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### **Glossary**

ABS Australian Bureau of Statistics

ACT Australia Capital Territory

AIHW Australian Institute of Health and Welfare

AIT Anti Illicit Trade

ATO Australian Taxation Office

AWOTE Average Weekly Ordinary Time Earnings

BATA British American Tobacco Australia

CAGR Compound Annual Growth Rate

CATI Computer Aided Telephone Interview

CAWI Computer Aided Web Interview

Contraband Genuine manufactured cigarettes that are sold without the payment of applicable excise

taxes in the market of consumption. Contraband cigarettes tend to have been made in a low-tax country and brought into the country of consumption illegally, or acquired without taxes (for export purposes) and illegally re-sold in the market of consumption. This includes genuine products which are brought into a country in amounts exceeding the personal allowance; in Australia this limit is 50 sticks or 50 grams of RYO per person

**Counterfeit** Manufactured cigarettes which are illegally manufactured and carry the trademark and/or

branding of a legally sold brand without the consent of the trademark owner. Counterfeit cigarettes are also known as fake cigarettes. For the purposes of this analysis, data

relating to counterfeit is not included within the definition of contraband

CPI Consumer Price Index

Eos Exchange Of Sales data. Shipment data provided by the industry

**EPS** Empty Pack Survey

FCTC Framework Convention on Tobacco Control

GDP Gross Domestic Product

**H1** First half of the year i.e. the period from January to June

**H2** Second half of the year i.e. the period from July to December

Illicit whites 'Illicit whites' is a term for brands of manufactured cigarettes that are not legally available

in the local market. Whilst possibly legal at the point of manufacture, these brands are typically not sold legally anywhere, and are often made exclusively for smuggling

Inflows Total volume of cigarettes coming into Australia

ITA Imperial Tobacco Australia

kg Kilogram

KPI Key Performance Indicator

LDC Legal Domestic Consumption

LTM Legal Domestic Sales

Last Twelve Months

LTM H1 Last Twelve Months to the end of June (e.g. 1 July 2012 to 30 June 2013)

LTM H2 Last Twelve Months to the end of December (e.g. 1 January 2013 to 31 December 2013)

MSI MSIntelligence

### **Glossary**

ND(L) Non-Domestic Legal is the legitimate tobacco purchased in duty free or abroad within

personal allowance limits

not sold in Australia, packs with identifying marks from other markets such as tax stamps)

OECD Organisation for Economic Cooperation & Development

PDI Personal Disposable Income

PML Philip Morris Limited
pp Percentage point

Outflows Legitimate tobacco purchased in Australia and taken abroad

RMR Roy Morgan Research
RSP Retail Selling Price

RYO Roll Your Own

TISG Tobacco Industry Stakeholder Group. Formerly known as the Tobacco Industry Forum

(TIF)

Tonnes Thousand kilograms

WHO World Health Organisation

Unbranded tobacco Illegal loose leaf tobacco upon which no duty has been paid and which carries no labelling

or health warnings. It is sold and consumed either in RYO form (called Chop Chop) or

inserted into empty cigarette tubes. Commonly sold in both bags or boxes

YoY Year on Year

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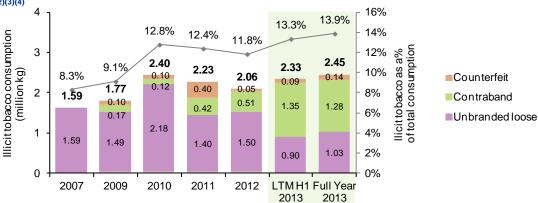
# 1. Executive summary and key findings

- 1.1 Key messages
- 1.2 The purpose of this report
- 1.3 KPMG LLP's experience in measuring illicit trade

## Illicit tobacco consumption has increased, driven by a growth in illicit manufactured cigarettes

#### 1.1 Key messages

Figure 1.1 Illicit tobacco consumption as a proportion of total consumption  $2007 - 2013^{(1)(2)(3)(4)}$ 



#### Introduction

This is the 2013 full year report examining the size of the illicit tobacco market in Australia for the twelve months ending December 2013. The percentage of the overall illicit tobacco consumption in 2013 has been calculated using the approach adopted in the H1 2013 report and uses all the available data captured in 2013.

Unbranded tobacco consumption has been calculated using a consumer survey whilst the consumption of illicit manufactured cigarettes has been estimated based on empty pack survey results.

#### **Tobacco consumption in Australia**

The overall level of tobacco consumption in Australia was approximately 17.7 million kilograms in the full year 2013, of which 2.45 million kilograms are estimated to be illicit. This estimate of total consumption is marginally higher than both the 2012 and the H1 2013 figures.

#### Illicit tobacco consumption in Australia

Figure 1.1 highlights that in the twelve months to the end of 2013, the level of illicit consumption grew to 13.9% of total consumption, 2.1 percentage points higher than in 2012, and 0.6 percentage points higher than in the twelve months ending June 2013.

If all of this tobacco had been consumed in the legitimate market it would have represented an excise amount payable to the Government of AUD1.1bn at current excise rates.

This growth in illicit consumption is driven by a slight increase in unbranded tobacco consumption volumes from H1 2013 whilst illicit manufactured cigarette consumption volumes have stabilised at levels recorded in LTM H1 2013.

There has, however, been a change in the mix of illicit manufactured cigarettes consumed with counterfeit

Sources: (1) Deloitte, Illicit Trade of Tobacco in Australia, 2010, 2011, 2012

- (2) Industry data
- (3) KPMG Analysis
- (4) Euromonitor, Tobacco Consumption in Australia, 2013

volumes experiencing a large increase in 2013, though when compared to the total illicit consumption, counterfeit consumption continues to be relatively small. Contraband volumes, despite witnessing a decline from H1 2013 levels, continue to account for the majority share of illicit manufactured cigarette consumption. Additionally, the consumption of illicit whites continues to be a growing issue – they accounted for more than 2.3% of total manufactured cigarette consumption in 2013. Manchester is currently the largest illicit white brand in Australia; if it were sold legally in Australia it would have a 1.4% market share.<sup>(3)</sup>

#### Legal tobacco market in Australia

The overall sales of legal domestic tobacco in the full year 2013 declined by 0.5% from the previous year: a lower decrease compared to an annual fall of 1.6% between 2000 and 2013. Whilst manufactured cigarette volumes have declined at an annual rate of 2.1% over the last thirteen years, loose tobacco volumes have increased at a CAGR of 3.0% over the same period, representing a shift in the mix of tobacco products consumed. In line with this trend, manufactured cigarette volumes declined by 1.1% and loose tobacco volumes grew by 3.5% between 2012 and 2013.

#### Regulatory changes

In August 2013 the Australian government announced excise duty increases in tobacco products of an additional 12.5% annually for the next four years. The first of these increases was implemented on 1 December 2013, with further 12.5% increases to be applied on 1 September 2014, 1 September 2015 and 1 September 2016. Additionally from 1 March 2014 excise and excise equivalent customs duty will be indexed to the Average Weekly Ordinary Time Earnings (AWOTE) instead of the Consumer Price Index.<sup>(5)</sup> The Victorian government recently announced its intention to quadruple fines for retailers caught with illicit tobacco.<sup>(6)</sup>

- Treasurer of the Commonwealth of Australia, Government to increase tobacco excise, August 2013
- Department of Health, Victoria

#### Executive summary and key findings

## KPMG LLP is the leading advisor in the field of illicit tobacco consumption measurement

#### 1.2 The purpose of this report

British American Tobacco Australia, Imperial Tobacco Australia Limited and Philip Morris Limited have commissioned KPMG LLP to conduct an independent report to estimate the size of the consumption of illicit tobacco in Australia. KPMG LLP had final decisions on all methodologies and messages contained in this report. The purpose of this report is:

- To provide an overview of the nature and dynamics of the legal and illicit tobacco markets in Australia, and
- 2.To provide an independent estimate of the size of the illicit tobacco market in Australia.

KPMG was appointed to produce bi-annual reports on the illicit trade for the industry in Australia.

This full year 2013 report is the second of two reports that are published focusing on 2013 and is an update to the H1 2013 report that was released in October 2013.

This report covers the period from January to December 2013 and shows the 2013 results based on our methodology. The result for 2013 is also presented on a basis consistent with H1 2013 report.

### 1.3 KPMG LLP's experience in measuring illicit trade

KPMG LLP has significant experience in the measurement of illicit tobacco consumption across a number of markets. Our experience covers the following:

#### **Europe**

Since 2005, KPMG LLP has led a Pan European assessment of the scale of counterfeit and contraband tobacco on behalf of Philip Morris International Management S.A. (PMI) and the European Commissions Anti Fraud Office (OLAF). Project Star has been conducted annually since 2006 by KPMG for PMI, the European Commission and the 28 EU Member States.

We have worked extensively with the industry and other stakeholders on developing an approach to illicit market sizing and implementing a common, global approach to illicit trade measurement.

#### **Latin America**

In 2013 KPMG LLP led the first multi-territory study into the illicit trade in Latin America. The study focuses on the levels of inflows and outflows of both legal and illicit cigarettes and other tobacco products across a selection of Latin American countries. The work performed has allowed a variety of stakeholders access to the first picture of the cross border nature of illicit tobacco volumes in Latin America. This report was prepared for an internal use of a tobacco company and has not been published.

#### Oceania

KPMG LLP is currently involved in assessing the illicit tobacco trade in selected South Pacific markets for a tobacco company.

As part of this ongoing work, KPMG has a strong understanding of some of the unique issues found in the wider Oceania region outside of Australia and have developed specific methodologies designed for the purpose of sizing the illicit trade in each country.

## 2. Australian tobacco market

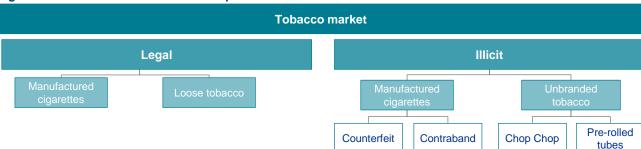
- 2.1 Tobacco consumption in Australia
- 2.2 Legal tobacco market

## The legal and illicit markets are made up of manufactured cigarettes and loose tobacco

#### 2.1 Tobacco consumption in Australia

Tobacco consumption refers to total volume of consumption for all types of tobacco as mapped out in figure 2.1. This section deals with the tobacco market and related products:

Figure 2.1: Australia tobacco market map



#### Legal tobacco products

There are two main types of tobacco products considered in total tobacco consumption (cigars and pipe tobacco have been excluded for the purposes of this study):

**Manufactured cigarettes** – made for the legal tobacco market and sold in packets.

**Loose tobacco** – Legal loose leaf tobacco sold in pouches and used in Roll-Your-Own (RYO) cigarettes, which are consumed using rolling papers or tubes.

As shown in section 5.1, additional legal consumption is possible in the form of non-domestic legal product, that is tobacco purchased by consumers in other countries and imported into Australia legally for personal consumption.

#### Illicit tobacco consumption

Illicit tobacco is mainly brought into the country illegally from overseas markets without the payment of excise duties. This tobacco is sold to consumers at lower prices than Australian cigarettes, avoiding Australian tax obligations or is brought into the country in amounts exceeding the allowable personal limit. The Australian Crime Commission believes that organised crime groups perceive tobacco smuggling to be low-risk and high profitability. Penalties for smuggling illicit tobacco have been increased, with potential for a jail term of up to ten vears.<sup>(1)</sup>

#### Counterfeit

These are manufactured cigarettes, often specifically manufactured overseas on a large scale. Once manufactured, they are smuggled into Australia most commonly via ports on large container freight and other channels including airmail. These products carry branding without the consent of the trademark owner to imitate popular legitimate tobacco product brands.

According to the Tobacco Industry Stakeholder Group (TISG)<sup>(a)</sup> they do not adhere to industry production

standards, they may pose additional serious health risks and are also known as fake cigarettes. (2)

#### Contraband

These are mainly genuine cigarettes that are manufactured legally outside of Australia adhering to local regulations and smuggled into the Australian market. This also includes cigarettes which are purchased legally outside Australia but exceed the personal import allowance and have no duty paid.

Contraband cigarettes are legitimately manufactured by the trademark owner but avoid Australian government regulations, quarantine inspections and local ingredient controls.<sup>(2)</sup>

Illicit whites, as discussed in section 6, are also a constituent part of contraband. 'Illicit whites' is a term for brands of manufactured cigarettes that are not legally available in the local market, though they could be legal at the point of manufacture. These brands are often made exclusively for smuggling.

#### **Unbranded tobacco**

Unbranded tobacco is sold as finely cut loose leaf tobacco in half kilogram or one kilogram amounts. TISG indicates that it may be grown illicitly without a licence in Australia but is most commonly smuggled from overseas countries.

This product carries no labelling or health warnings and is consumed in RYO form or inserted into empty cigarette tubes and sold in boxes which are available from tobacco retailers. The product is then sold loose in bags or prerolled tubes (called Chop Chop). (2)

The Australian Crime Commission believes that the majority of unbranded tobacco is imported rather than grown in Australia. It is distributed to retailers in the same way as counterfeit and contraband products.<sup>(1)</sup>

Note: (a) Formerly known as Tobacco Industry Forum (TIF), recently changed as the result of recent changes by the Australian Taxation Office (ATO) forums

Sources: (1) Australian Crime Commission, Organised Crime in Australia, July 2013

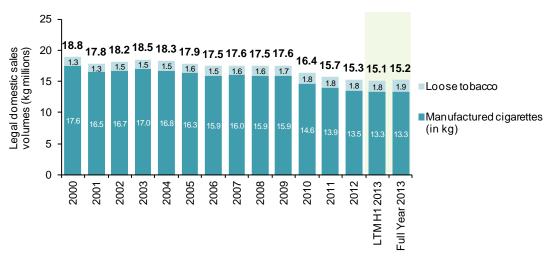
(2) Tobacco Industry Stakeholder Group (TISG) formerly known as Tobacco Industry Forum (TIF)

## The legal domestic sales volumes have gradually declined since 2000 but the decline appears to have levelled out in recent years

#### 2.2 Legal tobacco market

#### 2.2.1 Historic legal domestic sales

Legal domestic sales in Australia, 2000 – 2013<sup>(1)(2)(a)</sup>



CAGR (%)	2000-09	2009-12	2000-12	2000-LTM H1 2013	2000-13	2012-13
Manufactured cigarettes	-1.1%	-5.3%	-2.2%	-2.2%	-2.1%	-1.1%
Loose tobacco	3.0%	2.8%	3.0%	2.9%	3.0%	3.5%
Total market	-0.8%	-4.5%	-1.7%	-1.8%	-1.6%	-0.5%

The overall sales of legal domestic tobacco in the full year 2013 declined by 0.5% from the previous year: a lower decrease compared to an annual fall of 1.6% between 2000 and 2013.

The legal domestic sales volumes between LTM H1 2013 and 2013 have largely remained flat, and the marginal increase witnessed has been driven by an increase in legal domestic sales volumes for loose tobacco and a slight increase in sales of manufactured cigarettes during the last quarter of 2013. However, along with these marginal increases in legal sales between LTM H1 2013 and 2013 there was also an increase in illicit tobacco consumption.

Australian legal domestic sales volumes have gradually declined since 2000. The 25% increase in excise duties in April 2010 coincided with a 6.8% decline in legal domestic sales volumes.

Whilst manufactured cigarette volumes have declined at an annual rate of 2.1% over the last thirteen years, loose tobacco volumes have increased at an annual rate of 3.0% over the same period, representing a shift in the mix of tobacco products consumed.

<sup>(</sup>a) Legal domestic sales numbers presented here are based on Euromonitor data. Through an analysis of confidential Exchange of Sales data, Euromonitor appears to underestimate actual sales and so we have taken a historic average to uplift Euromonitor manufactured cigarette volumes in each year by 2%. Loose tobacco volumes remain unchanged. Please refer to page 55 for details

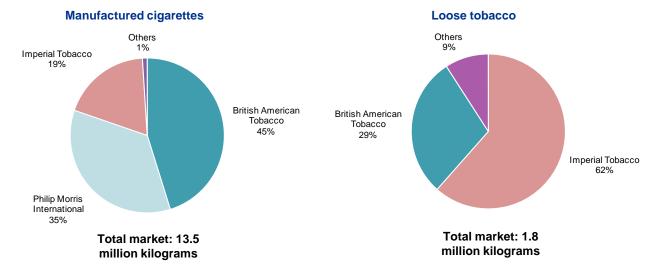
Sources: (1) Euromonitor, Legal domestic sales, accessed January 2014

<sup>(2)</sup> KPMG analysis of data from Nielsen Australia and Aztec databases

### BAT has the largest market share in manufactured cigarettes whilst Imperial Tobacco has the biggest market share in loose tobacco

#### 2.2.2 Australia legal tobacco competitive overview

### Market share by manufacturer, 2012<sup>(1)(a)</sup>

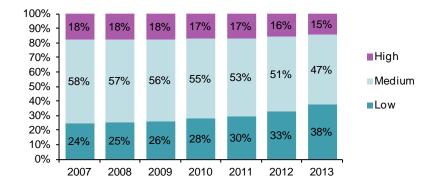


#### Market share

The three major tobacco manufacturers have large shares across both the manufactured cigarette and loose tobacco market. British American Tobacco has a market share of 45% in manufactured cigarettes with its brand Winfield having the largest market share of 23%.

Imperial Tobacco has the largest market share in loose tobacco with five of the top six loose tobacco brands.

### Market share of manufactured cigarettes by price category, $2013^{(2)}$



#### **Price category**

Cigarettes are taxed by the stick rather than value and as a result increases in prices through excise tax do not increase the gap in price between high and low priced categories.

Since 2007 there has been an increase in the market share of low priced categories at the expense of medium and high priced cigarettes as people are switching to cheaper cigarettes. This trend appears to have developed further in 2013 as the low price segment increased by 5pp. between 2012 and 2013, the biggest increase since 2007.

Note: (a) The market share information has not been updated since the H1 2013 report as new data from Euromonitor is likely to be available only by the mid of 2014

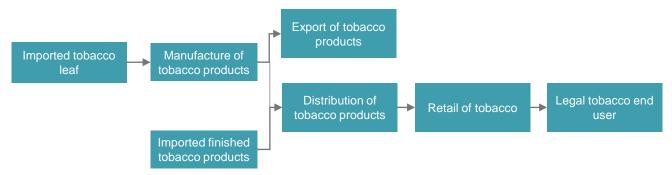
Sources: (1) Euromonitor, Tobacco in Australia, 2013

(2) KPMG analysis of Nielsen Australia - BAT Tobacco Industry database

#### No tobacco is grown in Australia for legal commercial sale

#### 2.2.3 Supply and distribution of legal manufactured tobacco in Australia

### Supply chain for legal tobacco products in Australia, 2013



#### Tobacco supply chain

All manufactured tobacco products are imported into Australia as tobacco leaf or finished products. No tobacco is legally grown in Australia for commercial purposes. However, the majority of PML and BATA products are manufactured in Australia, whilst all of ITA's products are imported. Some of the products manufactured in Australia are exported to other countries in the region.

#### Non-domestic legal consumption channel

A small amount of tobacco is imported into Australia by consumers for their own personal consumption. Since 1 September 2012, consumers have a limit of 50 cigarettes or 50g of loose tobacco (down from 250 of each) which can be brought into Australia without paying excise duty. This volume can be brought in from the country of origin or through duty free sales channels. Given this low allowance, the non-domestic legal volume is likely to be a small proportion of consumption and is discussed further in the appendix A2.4.

## 3. Macroeconomic environment

- 3.1 Macroeconomic context
- 3.2 Gross domestic product growth
- 3.3 Unemployment
- 3.4 Personal Disposable Income
- 3.5 Consumer Price Index

# The Australian economy has achieved steady growth over the last five years, with low unemployment rates compared with other OECD countries

#### 3.1 Macroeconomic context

This section provides background on the Australian economy as a change in GDP growth, unemployment, personal disposable income or inflation, could impact consumer behavior and subsequently tobacco consumption.

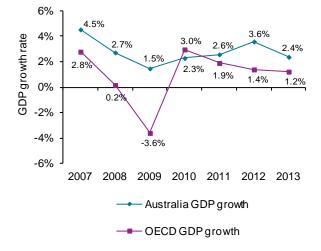
The decline in legal domestic sales since 2009 needs to be examined in the context of the affordability of tobacco products. Personal disposable income (PDI) and the consumer price index (CPI) are analysed in order to assess possible reasons for changes in consumer behavior.

#### 3.2 Gross domestic product growth

Australia has been one of the few members of the OECD to have experienced continuous economic growth since the 1990s. The global financial crisis caused a slow-down in growth as opposed to a recession.

Between 2007 and 2012 the economy grew at a compound annual growth-rate (CAGR) of 2.5%; however, growth in 2013 appears to have slowed down.

### Year-on-year GDP Growth, 2007 – 2013<sup>(1)(2)(a)</sup>

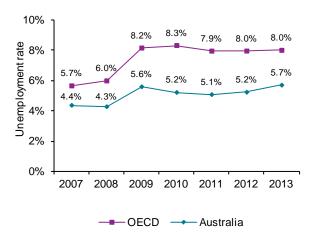


#### 3.3 Unemployment

Unemployment in Australia is one of the lowest of all OECD countries. Unemployment increased in 2009 but remained broadly stable until 2012.

Unemployment in December 2013 was 5.9%, a slight increase from the 5.8% recorded in November 2013. (5)

### Recorded unemployment, 2007 – 2013<sup>(3)(4)</sup>



Note:

a) Historical numbers for GDP have been updated and have been based on data from the Economist Intelligence Unit

Sources: (1) The Economist Intelligence Unit, GDP at constant prices, accessed March 2014

(2) OECD, GDP (expenditure approach), accessed March 2014

(3) The Economist Intelligence Unit, recorded unemployment as a percentage of total labour force, accessed March 2014

4) OECD, harmonized unemployment rates, accessed March 2014

(5) Australia Bureau of Statistics

#### Australia has seen consistent growth in personal disposable incomes

#### 3.4 Personal Disposable Income

Australia has been through a period of increasing consumer disposable income during the past decade. Personal Disposable Income (PDI) per capita increased by 4.9% p.a. between 2007 and 2013.

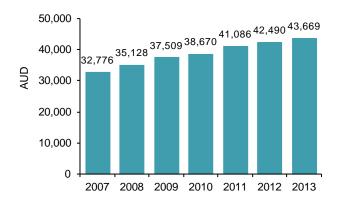
Despite the global financial crisis, income levels in Australia do not appear to be considerably impacted with growth in PDI being supported by an increase in hours worked (by part-time workers) and increased hourly wages. (2)

#### 3.5 Consumer Price Index

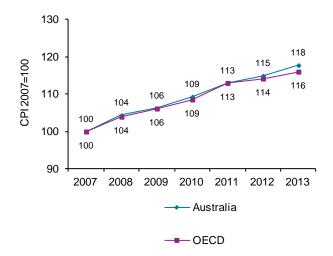
Australia's Consumer Price Index has developed at the same pace as the OECD average, growing consistently since 2007. However, forecasts suggest that inflation will be higher than the OECD average in 2013.

The Economist Intelligence Unit forecast that annual inflation will average 2.8% in 2013-17 is subject to both upside and downside risk. (5)(6) Interest-rate rises may relieve some inflationary pressure, but a revival in the housing market could cause inflation to accelerate.

### Personal disposable income per capita, 2007 – 2013<sup>(1)</sup>



### Consumer price index, 2007 – 2013<sup>(3)(4)</sup>



Sources: (1) Euromonitor, Annual disposable income per capita, accessed March 2014

- (2) Productivity Commission media release, Trends in the distribution of income in Australia, March 2013
- (3) Euromonitor, Index of consumer prices; accessed March 2014
- (4) OECD Economics, Consumer prices, accessed February 2014, rebased to 2007
- (5) Economist Intelligence Unit, Consumer prices, accessed February 2014
- (6) Australian Bureau of Statistics, Consumer price index, accessed January 2014

## 4. Regulation and taxation

- 4.1 Tobacco regulation in Australia
- 4.2 Future proposed legislation
- 4.3 Recent development of excise duty and tobacco affordability in Australia
- 4.4 Regional tobacco prices
- 4.5 Relative price of illicit tobacco

## The tobacco market in Australia is one of the most tightly regulated in the world

#### 4.1 Tobacco regulation in Australia

In this section we discuss key government legislation and activities undertaken to control tobacco consumption. The advertising and promotion of tobacco is regulated by the Tobacco Advertising Prohibition Act 1992, and similar laws in each Australian state and territory. These laws set strict rules on how tobacco can be advertised, displayed and sold. The Department of Health and Ageing's National Tobacco Strategy aims to reduce smoking prevalence nationally from over 15% in 2012 to 10% in 2018.(1) To reduce smoking prevalence, numerous tobacco control have been developed over regulations demonstrated in Figure 4.1. A more detailed overview of recent legislative changes both at the Australian Commonwealth level and the state level are detailed in the appendix.

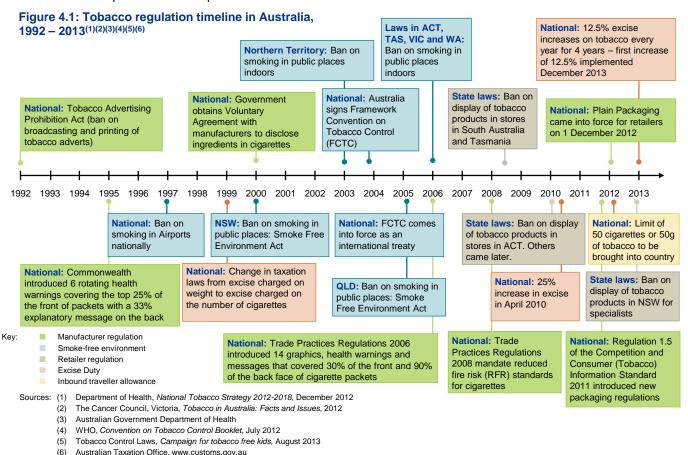
#### **National Tobacco Strategy**

The National Tobacco Strategy 2012-18 was released in January 2013. The strategy highlights nine priority areas including;

- Protect public health policy, including tobacco control policies, from tobacco industry interference
- Strengthen mass media campaigns to: motivate smokers to quit and recent quitters to remain non-

- smokers; discourage uptake of smoking; and reshape social norms about smoking
- 3. Continue to reduce the affordability of tobacco products
- Bolster and build on existing programs and partnerships to reduce smoking rates among Aboriginal and Torres Strait Islander people
- 5. Strengthen efforts to reduce smoking among people in populations with a high prevalence of smoking
- Eliminate remaining advertising, promotion and sponsorship of tobacco products
- Consider further regulation of the contents, product disclosure and supply of tobacco products and alternative nicotine delivery systems
- Reduce exceptions to smoke-free workplaces, public places and other settings
- Provide greater access to a range of evidence-based cessation services and support to help smokers to quit.

The strategy also proposes a number of actions to combat the illicit trade of tobacco.



## Australia continues to explore new legislation in order to reduce smoking prevalence

#### 4.1 Tobacco regulation in Australia (continued)

#### **Tobacco products regulation**

Tobacco products are regulated through, amongst other things, bans on advertising and packaging restrictions. The Tobacco Advertising Prohibition Act in 1992 banned the publication or broadcast of tobacco advertisements.

Subsequent amendments to the Act have resulted in online tobacco retailers having to display health warnings and comply with restrictions on advertisement wording. Brand and variant information is permitted to be displayed.

The Tobacco Plain Packaging Act, passed in 2011, made Australia the first country in the world to implement plain packaging of tobacco products. This means that all tobacco products are required to be displayed in the same standard colour packaging with all trademarks banned and the only differentiator being the name of the brand and descriptor, printed in Lucida Sans font.

#### **Smoke-free environment legislation**

The majority of smoke-free environmental laws in Australia are determined by State parliaments and further fragmented by local council by-laws. The Australian Federal Government passed legislation to create smoke-free environments in areas within its own jurisdiction, such as airports and public transport, whilst State parliaments historically created their own laws banning smoking in some public places. State parliaments followed the Australian Commonwealth by passing legislation which banned smoking in restaurants in the early 2000s.<sup>(1)</sup>

The establishment of the Framework Convention on Tobacco Control (FCTC) resulted in the creation of guidelines surrounding smoke-free environments which some State Parliaments adopted. In 2005 and 2006 the States passed laws which created smoke-free environments in public places including licensed premises, partially covered outdoor spaces and al fresco dining areas. States have continued to establish further smokefree environments, including the banning of smoking on beaches, playgrounds and at stadia or other sporting events and concerts.(2)

Individual States in Australia have also passed laws which restrict smoking in cars with children under the age of 17. In November 2013, the Tobacco Amendment Act was passed by both houses of Victorian Parliament and will come into effect when proclaimed or on 1 October 2014 at latest. This bill aims to extend smoking bans to a range of areas especially where children are present. (3)

#### **Retailer regulations**

Australia has a Commonwealth wide law which bans the sale of tobacco products to anyone under the age of 18. During the 1990s, States introduced laws which imposed harsher penalties on vendors that sold cigarettes to individuals under 18 years. Some States have also undertaken surveillance programmes compliance. In order to further regulate retailers, some States have required vendors to hold licenses to sell tobacco. With the exception of Victoria and Queensland. all other States and Territories require tobacco retailers to hold a licence. In the States and Territories that do require a tobacco licence, fees range from AU\$200-AU\$302.22 per annum. In New South Wales, retailers must inform the Department of Health that they will sell tobacco products. This enables the State to have additional control over tobacco retailers, as it can threaten to withhold licenses in the event of sales to minors.(2)

States and Territories have also banned retailers from point of sale advertising and the display of tobacco products within stores. Australia Capital Territory (ACT), New South Wales, the Northern Territory, Queensland and Tasmania all have legislation in place banning point of sale displays. South Australia, Victoria and Western Australia have similar legislation; however, there are exemptions in place for specialist outlets. (2) South Australia has an exemption until December 2014. Victorian specialist outlets who were granted exemption prior to 1 April 2014 will be able to continue displaying products, however following this date no new specialist licenses will be issued. (5) There is currently no set timeframe for the expiration of the exemptions in Western Australia.

Some States and Territories have also applied restrictions on the number and operation of vending machines in licensed premises and gambling establishments.<sup>(2)</sup> In the ACT, cigarette vending machines have been banned entirely.

The Victorian government recently announced its intent to quadruple fines for retailers caught with illicit tobacco. (5)

Note: (a) Customs duty is at the excise equivalent rate

Sources: (1) Tobacco Control Laws, Campaign for tobacco free kids, August 2013

(2) The Cancer Council Victoria, Tobacco in Australia: Facts and Issues, 2012

(3) Parliament of Victoria, www.legislation.vic.gov.au

(4) Australian Government, Customs Amendment Act, July 2013

## Australia continues to explore new legislation in order to reduce smoking prevalence

#### 4.1 Tobacco regulation in Australia (continued) 4.2 Future proposed legislation

#### **Duty free and customs allowances**

In the 2012 budget, it was announced that the inbound traveller allowance from international travel would be reduced from 250g/250 sticks of tobacco per person to 50g/50 sticks.<sup>(a)</sup>

In 2012 Australia passed the Customs Amendment Act which conveyed new offences for smuggling or possessing illicit tobacco. It was the first time that custodial sentences were recommended for smuggling tobacco. (4) Victoria has legislation pending which criminalises the possession of illicit tobacco or tobacco on which the appropriate excise duties have not been paid. (1)

#### **Excise duty increases**

Australian excise duty has risen with inflation with the exception of a one-off 25% increase in 2010. The 2013-14 federal budget included a change to indexation of excise duty for tobacco and tobacco products from the Consumer Price Index (CPI) to Average Weekly Ordinary Time Earnings (AWOTE) commencing from 1 March 2014.

In August 2013 the Australian government announced excise duty increases in tobacco products of an additional 12.5% annually for the next four years in addition to the switch to AWOTE.<sup>(2)</sup> The first of these increases was implemented on 1 December 2013, with further 12.5% increases to be applied on 1 September 2014, 1 September 2015 and 1 September 2016.<sup>(3)</sup> As a result of these tax increases the excise on a pack of cigarettes in Australia will increase by 60% (compounded over four years) above the increase of AWOTE.

#### Framework Convention on Tobacco Control (FCTC)(3)

Australia became a Signatory to the World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) on 5 December 2003. The Conference of Parties (COP) has adopted detailed guidelines for effective implementation of many of the broad range of legislative, executive, administrative and other measures required under the Convention. Together, the FCTC and its guidelines have the potential to help set the priorities of Australian governments, including Commonwealth, State and Territory, in relation to tobacco control policies and programmes.

The FCTC also provides a framework for international cooperation in a number of areas of tobacco control in which Australia and other Parties cannot effectively act alone. These include the regulation of cross-border tobacco advertising, promotion and sponsorship and the implementation of measures to address illicit trade in tobacco products.

Australia has the responsibility to cooperate with other FCTC Parties to address trans-boundary tobacco control problems and to assist other Parties in meeting common challenges to effective tobacco control.

The Australian tobacco industry participated in a consultation around the Anti-Illicit Trade Protocol (AITP). The AITP was adopted on 12 November 2012 and opened for signature from 10 January 2013 to 9 January 2014. When the AITP was closed for signature, it had been signed by 53 countries and the European Union. However, Australia is not among the countries that have signed the AITP. (5)

#### Continuous pursuit of smoke-free environments

State governments have continued to focus on the banning of smoking in public outdoor areas. Where States have not banned smoking in outdoor public areas, many local councils have issued the relevant bans and often play a key role in expanding public smoking restrictions. States continue to ban smoking or implement buffer zones at public events and any areas where children may be present such as open air concerts, playgrounds, sporting events and skate parks.<sup>(3)</sup> Additionally, a number of states are also considering to impose smoking bans in prisons, with Northern Territory being the first to implement a smoking ban in prisons from 1 July 2013.<sup>(6)</sup>

Note: (a) Customs duty is at the excise equivalent rate

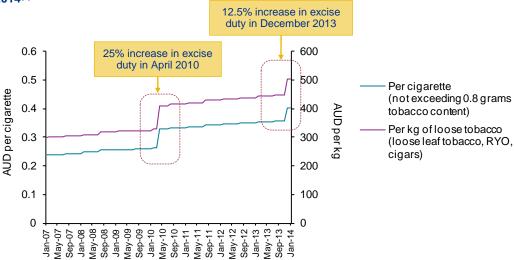
Sources: (1) Department of Health, Victoria

- (2) Treasurer of the Commonwealth of Australia, Government to increase tobacco excise, August 2013
- (3) Australian Customs Border Protection
- (4) The Cancer Council Victoria, Tobacco in Australia: Facts and Issues, 2012
- (5) Protocol to Eliminate Illicit Trade in Tobacco Products, www.treaties.un.org
- 6) Northern Territory Government Media Release, Moving Towards a Total Smoking Ban in Northern Territory Prisons, http://newsroom.nt.gov.au/index.cfm?fuseaction=viewRelease&id=11006&d=5, June 2013

## Excise rates have increased steadily in addition to two large excise increases: one in April 2010 and another in December 2013

#### 4.3 Recent development of excise duty and tobacco affordability in Australia

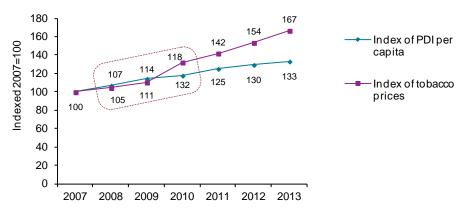
Values of tobacco excise and customs duty, Australia, January 2007 – January 2014<sup>(1)</sup>



Excise rates are revised twice a year in February and August. Under the new regime, excise will be indexed to AWOTE in March and September. (2) There was a one-off 25% increase in excise, introduced on 30 April 2010 in accordance with the National Preventive Health Strategy.

Excise duty on tobacco products increased by 12.5% in December 2013. The Australian government announced further successive excise duty increases of 12.5% above the rate of AWOTE in the September of each of the following three years.

### Index of tobacco prices and per capita PDI, Australia, 2007 – 2013<sup>(3)(4)(a)</sup>



Although PDI per capita has continued to grow, the excise rate increase in 2010, combined with subsequent increases, saw tobacco prices increase at a higher rate than PDI per capita.

This has resulted in a decline in relative affordability. This decline in relative affordability is likely to continue with the future planned excise rate increases.

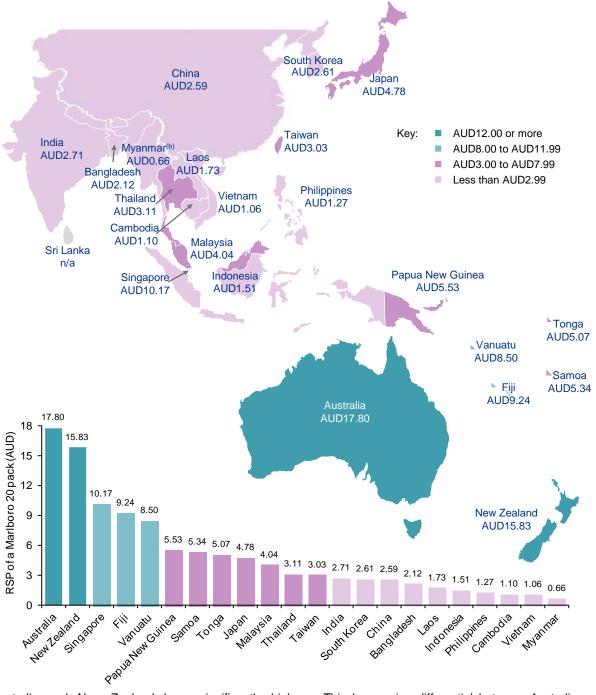
Note: (a) Indexed with 2007 values taken as 100

Sources: (1) Australian Taxation Office, www.customs.gov.au

- (2) Australian Government Australian Taxation Office, New legislation: Excise and excise-equivalent customs duty index tobacco excise to average weekly ordinary time earnings, 25 June 2013
- (3) Euromonitor, Index of tobacco prices, accessed January 2014
- (4) Euromonitor, Annual disposable income, accessed January 2014

#### 4.4 Regional tobacco prices

Price of a pack of 20 Marlboro cigarettes – Australia and selected markets, 2013(1)(2)(a)



Australia and New Zealand have significantly higher cigarette prices than surrounding markets in South East Asia, with Australian prices more than 50% higher than those of the nearest non-Australasian market.

This large price differential between Australia and other relatively nearby markets creates smuggling opportunities for those involved in the illicit market.

Notes: (a) Prices for a 20 cigarette pack of Marlboro (taxes included); where Marlboro is not available, a comparable premium brand has been used

Sources: (1) Industry data

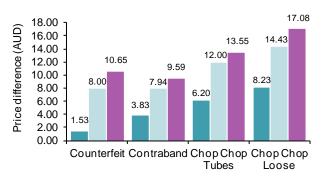
<sup>(</sup>b) In the H1 2013 report, the price of Duty Free Marlboro has been used to represent the price of premium brand in Myanmar. However, as Marlboro is not legally sold in Myanmar, the price of a comparable premium local brand, Red Ruby, has been used in this report

<sup>(2)</sup> www.oanda.com

## The price differential between legal products and illicit products continues to widen

#### 4.5 Relative price of illicit tobacco

Price differential of illicit products to a packet of Winfield 25s, 2010 – 2013<sup>(1)(a)</sup>



■Jan-10 ■Jun-13 ■Dec-13

Data provided by BATA based upon covert purchases made across Australia highlights the price difference of illicit products compared to legitimate products. While this data will be impacted by the split of random versus intelligence led purchases, the data will provide some insights into the size and change in the market.

The data illustrated above highlights the difference in price between different types of illicit tobacco products and a packet of legitimate Winfield 25s. The chart also shows how this difference in price has increased since January 2010.

Over the last three years, the largest relative increases have developed in counterfeit and contraband products and this price differential appears to have widened by the end of 2013. For instance, the per pack price of counterfeit cigarettes averaged AUD10.92 compared to AUD12.45 for a pack of Winfield in January 2010 (i.e. AUD1.53 price differential). By December 2013, however, although the average price of a counterfeit pack was approximately the same (AUD10.75), the price of Winfield had increased to AUD21.40 (i.e. AUD10.65 price differential).

The industry has also highlighted that prices of contraband in particular have increased by 37% since January 2010, which has likely fuelled bigger margins to smugglers and illegal retailers.

Note: (a) Contraband and counterfeit prices are an average of price for products found in Sydney and Melbourne. Unbranded prices have been converted to a pack of 25 cigarette equivalents

Source: (1) BATA intelligence data

## 5. Size of the illicit tobacco market

- 5.1 Estimating the illicit tobacco market
- 5.2 Illicit tobacco consumption in Australia

We have used a robust, methodical and globally consistent approach to produce an estimate for the size of the Australian illicit tobacco market

#### 5.1 Estimating the illicit tobacco market

#### Methodology and validation

As discussed in section 2.1, the illicit tobacco market is split into unbranded tobacco and illicit manufactured cigarettes in the form of counterfeit and contraband. Both of these categories taken together form total illicit consumption. It is therefore important to take account of all consumption flows when assessing the amount of illicit tobacco consumed.

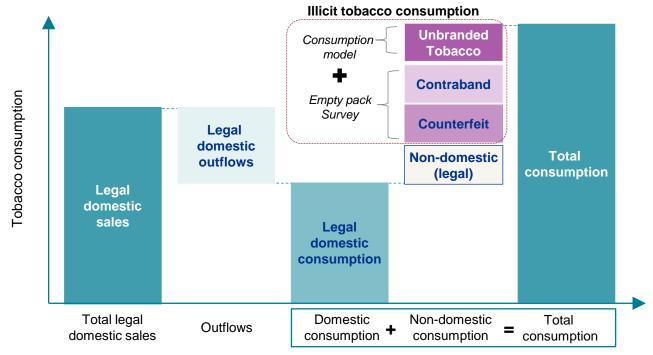
The chart below illustrates how KPMG breaks consumption into a number of categories (defined in section 2.1) and how each category requires different data sources to estimate the size of the market and to validate the findings.

For each of these categories a separate primary approach is used in order to estimate the volume of illicit tobacco. For unbranded tobacco a consumption model approach is used, based on results from a consumer survey. This includes Chop Chop (unbranded loose tobacco sold in bags) and unbranded tobacco sold in pre-filled tubes. For illicit manufactured cigarettes an empty pack survey analysis is used, based on the collection of discarded cigarette packs across Australia.

We believe this approach provides a robust estimate of the size of the illicit market in Australia. However, to further increase the level of confidence in this estimate, some alternative approaches are used to validate the illicit tobacco volumes generated by the consumption model and the empty pack survey analysis.

The validations can be used as alternative estimations, or to support trends and changes noted in the market. In this section each of the approaches are described before the process of estimation and validation is explained. A detailed overview of these approaches can be found in appendix A1.

#### Estimation of the illicit market(a)



#### **Data sources**

Tobacco Industry database RMR consumer survey (Nielsen, Aztec) Tourism statistics Euromonitor Datamonitor Exchange of Sales

RMR consumer survey
Empty pack survey
Rolling papers sales data
Internal company
intelligence data
Customs'
seizure data

RMR consumer survey Health statistics

Note: (a) Definitions for the above sales categories can be found in the glossary on page 2

## We have used a broad range of approaches to produce an estimate for the size of the Australian illicit tobacco market

#### 5.1 Estimating the illicit tobacco market (continued)

#### Primary approaches

#### **Consumption model**

This approach is based on the responses of consumers to the survey conducted by Roy Morgan Research in H2 2013. Like the LTM H1 report, the survey asks consumers about their consumption of both legal and illicit tobacco. These survey responses are then combined with other data sources to arrive at an estimate for total illicit tobacco consumption. Consumers are asked about both unbranded tobacco and illicit manufactured cigarettes.

For the purpose of this report, the consumption model number for unbranded volumes in the full year 2013 is based on the average of the H1 2013 and the H2 2013 consumer survey results. Since consumers are likely to give a more accurate estimate of their purchase behaviour over a shorter time period rather than the last twelve months, using an average of the H1 and H2 consumer survey results provide a more accurate number for 2013. Detailed results of the consumer survey are discussed in section 6.

#### **Empty pack survey (EPS)**

An empty pack survey is a study undertaken independently by MSIntelligence which collected 12,000 discarded cigarette packs across 16 different towns and cities in Australia. The brand and market of destination of each collected pack is assessed to determine whether it is a domestic or non-domestic product, and genuine or a counterfeit product. Products from different markets are labelled as non-domestic. The empty pack survey is used to extrapolate overall consumption in the market by projecting legal domestic sales. The percentages of non-domestic and counterfeit packs are added to this total in order to establish the total consumption of manufactured cigarettes in Australia.

We believe that the empty pack survey approach provides a robust and statistically significant estimate of the size of the illicit manufactured cigarette market. The results are not subject to respondent behaviour and are therefore less prone to sampling errors, whilst the 16 cities covered by the sample plan covers the equivalent of over 75% of Australia's population.

A small proportion of non-domestic cigarettes are likely to have been brought into Australia legally by Australians travelling overseas or by tourists arriving in Australia. Travel statistics from the Australian Bureau of Statistics are reviewed in order to determine the likely volume.

These non-domestic legal cigarettes are removed from the total non-domestic volume, which leaves the total illicit manufactured cigarette market, split into contraband and counterfeit cigarettes as described in section 2. The empty pack survey was used for the first time in the H1 2013 report to size the illicit manufactured cigarette consumption. The empty pack survey was not used previously because of the low levels of illicit manufactured cigarettes consumption. Recent observations that the consumption of illicit manufactured cigarettes has been growing now means that it is a required tool to gain a detailed understanding of these trends.

An empty pack survey was jointly commissioned by BATA, ITA and PML in 2012. The study was carried out by ACNielsen. Prior surveys were also run in 2009 and 2010 by ACNielsen on behalf of PML, and these have been made available to KPMG for use in this report.

For the purpose of this update report a new empty pack survey has been conducted in Q4 2013. The results from this survey have been used in conjunction with the empty pack survey results from Q2 2013 to arrive at an estimate for the illicit manufactured cigarette consumption for the year 2013. This method is consistent with the approach used by KPMG in Project STAR to assess the level of counterfeit and contraband cigarettes across the EU Member States. It is a widely accepted method for measuring the illicit market.

#### Means of validation

#### Rolling papers analysis

This analysis has been developed by KPMG and has been used with other clients to infer the volume of loose tobacco smoked from the quantum of papers sold. It compares this with the legal sales of loose tobacco to estimate a consumption gap between legal and illicit.

In order to use this approach several assumptions are made:

- 1. Grams per rolled cigarette
- Wastage rate of rolling papers
- 3. Rolling papers used for consumption of illegal drugs

Data obtained in consumer surveys carried out by the industry and sales figures from rolling papers manufacturers are used in order to verify these assumptions, along with data from the National Drug and Alcohol Centre.

We have found from previous analyses that given the number of assumptions in this approach it is useful for providing a range of estimates for the market size to help validate other estimates.

## Rolling papers, seizures data and consumption gap analysis are used to validate the results of the consumption model and empty pack survey

#### 5.1 Estimating the illicit tobacco market (continued)

#### Means of validation (cont.)

#### Seizures data

Seizures data obtained from the Australian Customs and Border Protection Authorities shows the volume and type of tobacco intercepted at ports and airports. Using seizure data to size the illicit market is often unreliable since it is difficult to ascertain the proportion of total illicit product that is seized. In addition, seizure data used to intercept tobacco products coming into Australia will not pick up loose tobacco which may have been illegally grown in Australia.

Whilst seizure data is unlikely to generate an accurate estimate for the illicit tobacco market, it can be used to indicate trends and validate any considerable changes to the illicit market. For example, an increase in manufactured cigarette flows from a country picked up in the empty pack survey could be validated with a corresponding increase in seizures from that country or in manufactured cigarettes representing a growing percentage of seizures. We also use internal tobacco company intelligence data as a validation of trends. However, since this data is commercially sensitive we are unable to publish it.

#### Consumption gap analysis

Consumption gap analysis is used to identify the 'gap' in consumption between legal domestic sales and total tobacco consumption, calculated based on the number of smokers known to exist in Australia and historic consumption patterns. The 'gap' between total consumption and legal domestic sales is likely to be filled by illicit tobacco consumption.

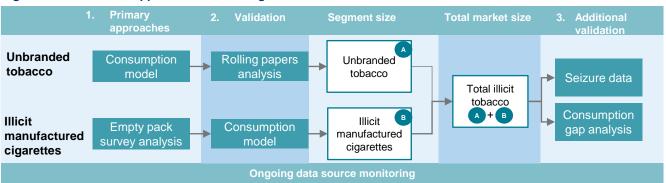
The consumption gap takes into account likely changes to the smoking population and the impact that it will have on tobacco consumption. For example, if legal domestic sales fell significantly, but there was no significant fall in the smoking population it may imply an increase in illicit tobacco consumption. Given the historic and consistent trends in tobacco consumption, significant drops are unlikely without major changes taking place in the market.

The consumption gap analysis is used in order to support any movements in the total illicit tobacco market across both unbranded tobacco and illicit manufactured cigarettes.

## The validation of our measurements with additional data sources provides confidence in the results

#### 5.1 Estimating the illicit tobacco market (continued)

Figure 5.1 Overview of approach to estimating illicit tobacco



The empty pack survey and consumption model approaches are thought to be the most robust for estimating the illicit tobacco market. Figure 5.1 shows the process by which the consumption model and empty pack survey analysis is validated through alternative analysis.

#### 1. Primary approaches

A Unbranded tobacco: The consumption model uses data from the Roy Morgan Research consumer survey; other external data sources such as the Australian Institute of Health and Welfare and the Australian Bureau of Statistics are taken into account to determine the result. Roy Morgan Research conducted consumer surveys in H1 2013 and H2 2013. Both surveys were leveraged to derive the estimated unbranded consumption volume in 2013.

B Manufactured cigarettes: The empty pack survey is the most reliable measure of contraband and counterfeit. It also forms the foundation for Project Star. Two empty pack surveys were conducted in 2013 (Q2 and Q4). A blended empty pack survey approach, assigning equal weighting to both surveys, has been used to size the illicit manufactured cigarette consumption volume for the year 2013.

**Total illicit tobacco (A+B):** The total illicit tobacco market size estimate is calculated by adding the results of the validated empty pack survey analysis for manufactured cigarettes (i.e. contraband and counterfeit) with the output of the validated consumption model for unbranded tobacco.

#### 2. Validation

Rolling papers analysis is used in order to validate the unbranded tobacco market. Whilst assumptions relating to grams per tobacco, rolling paper leaf wastage and cannabis usage are hard to verify, rolling papers analysis is helpful to determine the likely ratio between consumption of loose tobacco and illicit loose (unbranded) tobacco.

The consumption model has historically been used in order to estimate the illicit volume of manufactured cigarettes. As

such it provides a good approach by which to validate the empty pack survey results.

#### 3. Additional validation

Total illicit tobacco consumption (i.e. unbranded tobacco and manufactured cigarettes together) can be validated by two further data sources.

Seizures data can be used in order to validate the likely mix of illicit tobacco consumption. If the consumption model and empty pack survey show a large change in the mix of illicit products, seizures data should support this change.

Consumption gap analysis is also used in order to support the estimate for illicit tobacco consumption. Changes in total tobacco consumption tends to be a slow long-term decline, as seen by the decline recorded by the AIHW in surveys in 2007 and 2010. Given this consistent trend, the likely corresponding change in overall tobacco consumption is likely to follow an equivalent pattern. For example, large changes in total estimated consumption unprompted by external factors indicate there may be an issue in the estimation of illicit consumption.

Using this validation process enables us to understand and corroborate any major changes to illicit tobacco consumption.

#### Ongoing data source monitoring

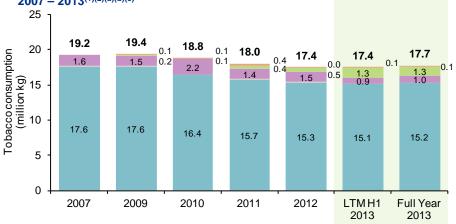
We take a forward looking approach to ensuring the most appropriate data is used in the modelling process. For example, many surveys of smoking prevalence are conducted at irregular intervals whereas the actual decline is smooth over time between these periods. To avoid major future restatements that distort trends we continuously monitor the relevance of data sources and may rebase some data based on historic and forecast trends.

To ensure comparability with our ongoing methodology we have applied these changes retrospectively. See appendix A2 for details.

## Illicit tobacco accounted for 13.9% of total tobacco consumption in 2013, primarily driven by the increase in consumption of contraband products

#### 5.2 Illicit tobacco consumption in Australia



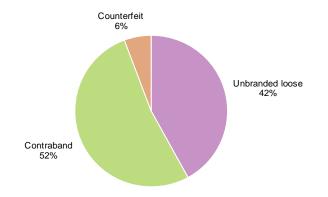




The overall level of tobacco consumption in Australia was calculated to be equal to 17.7 million kilograms in 2013, of which 2.45 million kilograms are estimated to be illicit. This estimate of total consumption is marginally higher than both the 2012 and the H1 2013 measures. This is contrary to the long term trend that shows a decline in tobacco consumption of 2.2% per annum between 2009 and 2013.

The full year 2013 consumption volumes support the structural shift within the illicit market towards illicit manufactured cigarettes and away from illicit unbranded tobacco which was highlighted in the H1 report. The growth since H1 2013, however, was driven by a slight increase of unbranded consumption whilst the illicit manufactured cigarettes consumption has stabilised. Whilst counterfeit consumption has increased in 2013, its share in total illicit consumption continues to be relatively small and contraband consumption remains the largest driver of illicit manufactured cigarette consumption.

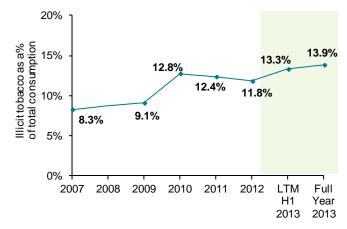
### Share of illicit tobacco consumption, 2013<sup>(1)</sup>



Since 2012 there has been an increase in both the illicit proportion of tobacco consumption and a change in mix of illicit products consumed away from unbranded tobacco and towards manufactured cigarettes. Volumes of illicit unbranded tobacco have declined by 31% whilst volumes of illicit manufactured cigarettes have increased by 151% between 2012 and 2013.

Overall consumption of illicit product is estimated to be equivalent to 13.9% of total tobacco consumption in 2013, 2.1 percentage points higher than in 2012. This is the highest level recorded and indicates a confirmation of an increase in illicit consumption highlighted in the H1 2013 report.

## Illicit tobacco consumption as a proportion of total consumption, 2007 – 2013<sup>(1)(2)(3)(4)</sup>



Notes:

- (a) H1 2013 represent consumption for the twelve months to end June 2013
- (b) Counterfeit and contraband estimations are unavailable for 2007
- (c) Non-domestic legal volumes are smaller than 0.1 million kg and volume labels have not been included for this category

Sources: (1) KPMG analysis

- (2) Deloitte, Illicit Trade of Tobacco in Australia, 2010, 2011, 2012
  - (3) PriceWaterhouseCoopers, Australia's Illegal Tobacco Market, 2007, 2009
  - (4) Industry data

The shift in mix towards manufactured cigarettes is supported by the consumption model. The validation process provides some certainty around the results

#### 5.2 Illicit tobacco consumption in Australia (continued)

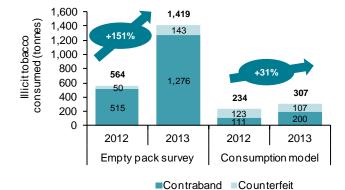
Table 5.2 Results of primary methodologies, 2012 – 2013

2012 and 2013 results (tonnes)				
		2012	2013	% change (2012 - 2013)
I.Illicit manufactured cigarettes	Contraband	515	1,276	148%
	Counterfeit	50	143	187%
	Total	564	1,419	151%
2. Unbranded tobacco		1,495	1,034	-31%
3. Total illicit tobacco		2,060	2,453	19%

#### 1. Illicit manufactured cigarettes

Based on the empty pack survey analysis, our full year 2013 estimation of the illicit manufactured cigarettes market is 1,276 tonnes for contraband and 143 tonnes for counterfeit. This represents an increase of 148% for contraband and 187% for counterfeit; and a total increase of 151%.

### Estimates of illicit manufactured cigarettes, 2012 – 2013<sup>(1)(2)(3)(4)</sup>



The empty pack survey and consumption model produce different estimates for the consumption of illicit manufactured cigarettes. See appendix A1.1 for a detailed analysis of the consumption model. There are a number of

reasons that may explain the differences between the estimates:

- Consumers may have difficulty identifying if they have purchased a contraband or counterfeit product. Unbranded tobacco is much more obvious to determine. This will affect the consumption model estimate for manufactured cigarettes, but not the empty pack survey estimate.
- Some contraband and counterfeit is sold at full retail sales price which means respondents in these cases will not have an important indicator of illicit consumption. This is not an issue in the empty pack survey.
- There could be some underreporting by survey respondents who do not wish to admit to illicit activities.

However, both the empty pack survey (+151%) and the consumption model (+31%) indicate a considerable growth in the consumption of illicit manufactured cigarettes.

Given the robustness and credibility of the empty pack survey for manufactured cigarettes we have adopted the empty pack survey as our primary method of estimating illicit manufactured cigarettes consumption.

#### 2. Unbranded tobacco

The consumption model indicates that the volume of unbranded tobacco consumed declined by 31% between 2012 and 2013, from 1.5 million kilograms to 1.0 million kilograms. This illicit volume is supported by the rolling papers analysis.

Our rolling papers analysis indicates that the unbranded tobacco market is likely to be between 0.7 million kilograms and 1.4 million kilograms. The 1.0 million kilograms sits comfortably within the mid point of this range. See appendix A1.3 for more detail.

- Sources: (1) Deloitte, Illicit Trade of Tobacco in Australia, 2012
  - (2) Roy Morgan Research, Consumer survey, H1 2013 and H2 2013
  - (3) Euromonitor, Legal domestic sales, January 2014
  - (4) KPMG analysis

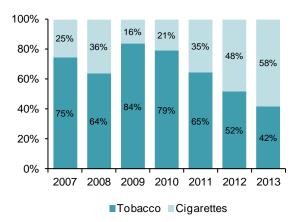
## The additional validation process indicates that the trend and mix shift in illicit tobacco consumption is in line with secondary data sources

#### 3. Overall illicit tobacco consumption

The estimated movement in the unbranded tobacco and manufactured cigarette consumption between 2012 and 2013 is an overall increase of 19.1% with illicit tobacco consumption rising to 2,453 tonnes in 2013. This increase is also characterised by a change in the mix of illicit tobacco consumed towards manufactured cigarettes. In 2013 manufactured cigarettes accounted for nearly 60% of total illicit consumption. The results are further validated by seizures data and consumption gap analysis.

Seizures data demonstrates a rise in the proportion of manufactured cigarettes as a percentage of illicit tobacco intercepted between 2009 and 2013. In 2009 16% of the volume of seizures came from manufactured cigarettes, whilst in 2013 58% of tobacco seizures were manufactured cigarettes.

### Sea cargo seizures split by type of illicit tobacco, 2007 – 2013<sup>(1)(a)(b)(c)(d)</sup>

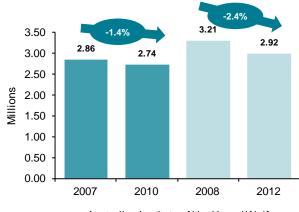


This indicates that the proportion of manufactured cigarettes smuggled into Australia appears to be growing as a percentage of total illicit tobacco, validating the growth of illicit manufactured cigarettes indicated by the primary approaches.

Recent seizures include eighty million cigarettes and over seventy tonnes of tobacco in Melbourne in October 2013.<sup>(2)</sup> Additionally, in March 2014, the police seized 35,000 tobacco plants being grown illegally at Moorabool.<sup>(3)</sup>

Consumption gap analysis indicates that both legal domestic sales and the smoking population have declined marginally in the long term.

#### Number of smokers<sup>(4)(5)</sup>

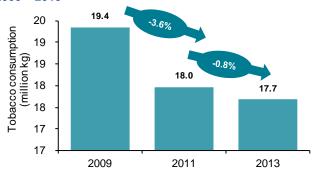


■ Australian Institute of Health and Welfare

Australian Bureau of Statistics

However, the smoking population has declined at a slower pace than legal domestic sales, indicating that there may be room for an increase in illicit tobacco consumption.

### Estimates of year on year change in tobacco consumption, 2009 – 2013<sup>(6)(7)</sup>



The consumption gap validates the overall estimate of the volume of illicit tobacco, indicating shifts in the mix of illicit tobacco between manufactured cigarettes and unbranded tobacco. This corroborates the results of the empty pack survey analysis and consumption model.

Notes: (a) Illicit tobacco detections were also made in air cargo. However, volumes are considerably smaller and have not been included in the figures above

- (b) Tobacco seizures have been converted to cigarette equivalents based on the conversion rates used for consumption modelling
- (c) Numbers for 2012 have been updated and are based on data provided by the Australian Customs and Border Protection Service
- (d) Percentages for 2013 are based on seizures data for the first six months of 2013

Sources: (1)

(1) Australian Customs and Border Protection Service, 2013

- (2) The Age Victoria, Ten arrested in massive illegal tobacco bust, www.theage.com.au/victoria/
- (3) Geelong Advertiser, Police seize 35,000 tobacco plants from Moorabool plantation, www.geelongadvertiser.com.au/news/
- (4) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2007, 2010
- (5) Australia Bureau of Statistics
- (6) KPMG analysis of previous reports on illicit trade in Australia, written by Deloitte between 2009 and 2012
- (7) Deloitte, Illicit Trade of Tobacco in Australia, 2010, 2011, 2012

## 6. Drivers of results

- 6.1 Consumer survey results
- 6.2 Empty pack survey results

#### Roy Morgan Research sampling overview

#### 6.1 Consumer survey results

#### 6.1.1 Roy Morgan Research survey overview

The consumer survey is a primary piece of research carried out to establish the size of the illicit tobacco market in Australia. The survey was again carried out by Roy Morgan Research to ensure comparability with previous years.

The survey made use of Computer Assisted Web-based Interviewing (CAWI). This enabled a sample of 2,116 adult respondents to be collected from 10,286 who responded to the email link sent out to Roy Morgan Research's pool of respondents in November 2013.

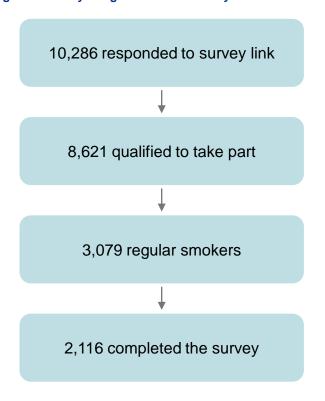
If a respondent was a regular smoker and fell into the correct demographic to be surveyed, they were considered eligible for the survey.

For the purposes of this report, a regular smoker is defined as a person who smokes tobacco products at least 5 days a week. The correct demographic is someone who is a regular smoker and above 18 years of age.

Of those who proved to be eligible for the survey, 69% completed the survey.

Founded in 1941, Roy Morgan Research (RMR) is an established Australian market research company. RMR have significant experience working with consumer surveys monitoring legal and illicit tobacco consumption and have provided the consumer research for all of the previous versions of this report.

Figure 6.1.1 Roy Morgan Research survey attrition chart

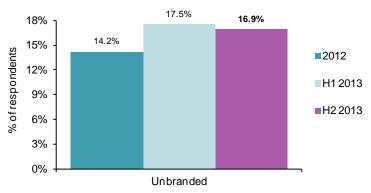


- Roy Morgan Research contact their panel by email in order to undertake the survey.
- The panel is based across a range of cities and demographics within Australia.
- The panel is filtered out with screening questions which enables the right demographics and a representative sample to be taken.
- The respondents are now broadly representative of Australia's demographics.
- The survey asks more screening questions about smoking habits and products smoked.
- This establishes that the panel are regular smokers.
- 69% of those that were filtered into the correct demographic completed the survey, reaching the target of over 2,000 respondents.
- Sample of over 2,000 respondents improves statistical significance.

Whilst the proportion of smokers who purchased unbranded illicit tobacco has increased since 2012, the average frequency of purchase of unbranded tobacco declined over the same period

#### 6.1.2 Purchasers of illicit tobacco

### Proportion of respondents who reported purchasing illicit unbranded tobacco, 2012 – H2 2013 $^{(1)(2)(a)}$

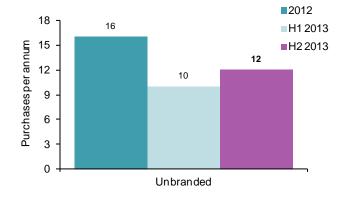


The H2 2013 Roy Morgan Research consumer survey saw a level of consistency in the key metrics between H1 2013 and H2 2013. The results showed that the proportion of respondents who said they purchased unbranded tobacco increased between 2012 and 2013, the average frequency declined whereas the average amount purchased remained broadly stable. Purchase frequency declined by approximately 25% and purchase amount by 11%.

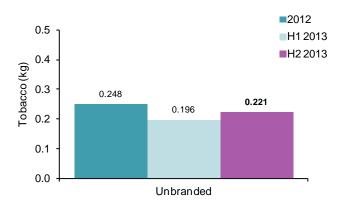
The combination of these movements in the consumption model equates to an overall decline in the amount of illicit unbranded tobacco consumed.

The change in consumption patterns may indicate a relative decline in the availability of illicit unbranded tobacco. Many respondents highlight that they purchase whenever illicit product is available.

### Average frequency of purchase per annum, 2012 – H2 2013<sup>(1)(2)(a)</sup>



### Average volume purchased (kg) per occasion, 2012 – H2 2013<sup>(1)(2)(a)</sup>



Note: (a) 2012 and 2013 analysis is based on CAWI consumer survey results

Sources: (1) Deloitte, Illicit Trade of Tobacco in Australia, 2012

(2) Roy Morgan Research, Consumer survey, H1 2013 and H2 2013

## The empty pack survey sampling plan comprised collection of 12,000 empty packs across 16 cities in Australia

#### 6.2 Empty pack survey results

#### 6.2.1 Australian empty pack survey sampling plan<sup>(1)(2)</sup>

Empty pack surveys analyse discarded cigarette packets which have been collected from a set area. The aim is to collect a representative sample of discarded cigarette packets which can then be analysed to provide information about the nature of consumption of manufactured tobacco products.

Empty packs are collected on a proportionate basis from several neighbourhoods. Packs are collected from streets and easy access public bins in areas on the sampling plan.

For the purpose of this report, an empty pack survey was carried out by an independent market research agency; MSIntelligence (MSI) across October – November 2013. This Q4 2013 EPS collection was based on a sampling plan consistent with the Q2 2013 EPS sampling plan i.e. 12,000 empty packs, collected in the same neighbourhoods as in Q2 2013 across 16 cities in Australia, providing coverage for approximately 75% of the total population as shown in Figure 6.2.1.

Packs are collected from pre-determined neighbourhoods, selected to be representative of the city being sampled. Similarly, the neighbourhoods selected are also consistent with the previous surveys. Packs are collected irrespective of their brand and country of origin. Residences, offices and other locations such as stadiums have been excluded from the sampling plan.

After the collection is completed, to ensure the representativeness of the sample, packs are weighted based on the proportion of each city's population.

Founded in 2001, MSI is a private company with headquarters in Geneva, Switzerland specialising in market research. MSI have particular experience in the tobacco industry and conduct over 700 surveys a year in more than 70 countries.

Figure 6.2.1 Q4 2013 empty pack survey sampling plan

City	Population (million) 2012 estimate <sup>(2)(a)</sup>	Sample packs	Weighted packs	
Sydney	4.7	3,000	3,253	
Melbourne	4.2	2,500	2,959	
Brisbane	2.2	1,200	1,526	
Perth	1.9	1,000	1,322	
Adelaide	1.3	800	890	
Goldcoast – Tweed Heads	0.6	400	412	
Newcastle	0.4	400	292	
Canberra - Queanbeyan	0.4	300	287	
Wollongong	0.3	300	197	
Sunshine coast	0.3	300	199	
Hobart	0.2	300	151	
Geelong	0.2	300	125	
Townsville	0.2	300	120	
Cairns	0.1	300	98	
Darwin	0.1	300	92	
Toowoomba	0.1	300	77	
Total sample	17.2	12,000	12,000	
Total population of Australia	22.9			

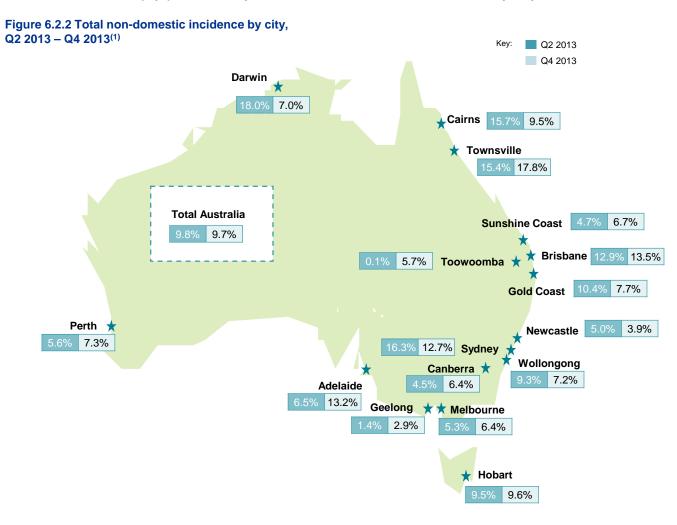
Note: (a) Population estimates for 2012 have been used as population numbers for 2013 were updated in December 2013, i.e. after the empty pack survey was conducted

Sources: (1) MSIntelligence Research, *Empty pack survey*, Q2 2013 and Q4 2013

<sup>(2)</sup> Australian Bureau of Statistics

The growth of non-domestic consumption continues to be a national trend with notable increases recorded in Adelaide, Toowoomba and Townsville

#### 6.2.2 Australian empty pack survey results – non-domestic incidence by city



Consistent with the Q2 2013 empty pack survey findings, the non-domestic incidence was spread across the sixteen cities sampled in the Q4 2013 empty pack survey. Only Townsville recorded a non-domestic incidence higher than 15% in the Q4 2013 empty pack survey whereas Darwin, Sydney, Cairns and Townsville all recorded non-domestic consumption higher than 15% in the Q2 2013 empty pack survey.

A notable increase in non-domestic incidence was recorded in Adelaide (+6.8pp.) and Toowoomba (+5.5pp.) whilst there were notable declines in non-domestic consumption in Darwin (-11.0pp.), Cairns (-6.3pp.) and Sydney (-3.6pp.).

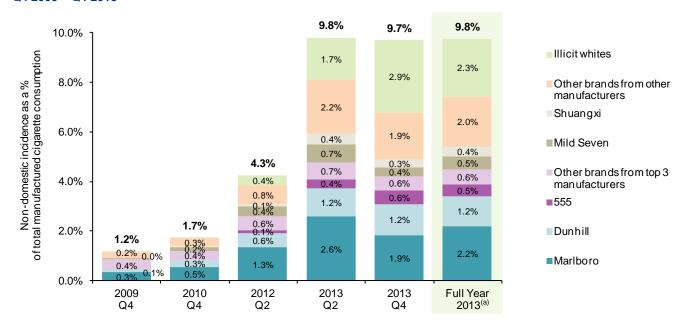
The pack survey shows a large increase in manufactured cigarettes from South Korea and other locations which has driven the growth in non-domestic incidence in Adelaide. In Darwin, a lower incidence of illicit whites has led to a reduction in the non-domestic incidence in the Q4 2013 empty pack survey. The share of illicit whites in Darwin declined to 23.4% in Q4 2013 from the 42.7% recorded in the previous guarter.

Additionally, the size of the city does not appear to be indicative of the non-domestic consumption as both small and large cities reported a range of incidences in the empty pack surveys for the last two years.

### Non-domestic incidence has increased in the past years across most brands as well as illicit white brands

#### 6.2.3 Australian empty pack survey results - non-domestic incidence by brand

Total non-domestic incidence by brand as a percentage of total manufactured cigarette consumption Q4 2009 – Q4 2013<sup>(1)(2)</sup>



Two empty pack surveys were conducted in 2013 (Q2 and Q4). A blended empty pack survey approach, assigning equal weighting to both surveys, has been used to size the illicit manufactured cigarette consumption volume for the year 2013. As highlighted earlier, using the blended method is consistent with the approach used by KPMG in Project STAR to assess the level of counterfeit and contraband cigarettes across the EU Member States. A blended approach gives a more accurate view on the full year findings as each quarterly empty pack survey is reflective of market trends at that point in time only.

The empty pack survey findings indicate that the growth in non-domestic incidence since 2012 appears to be driven by an increase in the number of identified illicit white brands.

'Illicit whites' is a term for brands of manufactured cigarettes that are not legally available in the local market, although they could be legal at the point of manufacture. These brands are often made exclusively for smuggling.

Illicit white brands are not counterfeit products as they do not infringe on intellectual property rights. Illicit white volumes form part of the contraband volumes in Australia. Please refer to section 6.2.6 for further details.

The share of illicit whites has increased noticeably since 2012 and was 2.5pp higher in Q4 2013 when compared to 2012. Illicit whites account for approximately 30% of non-domestic manufactured cigarettes consumption in Q4 2013, up from 10% in Q2 2012. Legitimate brands produced by other manufacturers, including Mild Seven and Shuangxi, have witnessed a 1.3 pp increase during the same period. Marlboro remains the largest brand in terms of non-domestic consumption. However, as a percentage of total non-domestic manufactured cigarette consumption it has declined to approximately 19% from over 31% in Q2 2012.

ote: (a) The full year 2013 figures are based on the blended result of the Q2 2014 and the Q4 2013 empty pack surveys

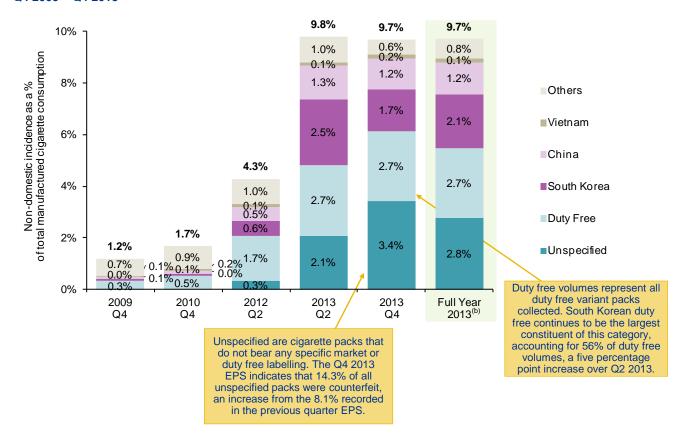
Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

(2) AC Nielsen, Empty pack survey, 2009, 2010, 2012

# South Korean variant products have declined yet remain a large part of non-domestic manufactured products in the empty pack survey

#### 6.2.4 Australian empty pack survey results - market variants

Total non-domestic incidence by market variant as a percentage of total manufactured cigarette consumption Q4 2009 – Q4 2013<sup>(1)(2)(a)</sup>



Neighbouring Asian countries continue to be the primary source for inflow of non-domestic manufactured products into Australia, with high levels of duty free products also present. South Korea (including South Korea duty free) remains the largest individual source country for non-domestic manufactured products. However, the share of South Korean products declined to 33% in Q4 2013 from the 40% recorded in the Q2 2013 empty pack survey.

Inflow of non-domestic manufactured products from unspecified destination markets have shown a sizeable increase in 2013. Unspecified destination markets were the largest constituent of non-domestic inflows in Q4 2013 empty pack survey with a share of over 35%. Unspecified are cigarette packs that do not bear any specific market or duty free labelling. Some unspecified packs are counterfeit. Based on the result of the Q4 2013 empty pack survey, 14.3% of all unspecified packs were counterfeit, an increase from the 8.1% incidence recorded in the Q2 2013 empty pack survey.

Note: (a) Vietnam has replaced Indonesia as the fifth largest constituent of non-domestic products in the Q4 2013 empty pack survey

(b) The full year 2013 figures are based on the blended result of the Q2 2014 and the Q4 2013 empty pack surveys

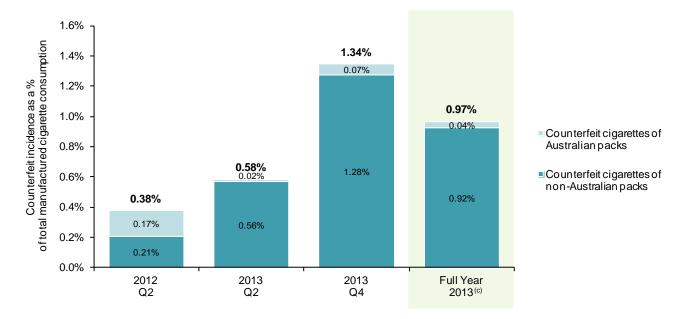
Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

<sup>(2)</sup> AC Nielsen, Empty pack survey, 2009, 2010, 2012

### Counterfeit incidence has experienced a large increase in Q4 2013, more than double the Q2 2013 incidence

#### 6.2.5 Australian empty pack survey results – counterfeit

### Counterfeit incidence as a percentage of total manufactured cigarette consumption 2012–2013<sup>(1)(2)(a)(b)(c)</sup>



The Q4 2013 empty pack survey indicates that 1.34% of all manufactured cigarettes consumed in Australia were counterfeit. This represents a greater than 100% increase of counterfeit incidence recorded in the Q2 2013 empty pack survey.

Although the share of counterfeit of total consumption remains relatively small, it is worth noting that this is the highest level of counterfeit incidence recorded in an empty pack survey in Australia.

Counterfeit cigarettes that were designed for the Australian market, i.e. compliant with Australian regulations, accounted for 4.6% of all counterfeit cigarettes consumed in 2013. This represents a change from 2012 where approximately 45% of counterfeit cigarettes consumed appeared to have been designed for the local market. Analysis of counterfeit packs has also highlighted that no plain packaged counterfeit packs were reported in the Q4 2013 empty pack survey.

Notes: (a) Counterfeit incidence is not available for 2009, 2010 and 2011

(b) Counterfeit packs refer to counterfeit packs of the companies participating in the empty pack surveys only

(c) The full year 2013 figures are based on the blended result of the Q2 2014 and the Q4 2013 empty pack surveys

Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

(2) AC Nielsen, Empty pack survey, 2012

Consumption of counterfeit cigarettes has more than doubled and was located in 15 out of the 16 cities sampled in the Q4 2013 empty pack survey

#### 6.2.5 Australian empty pack survey results – counterfeit

Figure 6.2.5 Consumption of counterfeit manufactured cigarettes by city 02 2013 – Q4 2013<sup>(1)(a)</sup>

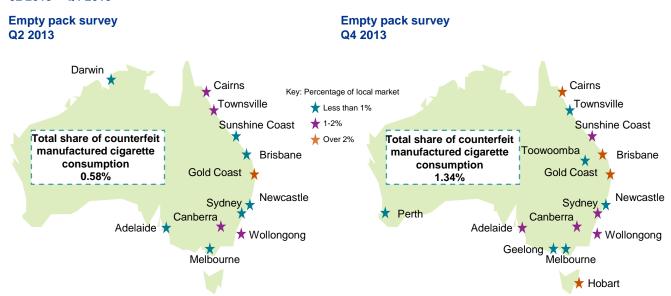


Figure 6.2.5 shows the growth of counterfeit cigarettes in Australia between Q2 2013 and Q4 2013. The empty pack survey for Q4 2013 showed that total consumption of counterfeit cigarettes had grown from 0.58% to 1.34% of manufactured cigarettes. It was located in 15 out of 16 cities across Australia, compared to 12 cities in Q2 2013.

Geelong, Hobart, Perth and Toowoomba were the four new cities where counterfeit cigarettes were found in the Q4 2013 empty pack survey whilst Darwin was the only city which did not record any counterfeit incidence. The highest increase in counterfeit incidence in Q4 2012 was observed in Hobart and Brisbane. Incidentally, Hobart recorded no counterfeit incidence in the Q2 2013 empty pack survey and Brisbane had a share of less than 1%.

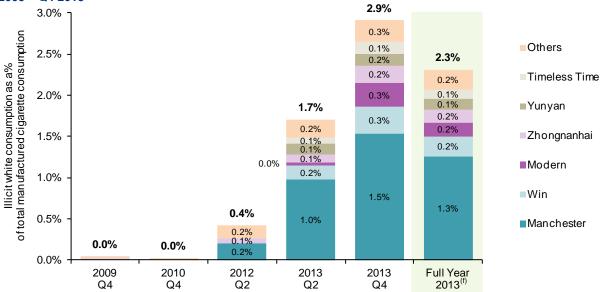
Notes: (a) Analysis is based on weighted number of sticks

Source: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

## The consumption of illicit whites continues to be a growing issue and Manchester remains the largest illicit white brand in Australia

#### 6.2.6 Australian empty pack survey results – illicit whites

Consumption of selected illicit white brands as a percentage of total manufactured cigarette consumption Q4 2009 – Q4 2013<sup>(1)(2)(a)(b)(c)(d)(e)</sup>



As indicated earlier, 'illicit whites' is a term for brands of manufactured cigarettes that are not legally available in the local market.

Industry sales data on illicit white cigarettes shows that between July and December 2013, an illicit white pack was sold at an average price of AUD8.68. This represents a slight increase from the average selling price of AUD8.60 recorded between March and June 2013. The illicit white packs in general continue to be sold at a price which is 50% less than the cost of a Marlboro or Winfield Blue.<sup>(3)</sup>

For consistency with the rest of this report, we are expressing illicit whites as a percentage of sticks. In the H1 2013 report, it was reported as a percentage of packs. As a result, the numbers reported are slightly lower than those reported previously due to the fact that illicit whites tend to come in smaller pack sizes.

According to the Q4 2013 empty pack survey, 2.9% of all manufactured cigarettes consumed in Australia were illicit whites, an increase from the 1.7% consumption recorded in the Q2 2013 empty pack survey.

As highlighted in the H1 2013 report, this analysis is based on the combined volume of selected illicit white brands, focusing on the most prominent brands identified in 2013.

Analysis of the total illicit white volumes in a market is difficult to perform as manufacturers of illicit whites often change brand names frequently in order to avoid detection.

In addition to the brands classified as illicit whites in the H1 report, we have identified five new illicit white brands in the Q4 2013 empty pack survey. These brands are Modern, Mega, Bridgeway, Kingdom and Ashima. With the exception of Modern, all other new brands have a relatively small share and have been classified as others.

Manchester continues to be the largest illicit white brand in Australia. According to the Q4 2013 empty pack survey results, Manchester represented 1.5% of total manufactured cigarette consumption and if it were sold legally in Australia it would have an equivalent legal market share of 1.7%. (1)

Incidence of illicit whites increased by over 500% between Q2 2012 and Q4 2013, a much larger increase than that of the total contraband incidence. According to the Q4 2013 empty pack survey findings, illicit whites now make up approximately 30% of non-domestic manufactured cigarette consumption.

Notes:

- (a) Others include Mega, Septwolves, Sunlite, Bridgeway, Kingdom, Ashima, Modeng, Asia Cup and Master brands
- (b) The following brands were not included in the H1 2013 report because we had limited information at that time to establish their status as illicit whites: Modern, Mega, Bridgeway, Kingdom and Ashima
- (c) The top six brands reported in the Q4 2013 empty pack survey are different from the ones reported in the H1 2013 report. Modern is the new brand that has come in and Sunlite has now been classified under others
- (d) These brands are known illicit whites as provided by the industry
- (e) The share of illicit whites is calculated based on the number of sticks, however, in the H1 report the share of illicit white brands was calculated based on weighted packs. The share of illicit whites when calculated based on weighted packs would have been: 0.1% in Q4 2009, 0.0% in Q4 2010, 0.5% in Q2 2012, 2.0% in Q2 2013 and 3.5% in Q4 2013
- (f) The full year 2013 figures are based on the blended result of the Q2 2014 and the Q4 2013 empty pack surveys
- Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013
  - (2) AC Nielsen, Empty pack survey, 2009, 2010, 2012

# Consumption of Manchester cigarettes continues to increase and was located in 15 out of the 16 cities sampled in the Q4 2013 empty pack survey

#### 6.2.6 Australian empty pack survey results – illicit whites

Figure 6.2.6 Consumption of Manchester by city Q2 2013 – Q4 2013<sup>(1)(a)</sup>

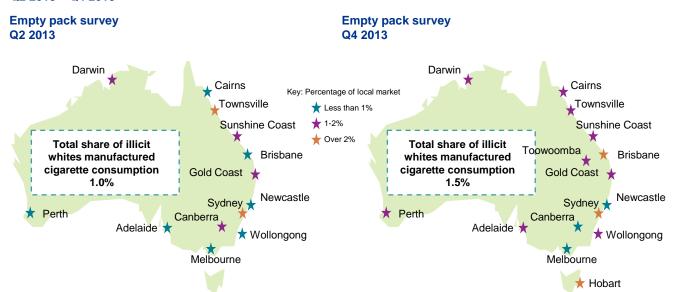


Figure 6.2.6 shows the growth of Manchester in Australia between Q2 2013 and Q4 2013. The Q4 2013 empty pack survey shows that total consumption of Manchester has grown from 1.0% to 1.5% of manufactured cigarettes, and it was located in 15 out of 16 cities across Australia, compared to 13 cities in Q2 2013.

Hobart and Toowoomba were the two new cities where Manchester was found in the Q4 2013 empty pack survey. Incidentally, Hobart along with Brisbane also reported the highest shares of Manchester in Q4 2013. Brisbane and Hobart had a share of 2.7% and 2.5% respectively.

Manchester is not sold legally in any retail outlets in Australia but Manchester appears to be available throughout the country. Whilst 73% of Manchester cigarettes collected in Q2 2013 were found in Sydney, in Q4 2013 they were distributed between Sydney (37.3%), Brisbane (21.6%) and Melbourne (13.2%). Together they accounted for approximately 72% of the total cigarettes of Manchester that were collected in Q4 2013.

e: (a) Analysis is based on weighted number of sticks, however, in the H1 report the share was calculated based on weighted packs

Source: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

### 7. Conclusion

A nation wide issue, illicit tobacco consumption rose from 11.8% in 2012 to 13.9% in 2013. Total consumption of tobacco in Australia also grew in 2013

2012 and 2013 results (tonnes)							
		2012	LTM H1 2013	Full Year 2013	% change (2012-13)		
	Contraband	515	1,348	1,276	148%		
Illicit manufactured cigarettes	Counterfeit	50	85	143	187%		
S	Total	564	1,433	1,419	151%		
Unbranded tobacco		1,495	895	1,034	-31%		
Total illicit tobacco		2,060	2,329	2,453	19%		
Illicit tobacco consumption as % of total consumption		11.8%	13.3%	13.9%	n/a		
Equivalent excise value (AUDm)		AUD893	AUD1,021	AUD1,101	23%		

#### The illicit market in Australia

Our study indicates there has been a growth in the consumption of illicit tobacco in Australia. As a proportion of total consumption this represents an increase from 11.8% in 2012 and 13.3% in LTM H1 2013 to 13.9% in the full year 2013. This trend is consistent with a range of secondary data sources.

If all of this tobacco had been consumed in the legitimate market, it would have represented an excise amount of AUD1.1bn at current excise rates. (1)

This growth in illicit consumption appears to be driven by a slight increase in unbranded tobacco consumption volumes whilst illicit manufactured cigarette consumption volumes have stabilised at levels recorded in LTM H1 2013. There has, however, been a change in the mix of illicit manufactured cigarettes consumed with counterfeit volumes witnessing a large increase in 2013. The consumption of illicit whites also continues to be a growing issue — they accounted for more than 2.3% of total manufactured cigarette consumption in 2013 with a large proportion of this growth coming from illicit white brands like Manchester that are not legally sold in Australia.

#### The legal tobacco market in Australia

Whilst legally manufactured cigarette volumes have declined at an annual rate of 2.1% over the last thirteen years, loose tobacco volumes have increased at a CAGR of 3.0% over the same period, representing a shift in the mix of tobacco products consumed. Overall sales of legal domestic tobacco declined by 1.6% over the thirteen year period. During 2013, the decline slowed, with sales only declining by 0.5%.

#### Regional overview

The Australian market is the most expensive market in the region and with the December 2013 increase in excise, the gap has further widened. A packet of 20 Marlboro cigarettes is now 12% more expensive than in New Zealand; the second most expensive market. However, a packet is 75% more than the third most expensive market (Singapore) and nearly 600% more expensive than in South Korea from where the empty pack survey indicates the majority of new contraband is originating.

The Australian Crime Commission believes that organised crime groups perceive tobacco smuggling to be low-risk and highly profitable. As a result, this price differential may explain some of this growth.

Sources: (1) Based upon the average excise rate over the past 12 months for both loose and manufactured cigarettes

(2) Australian Crime Commission, Organised Crime in Australia, July 2013

### **Appendices**

Appendix 1. Illicit market measurements

Appendix 2. Technical appendices

### Appendix 1: Illicit market measurements

- A1.1 Consumption model
- A1.2 Empty pack survey analysis
- A1.3 Rolling papers analysis
- A1.4 Consumption gap analysis

# KPMG has used a consumption based approach to size the unbranded tobacco market in Australia

#### A1 Review of illicit tobacco estimates

#### A1.1 Consumption model

#### Introduction

The primary methodology we have used to size the unbranded tobacco market in Australia is the consumption model approach. The approach adopted by KPMG is similar to that used in previous reports on the illicit tobacco market in Australia.

The consumption model utilises the results of the Roy Morgan consumer survey to determine the core inputs to the model, combined with publicly available information on the legal tobacco market and smoking population.

For the purpose of this report, the consumption model number for unbranded volumes in the full year 2013 is based on the average of the H1 2013 and the H2 2013 consumer survey results. Since consumers are likely to give a more accurate estimate of their purchase behaviour over a shorter time period rather than the last twelve months, using an average of the H1 and H2 consumer survey results provide a more accurate number for 2013.

#### The consumer survey

The consumer survey was based on the responses of 2,116 smokers in Australia to a CAWI web based questionnaire. Respondents were selected from across the country, from both metropolitan and non-metropolitan areas, in a sampling plan consistent with the survey carried out by Roy Morgan Research in the first half of 2013.

The survey was conducted in November 2013. Consumers were asked about their consumption and purchase of legal and illicit tobacco products; namely Chop Chop (unbranded loose tobacco sold in bags), pre-rolled unbranded tobacco as well as counterfeit and contraband manufactured cigarette products.

### The consumer survey is used as one tool to form an estimate of the illicit market

The consumer survey responses are used to obtain several core inputs for the consumption model process. These core inputs are based on consumer responses and include;

- How many smokers purchase the different types of illicit tobacco,
- How often these illicit purchasers purchase illicit tobacco, and
- How much illicit tobacco these illicit purchasers purchase on each purchase occasion.

These responses generate the core assumptions which are used in the consumption model and are illustrated on figure A1.1overleaf.

#### Additional assumptions

In addition to the results generated by the consumer survey there are some additional assumptions and datapoints which are used:

- Total adult smoking population we assumed that the total smoking population was 2.6 million. This is based on AIHW data updated for the decline in smoking population numbers since the last official estimate.
- Quantity of legal tobacco purchased we have obtained this data from Euromonitor and estimate the total legal sales volume to be 15.2 million kilograms.

# The consumption modelling calculation relies on the results of the Roy Morgan Research consumer survey and publicly available data

#### A1.1 Consumption model (continued)

The core inputs from the consumer survey and publicly available information are used in the consumption model, illustrated in table A1.1. These core inputs are factored together to produce an estimate of the amount of illicit tobacco product consumed by the representative population sampled in the Roy Morgan Research consumer survey covering the steps outlined:

- Steps 1 and 2 are used to calculate the total annual volume of illicit consumption per consumer in step 3.
- The number of illicit tobacco users is calculated using the percentage of illicit tobacco users noted in the consumer survey in step 5.
- This is multiplied by the total number of smokers in Australia in Step 6 which is multiplied by the average quantity purchased to give the total quantity of illicit tobacco consumption in Australia in step 7.

The consumption model approach measures illicit tobacco consumption by utilising consumers' responses. It is not possible to accurately break down illicit consumption into its constituent parts of loose unbranded and branded tobacco as consumers may be unable to tell the difference in the way in which the tobacco is sold.

The 2013 consumption model process and relevant data sources are shown in detail overleaf.

#### Table A1.1 Consumption model data sources and process

		Consumption model inputs
Quantity of illicit tobacco purchased per occasion (g)	1	Roy Morgan consumer survey
Frequency of illicit tobacco purchased pe annum	<sup>r</sup> ②	Roy Morgan consumer survey
Quantity of illicit tobacco purchased per annum (g)	3	1 X 2 = 3
Total adult smoking population ('000)	4	Extrapolated Australian Bureau of Statistics smoking prevalence data <sup>(a)</sup>
Illicit tobacco users as % of Australia tobacco users	5	Roy Morgan consumer survey
Number of illicit tobacco users, Australia ('000)	6	(4) X (5) = (6)
Quantity of illicit tobacco purchased in Australia (tonnes)	7	3 X 6 = 7
Quantity of illicit tobacco purchased in Australia in 2013 (tonnes)	8	Average of H1 2013 and H2 2013 quantity of unbranded tobacco

The results of the H2 2013 consumption model indicate an increase in unbranded volume but a moderate decline in illicit manufactured cigarette volume

#### A1.1 Consumption model (continued)

Figure A1.1 Consumption model results, 2013(1)(2)(3)(4)(a)

		Ur	brand	ed	Co	unterf	eit	Co	ntraba	ınd		otal illio obacco	
		LTM H1 2013	LTM H2 2013	Full Year 2013	LTM H1 2013	LTM H2 2013	Full Year 2013	LTM H1 2013	LTM H2 2013	Full Year 2013	LTM H1 2013	LTM H2 2013	Full Year 2013
·	Quantity of illicit tobacco purchased per occasion (g)	196	221		142	94		136	117				
	Frequency of illicit tobacco purchased per annum	10	12		9	7		9	8				
	Quantity of illicit Tobacco purchased per annum (g)	1,960	2,652		1,278	658		1,224	936				
$\sim$	Total adult smoking population ('000)	2,609	2,615		2,609	2,615		2,609	2,615				
(5)	Illicit tobacco users as % of Australian tobacco users	17.5%	16.9%		4.3%	4.1%		6.9%	7.3%				
<b>(6)</b>	Number of illicit tobacco users, Australia ('000)	457	442		112	108		180	191				
0	Quantity of illicit tobacco purchased in Australia (tonnes)	895	1,173	1,034	143	71	107	220	179	200	1,258	1,423	1,341

The full year 2013 consumption model results indicate that total consumption of illicit tobacco is approximately 1.3 million kilograms. This estimate is based on the average of the H1 2013 and H2 2013 consumer survey results.

The consumption model indicates that illicit manufactured cigarette volumes declined moderately between H1 2013 and H2 2013, whilst unbranded volumes has increased from 0.9 million kilograms in LTM H1 2013 to 1.2 million kilograms in LTM H2 2013. This annualised increase of 71.6% in unbranded consumption between LTM H1 2013 and LTM H2 2013 appears to be high and does not accurately reflect the market trend.

Additionally, we believe that consumers are likely to give a more accurate estimate of their recent purchase behaviour rather than that of the last twelve months. Therefore, using an average of the H1 and H2 consumption model results would provide a more accurate number for 2013.

For the purpose of this report, the 2013 estimate of unbranded consumption volume is based on the average of the H1 2013 and H2 2013 consumer surveys. The net result of this approach is a reduction of unbranded tobacco consumption.

Note: (a) The number for 2013 is the average of the H1 2013 and the H2 2013 consumer survey results

Sources: (1) Deloitte, Illicit Trade of Tobacco in Australia, 2012

(2) Roy Morgan Research, Consumer survey, H1 2013 and H2 2013

(3) Euromonitor, Tobacco consumption in Australia, 2013

(4) KPMG analysis

The Q4 2013 empty pack survey found that 9.7% of manufactured cigarettes consumed originated outside Australia, consistent with the Q2 2013 results

#### A1.2 Empty pack survey analysis

Five empty pack surveys have been carried out in Australia in the last five years.

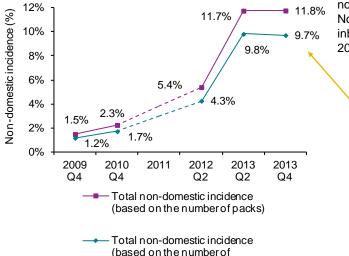
AC Nielsen carried out surveys solely for PML in Q4 2009 and Q4 2010. The 2009 survey consisted of 9,343 collected packs and the 2010 survey 6,000 packs and these surveys are believed to be broadly comparable to the 2012 and 2013 empty pack surveys.

AC Nielsen also carried out the 2012 Q2 survey which was commissioned by all three industry parties; BATA, PML and ITA. The 2012 survey was conducted in May, June and July and consisted of 12,000 packs collected across 16 cities.

In 2013, the empty pack survey provider changed from AC Nielsen to MSIntelligence (MSI). MSI were selected after a tender process. MSIntelligence were commissioned to replicate the survey using an identical methodology to AC Nielsen.

Two surveys have been conducted for 2013 and have been again produced for all three industry parties. The Q2 survey was conducted in May and June whilst the Q4 survey was conducted in October and November. Both the surveys were carried out in the same 16 cities as 2012 and again consisted of 12,000 collected packs.

### Total non-domestic incidence, Q4 2009 – Q4 2013<sup>(1)(2)(a)(b)</sup>



Empty pack survey results can be calculated on either a cigarettes basis or a packs basis. This is possible as the size of each pack collected is recorded during the survey. As there is considerable variation in pack sizes, utilising a measurement based on the number of cigarettes provides a more accurate representation of consumption patterns.

The empty pack survey analysis takes the proportion of cigarettes which are not Australian (health warnings missing or not in English, brands not sold in Australia, packs with identifying marks from other markets such as tax stamps) and classes these cigarettes as "non-domestic". The proportion of non-domestic cigarettes recorded by the empty pack survey is called the non-domestic incidence. The non-domestic incidence of the EPS is shown above.

The total non-domestic incidence in Australia in the Q4 2013 survey was 9.7% (on the basis of number of cigarettes) and 11.8% (on the basis of number of packs). These results are consistent with the non-domestic incidence recorded in the Q2 2013 survey. Overall the 2013 non-domestic incidence is the highest level of non-domestic incidence recorded in an empty pack survey and indicates an increase in illicit manufactured cigarettes.

Whilst a proportion of non-domestic cigarettes will be legally brought into Australia by both inbound (foreign nationals travelling to Australia) and outbound travellers (Australians returning from abroad), this legal proportion is relatively small, with the majority of non-domestic cigarettes being illicit. A calculation of the legal volume of non-domestic cigarettes is shown in appendix A2.4. Nonetheless, this increase occurred at a time after the inbound traveller allowance was reduced in September 2012.

The total non-domestic incidence in Australia for the year 2013 was 9.8% (on the basis of number of cigarettes) and 11.7% (on the basis of number of packs). This has been calculated using a blended empty pack survey approach i.e. using a combination of Q2 2013 and Q4 2013 results.

Notes: (a) No survey was conducted in 2011, trend line is for information only

(b) Non-domestic incidence based on the number of packs is higher than the non-domestic incidence based on the number of packs due to the average Australian pack of cigarettes being larger than an international pack, i.e. the most commonly sold pack size in Australia is 25 cigarettes compared to the standard 20 cigarettes packs available internationally

Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

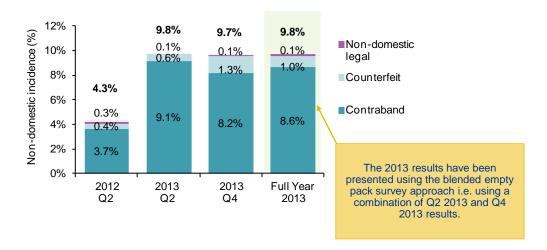
(2) AC Nielsen, Empty pack survey, 2009, 2010, 2012

cigarettes)

Whilst contraband products continue to be the primary driver of increased illicit consumption, counterfeit products witnessed a large increase in the Q4 2013 empty pack survey results

#### A1.2.1 Empty pack survey analysis (continued)

Break down of non-domestic incidence, Q2 2012 – Q4 2013<sup>(1)(2)(3)</sup>



As discussed on the previous page, not all non-domestic tobacco is illicit tobacco. Non-domestic incidence can be broken down into three separate categories:

- **1. Non-domestic legal** These are cigarettes legally brought into Australia as part of travelers' inbound allowance.<sup>(a)</sup>
- **2. Counterfeit** The packs collected in the empty pack survey are examined by the participating companies. They are able to identify packs which are counterfeit versions of their products.
- **3. Contraband** The remainder, and majority, of non-domestic manufactured cigarettes are legitimate products (i.e. non-counterfeit) that have entered Australia illegally.

Non-domestic legal volumes constitute only a very small proportion of the total non-domestic incidence. They accounted for 0.1% of the total non-domestic incidence in both Q2 2013 and the Q4 2013. The decline from 2012 is in part explained by the reduction in Australia's inbound traveler allowance from 250g to 50g/ 50 sticks per person per trip in September 2012.<sup>(a)</sup>

The majority of non-domestic cigarettes are therefore illicit, with the illicit proportion of manufactured cigarettes consumed in Australia showing a marked increase since 2012.

The empty pack survey findings for both quarters of 2013 indicate that contraband product, with a share of more than 85% in the total illicit consumption, is the predominant driver of the increase in illicit manufactured cigarette volumes seen between 2012 and 2013.

However, the contraband share of the total non-domestic incidence declined slightly in the Q4 2013 empty pack survey when compared to the previous quarter. This decline is attributed to a concurrent increase in counterfeit volumes.

The empty pack survey findings showed that 1.3% of all packs collected in Q4 2013 were counterfeit products, compared to the 0.6% level recorded in the Q2 2013 survey.

Note: (a) Please refer to appendix A2.4 for detailed for detail on the calculation of non-domestic legal volumes

Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

(2) AC Nielsen, Empty pack survey, 2012

(3) KPMG analysis

# The results of the empty pack survey analysis indicate an illicit volume of 1.4 million kilograms for manufactured cigarettes

#### A1.2.2 Empty pack survey analysis (continued)

We have used the non-domestic incidence obtained from the empty pack surveys as the basis of estimates for the volumes of counterfeit and contraband consumption in Australia.

The 9.8% non-domestic incidence is combined with estimates for legal domestic sales volumes from

Euromonitor to create a volume estimate for illicit manufactured cigarettes. This can then be broken down into volume estimates for non-domestic legal, counterfeit and contraband.

Figure A1.2.2

	Report page		2009	2010	2011	2012	2013
Legal sales of manufactured cigarettes (tonnes)	1 10		15,881	14,598	13,908	13,468	13,321
Empty pack survey non- domestic incidence	2 49		1.2%	1.7%	-	4.3%	9.8%
Total consumption of manufactured cigarettes (tonnes)	3	= 1/(100%-2)	16,071	14,857	-	14,068	14,762
Non-domestic consumption (tonnes)	4	= 3 - 1	191	258	-	600	1,441
Non-domestic (legal) volume estimate (tonnes)	5 62,64		34.6	33.7	-	35.6	22.0
Illicit consumption (tonnes)	6	= 4 - 5	156.4	224.3	-	564	1,419
Empty pack survey counterfeit incidence	7 50		-	-	-	0.4%	1.0%
Counterfeit consumption (tonnes)	8	= 4 *(7/2)	-	-	-	50	143
Contraband consumption (tonnes)	9	= 6 - 8	-	-	-	515	1,276

Figure A1.2.2 shows the calculation used to estimate the total volume of illicit manufactured cigarettes consumed in Australia. The percentage of non-domestic cigarettes is added to legal domestic consumption in order to calculate total consumption in step 3. Total illicit consumption is calculated by removing the non-domestic legal volume estimate in step 6.

The EPS also records the counterfeit incidence as a percentage in step 7. This counterfeit incidence is taken as a percentage of total non-domestic consumption and multiplied by the non-domestic consumption estimate in step 8, with the remainder contraband in step 9.

The results of the empty pack survey analysis show a large increase in non-domestic volumes in 2013. As non-domestic legal volumes declined, this translated into much higher volumes of illicit counterfeit and contraband manufactured cigarettes.

Whilst volumes attributable to counterfeit manufactured cigarettes rose, the true volume increase was driven by contraband product, which accounts for 90% of the total illicit consumption indicated by the empty pack survey analysis.

Notes:

- (a) We have uplifted the Euromonitor manufactured cigarettes volumes by 2% in each year, as we believe that the overall quantum of estimate is too low
- (b) Counterfeit incidence is not available for 2009, 2010 and 2011
- (c) The non-domestic legal estimate for 2013 is based on both the volumes brought by tourists arriving in Australia and by short term resident departures. Please refer to appendix A2.4 for further details

Sources: (1) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013

- (2) AC Nielsen, Empty pack survey, 2009, 2010, 2012
- (3) Euromonitor, Legal domestic sales, accessed January 2014
- (4) KPMG analysis

## The illicit tobacco volumes generated by the consumption model fall within the range provided by the rolling papers analysis

#### A1.3 Rolling papers analysis

Figure A1.3.1 Rolling papers calculation for unbranded tobacco

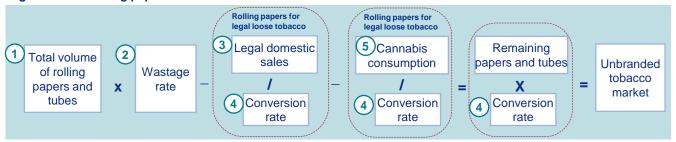
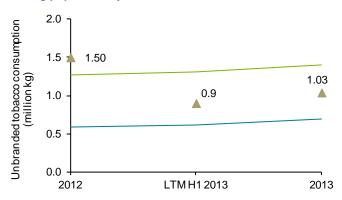


Figure A1.3.1 highlights our approach to the rolling papers analysis used to calculate the total volume of unbranded tobacco. For other clients we have applied this approach to markets with sizeable loose tobacco consumption and has proven to help validate the size of the unbranded market. Each step of the calculation involves the following assumptions and data-points:

- 1 Total volume of rolling papers and tubes the volume used comes from retail sales data provided by Aztec and cannot be published due to contractual obligations with the data provider.
- Wastage rate The wastage rate is the percentage of rolling papers used and excludes any discarded or spoilt papers. This data has been sourced through consumer research undertaken by the industry and is commercially sensitive and cannot be published.
- 3 Legal domestic sales of loose tobacco We use the same volumes calculated for 2013, which equated to 1.893 tonnes.
- 4 Conversion rate The amount of grams of tobacco used in a rolled cigarette. Consumer surveys and estimations by the industry have produced a range of values. As a sensitivity, we use an upper and lower limit of 0.75 and 0.6 respectively. We believe that a lower limit of 0.6g is reflective of the Australian market this limit may be lower or higher than other markets.
- 5 Cannabis consumption Rolling papers are also used in the consumption of cannabis. The conversion rate for use of papers and tubes is assumed to be the same as the conversion rate for cigarettes. Total cannabis consumption is estimated on the basis of the Australian Department of Health and Aging survey at a total volume of 22,500kg.<sup>(2)</sup>

### Volume of illicit unbranded tobacco generated by the rolling papers analysis, 2012- 2013



- Minimum volume with a lower limit of 0.60g per rolled cigarette

  Maximum volume with an upper limit of 0.75g per rolled cigarette
  - Consumption model output

The chart above illustrates a sensitized range for the rolling papers analysis. The sensitivity is based around the value for the conversion rate which is the most uncertain variable in the analysis. By flexing this value between a high value of 0.75g per rolled cigarette and a low value of 0.6g per rolled cigarette, we can determine a range of potential market sizes. We believe that this approach is appropriate to validate the unbranded tobacco market and we intend to keep tracking it similarly in subsequent reports.

The volume of illicit unbranded tobacco generated by the consumption model output is within the range of the rolling papers analysis in both the H1 2013 and 2013. As highlighted earlier, KPMG has used a prudent estimate of unbranded consumption in 2013. The consumer survey results for H2 2013 indicated a large increase in consumption of unbranded tobacco which does not appear to accurately reflect the market trend. We have utilised the average of the H1 and H2 results to derive a more accurate estimate for 2013.

Sources: (1) Size of rolling papers market obtained from the industry

<sup>(2)</sup> National Drug and Alcohol Centre NSW, Cannabis in Australia, June 2007

## Our estimate of total tobacco consumption for 2013 is consistent with the historic decline in tobacco consumption

#### A1.4 Consumption gap analysis

Trend in total consumption of tobacco in Australia, 2007 – 2013<sup>(1)(2)(a)(b)(c)</sup>



CAGR (%)	2007-LTM H1 2013	2009-LTM H1 2013	2007-13	2009-13
Illicit consumption	n/a	8.2%	n/a	8.6%
Legal consumption	-2.7%	-4.2%	-2.4%	-3.5%
Total consumption	-1.7%	-2.9%	-1.3%	-2.2%

Under the KPMG methodology, the overall level of tobacco consumption was equal to 17.7 million kilograms in 2013.

Although the full year 2013 estimate of total consumption is higher than the 2012 estimate, it shows a continuation of the long term historical trend of declining tobacco consumption since 2007 when the first study was conducted.

The 2013 estimate indicates a confirmation of a small increase in consumption initially highlighted in the H1 2013 report.

Overall, as our 2013 estimate fits with the trend of continuing decline in total tobacco consumption, we believe the consumption gap analysis supports our estimate.

Notes: (a) H1 2013 represents consumption for the twelve months to end June 2013

(b) Counterfeit and contraband estimations are unavailable for 2007

(c) Legal consumption includes both legal domestic sales volumes and non-domestic legal volumes

Sources: (1) KPMG analysis of previous reports on illicit trade in Australia, run by Deloitte between 2009 and 2012

(2) Deloitte, Illicit Trade of Tobacco in Australia, 2012, 2011, 2012

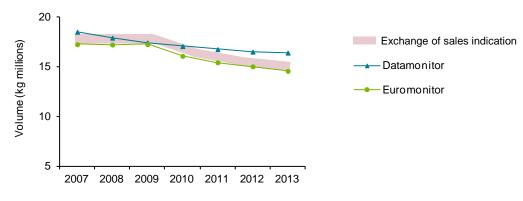
# **Appendix 2: Technical appendices**

- A2.1 Source of legal domestic sales estimates
- A2.2 Estimation of smoking population
- A2.3 Recent regulatory changes
- A2.4 Travel trends and non-domestic legal calculation
- A2.5 Consumer surveys
- A2.6 Scope of work
- A2.7 Roy Morgan Research questionnaire
- A2.8 Bibliography

Over the past few years Euromonitor has tracked the market most accurately in Australia. As a result we have adopted this as our measure for legal domestic sales

#### A2.1 Source of legal domestic sales estimates

### Estimates of legal domestic sales manufactured cigarette volumes, $2007 - 2013^{(1)(2)(3)(a)}$



CAGR (%)	2007-09	2009-13	2007-13
<ul><li>Datamonitor</li></ul>	-2.9%	-1.5%	-2.0%
<ul><li>Euromonitor</li></ul>	-0.0%	-4.1%	-2.8%

In order to accurately reflect the size and trend of the illicit tobacco volumes, it is necessary to obtain a robust estimate of legal domestic sales. Understating legal domestic sales has the effect of incorrectly inflating the estimate of the illicit proportion of the market.

We have examined several publicly available estimates of Australian legal domestic sales and have compared it to sales data supplied by the industry. Whilst we cannot publish sales data from industry players due to the commercial sensitivity of this information, we show an indicative range on the chart above. We have analysed this industry sales data and how it relates to publicly available estimates of the illicit market in Australia.

As indicated in the H1 2013 report, compared with industry sales data, Euromonitor data most accurately captures both the nominal volumes and the trend in the market across the 2007-2012 period as a whole. As a result, we have adjusted the historic illicit volumes estimations based on using Euromonitor volume estimates.

We have sought to avoid possible over estimation of the illicit proportion of the market that would be caused by having an estimation of legal domestic sales lower than industry supplied volumes. As a result, we have uplifted the Euromonitor volume estimate for manufactured cigarettes by 2% in each year between 2007 and 2013. Loose tobacco volumes do not require adjustment.

Note: (a) To preserve confidentiality of commercially sensitive data, Exchange of Sales data has been grossed up to factor in the market coverage of the data and then rounded to the nearest thousand

Sources: (1) Datamonitor

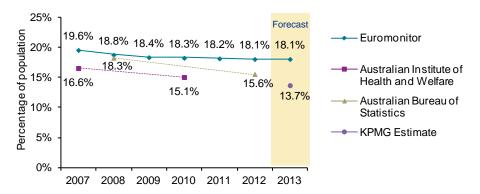
(2) Euromonitor, Legal domestic sales, accessed January 2014

(3) Industry sales data

## Several estimations of Australian smoking prevalence are publicly available, but yearly data is not available from the Australian government

#### A2.2 Estimation of smoking population

Smokers as a percentage of population, 2007 - 2013 (1)(2)(3)(a)(b)(c)



CAGR (%)	2007-10	2008-12	2007-13
→ Euromonitor	-2.3%	-0.9%	-1.3%
<ul> <li>Australian Institute of Health and Welfare</li> </ul>	-3.1%	-	-
* Australian Bureau of Statistics	-	-3.9%	-

Official Australian Government estimates of smoking incidence are available from both the Australian Institute of Health and Welfare (AIHW) and the Australian Bureau of Statistics (ABS). Euromonitor also provide estimates of smoking incidence.

Each of the surveys reflects specific age groups. The AIHW and ABS estimates reflect prevalence for 14 year olds and above, whilst Euromonitor figures estimate prevalence among those aged over 18. This in part explains the higher Euromonitor estimate.

Timing of estimates also varies. The National Drug Strategy Household Survey is conducted by the AIHW every three years and includes questions on smoking prevalence. The last two surveys were conducted in 2007 and 2010; the 2013 survey is underway and results are expected to be released in 2014.

ABS figures are taken from Australian Health Surveys carried out in 2008 and 2012, whilst Euromonitor compiles its estimates annually.

All smoking prevalence surveys encounter issues with respondents under reporting. The AIHW survey highlights the possibility of under-reporting as some respondents did not answer smoking related questions. Potential underreporting was identified in the ABS report, primarily due to social pressures, especially where other household members / parents were present at the interviews for respondents.

Where KPMG require prevalence data for our modelling process, we have used the AIHW results to ensure that our estimate for the number of Australian smokers is not overstated. Overstating the number of smokers would lead to an incorrectly inflated estimate of the size of the illicit trade.

We have estimated the smoking population for 2013 based on AIHW results for 2007 and 2010.

Notes: (a) Euromonitor, percentage of population that are smokers refers to daily smokers > 18 years

(b) Australian Institute of Health and Welfare and ABS percentage of population that are smokers refers to daily smokers >14 years

(c) Euromonitor figures for 2013 are based on full year estimates

Sources: (1) Euromonitor, Smoking prevalence, updated January 2014

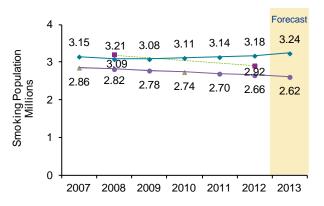
(2) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2007, 2010

(3) Australia Bureau of Statistics

# As with prevalence, KPMG believes it is prudent to use the lowest estimates of smoking population to calculate illicit consumption

#### A2.2 Estimation of smoking population (cont.)

Total number of smokers, 2007 – 2013 (1)(2)(3)(a)(b)(c)



Euromonitor
— Australian Bureau of Statistics
Australian Institute of Health and Welfare
KPMG Estimate

CAGR (%)	2007-10	2008-12	2007-13
◆ Euromonitor	- 0.4%	0.7%	0.5%
- Australian Institute of Health and Welfare	-1.4%	-	-
★ Australian Bureau of Statistics	-	-2.4%	-
→ KPMG Estimate	-1.4%	-1.5%	-1.5%

The number of adult daily smokers in Australia is used to extrapolate the consumer survey results up to an illicit estimate for the entire population.

To avoid overstatement of results, KPMG considers it prudent to use the lowest estimate for smoking population to extrapolate illicit consumption due to the effect it has on the modelling process — i.e. as a higher smoking population equates to a higher illicit estimate.

As there is no recent AIHW estimate, KPMG has had to extrapolate forward the rate of decline in smoker numbers to create an estimate for 2013. Extrapolating the rate of decline forwards is more likely to give us an accurate estimate of the smoking population in comparison to taking the published 2010 AIHW estimate.

Notes: (a) Euromonitor considers adult population as >18 years, while ABS and the Australian Institute of Health and Welfare considers adult population >14 years

(c) Figures for 2013 are based on full year estimates

Sources: (1) Euromonitor, Smoking prevalence, accessed January 2014

(2) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2007, 2010

(3) Australia Bureau of Statistics

<sup>(</sup>b) Figures for Australian Bureau of Statistics are taken for 2008 & 2012 from Australian Health Survey; for the Australian Institute of Health and Welfare they are taken from the National Drug Strategy Household Survey, 2007 and 2010

# The Commonwealth government has implemented the Plain Packaging Act and other tobacco controls in 2012

#### A2.3 Recent regulatory changes

Table A2.3.1: Recent regulatory changes 2012/13<sup>(1)(2)</sup>

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Australia	Tobacco Advertising Prohibition Amendment Act 1992	Internet advertising	6 September 2012	It is made a criminal offence to publish tobacco advertising on the internet or other electronic media.
				Internet point-of-sale tobacco advertisements need to be presented in plain text-only format with graphic health warnings and warnings about age restriction on tobacco sales.
				<ul> <li>Online tobacco retailers will have to display health warnings and comply with restrictions on advertisement wording under the same legislation that other forms of advertising are covered.</li> </ul>
	Tobacco Plain Packaging Act 2011;  Trade Marks Amendment (Tobacco Plain Packaging) Act 2011	Plain packaging of tobacco	1 December 2012	Law on plain packaging for all tobacco products sold enacted and fully implemented.
	Customs Amendment (Smuggled Tobacco) Bill 2012 Amendment of Customs Act 1901	Illicit tobacco	November 2012	<ul> <li>Smuggling tobacco or possessing illicit tobacco will attract tougher penalties including potential imprisonment.</li> </ul>
	Competition and Consumer (Tobacco) Information Standard 2011	Health warnings	1 December 2012	Tobacco products required to display the updated and expanded graphic health warnings covering 75% of the front of face.
	Customs Act1901, Customs Tariff Act 1995	Duty free tobacco restrictions	1 September 2012	<ul> <li>Inbound traveller allowance for tobacco products is reduced from 250g per person to 50g/ 50 sticks per person.</li> </ul>
	Excise Tariff Amendment (Tobacco) Bill 2014 and Customs Tariff Amendment (Tobacco) Bill 2014	Excise	1 December 2013 for excise increases 1 March 2014 AWOTE change will be effective	■ In August 2013 the Australian government announced excise duty increases in tobacco products of an additional 12.5% annually for the next four years in addition to the switch to AWOTE. The first of these increases was implemented on 1 December 2013. These four tax increases will increase the excise on a pack of cigarettes in Australia by 60% above the rate of AWOTE inflation until September 2016.

Sources: (1) Australian Government Department of Health

<sup>(2)</sup> Department of Health, Victoria, www.health.vic.gov.au/tobaccoreforms

# Local states have been introducing additional regulations to further restrict tobacco consumption and meet local market requirements

#### A2.3 Recent regulatory changes (continued)

Table A2.3.2 Recent regulatory changes 2012/13 – state specific(1)(2)(3)(a)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
New South Wales	Public Health Act 2008; Public Health Regulation 2009	Retail Display Ban	1 July 2013	Exemption for specialist tobacconists under the ban on the display of tobacco products at point-of-sale ends
Victoria	Tobacco Act 1987	Smoke free Local Areas	1 December 2012	A ban on smoking at all of Victoria's patrolled beaches in the area between the red-and-yellow lifesaving flags and within a 50 metre radius of a red-and-yellow flag.
	Tobacco Amendment (Shopper Loyalty Schemes) Bill 2012	Removal of tobacco from shopper loyalty programs	1 March 2013	Tobacco products are prohibited from earning points under shopper loyalty initiatives.
	Tobacco Amendment Act 2013	Smoke free Local Areas, Cessation of new certification for specialist tobacconists	1 October 2014	Introduction of smoke-free children's playgrounds and related recreational areas. Applications for specialist tobacconist certification received on or after 1 April 2014 will not be considered.  Price boards will come under closer scrutiny and there are
				provisions to repeal certain packaging and labelling requirements made redundant by plain packaging.  The Bill received Royal assent on
				6 November 2013
South Australia	Tobacco Products Regulation Act 1997. Tobacco Products Regulations 2004.	Retail Display Ban	1 January 2012	A ban on the display of tobacco products at point-of-sale with an exemption for specialist tobacconists.
	Tobacco Products Variation Regulations 2012 (Capsule cigarette)			Display of 'capsule' cigarettes banned, extending previous ban on fruit & confectionery flavoured cigarettes.

Note:

Sources: (1) Australian Government Department of Health

<sup>(</sup>a) There has been no new legislation specifically for the Australian Capital Territory

<sup>(2)</sup> Department of Health, Victoria, www.health.vic.gov.au/tobaccoreforms

<sup>(3)</sup> The Tobacco Amendment Act 2013

# Local states have been introducing additional regulations to further restrict tobacco consumption and meet local market requirements

#### A2.3 Recent regulatory changes (continued)

#### Table A2.3.2 Recent regulatory changes 2012/13 – state specific (1)(2)(3)(a)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Tasmania	Public Health Act 1997	Retail Display Ban	1 March 2012	Specialist tobacconists included in retail display ban, removing earlier exemption.
		Removal of tobacco from shopper loyalty programs	1 March 2012	Tobacco products are prohibited from earning points under shopper loyalty initiatives.
		Licensing of tobacco retailers	1 March 2012	<ul> <li>Licences must be obtained prior to selling products from additional venues.</li> <li>Licenses are not transferable to new business owners.</li> <li>Licences will not be displayed in premises.</li> </ul>
		Vending machine restrictions	1 March 2012	Tobacco vending machines now restricted to one machine per site within specified locations.
Queensland	Health Legislation Amendment Act 2012	Tobacco type restriction	25 November 2012	Ban on the sale of fruit & confectionery flavoured cigarettes.
The Northern Territory	Smokefree legislation	Ban on smoking in prisons	1 July 2013	Total ban on tobacco in prisons.

Note:

Sources: (1) Australian Government Department of Health

<sup>(</sup>a) There has been no new legislation specifically for the Australian Capital Territory

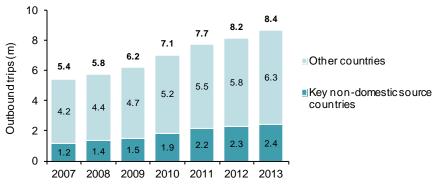
<sup>(2)</sup> Department of Health, Victoria, www.health.vic.gov.au/tobaccoreforms

<sup>(3)</sup> AIHW Media Release, 22 October 2013

Visits to countries indicated by the empty pack survey as contributors to non-domestic packs found in Australia have grown strongly. This could imply a growth in legal non-domestic consumption

#### A2.4.1 Travel trends and non-domestic legal calculation based on departures of Australians

### Overseas travel of Australian residents, 2007 – 2013<sup>(1)(a)</sup>

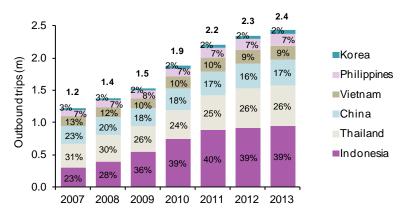


CAGR (%)	2007-09	2009-11	2011-13	2007-13
Key ND source countries	11.9%	20.1%	5.1%	12.2%
Total overseas trips	7.0%	11.5%	6.1%	8.2%

Travel trend data can be used in the calculation of nondomestic legal volumes, i.e. tobacco products that are brought into the country legally by consumers, such as during an overseas trip. Trips made to key non-domestic source countries of manufactured cigarettes increased at a faster rate than overall visits, 12.2% compared to 8.2% between 2007 to 2013.

Later in the report this data is used to estimate legal nondomestic sales which, it will be shown, is immaterial in size.

### Overseas travel of Australian residents to key non-domestic source countries, $2007 - 2013^{(1)(a)}$



Visits to key non-domestic source countries reached a total of 2.44 million in 2013 accounting for approximately 30% of all trips made overseas by Australian residents.

However, reductions in inbound traveller allowances will likely have tempered the growth of legal non-domestic consumption. We examine this in more detail overleaf.

Note: (a) Key non-domestic source countries have been selected from the empty pack survey carried out in 2013, the countries highlighted in the graph above accounted for over 75% of the non-domestic cigarette packs found in Australia and excludes packs that come from unspecified countries

Source: (1) Australian Bureau of Statistics, Short-term movement, Resident Departures - Selected Destinations: Trend, 2013

# Non-domestic legal ND(L) estimates account for a small proportion of total consumption and have a limited effect on the aggregate results

#### A2.4.1 Travel trends and non-domestic legal calculation (continued)

Overseas ND uplift % population Propensity Amount visits smokers to purchase per trip			
	(tonnes)	Total (tonnes)	
Year 2013         2.4m         X         10%         13.7%         X         59%         X         50g	= 10.8		

KPMG non-domestic legal calculation <sup>(1)(2)(3)(a)(b)(c)</sup>							
	Source	2007	2009	2010	2011	2012	2013
Overseas trips to non- domestic source countries in the year (m)	Australian Bureau of statistics	1.22	1.53	1.53	2.2	2.35	2.44
Non-domestic source uplift	Empty pack survey	10%	10%	10%	10%	10%	10%
% of population that are smokers	AIHW (and extrapolated)	16.1%	15.5%	15.1%	14.7%	14.2%	13.7%
% of smokers that buy tobacco	RMR consumer survey	53%	53%	53%	53%	53%	59%
Number of smokers purchasing overseas (m)		0.11	0.14	0.14	0.19	0.20	0.22
Amount purchased	Inbound traveller allowance	250	250	250	250	183	50
Total (kg)		28,628	34,565	33,673	47,136	35,602	10,835
Non-domestic legal as % of total consumption		0.1%	0.2%	0.2%	0.3%	0.2%	0.1%

Estimates of non-domestic legal show that total volumes account for a small proportion of total consumption.

The change to inbound traveller allowances made in September 2012 has a considerable impact on the amount of tobacco consumers can bring back into the country legally, reducing the estimate of legal non-domestic volumes further in 2013.

A consumer survey undertaken in February 2013 was the first time respondents were asked about overseas travel and tobacco purchase. The percentage of smokers who bought tobacco whilst overseas was 53%, however, this may have changed during the period from 2007-2012. The H2 2013 survey suggested that 59% of smokers bought cigarettes overseas, potentially indicating how the difference in price impacts purchasing decisions.

Notes: (a) Respondents were asked "Q51. Have you travelled outside of Australia in the last 6 months?"

Sources: (1) Roy Morgan Research, Consumer survey, H1 2013 and H2 2013

<sup>(</sup>b) Respondents were then asked "Q52. Did you buy any manufactured cigarettes or any other tobacco products to bring back to Australia on any of your trips to other countries in the past 6 months?

<sup>(</sup>c) The inbound traveller allowance for 2012 has been calculated using the 250g limit for 8 months and the 50g limit for 4 months to reflect the change in inbound traveller allowances made in September 2012

<sup>(2)</sup> Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2007, 2010

<sup>(3)</sup> Australian Bureau of Statistics, Short-term movement, Resident Departures - Selected Destinations: Trend, 2013

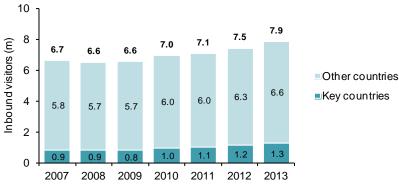
# Visitors from countries indicated by the empty pack survey also serve as contributors to non-domestic packs found in Australia

### A2.4.2 Travel trends and non-domestic legal calculation based on arrivals of visitors (short-term visitors and permanent settlers)

A common comment on the H1 2013 report was that domestic legal inflows calculation only considers the amount of product brought in by Australian residents returning from short-term visits overseas and does not reflect any cigarettes brought to Australia by overseas visitors.

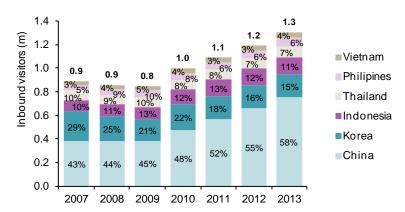
At the time we understood the immateriality of the impact, but feel it is worth highlighting. Thus, we provide an approach of estimating non-domestic legal inflows that considers both the amount of product brought in by Australian residents returning from overseas visits as well as cigarettes brought by overseas visitors (short-term visitors and settlers).

### Overseas visitors (short term visitors and settlers) arrivals to Australia, $2007 - 2013^{(1)(2)(a)}$



CAGR (%)	2007-09	2009-11	2011-13	2007-13
Key ND source countries	-2.3%	13.4%	9.5%	6.6%
Total overseas trips	-0.4%	2.5%	4.6%	2.2%

### Overseas visitors arrivals from key non-domestic source countries, $2007 - 2013^{(1)(2)(a)}$



Overseas visitors arrivals from key non-domestic countries include both short term arrivals and permanent settlers.

Visitors from the key non-domestic source countries have increased since 2007. Visitors from China have increased by 12% between 2007 and 2013.

Later in the report this data together with the overseas travel of Australian residents data are used to estimate legal non-domestic sales which, it will be shown, the impact of the change in domestic legal inflows calculation is immaterial in size.

Note: (a) Key non-domestic source countries have been selected from the empty pack survey carried out in 2013, the countries highlighted in the graph above accounted for over 75% of the non-domestic cigarette packs found in Australia. Packs that come from unspecified countries are excluded.

Sources: (1) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals - Selected Countries of Residence: Trend, 2013

(2) Australian Bureau of Statistics, Permanent Movement, Settlers - Country of Birth, Major Groups and Selected Source Countries: Original, 2013

Non-domestic legal estimates calculated on the basis of inbound visitor arrivals indicate that non-domestic legal remains a small proportion of total consumption

#### A2.4.2 Inbound travel trends and non-domestic legal calculation (continued)

#### Example non-domestic legal calculation based on overseas visitor arrivals data

Inbound visitor arrivals<sup>(a)</sup>

% population above 18

% population smokers

Amount per trip (max. allowance = of 50g)

Total (Kg)

### Estimated number of visitors who bring in tobacco to Australia

Example of KPMG non-domestic legal calculation based on overseas visitor arrivals to Australia(1)(2)(3)(4)					
2013	Inbound visitor arrivals (m) <sup>(a)</sup>	% population above 18 <sup>(b)</sup>	% population smokers	Number of visitors bringing tobacco (m) <sup>(c)</sup>	Amount purchased (kg)
Source	Australian Bureau of statistics	Euromonitor	Euromonitor		
China	0.78	70%	25%	0.132	6,596
Korea	0.19	69%	20%	0.026	1,318
Indonesia	0.15	63%	36%	0.034	1,685
Thailand	0.09	67%	23%	0.014	678
Philippines	0.07	56%	28%	0.011	561
Vietnam	0.05	66%	22%	0.007	338
Total (kg)	1.30			0.224	11,176

Total amount purchased by overseas visitors to Australia

Estimation of non-domestic legal volumes shows that total volumes account for a small proportion of total consumption.

This proportion remains insignificant even if arrivals data is included in the non-domestic legal calculation. This has been shown in detail on the next page.

Notes: (a) Inbound visitor arrivals to include arrivals of short term overseas visitors and permanent settlers

- (b) Population within the age group 18-64 years
- (c) KPMG has used a prudent approach and assumed that 100% of visitors arriving in Australia purchase the maximum inbound traveller allowance

Sources: (1) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals - Selected Countries of Residence: Trend, 2013

(2) Australian Bureau of Statistics, Permanent Movement, Settlers - Country of Birth, Major Groups and Selected Source Countries: Original, 2013

(3) Euromonitor, Population: National Estimates, accessed January 2014

(4) Euromonitor, Smoking Prevalence Among Total Adult Population, accessed January 2014

#### The change in the calculation of non-domestic legal ND(L) estimates has a limited impact on the aggregate results

#### A2.4.2 Inbound travel trends and non-domestic legal calculation (continued)

Comparison of non-domestic legal estimate, 2012 - 2013(1)(2)(3)(4)(5)(6)(7)

	2012 <sup>(a)</sup>		LTM H1 2013 <sup>(b)</sup>		2013 <sup>(b)</sup>	
	H1 2013 Approach	New approach	H1 2013 Approach	New approach	H1 2013 Approach	New approach
Legal domestic sales	15,296.8	15,296.8	15,113.8	15,113.8	15,214.2	15,214.2
Non-domestic legal	35.6	73.0	10.7	21.5	10.8	22.0
Unbranded loose	1,495.2	1,495.2	895.5	895.5	1,034.3	1,034.3
Contraband	505.5	505.5	1,347.9	1,347.9	1,276.2	1,276.2
Counterfeit	48.9	48.9	84.9	84.9	142.8	142.8
Total	17,382.0	17,419.4	17,452.8	17,463.6	17,678.3	17,689.4
Non-domestic legal as % of total consumption	0.20%	0.42%	0.06%	0.12%	0.06%	0.12%
Total illicit as % of total consumption	11.8%	11.8%	13.3%	13.3%	13.9%	13.9%

Under the H1 2013 approach, the non-domestic legal volumes have been computed based on only the shortterm departures data i.e. tobacco brought back into Australia by locals travelling overseas.

The new approach estimates the non-domestic legal volumes by combining the volume of tobacco brought into Australia by Australian residents travelling overseas (i.e. short-term resident departures) and by visitors coming to Australia (i.e. short-term arrivals as well as permanent settlers).

There is a marginal difference in the proportion of nondomestic legal as a percentage of total consumption but non-domestic legal volumes remain small.

In this report we have used the new approach to derive the 2013 results. However, we have not updated or restated non-domestic estimates from previous years as the overall non-domestic legal volumes remain immaterial.

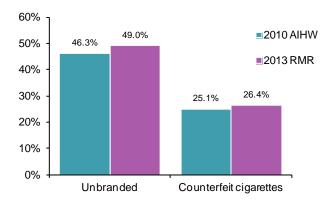
- (a) The amount per trip in 2012 is based on the inbound traveller allowance for 2012. This has been calculated using the 250g limit for 8 months and the 50g limit for 4 months to reflect the change in inbound traveller allowance made in September 2012 The amount per trip in 2013 is based on the new maximum inbound traveller allowance of 50g per person per trip
- Sources: (1) Euromonitor, Legal domestic sales, accessed January 2014
  - (2) MSIntelligence Research, Empty pack survey, Q2 2013 and Q4 2013
  - Roy Morgan Research, Consumer survey, H1 2013 and H2 2013
  - (4) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals - Selected Countries of Residence: Trend, 2013
  - (5) Australian Bureau of Statistics, Short-term movement, Resident Departures - Selected Destinations: Trend, 2013
  - Australian Bureau of Statistics, Permanent Movement, Settlers Country of Birth, Major Groups and Selected Source Countries: Original, 2013 (6)
  - KPMG Analysis

Notes:

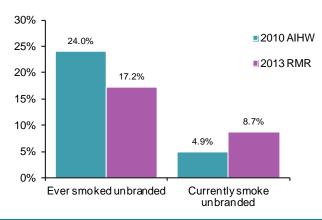
## The outputs of the Roy Morgan Research survey are broadly consistent with the AIHW survey on major indicators

#### A2.5 Consumer surveys

### Comparison of illicit tobacco awareness levels in consumer surveys<sup>(1)(2)(a)</sup>



### Comparison of unbranded illicit tobacco prevalence in consumer surveys<sup>(1)(2)(a)</sup>



Comparison of RMR and AIHW consumer surveys <sup>(1)(2)</sup>				
	RMR	AIHW (conducted by RMR)		
Survey focus	Size of the illicit tobacco market	<ul> <li>Knowledge of and attitudes towards drugs, drug consumption histories and related behaviours</li> </ul>		
Frequency	At least annually from 2009	■ Every three years		
	<b>2010: 949</b>			
Samula aiza	<b>2011: 931</b>	■ > 26,000 people aged 12 years or older		
Sample size	<b>2012: 1,405</b>	participated in the survey		
	■ 2013: 4,223 (H1: 2,107 + H2: 2,116)			
Age groups	■ Smokers aged 18 +	■ Smokers aged 14+		
Methodology	■ Web based surveys	Self-completion drop and collect methodology		
Types of tobacco addressed	<ul> <li>Unbranded, counterfeit cigarettes, contraband cigarettes</li> </ul>	■ Unbranded, counterfeit cigarettes		

The Australian Institute of Health and Welfare's (AIHW) National Drug Strategy Household Survey is the only other major consumer survey in Australia that provides an overview on the prevalence of the use of illicit tobacco. There are a number of differences between the Roy Morgan Research and AHIW survey including the frequency of surveys carried out, size of the sample and the key purpose of each. The RMR survey is used to estimate the size of the illicit market whereas the AHIW survey is focused more on attitudes and behaviours. A key metric used from the RMR survey for sizing the illicit market is the quantity of illicit tobacco purchased per occasion, data that is not captured in the AHIW survey.

Despite differences in the survev objectives and methodologies, headline awareness and prevalence indicators of unbranded illicit tobacco are similar in the AIHW and RMR surveys. Awareness of unbranded tobacco was close to 50% in both studies, while awareness of counterfeit cigarettes was close to 30%. Both surveys highlight the difference in responses when asking consumers about having 'ever smoked' compared to 'currently smoking'. Respondents in both cases appear to be more willing to admit to illicit behaviour when its not considered a 'current' activity. The 2010 AIHW survey asks consumers about Chop Chop (unbranded loose tobacco sold in bags) only whereas the 2007 survey asked about both Chop Chop and unbranded cigarettes.

Note: (a) Roy Morgan Research results for 2013 are based on CAWI responses only

Sources: (1) Roy Morgan Research, Consumer survey, H1 2013 and H2 2013

(2) Australian Institute of Health and Welfare, The 2010 National Drug Strategy Household Survey, 2011

#### Appendix – Technical appendices

## The description of the services set out below comprises the agreed scope of our work

#### A2.6 Scope of work

#### Scope

We will analyse and report on:

- The total level of legal domestic sales of tobacco products and consumption in the market.
- The estimated proportion of the Australian tobacco market accounted for by the illicit trade, across both manufactured products and the unbranded, encompassing contraband, counterfeit and unbranded products (including 'chop chop').
- An overview of the nature of the illicit trade in the country, including the sources of illicit product.
- Findings on the characteristics and consumption patterns of illicit tobacco users, and how these have changed from the results of surveys previously undertaken, based on the consumer research outputs.
- Data on how taxation has evolved over time and report on tobacco regulation in the Australian market.

#### Methodology

In order to size the illicit tobacco market, we will use two principal approaches:

Consumer research approach: utilising the half yearly and full year 2013 Roy Morgan Research reports, as used in the previously published Deloitte 'Illicit trade of tobacco in Australia: Report for 2011/2012'; namely:

- Analyse consumer responses to establish the proportion of illicit tobacco consumed (including assisting with the design of the sampling methodology and the questionnaire for the 2013 surveys in order to help ensure that the consumer research is as robust as possible).
- Extrapolate the proportion of illicit tobacco consumed on a national level.
- Express the findings as a proportion of total tobacco consumption.

#### Empty pack survey approach: utilising empty pack survey data; namely

- Analyse the data output from the empty pack surveys to establish the proportion of market accounted for by non-domestic manufactured cigarettes.
- Extrapolate the non-domestic and counterfeit incidence estimates identified in the empty pack survey against the level of legal domestic sales in Australia.
- Express findings on the estimates of both non-domestic consumption of manufactured cigarettes and consumption of counterfeit product as a proportion of consumption.

The overall results from the two approaches will then be compared and combined in order to build up our overall estimate of the size and composition of the illicit market as a proportion of total tobacco consumption.

#### A2.7 Roy Morgan Research questionnaire

Do you, or does any member of your immediate family work in any of the following companies/industry sectors?

What is your post code?

What is your gender?

Are you currently employed?

Which of the following occupational categories best suits you? (Options provided)

What is your approximate annual personal income?

What is your current age?

Which products do you currently consume? (Options provided)

What type of tobacco product do you smoke or use, even if only occasionally?

How often do you normally smoke manufactured cigarettes?

How often do you normally smoke roll your own cigarettes?

How many manufactured cigarettes do you normally smoke each day (on average)?

How many roll your own cigarettes do you normally smoke each day (on average)?

What is your regular brand of manufactured cigarettes, that is, the one you smoke more than any other brand now-a-days?

What other brands of manufactured cigarettes do you currently smoke?

What is your regular brand of roll your own cigarettes, that is, the one you smoke more than any other brand now-adays?

What other brands of roll your own cigarettes do you currently smoke?

Are you aware that unbranded tobacco can be purchased? Unbranded tobacco is also known as 'chop chop.' It is loose tobacco or cigarettes in cartons or packs that are sold without a brand name. This does not include branded tobacco products that are now sold in plain packaging that are green/brown in colour with graphic health warnings and information messages.

Since you turned 18 have you ever purchased unbranded tobacco?

Throughout the survey, we're just focusing on products you buy for your own use. Do you purchase unbranded tobacco for your own use currently?

Have you purchased unbranded tobacco in the last 12 months? (we are talking about purchases for your use)

In the past 12 months, how often did you purchase unbranded tobacco?

Well, can you give me an estimate of how often you purchased unbranded tobacco in the past 12 months?

Since you turned 18, how long had you been buying unbranded tobacco?

Well, can you give an estimate of how long you had been buying unbranded tobacco since you turned 18?

When you last purchased unbranded tobacco, from which outlet or outlets did you buy it?

When you last purchased unbranded tobacco, how many grams of unbranded tobacco did you purchase?

When you last purchased unbranded tobacco, what format or formats was the unbranded tobacco in?

When you last purchased loose unbranded tobacco, how many grams did you buy? (In grams)

When you last purchased loose unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of loose unbranded tobacco?

Well, can you give me an estimate of when your most recent purchase of loose unbranded tobacco was?

When you last purchased cartons of unbranded tobacco, how many did you buy?

When you last purchased cartons of unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in cartons?

Well, can you give me an estimate of when your most recent purchase of unbranded tobacco in cartons was?

When you last purchased packs of unbranded tobacco, how many did you buy?

When you last purchased packs of unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in packs?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in packs was?

When you were smoking unbranded tobacco, how much of it would you say that you smoked per day?

Well, can you provide an estimate of how much unbranded tobacco you were smoking per day?

How did you usually consume unbranded tobacco?

#### A2.7 Roy Morgan Research questionnaire

How many suppliers did you ever purchase unbranded tobacco from, since you turned 18?

When you stopped buying unbranded tobacco did you not smoke or did you purchase duty paid tobacco products?

Why did you smoke unbranded tobacco?

Do you know the country of origin of the unbranded tobacco that you purchased?

Where does it usually come from?

Please select the reasons why you stopped purchasing unbranded tobacco? (Options provided)

How often do you purchase unbranded tobacco?

Well, can you provide an estimate of how often you purchase unbranded tobacco?

Since you turned 18, how long have you been buying unbranded tobacco?

Well, can you provide an estimate of how long you have been buying unbranded tobacco?

From which outlets do you usually buy your unbranded tobacco?

How many grams of unbranded tobacco do you purchase for the average purchase?

What format or formats do you usually purchase unbranded tobacco in?

What is the minimum price that you have paid for loose unbranded tobacco in bags?

What is the average price that you have paid for loose unbranded tobacco in bags?

What is the maximum price that you have paid for loose unbranded tobacco in bags?

What is the minimum price that you have paid for unbranded cigarettes in cartons?

What is the average price that you have paid for unbranded cigarettes in cartons?

What is the maximum price that you have paid for unbranded cigarettes in cartons?

What is the minimum price that you have paid for unbranded cigarettes in packs?

What is the average price that you have paid for unbranded cigarettes in packs?

What is the maximum price that you have paid for unbranded cigarettes in packs?

How much would you say that you smoke per day of unbranded tobacco?

per day of unbranded tobacco?

The most recent time you purchased unbranded tobacco what format or formats was it?

How much loose unbranded tobacco did you buy? (In grams)

How much did it cost in total?

How long ago was your most recent purchase of loose unbranded tobacco?

Well, can you provide an estimate of when your most recent purchase of loose unbranded tobacco was?

How many cartons of unbranded cigarettes did you buy?

How much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in cartons?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in cartons was?

How many packs of unbranded cigarettes did you buy?

How much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in packs?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in packs was?

How do you usually consume unbranded tobacco?

How many suppliers have you ever purchased unbranded tobacco from, since you turned 18?

Do you find unbranded tobacco easier or harder to obtain than a year ago or has there been no change?

If you cannot get unbranded tobacco do you not smoke or do you purchase duty paid tobacco products?

Why do you smoke unbranded tobacco?

Do you know the country of origin of the unbranded tobacco that you purchase?

Where does it usually come from?

Contraband cigarettes are legitimate brands of cigarettes purchased in shops without duty paid.

Are you aware that contraband cigarettes can be purchased?

How did you become aware of the availability of contraband cigarettes?

Since you turned 18, have you ever purchased contraband cigarettes?

#### A2.7 Roy Morgan Research questionnaire

Do you purchase contraband cigarettes for your own use currently?

Have you purchased contraband cigarettes in the last 12 months?

If you think you might have purchased contraband cigarettes, which brand(s) was it? Any others?

What would you do if contraband product were not available where you usually purchase it from? (Options provided)

How would you rate the overall quality of the contraband product(s) you purchase compared to the non-contraband version(s)?

Counterfeit cigarettes are packs of cigarettes labelled with a brand name that are not really that particular brand. They have been smuggled into the country without duty paid.

Are you aware that counterfeit cigarettes can be purchased?

How did you become aware of the availability of counterfeit cigarettes?

Since you turned 18 have you ever purchased counterfeit cigarettes?

Do you purchase counterfeit cigarettes for your own use currently?

Have you purchased counterfeit cigarettes in the last 12 months?

If you think you might have purchased counterfeit cigarettes, which brand(s) was it? Any others?

What made you believe the cigarettes were counterfeit?

What would you do if counterfeit product were not available where you usually purchase it from?

How would you rate the overall quality of the counterfeit product(s) you purchase compared to the non-counterfeit version(s)?

You have indicated that you have bought counterfeit product. What does the availability of the brand(s) in counterfeit form make you feel? (Options provided)

You indicated that you would feel more negative towards the brand knowing that it is available in counterfeit, can you please explain why you feel this way.

What would you do if counterfeit product were not available where you usually purchase it from? (Options provided)

How would you rate the overall quality of the counterfeit product you purchase compared to the real legitimate brand?

The most recent time you purchased counterfeit cigarettes, did you buy them by weight, by packs, or by cartons?

When you bought the counterfeit cigarettes by weight, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of counterfeit cigarettes by pack?

When you bought the counterfeit cigarettes/carton, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of counterfeit cigarettes by carton?

Do you find counterfeit cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke counterfeit cigarettes?

The most recent time you purchased contraband cigarettes, did you buy them by weight, by packs, or by cartons?

When you bought the contraband cigarettes by weight, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by weight?

When you bought the contraband cigarettes by pack, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by pack?

When you bought the contraband cigarettes by carton, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by carton?

Do you find contraband cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke contraband cigarettes?

It is sometimes possible to purchase cigarettes for less than the normal retail price. The price of these 'cheap cigarettes' is several dollars or more below the normal retail price, (for example, a price of AUD10 or less for a pack of 25, or AUD8 or less for a pack of 20).

#### A2.7 Roy Morgan Research questionnaire

Before today, were you aware of packs of cheap cigarettes that can be purchased for less than the normal retail price?

Since you turned 18 have you ever purchased cheap cigarettes for your own use?

Do you purchase cheap cigarettes for your own use currently?

Have you purchased cheap cigarettes for your own use in the last 12 months?

How did you become aware of the availability of cheap cigarettes?

If you think you might have purchased cheap cigarettes, what brand(s) were they?

What would you do if cheap cigarettes were not available where you usually purchase them from?

What did you do if cheap cigarettes were not available where you usually purchased them from?

How would you rate the overall quality of the cheap cigarettes that you have purchase(d) compared to the full price product(s)?

The most recent time you purchased cheap cigarettes, did you buy them by packs, or by cartons, or both?

When you bought the cheap cigarettes by pack, how many packs did you buy?

How much did it cost in total?

How long ago was your most recent purchase of cheap cigarettes by pack?

When you bought the cheap cigarettes by carton, how many cartons did you buy?

How much did it cost in total?

How long ago was your most recent purchase of cheap cigarettes by carton?

From what outlets do/did you usually buy cheap cigarettes?

Do you find cheap cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke cheap cigarettes?

Why did you stop smoking cheap cigarettes?

You have indicated that you have purchased either contraband or counterfeit cigarettes in the past. Sometimes people refer to contraband or counterfeit cigarettes as 'cheap' cigarettes. These people may or may not know that the 'cheap' cigarettes are contraband or counterfeit.

Whilst you are familiar with the terms contraband and/or counterfeit, do you also know contraband or counterfeit cigarettes as 'cheap' cigarettes?

Do you purchase rolling papers, tubes, or both for the purpose of smoking loose tobacco?

When you purchase rolling papers for smoking loose tobacco, what is the once pack size of rolling papers you usually purchase?

What percentage of that pack of rolling papers do you use before the pack is damaged, lost or discarded? (Options provided)

When you purchase tubes for smoking loose tobacco, what is the one pack size of tubes you usually purchase?

What percentage of that pack of tubes do you use before the pack is damaged, lost or discarded? (Options provided)

Have you travelled outside of Australia in the last 6 months?

Did you bring back any manufactured cigarettes or any other tobacco products to bring back to Australia on any of your trips to other countries in the past 6 months?

How many trips in the last 6 months did you make where you purchased manufactured cigarettes or any other tobacco products to bring back to Australia?

For each type of product listed below, indicate how much you brought back into Australia on average per trip? (Options provided)

In which countries did you buy manufactured cigarettes/any other tobacco products?

Did you buy duty free manufactured cigarettes or any tobacco products at the airport or port on your return to Australia after any of your trips to other countries in the last 6 months?

How many trips did you make in the last 6 months where you purchased duty free manufactured cigarettes or any other tobacco products on your return to Australia?

For each type of product, indicate how much you purchased in duty free on average per trip.

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