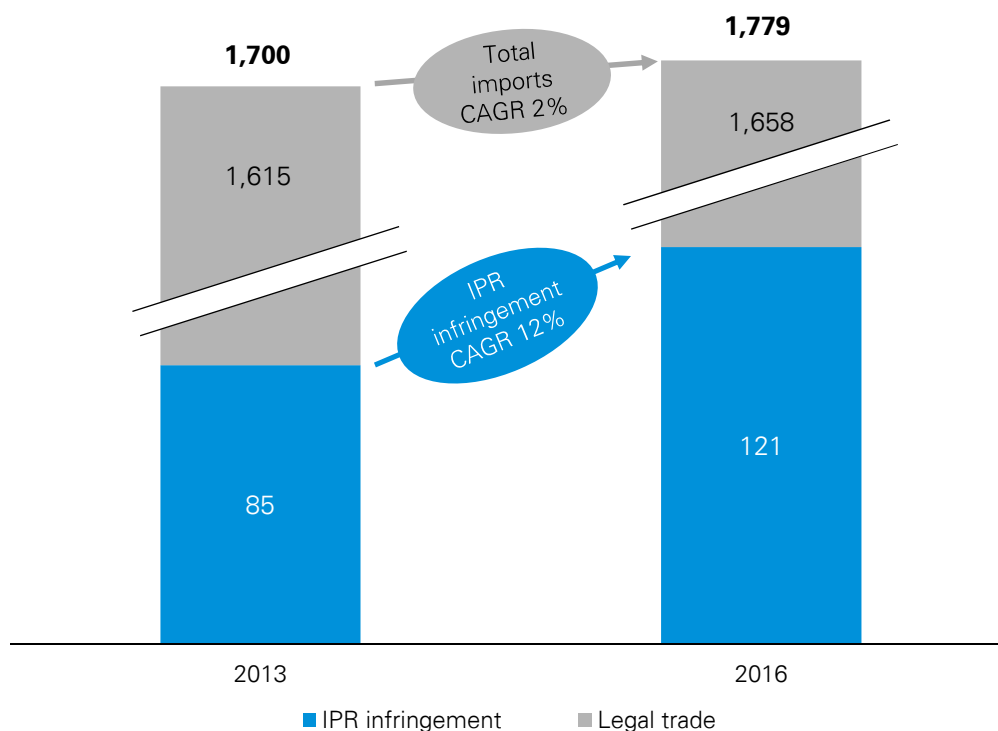
- EUIPO data indicate IPR (Intellectual Property Rights) infringement in international trade across a variety of product categories was up to €121bn or 6.8% of EU imports in 2016 vs €85bn or 5.0% in 2013<sup>(1)</sup>
- This growth in infringement of approximately 12% p.a. is particularly striking against a growth in imports of 2% p.a. over the same period.<sup>(1)</sup>

- EU authorities detained €0.7bn of non-EU goods suspected of IP infringement in 2018, an increase of 27% on 2017<sup>(2)</sup>
- It should be noted the figures above do not include EU-produced IP infringement, or online infringement (e.g. software) meaning the true scale of the problem is likely to be in excess of the figures shown

## Illicit trade is also an increasing problem at a global level<sup>(a)</sup>

- The total value of counterfeit and pirated goods was estimated at \$0.9 -1.1 trillion in 2013 and is forecast to reach \$1.9 - \$2.8 trillion by 2022<sup>(3)</sup>
- Counterfeiting and piracy are highly pervasive across countries and sectors, representing a multi-Billion-dollar industry globally that continues to grow<sup>(3)</sup>
- OCGs are increasingly using specific countries as 'safe havens' to manufacture and distribute illegal or counterfeit goods<sup>(4)</sup>

## EU IPR infringement in international trade, EUR bn, 2013 -2016 <sup>(1)</sup>



Note: (a) Many reports have been written about how illicit trade in multiple products is becoming a serious threat. Using technology and loopholes in legislation, OCGs have become adept in exploiting companies and consumers as a means of making money

Sources: (1) KPMG analysis of the EUIPO, 2019 Status Report On IPR Infringement. OECD/EUIPO (2019) and Trends in Trade in Counterfeit and Pirated Goods, OECD, March 2019

(2) European Commission, Report on the EU customs enforcement of intellectual property rights, 2018.

(3) ICC/BASCAP & Frontier Economics, The Economic Impacts of Counterfeiting and Piracy, 2016.

(4) Industry Expert and Local Law Enforcement interviews



# EU illicit supply is shifting away from historical, identifiable non-EU sources

Illicit cigarette volumes that can be identified from sources East of the EU border, such as Belarus (historically a key source of Illicit Whites) and Ukraine, have declined in response to increased law enforcement efforts to restrict flows<sup>(a)</sup>

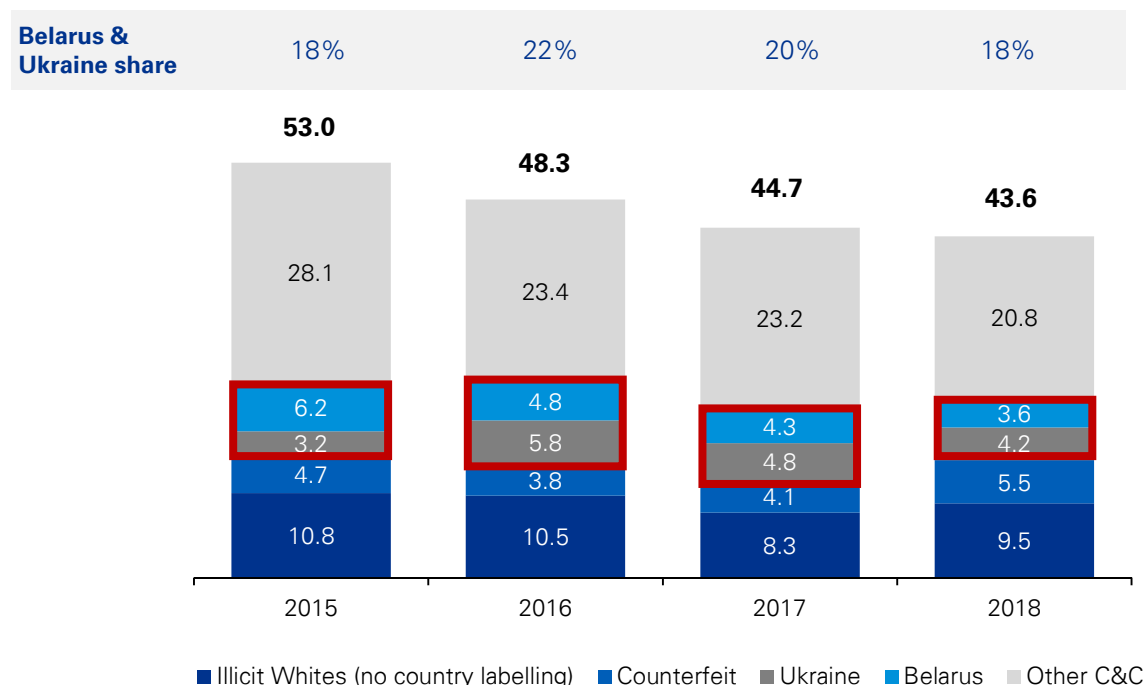
As a result, illicit cigarette traders appear to have shifted their efforts to alternative sources of cheap cigarettes, such as counterfeit and Illicit Whites with no country specific labelling

Determining the origin of counterfeit and Illicit Whites with no country specific labelling is challenging as;

- Illicit Whites manufacturers introduce new brands and labelling regularly, making determination of the manufacturer, or their place of manufacture even more difficult to identify
- Empty Pack Surveys only reveal the destination of consumption, and not the origin of production

Within this report, we seek to understand how much of this 15bn of Illicit White and Counterfeit consumption identified in the EU as part of project Stella Phase 1 was produced within the EU.

**EU Counterfeit and Contraband (bn sticks) 2015 -2018 – Project Stella Data<sup>(1)</sup>**



Source: (1) EPS, LDS and KPMG flows model.

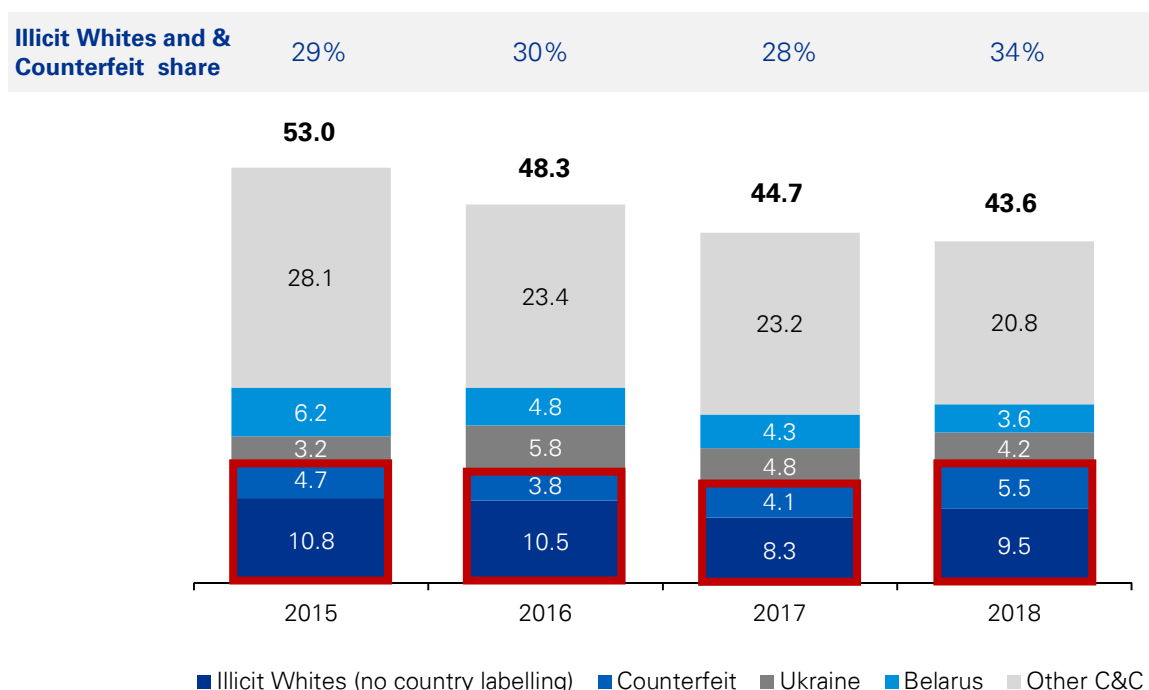
Note: (a) Interviews with law enforcement demonstrated that additional investments in equipment, notably on the Eastern EU border may have deterred criminals from transporting cigarettes from Ukraine and Belarus into the EU.

# Cigarettes of no specific origin grew to 34% of 2018 EU illicit consumption

The estimated growth in illegal manufacturing in the EU is supported by the growth in Illicit Whites with no country specific labelling and counterfeit, accounting for 34% of C&C in 2018, the highest level recorded

- Illicit Whites with no country specific labelling grew by 15% to 9.5bn in 2018, the largest component of C&C in the study
- Illicit Whites brands are usually manufactured legally in one country/market and the evidence suggests that they have been smuggled across borders during their transit to the destination market under review where they have limited or no legal distribution and are sold without payment of tax
- The number of counterfeit cigarettes grew by 33% to 5.5bn in 2018, the highest level since the study began in 2006
- Counterfeit cigarettes are illegally manufactured and sold by a party other than the original trademark owner.

EU Counterfeit and Contraband (bn sticks) 2015 -2018 – Project Stella Data<sup>(1)</sup>



Note: (a) Totals may not sum exactly due to rounding  
 Source: (1) EPS, LDS and KPMG flows model



# Analysis suggests up to 9bn of CF and IW may be produced in the EU

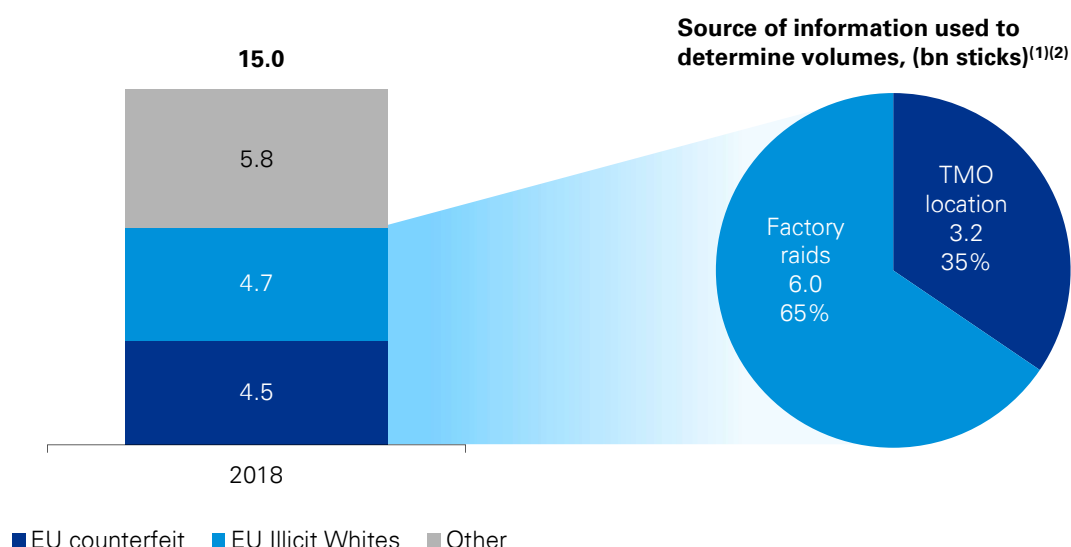
2018 raid data, seizure data and analysis of the manufacturing locations of Illicit White producers identified during project Stella Phase 1, indicated that EU manufacturing could potentially account for up to 9.2bn cigarettes

- This data has been collated and cross-referenced to ensure that it can be explained through the use of multiple unique information sources.
- This equates to almost two thirds of the 15.0bn of EU counterfeit and illicit Whites of unspecified origin consumption identified in project Stella in 2018.

## Two main sources have been used to compile this estimate:

- **Factory raid data** – Law enforcement data provided to manufacturers. This may account for **up to 4.5bn of potential counterfeit identified** below, and **1.6bn of the potential EU Illicit Whites**. Manufacturers are typically only notified if a factory raid impacts their own brands, whilst Illicit Whites brands are sometimes (but not always) identified at the same factory.<sup>(a)</sup>
- **Analysis of Illicit White manufacturer locations** – As Illicit Whites brands are usually manufactured legally in one country with the intention of being smuggled across borders to another, we have undertaken an analysis of both the market these packs have been designed for and the location of the manufacturer as identified in project Stella. This source accounts for **3.2bn of the potential EU manufactured Illicit Whites identified** below. As noted above some of these Illicit Whites may also be counterfeit, but we have not been able to confirm this with their brand owners.

## Potential 2018 EU Counterfeit and Illicit Whites with no country specific labelling (bn sticks) Project Stella / Seizures Data<sup>(1)(2)(b)</sup>



Sources: (1) EPS, LDS and KPMG flows model.

(2) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission.

Note: (a) Each factory has a production capacity estimate at approximately 250 million cigarettes per year, with further explanation of these assumptions in the appendix on page 32

(b) Potential EU counterfeit has been capped at the volume of counterfeit, 5.5bn, identified in Project Stella.

# Counterfeit Production: Illegal EU factories have capacity to make up to 5 billion counterfeit cigarettes

2018 raid and seizure data indicate that EU manufacturing capacity could potentially account for up to 5.2bn cigarettes

Based on raid data Poland, Greece and the Czech Republic are the largest manufacturing locations. As counterfeit factory production capacity is in excess of calculated for some markets (e.g. 1.7bn capacity for Poland below vs 0.8bn consumption calculated in the first Stella report), this indicates that a proportion of counterfeit produced is destined for other markets, a modus operandi confirmed in discussions with industry experts and via forensic analysis of machines found in raids vs counterfeit packs found in the EPS

Usually the trend is for illicit cigarettes to travel from East to West – mainly driven by price differences<sup>(3)</sup>. Key production markets are driven by a number of enabling factors, including:

- Cheap labour, and access to qualified technicians
- Source of raw tobacco/ ease of import of tobacco
- Presence in the EU, to take advantage of no border controls, but still close to the Eastern border
- Well established distribution through smuggling channels to Western EU

The forensic analysis of counterfeit cigarettes indicates that production has shifted to the EU from non-EU countries.<sup>(d)</sup>

The only notable exception to the East - West travel trend was Greece. Almost all Greek packs found in the EPS, and where forensic analysis could determine the location of manufacture, were manufactured in Greece, indicating that Organised Crime Groups in Greece produce predominantly for domestic consumption.

## Potential 2018 EU counterfeit and Unspecified Illicit Whites (bn sticks) – Project Stella/ Seizures Data<sup>(1)(2)(a)</sup>



Notes: (a) Greece CF production identified above is lower than consumption identified in the first Stella report of 1.5bn. This may indicate that there are still a significant number of un-raided factories operating within Greece, or that the actual production capacity of the factories that were raided in 2018 was in excess of our assumed capacity.

(b) 'Other' includes Slovakia (0.3bn), Netherlands (0.1bn), Bulgaria (0.1bn), Ireland (0.1bn), Hungary (0.0bn), Belgium (0.0bn).

(c) Raid data is that supplied to manufacturers. It is possible that other raids occurred in Europe that were not shared by law enforcement

(d) See analysis of forensic data on page 37

Sources: (1) EPS, LDS and KPMG flows model

(2) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission.

(3) Expert Interviews.



# Illicit Whites Production: Up to 5 bn of non-country specific Illicit Whites could be made in the EU

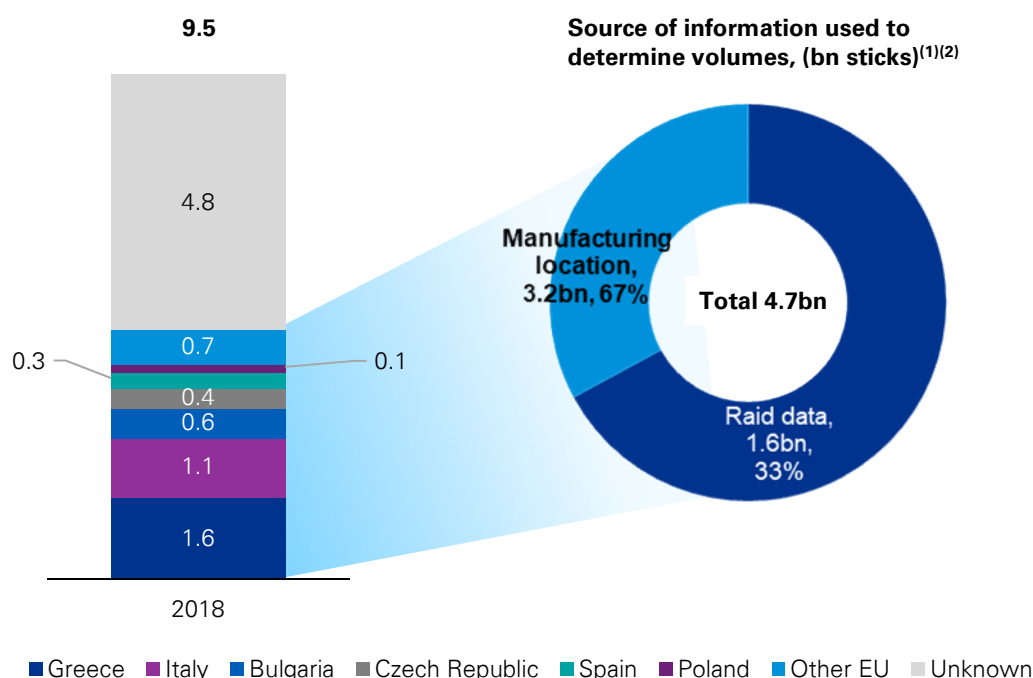
Factory Raid data, coupled with analysis of where Illicit White trademark owners are based and manufacture, indicates EU manufacturing could account for up to 4.7bn (43%) of EU Illicit White consumption of 9.5bn in 2018.

Greece, Italy, Bulgaria and the Czech Republic appear to be key manufacturing locations of Illicit Whites. Of the potential 4.7bn of EU manufactured Illicit Whites in 2018, 3.2bn were identified via the location of manufacture, with 1.6bn identified via analysis of brands seized through EU raids.

Major Illicit White brands identified included Regina, Karelia and Minsk.

- For the Illicit White brands identified through examination of the trademark owner's manufacturing location, we have assumed that manufacturing takes place in the same market in which the trademark owner is located. Were this not to be the case, and the manufacturing took place outside the EU this would reduce the 3.2bn figure
- It is not specified whether the 1.6bn of Illicit Whites brands identified via raid data were counterfeit or genuine production as this has not been confirmed by the brand owners

**Potential EU Illicit Whites volumes by country of production (bn sticks) – Project Stella and Seizures Data<sup>(1)(2)(a)</sup>**



Note: (a) 'Other' includes Netherlands (0.1bn), Portugal (0.1bn), Latvia (0.1bn), France (0.1bn), Cyprus (0.1bn), plus a number of other markets <0.1bn.

Sources: (1) EPS, LDS and KPMG flows model.

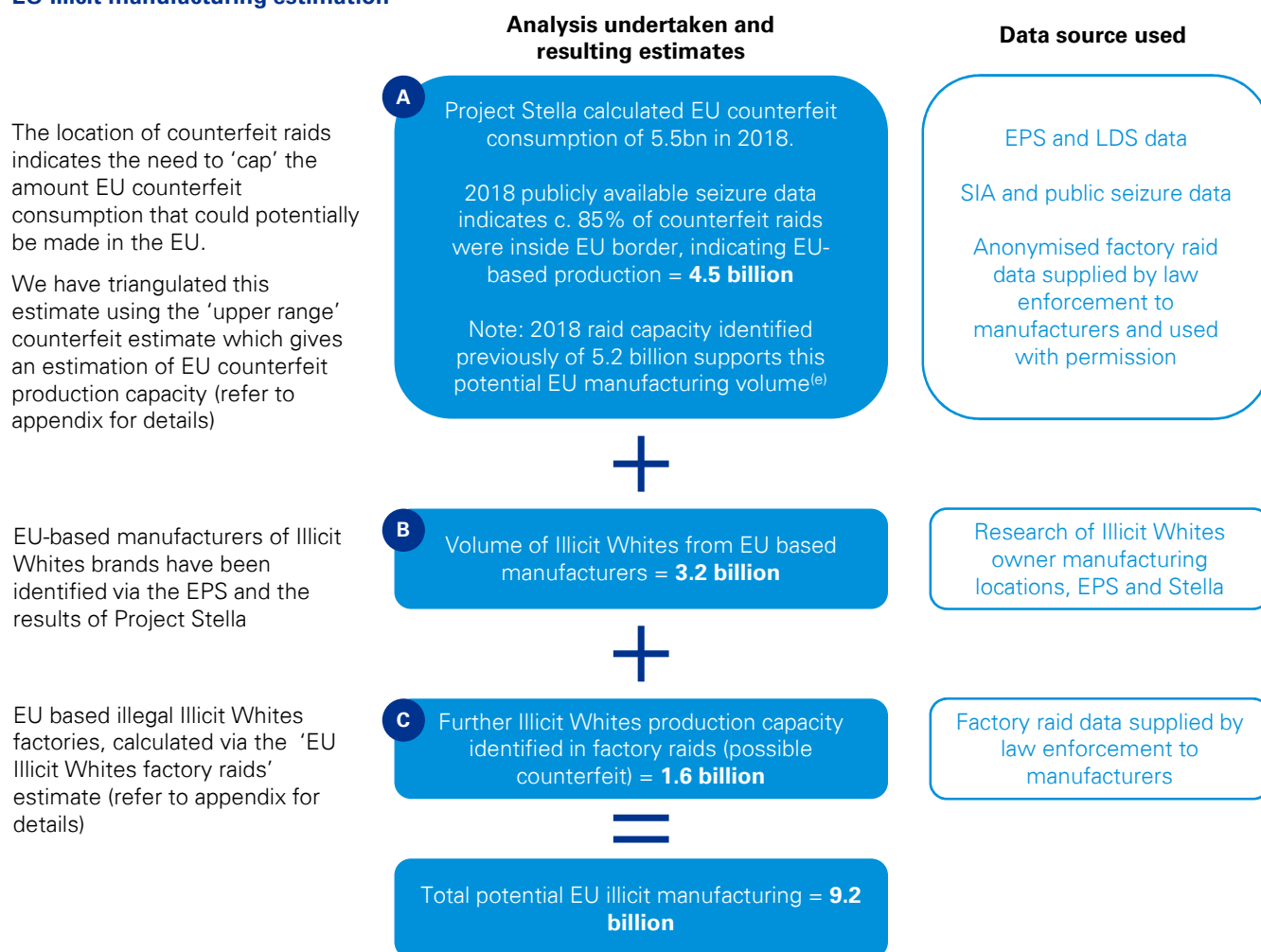
(2) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission.

# Estimating illicit cigarette production in the EU – ‘upper range’ estimate

As the total production volume estimate is assumption-based, the figures have an upper and lower range, based on maximum possible production at the upper limit and all identified EU produced cigarettes at the lower end. The below diagram demonstrates how we have calculated the 9.2 billion upper range estimation based on factory raid data. A more detailed breakdown of the methodology below is included in the appendix

Our analysis on the production capacity of factories raided in 2018, indicates they could potentially account for almost all EU counterfeit and some illicit white production, however we note that this is based on estimates and assumptions as set out in the appendix. Furthermore, our estimate only accounts for factories raided and does not account for factories which have not yet been discovered.

## EU Illicit manufacturing estimation



Notes: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

(b) Assumptions using raid data were based on conservative assumptions regarding production capacity, however, given that the identified potential production exceeds the maximum volume we believe that the production assumptions are safe

(c) Raid data is that supplied to manufacturers. It is possible that other raids occurred in Europe that were not shared by law enforcement

(d) It is not specified if Illicit Whites identified via raids were counterfeit or genuine production as this has not been confirmed by the brand owners

(e) The estimate is based on an annual production volume of 250 million cigarettes per year, explained further in the appendix on page 32

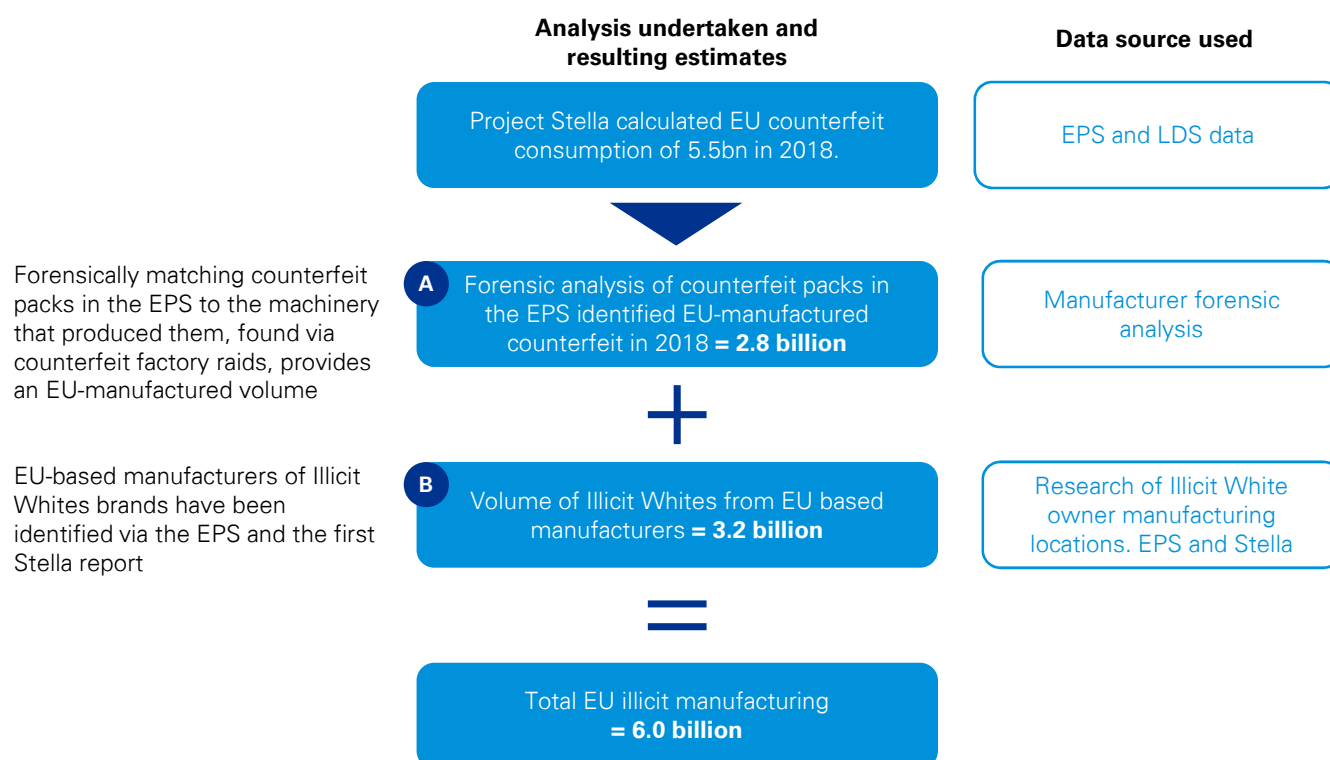


# Estimating illicit cigarette production in the EU - 'Lower range' estimate

The below diagram demonstrates how KPMG has calculated the 6.0 billion lower range estimation based on cigarettes explicitly identified in the EPS and forensic analysis of their place of manufacture. A more detailed breakdown of the methodology below is included in the appendix.

Note that we have not included any capping for non-EU counterfeit as the lower range estimate is based on counterfeit volumes directly observed in the EPS which forensic analysis indicates were EU manufactured, thus capping is not required.

## EU Illicit manufacturing estimation



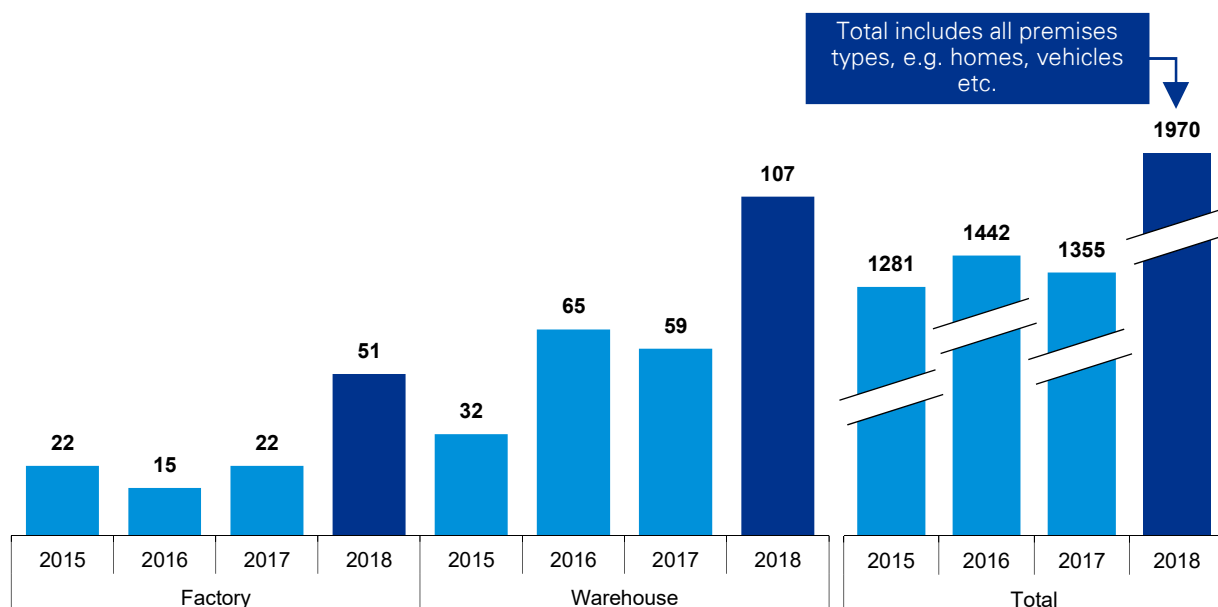
# Increased EU factory raids highlight growing EU-based illicit production

Publicly available data<sup>(1)</sup> shows EU factory production raids have increased by 132% to 51 raids in 2018 (35% in volume terms), highlighting a growing EU production trend

- Warehouse raids have also increased in both number and volume terms in 2018, which may be linked with increased need for the storage of raw materials or finished goods associated with illicit factories
- As has been the case in the EU for some time, seizure data demonstrates there to be a continuing shift away from large volume transport to low volume transport as OCGs seek to spread their exposure, for example:
  - The number of truck, van, train and ship seizures – those typically associated with cross-border protection, declined
  - Personal seizures and car seizures increased on both number and volume, indicating a continuation of the trend towards “ant smuggling”

Despite law enforcement agencies increasingly turning their attention to other areas, such as human trafficking, cyber crime and terrorism, successful raids increased with the growth in 2018 raids due to the efforts of a number of isolated markets, such as Poland, The Czech Republic and Greece<sup>(2)</sup>

**Number of seizure events at EU premises, 2015-18<sup>(1)(a)(b)</sup>**



Notes: (a) Loose leaf tobacco calculated based on cigarette equivalent of 1g per cigarette. Factory seizures shown are unique seizure events, i.e. if raw materials and finished goods, e.g. tobacco and cigarettes are seized in one factory raid this counts as one event. For all other classes this is counted as two separate seizures. Manufacturer factory seizure data is shown for 2018 only.

(b) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them.

Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

(2) Industry Expert interviews



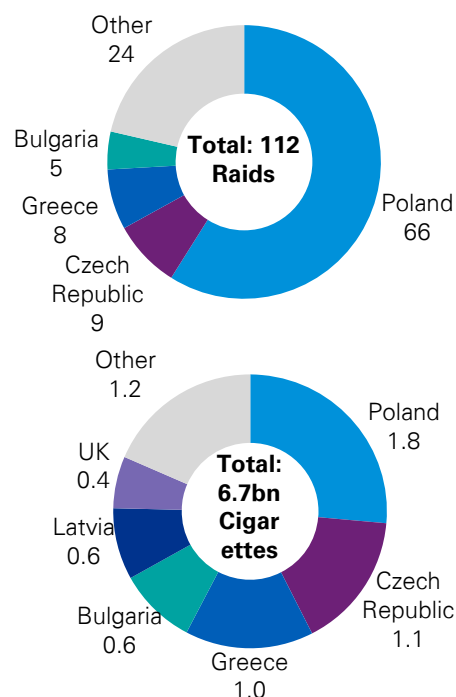
# Polish, Czech and Greek law enforcement have carried out the most illicit factory raids

Law enforcement raid data<sup>(1)</sup> indicates 57 factory raids and 55 raids of supporting premises (e.g. packing or printing facilities) in 2018, 112 in total. This is a different figure to the public factory raids as per the prior page (57 vs 51), as not all raids are made public, reasons for which may include ongoing prosecutions

Poland, Czech Republic and Greece had the highest number of raids and production volumes in 2018

- Of 112 raids in 2018 (i.e. factories and supporting premises) 74% took place in three markets; Poland (59%), the Czech Republic (8%) and Greece (7%)
- These three markets accounted for 58% of the potential 6.7bn of EU based Illicit White and Counterfeit cigarette manufacture
- Illicit products from machines seized in these raids were found throughout the EU (see p[16] for details)
- Industry experts indicate that although raid volumes are still relatively small, there is an increasing trend of illicit manufacture in Western Europe<sup>(2)</sup>

Factory seizures, 2018<sup>(1)(a)</sup>



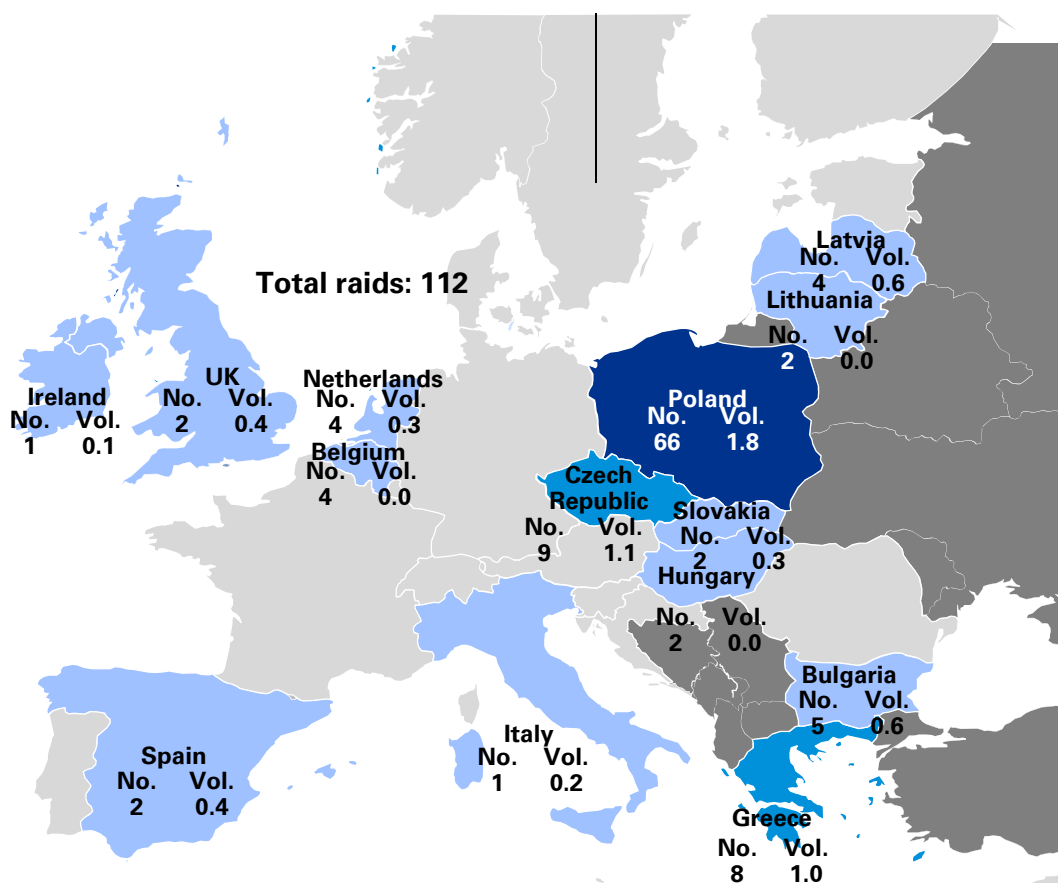
Factory and supporting premises raid events and indicative production (bn), 2018<sup>(1)(a)</sup>

## Key:



## Country

**No.** Number of raids  
**Vol.** Volume of cigarettes in billions



Source: (1) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission

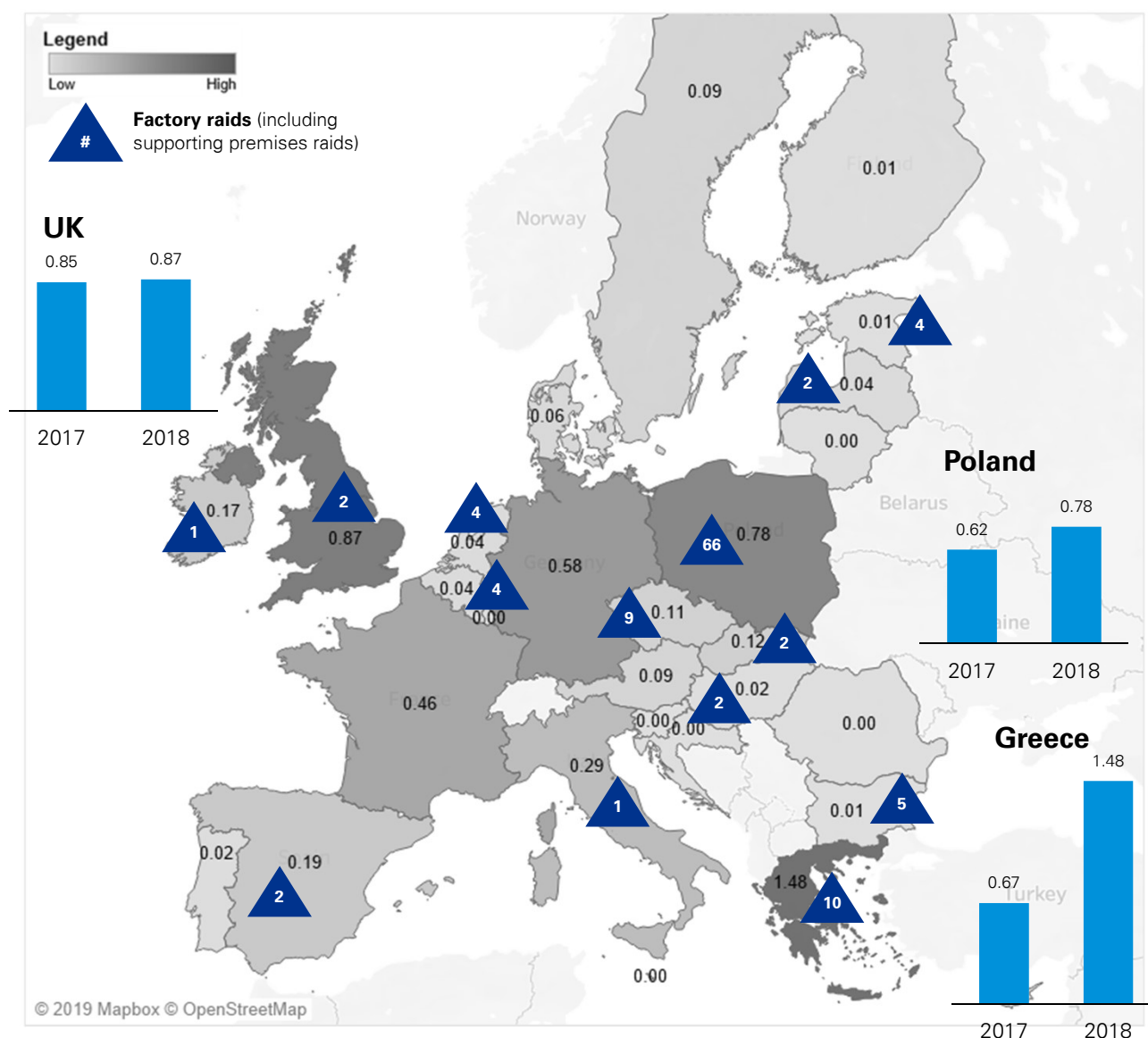
(2) Industry Expert interviews

Note: (a) Volumes shown are Illicit Whites and Counterfeit brands, and are uncapped

# Counterfeit consumption: Hot spots

The map below shows counterfeit consumption hotspot markets identified in the first Stella report, highlighting the large consumption and trends in Greece, The UK and Poland. Also shown on the maps are the number of factory raids in each country, indicating that production took place across the EU

**Map of total Counterfeit volume by country (bn sticks)<sup>(1)</sup>, and raid events, 2018<sup>(2)(a)(b)</sup>**



Note: (a) Factory raids shown are for factories producing CF or IWs at the time of raid. In the majority of factory raids both CF and IW brands were seized, and expert interviews indicate illicit factories will change between CF and IW brands regularly to evade detection, making identification of 'CF/IW only' factories problematic | (b) Supporting premises are ancillary services to manufacture but not including manufacture, e.g. printing of packs, packing of cigarettes etc.

Source: (1) EPS, LDS and KPMG flows model |

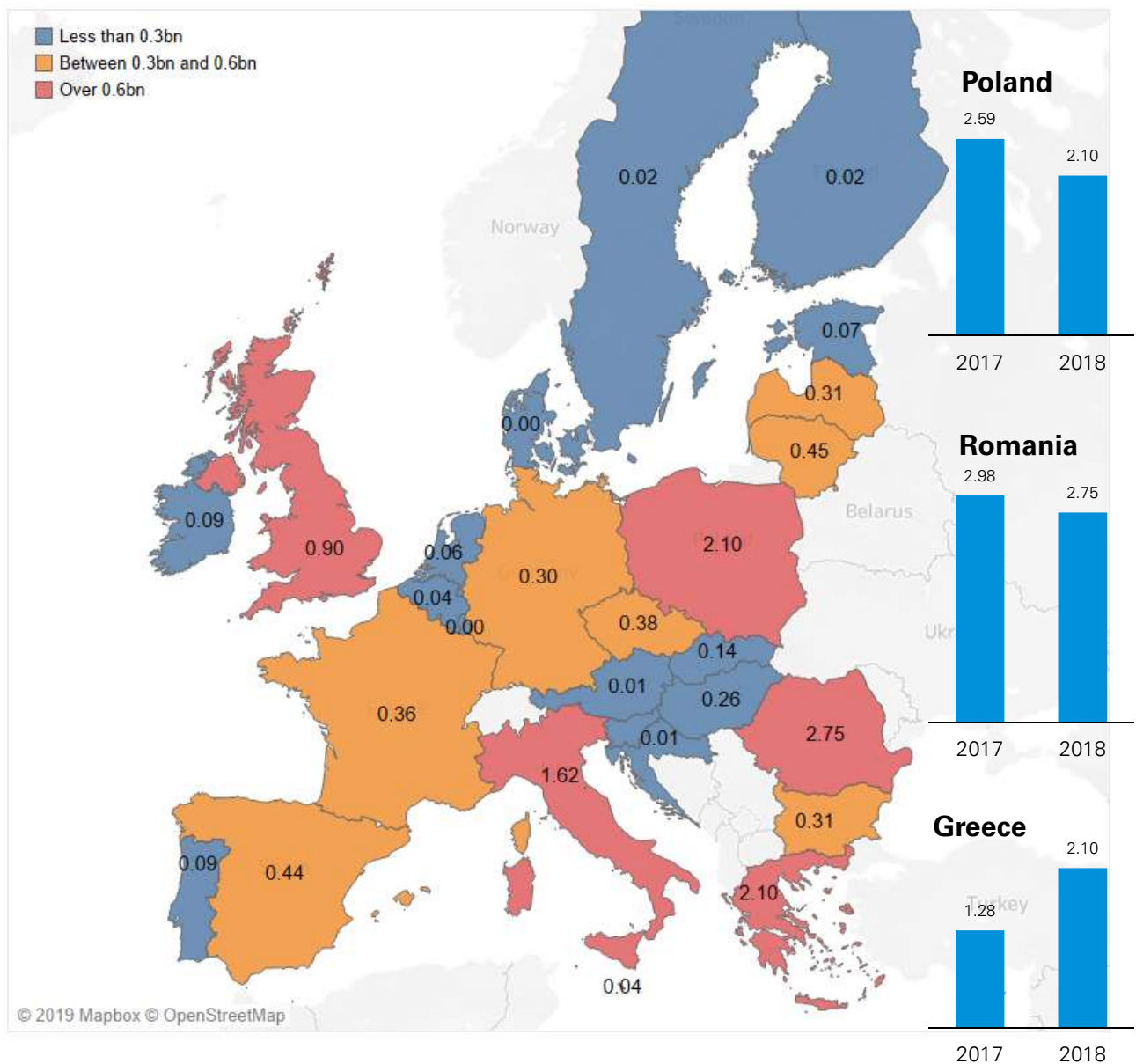
(2) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission



# Illicit Whites consumption: Hot spots

The map below shows the highest level of illicit consumption across the EU. Greece, Italy and Bulgaria appear to be major sources of EU manufactured Illicit Whites, and as such may have supported Illicit Whites volumes in the largest consumption markets; Romania, Greece and Poland in 2018

**Map of total Illicit White volume by country (bn sticks), 2018<sup>(1)</sup>**



# Precursor materials are easily available, only tobacco is controlled

The key raw materials required for cigarette manufacture are tobacco, filter rods, papers, and packaging materials for the boxes/ packs and cartons.

All the raw materials required for manufacture can be purchased either within the EU, or externally, imported with minimal customs checks.



**Tobacco**

- EU based tobacco farming, including Greece, Spain and Bulgaria
- Raw tobacco leaf can avoid excise tax in many EU markets, often only becoming excisable once dried and is not tracked in the Excise Movement and Control System, used to record duty suspended movements of excise goods around the EU
- Legislation differences between EU states impact illicit trade, e.g. greater regulation of traders in Poland has led to OCGs sourcing tobacco from nearby EU markets.
- Quality varies dependent on location and factory type



**Filter rods**

- Can be purchased from legitimate sources such as manufacturers and online marketplaces
- Materials are commonplace and used in many other applications, such as card, paper and shrink-wrap, hence purchase or import is unlikely to attract the attention of customs officers



**Papers**



**Packaging materials**

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

Source: (1) Industry Expert interviews (2) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates



# Production machinery is easy for criminal groups to acquire

Organised crime groups are able to get hold of increasingly sophisticated, industrial grade machinery and spare parts online, shipped via free trade zones to avoid detection, typically from the Middle and Far East, making it quicker and easier to set up, and maintain an illicit tobacco factory. Based on historic raid data, a production line is on average capable of producing around 0.25 billion cigarettes per year.

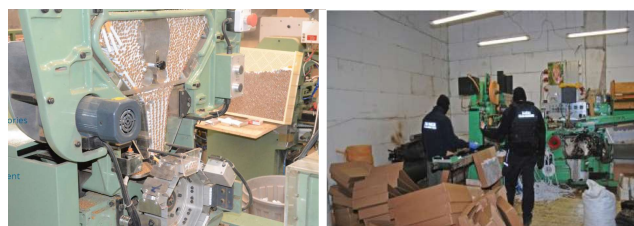
**Once an illicit factory is ready for production OCGs can manufacture rapidly at scale and recoup costs.**

## Traditional illicit cigarette factory dynamic<sup>(1)(2)(a)</sup>



- Typically older second hand manufacturer machinery, or machinery that has been confiscated by law enforcement and subsequently auctioned/ sold
- In some markets manual / low capacity machinery is in use, e.g. Poland, where a more 'cottage industry' style of production is more prevalent and is often housed in farmhouses or 'backyard' locations

## 'New' illicit cigarette factory dynamic<sup>(1)(2)(a)</sup>



- Machinery and spare parts can be purchased online
- Shipments may be broken into multiple consignments before they reach the EU, making it difficult for authorities to ascertain what is being shipped, with the full machines assembled at a later date
- Machinery housed in industrial settings to masquerade transport, noise, waste etc. as legitimate commercial activity
- Production is increasingly disaggregated. E.g. tobacco drying and cutting, cigarette manufacture and packaging will all take place at different locations, to reduce the risk of detection and the impact of seizures. This is already established practice in other non-EU regions and other non-tobacco sectors.

## Illustrative illicit cigarette factory production capacities<sup>(3)(a)(b)</sup>

	Production rate	hours operational per day	Days operational per year	Annual capacity
Modern factory	4,000 cigarettes per minute	7	250	0.42 billion
<b>'Average' capacity</b>	<b>4,000 cigarettes per minute</b>	<b>7</b>	<b>150</b>	<b>0.25 billion</b>
Low capacity / 'cottage industry'	1,000 cigarettes per minute	7	150	0.06 billion

Notes: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

(b) Assumes 7 hours of production per day. If a factory is only operating for part of a year annual capacities shown will be pro-rated accordingly

Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates.

(2) Industry expert interviews

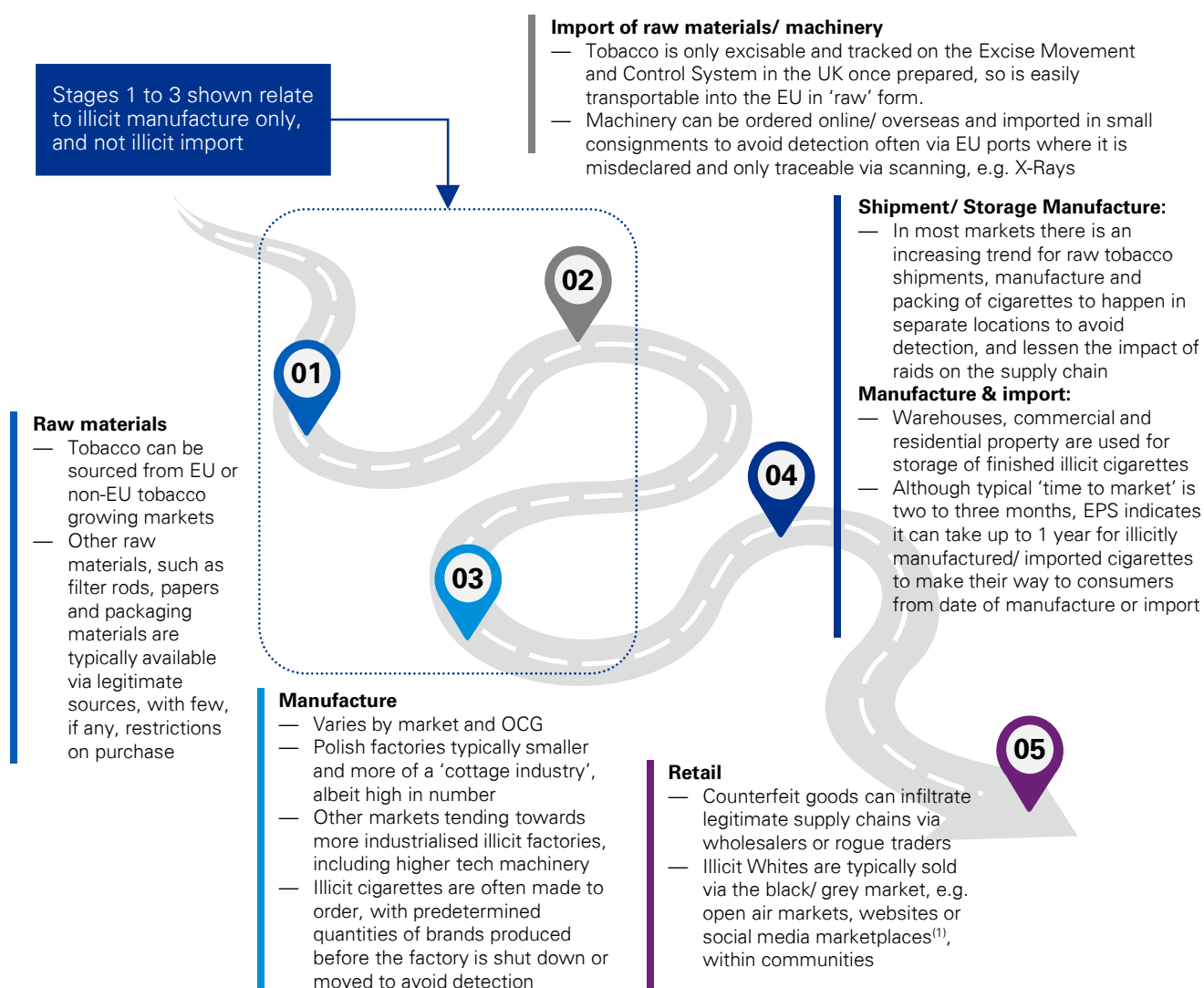
(3) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission. Over 200 raids over a period of 15 years have been used to reach the 'typical' annual capacity used in our analysis

# Illicit trade supply chains create challenges for law enforcement

Based on articles reviewed, seizure data and Industry Expert interviews, the illicit manufacture or import and sale of cigarettes is dependent upon, in most cases, well developed international supply chains.

However, as most materials and constituent machinery required for the illicit manufacture of cigarettes are legal and subjected to limited regulation this poses challenges for law enforcement to restrict OCG's access to these items.

## A 'typical' illicit cigarette trade supply chain<sup>(1)(2)(3)(a)</sup>



Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them.

Source: (1) Better Retailing, 'Tobacco manufacturers crack down on online illicit trade sales', April 2019.

(2) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates (3) Industry Expert interviews.

# OCGs appear to operate with differing sophistication by market

The Organised Criminal Groups (OCGs) operating in different countries appeared to operate with differing levels of sophistication, with some raids identifying large operations and 15-20 arrests and others with fewer than 6 arrests

The supply chains used by these factories also involved other excisable products alongside illegal drugs, counterfeit clothing and prescription drugs.

	Facilities	Network size	Other activities	Other notes
<b>Greece</b>	Appear to be larger and more complex, e.g., multiple sites in an industrial complex with sound proofing/ waste capture mechanisms	Large: up to 18 people	Antiquities smuggling	Multiple nationalities involved (including Greek, Ukrainian, Cypriot)
<b>Poland</b>	Medium-complexity manufacturing, with sites found in warehouses, private homes and recreational plots  Raw materials, manufacture and storage sites largely separate	Medium: up to 8 people	Other excised goods smuggling  Illicit drugs  GPS blockers/ disruptors	Multiple nationalities involved (including Polish, Ukrainian, Latvian, Moldovan, Serbian)
<b>UK</b>	Domestic cigarette manufacture is relatively uncommon, with the UK primarily an import market. Majority of factory raids related to roll your own product	Small: up to 6 people, typically 3.  Lack of manufacturing reflected in size of network	Other excised goods smuggling  Illicit drugs  counterfeit clothing  Prescription drugs	Groups appear to be import focused which is reflected in the other activities and illicit goods discovered as part of the raids, suggesting a more opportunistic approach

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

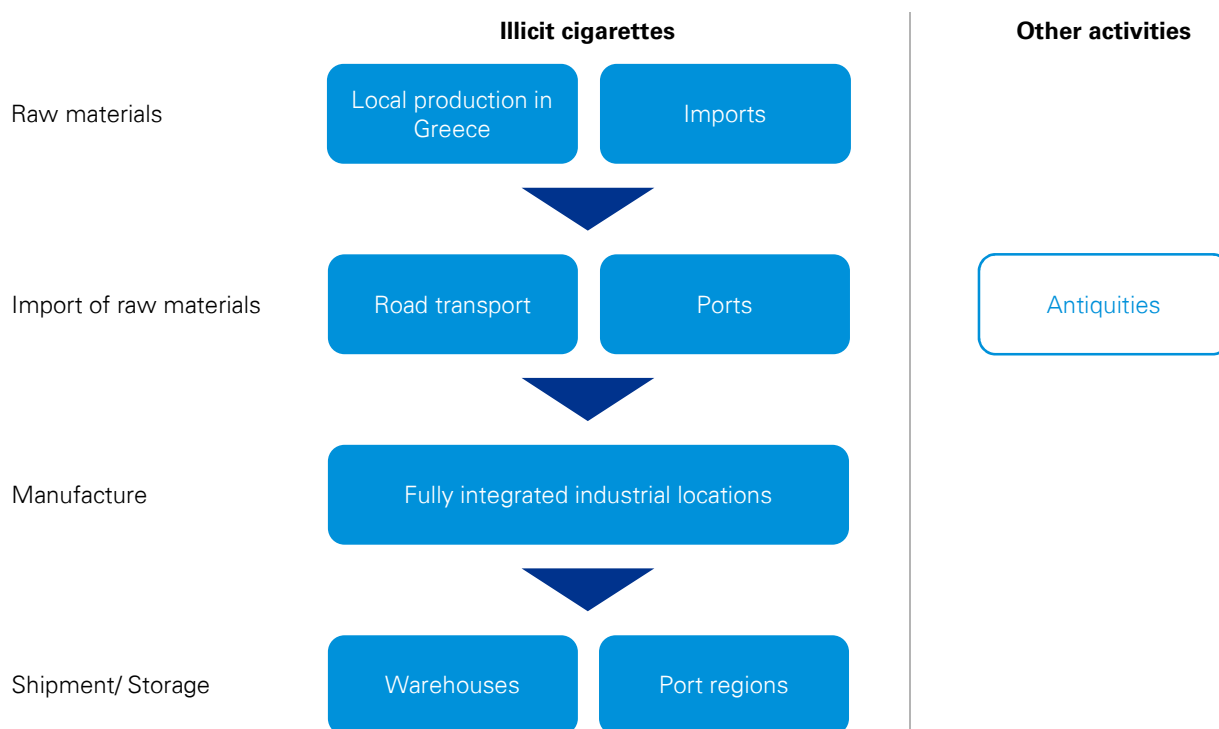
Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

(2) Discussions with market law enforcement



# Country case study: Greece

## Typical supply chain and other notable elements from raids data and expert interviews



### Notes

- The Greek financial crisis has been a key factor in historically high illicit consumption;
  - As consumers came under increasing economic pressure, coupled with rising prices in the legal market, illicit demand became more common-place
- 2018 increases in factory raids indicate a shift in OCG focus from import of illicit goods to local manufacture<sup>(3)</sup>
- Criminal groups appear to be relatively larger, run by 3-18 people
  - Largest operation publicly reported was 16 Ukrainian nationals and 2 Cypriots, with cigarette shipments disguised as sweets to mislead customs
- Operations appear to be larger and more complex, for example, multiple sites used in the same industrial complex with sound proofing/ waste capture mechanisms to avoid detection
  - Tobacco manufacturing specific equipment includes cigarette makers and packers, as well as auxiliary equipment, such as compressors, vacuum pumps and power generators

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

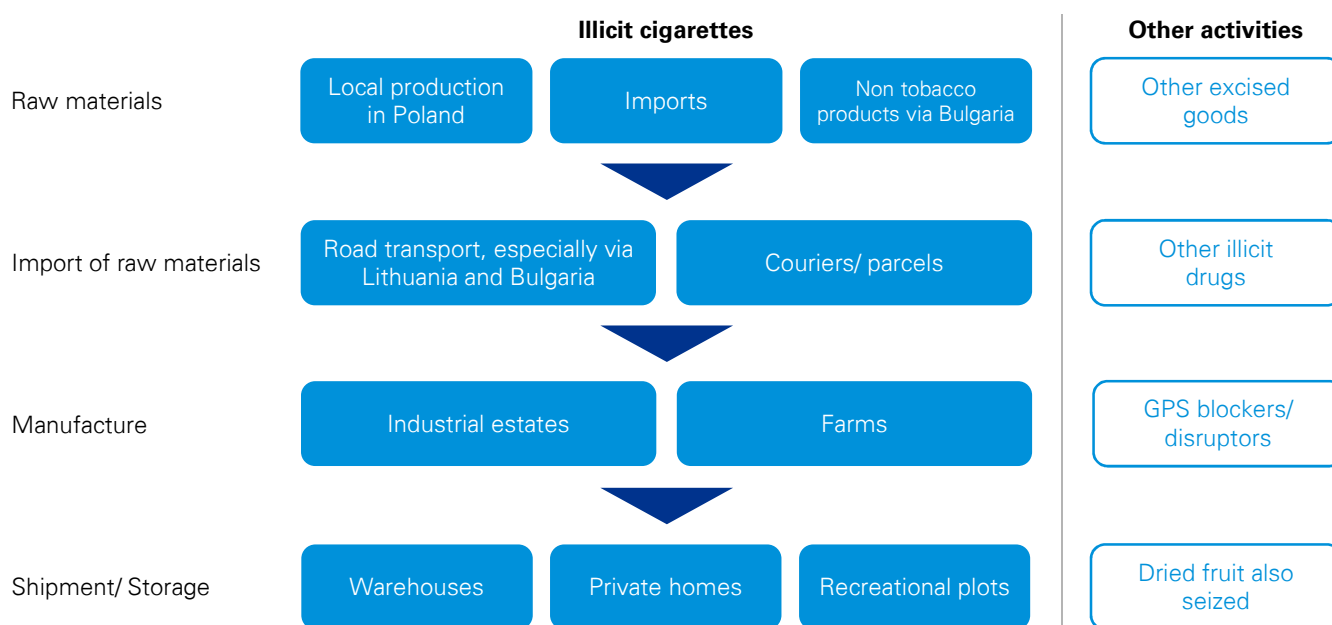
Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

(2) Industry Expert interviews

(3) Local Law Enforcement interviews

# Country case study: Poland

## Typical supply chain and other notable elements from raids data and expert interviews



### Notes

- Manufacturing operations appear to be run by 2-8 people in most instances
- Raw materials, manufacturing and storage locations appear to be separate locations in majority of reports. This reduces the manufacturing footprint, reducing the likelihood of detection, and if a factory is raided not all of the product/ machinery will be seized at once
- OCGs in Poland have found ways of circumventing more restrictive Polish laws on tobacco trading and transport
  - In Poland all tobacco trading companies must be registered with the ministry of finance and post a guarantee of €120,000 to discourage illicit traders. In addition raw tobacco is excisable, which is not the case in other EU markets, and shipments of all excisable goods must be registered with the Government and able to be live tracked using government accessible GPS technology
  - In response OCGs set up trading companies in less onerous regimes, such as Germany and Lithuania, legally ship raw tobacco marked for export to these companies (thereby avoiding Polish excise on the raw tobacco) then legally sell this raw tobacco excise free, subsequently smuggling it across the open border back to Poland where it can be used to manufacture illicit cigarettes on which no excise is paid<sup>(2)(3)</sup>
- Typical machinery found in raids includes; drying drums, cutting machines, cigarette making machines, packaging lines (albeit smaller factories tend to pack by hand)
- Cross border supply chain and expertise is implied given the nationalities of those detained; Polish, Ukrainian, Moldovan and other Eastern European states
- In 2018, 10,000 people were employed in the legal market for tobacco product manufacture<sup>(4)</sup>. This pool of skilled workers may also support the illicit market

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

(2) Industry Expert interviews

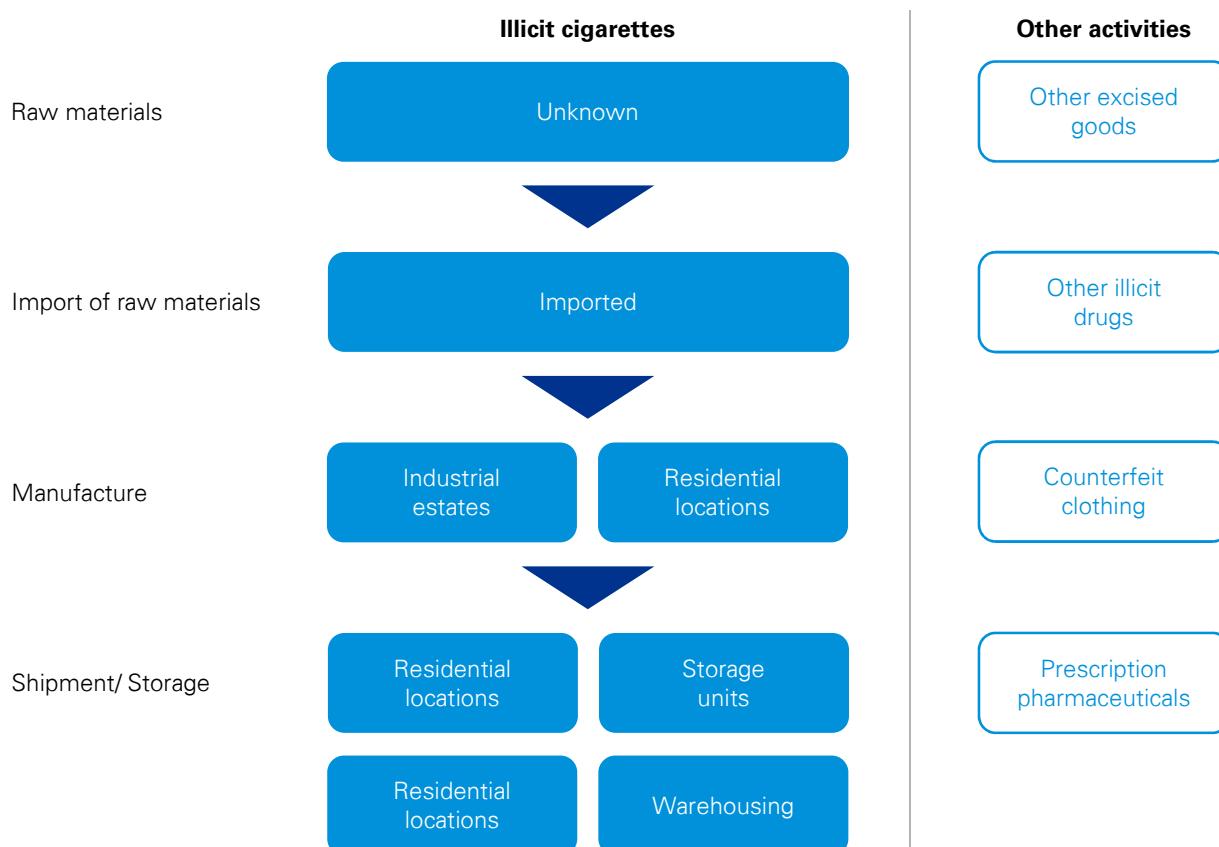
(3) Local Law Enforcement interviews

(4) CASE, The Significance Of The Tobacco Product Manufacturing To Poland's Economy, 2018

# Country case study: UK

A case study of the UK is included as whilst it was not a major manufacturing hub, the links with other products and the focus on importing goods was worth highlighting

## Typical supply chain and other notable elements from raids data and expert interviews



### Notes

- Ready made cigarette (RMC) factories appear to be scarcer than in other markets, with the majority of publicly reported factory raids related to roll your own product (4 of 5 raids). Seizures of RMC related to imported goods
- Lack of manufacturing operations is also reflected in the size of the OCGs raided, typically 3 – 6 people.
- As OCGs appear to be more import focused this is also reflected in the broad array of other activities and illicit goods discovered as part of the raids, suggesting a more opportunistic approach.

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them

Sources: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

(2) Industry Expert interviews





# Appendices



# Coverage of the data shown in this report

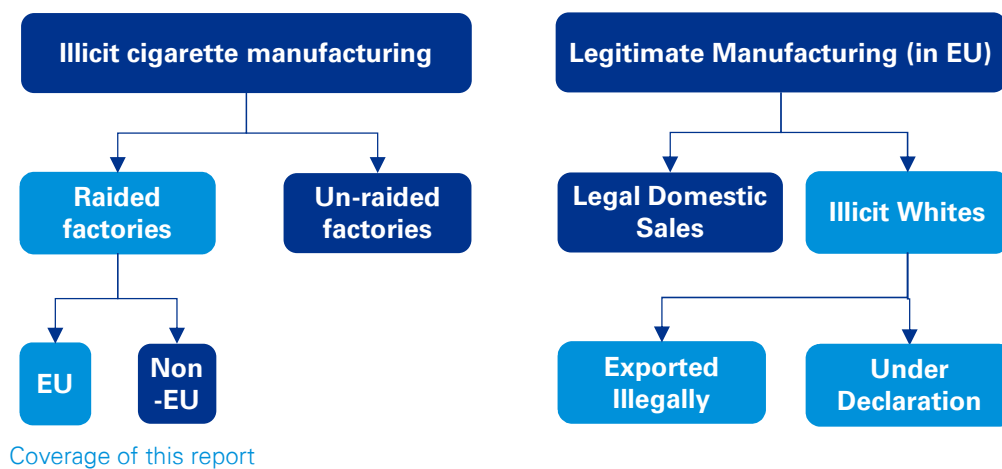
The EU illicit manufacturing methodology as set out in this report is based upon known illicit activity, and does not include an estimate for production at un-raided illicit manufacturing facilities within the EU

As the volumes of EU based illicit manufacturing identified in this report are based upon raided factories only there may be significant volumes of EU based counterfeit and Illicit Whites produced in the EU that are not included in our estimates as these illicit factories have not been raided.

Estimating this un-raided volume is problematic, as estimates do not exist for the number of un-raided EU based illicit factories in operation.

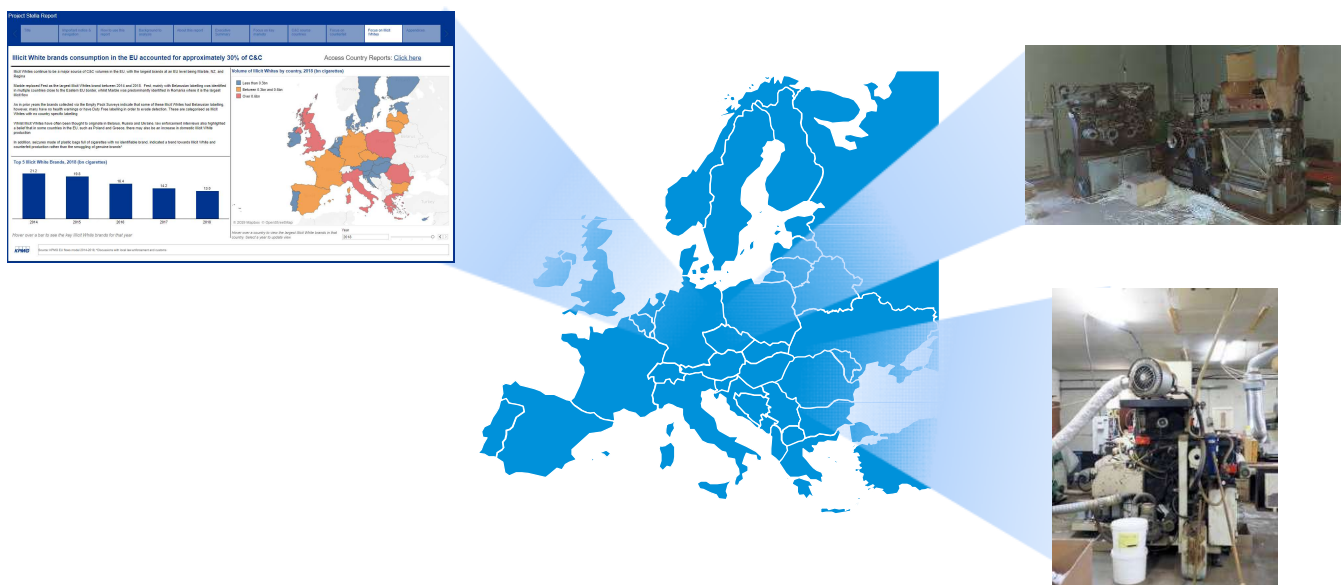
Illicit whites can either be legally manufactured but then illegally sold in other countries, or can be over-produced within the country of study, known as 'under-declaration'. Both these components are considered when estimating the size of illicit whites manufactured in the EU.

## Typical supply chain and other notable elements from raids data and expert interviews



# EU manufacturing: Estimation methodology overview

Our primary data sources are manufacturer data on EU factory raids and information collected via EPS. These sources are further supplemented with industry expert interviews, each of whom had at least 15 years' experience in combating illicit trade.



We have used three different methods to derive our estimates of EU-based Counterfeit (CF) and Illicit White (IW) production

1

## Upper range CF estimate

Estimation of maximum potential EU-based CF production, assuming that every 2018 counterfeit factory raid within the EU produced cigarettes destined for consumption in the EU

or

2

## Lower range CF estimate

Assumes a raided factory produced counterfeit cigarettes for consumption within the EU only if we found forensically identified counterfeit cigarettes from this factory within the 2018 EPS

+

3

## EU-based IW manufacturers

KPMG examined IW manufacturers identified in Stella Phase 1 and determined which were producing IWs within the EU

## EU-based IW factory raids

IW volumes identified via the same method used as (1) Upper range CF estimate opposite



# Upper range CF estimate - maximum estimated EU CF production capacity (1)

## Calculation steps

	Assumptions	Source	Notes
<b>Step 1</b> Determine number of producing EU factories raided	Excludes raids at factories under construction, stripped out factories, packing only, printing only, warehousing only and chopping only operations.	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission. <sup>(a)</sup>	
X			
<b>Step 2</b> Determine length of time that each factory had been operational	Where production start date and raid date are available this is used. Otherwise it is assumed the factory operated from 1 Jan 2018 until the raid date.	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission.	
X			
<b>Step 3</b> Factory Production capacity estimate (see next page)	0.25bn sticks can be made per CF factory per year. Refer to the next page for details on this calculation. Volumes produced in the EU are consumed in the EU.	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission. Over 200 raids and prosecutions since 2004.	
=			
<b>Maximum estimated EU CF production capacity</b> <b>5.2bn</b> (Compares to the 5.5bn in Stella report)			Estimate is only for raided EU CF factories. Including un-raided factories would increase this estimate further.

Note: (a) Raid data is that supplied to manufacturers. It is possible that other raids occurred in Europe that were not shared by law enforcement

# Upper range CF estimate - maximum estimated EU CF production capacity (2)

## Production capacity estimate

	Assumptions	Source	Notes
<b>A</b> Line production capacity  X	Lines are capable of producing 4,000 cigarettes per minute.	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission. Over 200 raids and prosecutions since 2004.	It could be anticipated that increasing availability of new machinery online will allow greater speeds of production in future.
<b>B</b> Operational efficiency  X	Illicit factories are operational for 7 hours per day, and 150 days/year, i.e. 12% efficient on a time basis.	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission. Over 200 raids and prosecutions since 2004.	Staff and ways of working can vary significantly by factory. However, breakdowns, availability of spares and workers reduces efficiency.
<b>C</b> Length of operation  =	Dependent on step 2 in the prior page.		
<b>Production capacity estimate</b>	E.g. operation of: 1 week = 5 million cigarettes 1 month = 21 million cigarettes 1 year = 252 million cigarettes		

# Lower range CF estimate – EPS-based EU CF production capacity

## Appendices

### Assumptions

### Source

### Notes

#### Step 1

Collect data on  
EU CF factory  
raids

N/a

Anonymised factory raid  
data supplied by law  
enforcement to  
manufacturers and used  
with permission

X

#### Step 2

Determine via  
forensic analysis  
if the raided  
factories  
produced any of  
the CF identified  
in the 2018 EPS  
used in project  
Stella Phase 1

N/a

Anonymised factory raid  
data supplied by law  
enforcement to  
manufacturers and used  
with permission.  
Manufacturer forensic  
analysis of counterfeit  
packs.  
EPS data and Stella  
results.

Manufacturers carry out  
forensic analysis to  
determine which CF packs  
identified in the EPS came  
from the same production  
line. If this factory is  
subsequently raided or  
machinery is seized it can  
be concluded that CF  
packs from this  
'Counterfeit Group' were  
manufactured at this  
location

=

**EPS-based EU  
CF production  
capacity  
2.8bn**

Of the total 5.5bn of counterfeit identified in the 2018 Stella report, 3.0bn was able to be identified as part of a specific Counterfeit Group, 2.8bn of which were confirmed or suspected to be based within the EU and 0.2bn non-EU

As a result there is 2.5bn (5.5bn total less the 3.0bn noted above) of counterfeit consumed in the EU in 2018 for which the location of manufacture is not known, a proportion of which could conceivably also be within the EU



# EU-based IW manufacturers, and EU IW factory raids

## EU-based IW manufacturers

	Assumptions	Source	Notes
<b>Step 1</b> Use 2018 EPS data and Phase 1 results to determine the volume of Illicit Whites consumed in the EU whose manufacturing facilities are EU-based	Manufacturing takes place in the same market in which the IW manufacturer is located Manufacturers are legitimate operators in their home markets, i.e. they would not be raided as part of the IW factory raid volumes below	EPS data and Stella results	Although IW packs collected in the EPS may not bear markings related to a particular market, it may be possible to identify the manufacturer. As we do not have information from the IW manufacturers as to the legitimacy of packs in the EPS we are unable to state if they are counterfeit or not. Research of trademark owner locations and operations can determine the country in which the manufacturer produces cigarettes
=			
<b>Volumes from EU-based IW manufacturers</b> <b>3.2bn</b>			

## EU IW factory raids

	Assumptions	Source	Notes
As per 'Upper range' estimate on prior pages	N/a	Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission Over 200 raids and prosecutions since 2004	Illicit factories raided may produce IW brands, sometimes alongside the counterfeiting of legitimate brands As we do not have information from the IW manufacturers as to the legitimacy of packs obtained via factory raids we are unable to state if they are counterfeit or not
=			
<b>Volumes from EU IW factory raids</b> <b>1.6bn</b>			

# Worked examples

## Upper range/ EU IW factory estimate worked examples

						$c = a \div 365 \times b$
Country	Date illicit packs first detected	Date of raid	Length of operation	Assumed annual production capacity (bn)	EU based CF volume (bn)	
<b>Czech Republic</b>	n/a	29 Oct 2018	301 <sup>(1)</sup>	0.25	0.21	
<b>Poland</b>	30 Jul 2018	23 Nov 2018	116	0.25	0.08	

Note: (1) As no information was available about when the counterfeit from this factory was first detected, it is assumed it has been in production since 1 January 2018

# Publicly available raid data

Publicly available raid data, sourced by KPMG research, 2018

Raid	Country	Location	Month	Cigarettes / cigarette equivalents seized
1	Austria	Sankt Polten	December	29,024,000
2	Germany	Langenfeld	July	2,367,000
3	Germany	n/a	January	108,840,000
4	Germany	Frankfurt	August	1,000,000
5	Greece	Koropi	May	6,685,840
6	Greece	Menemeni	April	950
7	Greece	Avlona	April	1,229,600
8	Greece	Avlona	April	13,080,000
9	Greece	Koropi	April	3,611,100
10	Greece	Athens	April	3,466,520
11	Greece	n/a	October	23,700,000
12	Greece	n/a	August	1,440
13	Ireland	Jenkinstown	March	36,280,000
14	Ireland	n/a	n/a	9,070,000
15	Italy	Naples	December	27,210,000
16	Latvia	Lielvarde	July	8,163,000
17	Latvia	Ogre	June	10,884,000
18	Netherlands	Alphen	June	4,000,000
19	Netherlands	Heijen	April	12,000,000
20	Netherlands	Dongen	April	17,000,000
21	Netherlands	Lithoijen	October	7,000,000
22	Poland	Wroclaw	March	3,200,000
23	Poland	Biala Podlaska	n/a	9,070,000
24	Poland	Konin	November	1,200,000
25	Poland	n/a	n/a	12,698,000
26	Poland	Grzechotki	September	2,000,000
27	Poland	Jelenia Gora	June	1,235,000
28	Poland	Gdansk	May	2,558,900
29	Poland	Opole	May	1,360,500
30	Poland	Nowy Tomysl	n/a	4,600,000
31	Poland	Chrzanow	n/a	600,000
32	Poland	n/a	January	670,000
33	Poland	Kolobrzeg	January	360,000
34	Poland	n/a	n/a	22,675,000
35	Poland	Nowy Tomysl	May	2,200,000
36	Poland	Lodz	March	1,809,000
37	Poland	Gliwice	April	2,267,500
38	Poland	Slupsk	April	1,840,000
39	Poland	Lodz	May	2,721,000
40	Poland	Lodz	January	9,070,000
41	Poland	Zgierz	February	2,549,000
42	Poland	Szczecin	February	3,174,500
43	Poland	Konin	March	2,343,000
44	Poland	n/a	March	200,000
45	Romania	Onesti	January	900,000
46	Slovakia	Revuca	June	10,500,000
47	Slovakia	Ruzomberok	August	21,500,000
48	Spain	n/a	October	69,000,000
49	Spain	n/a	October	118,500,000
50	Spain	Barcelona	July	10,500,000
51	UK	Newry	November	10,000,000

Note: (a) SIA data and anonymised factory raid data supplied by law enforcement to manufacturers are separate datasets and as such discrepancies will exist between them.

Source: (1) KPMG analysis of publicly available raid data collected during the SIA project and subsequent updates

# Additional analysis of growth in EU produced counterfeiting

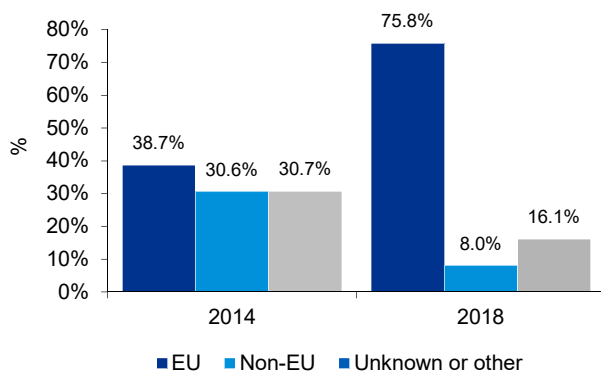
The combination of raids and forensic analysis of cigarette packs in the EPS have identified a trend towards EU based manufacturing which supports our analysis

Below we have illustrated the difference in counterfeit analysis by the main industry participants in conjunction with law enforcement, to determine the origin of counterfeit manufactured cigarettes.

The suspected manufacturing locations determined as within the EU have doubled between 2014 and 2018. This trend has also been observed across multiple product groups, especially those where the finished goods and labelling are now made in the EU to evade detection.<sup>(1)</sup>

Furthermore the increase with at least 75% identified as suspected EU manufacturing supports KPMG's assumptions using seizures of products to determine EU vs non-EU counterfeit split as discussed in the methodology.

**Counterfeiting groups in EPS (share of total counterfeit packs collected and likely manufacturing region), 2014 & 2018<sup>(2)(3)(4)</sup>**



Sources: (1) Europol, 2017 Situation Report on Counterfeiting and Piracy within the European Union  
 (2) EPS  
 (3) Anonymised factory raid data supplied by law enforcement to manufacturers and used with permission  
 (4) Manufacturer forensic analysis data



# Sources

Better Retailing, 'Tobacco manufacturers crack down on online illicit trade sales', April 2019

CASE, The Significance Of The Tobacco Product Manufacturing To Poland's Economy, 2018

European Commission, Report on the EU customs enforcement of intellectual property rights, 2018

EUIPO, 2019 Status Report On IPR Infringement

Expert interviews

Expert Panel interviews

Factory raid data supplied by law enforcement to manufacturers

publicly available raid data collected during the SIA project and subsequent updates

KPMG Stella Report

tobaccoasia.com 'Greek Leaf: Out of the Doldrums Yet', May 2017

# Scope of work

## Project Stella – Phase 2

After the technical analysis which led to the first phase of the Stella report, a second report is planned to explore some of this analysis in more detail. The conclusions of the first Stella report showed that whilst illicit cigarette consumption accounted for 8.6% of total consumption, the sources changed. Flows from key source countries (Belarus, Ukraine and Algeria) reduced whilst cigarettes with no identifiable labelling (counterfeit and some illicit whites) increased. Anecdotal evidence (from interviews and reviews of packs collected) indicated that production of these cigarettes was taking place inside the EU, a growing trend which had not previously been explored.

### **This report seeks to explore this growing trend in more detail, with the following objectives:**

- Quantify the proportion of counterfeit and illicit white cigarettes which are estimated to be manufactured within the EU
- Highlight the supply chain which is enabling illicit manufacturing to take place within the EU (raw materials, tobacco growing, green-leaf threshing and distribution hubs) and comment on why these hubs are attractive to criminal organisations
- Highlight anecdotal information which demonstrates the operation of OCGs and the other activities that they are involved in (including the financial flows)

### **Scope:**

- Executive summary
  - Highlight key messages in a few bullet points
  - Provide a foreword written by the expert panel about the project, approach and point of view on key challenges faced
- Growth of counterfeit and illicit whites
  - Highlight in more detail the trends identified in the Stella report
- Internal manufacturing identified across Europe
  - Analysis of factory raids and growth in identified production (2015-2018)
  - Highlight analysis of where it was believed packs collected in EPS came from (counterfeit machinery etc.)
  - Highlight analysis where seizures of products were linked to PMI analysis of specific counterfeit packs
- Raw materials associated with cigarette manufacturing
  - Highlight the key raw materials, supplies and quantities required
  - Overview of where some of the raw materials may have come from through data-points of factory raids
- Overview of 'typical illicit trade supply route' (including financial flows) – diagram and short commentary
- Key country case studies
  - Supply chains across the countries of study
- Key factory raid case studies
  - Quantities of cigarettes identified, production capacity, location, type of manufacturing, details on the raid
- Background to report and methodology





# Glossary

# Glossary (1)

<b>Bn</b>	billion
<b>C&amp;C</b>	Counterfeit and Contraband
<b>CAGR</b>	Compound Annual Growth Rate
<b>Cigarette</b>	Any factory-made product that contains tobacco and is intended to be burned under ordinary conditions of use. For the purpose of this report, it also includes counterfeit cigarettes
<b>Consumption</b>	Actual total consumption of cigarettes in a market, including Legal Domestic Consumption (LDC) and illicit products as well as those legally purchased overseas
<b>Contraband (CB)</b>	Genuine products that have been either bought in a low-tax country and which exceed legal border limits or acquired without taxes for export purposes to be illegally re-sold (for financial profit) in a higher priced market
<b>Counterfeit (CF)</b>	Cigarettes that are illegally manufactured and sold by a party other than the original trademark owner. In this report, counterfeit is only mentioned where the open-source data specifically highlights it. Therefore some of the other seizures may be counterfeit but are not reported as such
<b>Country of Origin</b>	Country from which the packs collected are deemed to have originated. This is determined by either the tax stamp on the pack or in cases where the tax stamp is not shown, on the health warning and packaging characteristics
<b>Duty Free</b>	Duty Free Cigarettes bought without payment of customs or excise duties. Consumers may buy Duty Free Cigarettes when travelling into or out of the EU (including Switzerland and Norway) by land, air or sea at legal Duty Free shops
<b>E.g.</b>	For example
<b>EPS</b>	Empty Pack Survey
<b>EU</b>	European Union
<b>EU Flows Model</b>	The primary methodology for measuring consumption in a market. The model has been developed by KPMG on a bespoke basis for the specific purpose of measuring inflows and outflows of cigarettes in the scope of this project
<b>FTZ</b>	Free Trade Zone
<b>GPS</b>	Global Positioning System
<b>Illicit Whites (IW)</b>	Cigarettes that are usually manufactured legally in one country/market but which the evidence suggests have been smuggled across borders during their transit to the destination market under review where they have limited or no legal distribution and are sold without payment of tax
<b>Illicit Whites with no country specific labelling</b>	Packs of Illicit White cigarettes which have “Duty Free” or no identifiable labelling on the packs



# Glossary (2)

<b>Inflows/Outflows</b>	Inflows of non-domestic product into a market / outflows of product from a market
<b>IP/ IPR</b>	Intellectual Property/ Intellectual Proprty Rights
<b>Kgs</b>	Kilograms
<b>LDS</b>	Legal Domestic Sales of genuine domestic product through legitimate, domestic channels based on In Market Sales (IMS) data
<b>No.</b>	Number
<b>OCG</b>	Organised Crime Group
<b>RMC</b>	Ready made cigarettes (or manufactured cigarettes)
<b>Premises</b>	Premises refers to type of seizure, which may be in transit (e.g. car, van, train, ship or truck) or found in a specific location (e.g., retail shop, customs personal seizure, house, factory)
<b>RYO</b>	Roll Your Own tobacco products
<b>Seizure event</b>	A seizure event includes all tobacco products seized at the same time, location and transportation unit.
<b>SIA</b>	KPMG developed online tool to track and monitor publicly available information on seizures of illicitly traded goods
<b>Stella</b>	A KPMG study of the illicit cigarette market in the European Union, Norway and Switzerland, Published June 2019
<b>TMO</b>	Trademark owner
<b>Tobacco</b>	<p>Tobacco refers to the leaves of the tobacco plant that have been dried and processed for people to roll up and smoke. Tobacco is the main ingredient for smoking cigarettes, cigars, pipe tobacco, and shisha tobacco. For the purpose of this report, it also includes raw tobacco, hand rolling tobacco, counterfeit hand rolling tobacco, shisha tobacco, chewing tobacco, and various other tobacco products.</p> <p>Conversion Factor: Tobacco is converted into cigarette equivalents where required at 1 gram per cigarette</p>
<b>Trademark owner</b>	The legal owner of an identified brand
<b>UK</b>	United Kingdom
<b>Unspecified</b>	Unspecified market variant refers to cigarette packs which do not bear specific market labelling or Duty Free labelling
<b>Vol.</b>	Volume
<b>Vs</b>	Versus

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