How Branded Packaging Contributes to the Delivery of Tobacco Control Objectives

Submission to the Chantler Review by UK Packaging Manufacturers in conjunction with the British Brands Group

January 2014
Packaging’s Contribution to Health Objectives

1. Minimise sales through illegitimate distribution /retail channels
   – Restrict availability to young people / enforcement of ban on sales to Under18s
   – Support duty-paid pricing levels (less affordable)

2. Minimise market share of counterfeit product & bootleg brands (“Illicit whites”)
   – Delivery of health regulations relating to product & packaging

3. Support premium pricing (less affordable)
   – High prices proven to reduce consumption / promote smoking cessation
Supporting the Ban of Sales to Under-18s

- Under-18 sale ban relies on legitimate retail channel
- U18 ban is recognised as making an important contribution to the fall in youth smoking
- Ban could be further strengthened through measures to tackle proxy purchasing
- Illicit trade provides an alternative distribution channel to minors with no age-related safeguards

Under-18 ban 'cut teenage smoking rates'

BBC News, 18 August 2010

Teenage smoking rates in England have dropped since the legal age for buying cigarettes rose from 16 to 18, research by University College London suggests.

Researchers surveyed more than 1,000 teenagers aged 16 and 17 before and after the age rise in October 2007.

Smoking rates in this age group dropped significantly, from 24% before the law change to about 17% after it. Smoking rates in over 18s remained unchanged.

Cancer Research UK said it showed tobacco policy could make a difference.

Figure 2.2

Prevalence of regular cigarette smoking, by sex: 1982-2012

All pupils

Smoking, drinking and drug use among young people in England in 2012 - Health and Social Care Information Centre
Delivering Health Regulation (Product & Packaging)

Legal Product
Packaging V
Ingredients V

Counterfeit
Packaging V
Ingredients X

Illicit Brand* (PP compliant)
Packaging V
Ingredients X

Illicit Brand* (non-compliant)
Packaging X
Ingredients X

* Australia experience: “Spoonbill” is the first illicit brand to appear in plain packaging format. “Manchester” is the biggest illicit brand in the market with an estimated share of 1.3% (KPMG)

European Union Directive on the Manufacture, presentation and sale of tobacco and related products (draft December 2013)

Article 3 Maximum tar, nicotine, carbon monoxide and other yields

The yield of cigarettes placed on the market or manufactured in the Member States shall not be greater than: (a) 10 mg per cigarette for tar, (b) 1 mg for nicotine, (c) 10 mg for carbon monoxide.

Article 6 Regulation of ingredients

1. Member States shall prohibit the placing on the market of tobacco products with a characterising flavour.

Article 9 Combined health warnings for tobacco for smoking

1. Each unit packet and any outside packaging of tobacco for smoking shall carry combined health warnings. The combined health warnings shall: (a) be comprised of a text warning listed … and a corresponding colour photograph; (b) include smoking cessation information; (c) cover 65% of the external area of both the front and back surface of the unit packet and any outside packaging;

'Toxic' risk of counterfeit cigarettes

BBC News, 30 January 2012

Counterfeit cigarettes being sold in Sussex contain abnormally high levels of cancer-causing chemicals, a BBC investigation has revealed.
The tests follow a BBC investigation in October into the illegal cigarette trade in Hastings and St Leonards. One brand had eight times as much lead as normal cigarettes. All contained higher levels of cadmium, which can severely damage the lungs and is linked with kidney disease. Robert West, the director of tobacco studies at University College London, said fake cigarettes contained "high levels of toxic heavy metals".

Fake cigarettes 'more hazardous'

BBC News, 15 December 2004

The growing number of fake cigarettes coming into the UK contain high levels of hazardous substances, the government has warned in a new campaign.
The fakes are not only illegal but pose an extra health hazard to smokers buying them, warn ministers. Criminal gangs have the cigarettes made mainly in Eastern Europe and China to look like well-known brands. More than a million fakes - containing high levels of substances like lead and arsenic - are seized daily in the UK. Independent research carried out at St Andrews University showed fake cigarettes being sold in the UK contained five times as much cadmium as genuine cigarettes. Cadmium can severely damage the lungs and is linked with kidney disease. Further research by an independent laboratory showed counterfeit cigarettes seized by Customs also contained 160% more tar, 80% more nicotine and 133% more carbon monoxide than genuine cigarettes.

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Reducing Affordability

• Broad agreement that **high pricing provides an effective deterrent to tobacco consumption** as well as an incentive for existing smokers to give up

  “Raising the price of cigarettes [through taxation] is an effective way of encouraging smokers who are thinking of quitting to make that step. High prices can also deter young people from smoking. - Deborah Arnott, Chief Executive of ASH, 13 March 2013

Tobacco Packaging Regulation – an international assessment of the intended and unintended consequences - Deloitte, May 2011 (available from the BAT website):

  “We undertook a panel study of 27 countries over 14 years (1996 – 2009) ... allowing for one of the most comprehensive investigations to date of this issue.

  Our analysis concludes that there is no statistically significant direct relationship between [packaging] regulation and licit tobacco consumption.

  Our analysis did find a statistically direct relationship between increased price and reduced licit consumption. The model estimated that the price elasticity is around -0.25, which is similar to other studies [showing] elasticity in the range -0.1 to -0.5.”

• Efforts to push the boundaries of affordability have to be weighed against consumers’ **propensity for trading down** to cheaper brands and illicit product in response and the increasing financial incentives for smugglers and counterfeiters

• **Branded packaging supports the sustainability of high prices and differentiation between legitimate and illicit product**
Packaging defence against Illicit Trade

• **Pack complexity** and use of **specialist manufacturing processes** presents technical & economic barriers to counterfeiting

• **Variety** of designs limits economies of scale

• **Concentrated & controlled supply chain** limits ‘leakage’ of materials and technologies
  – “Know your customer” procedures
  – Secure disposal of waste/surplus/obsolete packaging
  – Traceability systems

• **Branding creates consumer preference for ‘genuine’ product** over illicit/counterfeit
Packaging Complexity

The carton
- Different pack shapes /constructions
- Metallic and special colour inks (up to 10 col)
- Embossing
- Optional metallic laminate base board or foil stamping

Other print/packaging elements:
- Laminated / printed inner frame
- Printed / embossed inner liner
- Printed overwrap film
- Printed tear tape
- Printed multi-pack overwrap paper
- Printed / foiled cigarette tipping paper
Specialist /Capital-intensive Technologies

- **Special paperboard grades** developed to give high quality, ‘engineered’ product, low weight: stiffness and high speed packing

- **Reel-to-reel lamination** for laminated base materials

- **Specially formulated inks** – special colours & effects, low retained solvents

- **Reel-fed gravure printing** for metallic colours & special inks (investment >£2m per machine)
  - Cartons, frame board, overwrap film, paper overwrap, tear tape, tipping paper
  - Only a hand full of gravure printing facilities in UK

- **Gravure print cylinders** – one for each colour on each printed article; £ several million investment to supply UK tobacco market

- **Rotary tooling for embossing, cutting & creasing** requiring high investment in each pack construction (£several million in total)

- **High precision** finishing processes for materials to withstand packing speeds >1000 units per minute
Plain Packaging / Standardised Design

- **Pack simplicity**
  - Standard 20s flip top box (FTB) shape/construction
  - Plain white board
  - Four colour print
  - No embossing, foil or laminate
  - One-colour inner frame
  - One-colour/pattern inner liner
  - One-design tipping paper
  - Plain, un-printed tear tape
  - Plain, un-printed overwrap

- **Published design and specification**

- **Widely available technology**
  - Commodity board, paper & film from merchants
  - Sheet-fed offset printing (*thousands of machines worldwide*)
  - Any variant printable with standard 5 colour ink set (CMYK, Green)
  - *Five printing plates costing £20 each could print 20 - 30 brand variants, 1 extra plate for another 20 – 30 variants*
  - Sheet-fed cut & creasing (> hundred machines in UK alone)
  - 20s FTB packing machine (*available on the 2nd hand market*)
Design Variety

- 285 cigarette skus (> 2000 other tobacco products)
- 23 cigarette pack shapes / constructions

Economies of scale

Barrier to illicit trade

- One main pack shape
- One colour pallet / set of inks
- Common printing plates across brands and brand variants

Easy for illicit trade
Pack Design Changes

- Lambert & Butler – 4 major changes in 5 years (moving ‘target’ for counterfeiters)

- Government-regulated, fixed design
Branding – Differentiating Legitimate Product

- Helps consumer to distinguish between different products, including between ‘genuine’ and counterfeit
- Provides a basis of trust in the nature, quality & origin of legitimate product
- Facilitates competition on non-price factors / premiumisation
- For tobacco, branding = packaging (advertising/promotion prohibited)

Illicit | Value  | Mid Price | Sub-Prem | Premium  | Total
---|---|---|---|---|---
Selling Price | £3.50 | £6.35 | £6.85 | £7.07 | £7.72
Market Share\(^{(1)}\) | 10% | 35% | 22% | 14% | 19%
Annual Spend v. Value (£Bn) | 0.3 | 0.3 | 0.7 | 1.2 | 1.2
Annual Spend v. Illicit (£Bn) | 2.5 | 1.8 | 1.2 | 2.0 | 7.6Bn

\(^{(1)}\) Illicit trade share from HMRC, other data from Nielson Market Track
Branding – Making Smoking Less Affordable

Current situation

- Despite counterfeit and smuggled cigarettes being widely available, most consumers are willing to pay a significant premium to secure genuine product plus a further premium for higher priced brands

- A measure of the value of differentiation created by branding: £7.6Bn pa (Biggest beneficiary: HM Treasury)

Consequence of Eliminating Branding

- Elimination of cigarette branding will inevitably lead to commoditisation and price-led competition

- 80% tax and duty on legally marketed product provides illicit traders with an overwhelming cost advantage and profit opportunity

- Increased threat from bootleg brands (“illicit whites”) and smuggled product from lower taxed countries unaffected by branding restrictions
Impact of Plain Packaging

- **Removal of technical barriers to copying**
  - Simplified construction and print design
  - Standard, readily-available technologies

- **Huge economies of scale for counterfeiters**
  - Single pack design

- **Ease of deceiving consumers undermines trust in genuine merchandise**

- **Collapse in value** placed on legally marketed goods due to commoditisation of product category

\[ \text{Conditions highly favourable to illicit traders with overwhelming cost advantage. Minimal defence against counterfeit product swamping the market} \]

- **Higher tobacco consumption** due to increased affordability
  - Trading down, commoditisation and inability to sustain price differential between legitimate and illicit

- **Greater availability to young people** through illicit trade channels

- **Increased harm** from unregulated products
Further Information

Special Features & Processes used on Tobacco Packaging
High Grade Carton Board

• Qualified tobacco packaging raw materials are designed to-
  – Deliver complex design concepts such as round cornering, embossing, bevel edging & foil laminating.
  – Require very specific shade control.
  – Be able to withstand the demanding gravure print process.
  – Deliver a unique pack feel.

• To be a supplier, as well as being able to achieve the above-
  – Carton Board Mills must produce their materials under very strict regulations.
  – Control their products distribution to legitimate supply streams only.

• Remove the complex element of a pack risks:
  – Broadening the range of raw materials that can be used.
  – Diluting the supply control, aimed at reducing counterfeiting.
  – Hampering the investigative process aimed at countering counterfeiting.

• Remove pack complexity and a broader range of less regulated and more widely available packaging materials will be suitable for the tobacco packaging process. Align this with less demanding print characteristics and you give counterfeiters a gift!
Laminated Carton Board

• **Pack complexity**
  – Rolled aluminium or metallised polyester laminated to carton board
  – Provides metallic or holographic finish to base board before printing

• **Specialised technology**
  – Only a handful of reel-fed laminators throughout Europe (two in the UK)
  – Machines cost £2.5m+ each

• **Uses**
  – Two major UK brands and many other pack variants
Gravure Carton Printing

- **Pack complexity**
  - High lustre metallic inks for text and solid areas
  - Shade consistency on solid colours through large volumes
  - Precision manufacture for packs assembled at up to 1000 packs/min

- **Specialised technology**
  - High speed inline process with printing up to 12 colours, special finishes, cut, creased, embossed and palletised
  - Only two Gravure packaging printers in the UK compared with over 150 offset printers
  - Average machine installation £4-8 million
  - Significant investment in environmental & safety controls
  - All inks/processes tested for compliance with restricted ingredients
  - £millions investment in printing cylinders and rotary cutting & creasing dies

- **Uses**
  - 90%+ cigarette brands on the market
Special Carton Finishes

• **Pack complexity**
  – Embossing to accentuate text and logos
  – Foil stamping for more reflective metallics
  – High gloss varnishes
  – All providing a higher quality image and feel

• **Specialised technology**
  – In-line embossing on gravure carton lines
  – Rotary embossing tooling £25,000 per design
    – only handful of suppliers in Europe
  – UV-gravure for high gloss varnish
  – Foil stamping – a specialist capability within the print/packaging industry

• **Uses**
  – Majority of packs on the market are embossed
  – Other special finishes used on specific brands and brand variants
Printed / Laminated Inner Frame Board

• **Pack complexity**
  – High lustre metallic inks or brand colours for solid areas
  – Shade consistency for solid colours or to match the pack
  – Precision manufacture for packs assembled at up to 1000 packs/m

• **Specialised technology**
  – Capital-intensive gravure print or reel-to-reel lamination technology
  – Only one specialist printer and one laminator in the UK
  – Significant investment in environmental & safety controls
  – All inks/processes tested for compliance with restricted ingredients

• **Uses**
  – All packs have Inner frame as a structural element; a large majority have printed / laminated inner frame to enhance or continue the design
Printed Overwrap Film

- **Pack complexity**
  - Additional printing process
  - Different grades of film from shrinkable, non-shrinkable, opaque white and metallised films
  - Graphics often match those of the pack, requiring precise positioning & colour matching

- **Specialised technology**
  - Special film treatment to enhance printability
  - Expert reproduction process to replicate pack identity
  - High skill printing to tight register/positional tolerance on lightweight, shrinkable substrate
  - High opacity inks to cover carton graphics underneath, eg barcode
  - Web-fed gravure or flexo equipment (typical investment £1.5 m– £3.0m)

- **Uses**
  - Price promotions, communicating product & design changes
Printed Tear Tape

• **Pack complexity**
  – From 1.6mm to 30mm width – applied at point of pack manufacture
  – Sophisticated printing process – carries communication and security technologies
  – Tape2Pack technology enables accurate positioning on pack

• **Specialised technology**
  – Special MOPP orientated film – strength in direction of pack opening
  – Up to 10 station gravure printing on lightweight, shrinkable substrate
  – Specialised self-adhesive coating

• **Uses**
  – Functionality – easy opening & tamper evidence
  – Security – brand protection and on pack authentication
  – Communication – product, legislative, & design changes
Printed & Foiled Cigarette Tipping Paper

- Although not technically a ‘packaging’ item, tipping paper recommended for similar restrictions under plain packaging proposals

- **Product complexity**
  - Brand-specific multicolour graphics applied by gravure printing and hot foil stamping

- **Specialised technology**
  - Facilities fully dedicated to tobacco sector
  - Extreme care required handling and processing light-weight papers
  - Specialised gravure, reel-to-reel printing technology
  - Reel-fed foil stamping equipment built specially for tipping paper application
  - Gas chromatography control of print residues to avoid product contamination

- **Uses**
  - All cigarettes and filtered cigars
Novel Carton Constructions

- **Pack complexity**
  - Round corner, bevel edge, slims, ‘zippo’, side-slide, ‘glide-tech’

- **Specialised technology**
  - Heavily invested design concepts capable of delivering novelty for consumers combined with high volume, automated manufacture
  - Special, high cost cutting & creasing tools
  - Bespoke packing machines (>£5m each)
  - Months of trials and refinement

- **Applications**
  - Many leading brands and variants
Other Packaging Types

• **Pack complexity**
  – Composite cans, paper/plastic pouches, decorated tins, rigid boxes, shell & slide packs

• **Specialised technology matched to pack dimensions**
  – ‘Evo-Can’ closure system for composite cans
  – In-house built machinery for cans and rigid boxes

• **Applications**
  – Cigars
  – Fine cut, loose tobacco
  – Roll your own
  – Blended products
**API Group plc** is a producer of foils, films and laminated materials used to enhance and differentiate the packaging of premium consumer goods. A UK-based, AIM listed company with sales of £114m pa, API employs 350 people at locations in North West England and Scotland and a further 200 elsewhere in Europe and the US. Tobacco packaging has historically been an important market sector for the company which has supplied the gold foil material for the famous Benson & Hedges pack for more than 40 years.  

www.apigroup.com  enquiries@apigroup.com

**Chesapeake** protects and promotes the world’s great brands as a leading international supplier of consumer packaging. The company is one of Europe’s leading suppliers of folding cartons, leaflets and labels, as well as other specialist packaging. Chesapeake has over 35 locations in Asia, Europe and the United States and employs approximately 4,800 people worldwide. Chesapeake has 2 sites in the UK at Bradford and Portsmouth with over 100 employees, dedicated to the supply of various formats of printed packaging to the tobacco market.  

www.chesapeakecorp.com  marketing@chesapeakecorp.com

**Weidenhammer Packaging Group** Founded in 1955 in Hockenheim, south of Frankfurt, this family owned and managed company has become the leading company producing composite cans (e.g. Cadbury Drinking Chocolate, Pringles) in Europe. With 12 production sites and 1000 employees producing sales of GBP 240 million in 2012 it is also the leader in R&D and packaging development within this product sector. Weidenhammer supplies the leading tobacco companies on a Pan-European basis, producing sophisticated cylindrical composite cans for Fine Cut loose tobacco products. A purpose-built £12.5 million advanced manufacturing plant at Bradford, West Yorkshire was officially opened in November 2011 and now employs over 85 people producing high specification composite cans for the tobacco and other industries with plans to expand production and employment in the near future.  

www.weidenhammer.de  ralf.weidenhammer@weidenhammer.de

**Essentra Packaging** is part of the Protection & Securing Solutions division of Essentra plc and a leading global provider of packaging and securing solutions to a diversified blue-chip customer base across the healthcare, consumer and specialist packaging sectors. The division focuses on delivering value-adding innovation, quality and service through the provision of a wide range of cartons, tapes, leaflets, foils, labels and brand protection security solutions. Customers in over 100 countries are served from facilities in ten countries, with seven sites in the UK employing c. 1,000 people. Headquartered in the UK, Essentra plc is a FTSE 250 company and a leading international supplier of speciality plastic, fibre, foam and packaging products from locations in 32 countries, with c. 5,500 employees worldwide.  

www.essentrapackaging.com
Parkside Flexibles Group are an innovative, flexographic printing and specialised laminating company. We have a growing business with a global presence. Our manufacturing sites are located in both the UK and Asia with sales and marketing offices situated throughout Europe, Russia, China and Singapore. Our UK operation is organised into two divisions, one of which is dedicated to the supply of flexible packaging into the tobacco industry, with whom we have a long standing association. Turning over £30 million GBP as a group our UK manufacturing is located in Normanton, West Yorkshire where we employ over 120 people from the local area. New product development is delivered from our UK centre of excellence and is supported by continued investment. www.parksidetobacco.com paula.birch@parksidetobacco.com

Iggesund Paperboard, part of the Swedish forest Industry group Holmen, is a specialist supplier of high quality paperboards (produced at its production facilities in Sweden and the UK) to targeted market segments, with a focus on innovation, efficiency and excellent service. We acquired our site in Workington Cumbria in 1988 and have since invested in excess of £100 million in the plant, creating a market leading production facility with an output capacity of 200’000 tonne per annum, half of which is supplied into export markets. The site currently provides employment for circa 400 people and our investment continues. 2013 will see the completion of a 120 million investment in a new bio mass boiler, cementing our commitment to our UK facility. www.iggesund.com matthew.campbell@iggesund.com

Benkert Group have operated a sophisticated manufacturing facility in Central Scotland dedicated to the production of complex multi-colour cigarette tipping paper for more than 40 years. The Group have developed a range of gravure printing and hot stamping foiling solutions to produce complex and unique designs incorporating anti-counterfeiting features required by the tobacco industry. An inward investment exceeding £20m has been made. The company employs more than 150 people locally and is a significant exporter. www.benkert-group.com info.uk@benkert-group.com

Promopack Digital Studios are a leading reprographics and platemaking business serving the European flexible packaging market. With head offices are located in Derbyshire, and an additional Studio in Leeds, we employ over 30 people. Promopack have been supplying the industry since 1988 with innovative and exciting print solutions. All major print processes are managed at Promopack but our speciality lies in the technical packaging for tobacco. www.promopack.co.uk mikebaxter@promopack.co.uk

British Brands Group is a membership organisation that champions the role of brands in the UK, promoting their positive contribution to consumers, the economy and society. Members include leading brand manufacturers of all sizes and across a range of sectors. It is the UK arm of AIM (the European Brands Association) and part of an integral network of similar national organisations around the world. www.britishbrandsgroup.org.uk jn@britishbrandsgroup.org.uk