UK Vaping Industry Association (UKVIA) Submission to the Department of Health and Social Care's (DHSC) call for evidence on the Tobacco & Vapes Bill

1. Flavours & Ingredients:

Flavours play a critical role in helping adult smokers switch successfully from combustible tobacco to less harmful alternatives. Evidence across UKVIA membership shows that most flavourings used in e-liquids are food-grade ingredients already regulated under existing EU and UK consumer-safety frameworks. These ingredients are widely used in food and pharmaceutical products and are subject to rigorous safety assessments.

Concerns around youth appeal are largely driven by packaging and marketing rather than flavour chemistry. Flavour compounds alone do not determine appeal; it is the overall presentation, descriptors and branding that shape perception. Clinical and cohort studies show that access to nontobacco flavours supports adult switching and sustained abstinence: the 2024 Cochrane Review of e-cigarettes for smoking cessation and newer work on flavoured nicotine products find higher quit and reduction rates among adults using flavoured products compared with tobacco flavoured or unflavoured options. Large consumer-preference datasets – including surveys of 69,233 adult vapers (Farsalinos et al., 2023) and 20,836 adult vapers (Russell et al., 2018), how that most established adult vapers predominantly choose fruit, dessert, menthol or mint flavours and typically rotate several flavours over time, reporting that variety helps them avoid relapse to cigarettes. Natural experiment studies of flavour bans in jurisdictions such as San Francisco and several US states, as well as post-ban survey data from the Netherlands, indicate that broad flavour prohibitions often shift users toward cigarettes, illicit or home mixed products, or alternative nicotine devices rather than driving quitting. Youth surveys, by contrast, commonly report curiosity, peer use and discreet device design as the main reasons for experimentation, with flavours one factor among several. This is supported by major datasets such as the U.S. National Youth Tobacco Survey (NYTS) analysed by Tsai et al. (2016), which found that curiosity was the leading reason for youth experimentation, followed by peer influence. Kong et al. (2015) similarly reported that social factors and ease of concealment were primary drivers among adolescents and young adults, with flavour ranking well below these influences. These findings suggest that regulation should focus on marketing, access and enforcement rather than flavour chemistry itself.

Sales data provided by UKVIA members shows that adult consumers overwhelmingly choose non-tobacco flavours for vapes. Across the submissions received, the vast majority of businesses report that 76–100% of their e-liquid sales are flavoured products, with several retailers recording over 90%. One national retailer analysed 160,000 orders and found that only 3% of bottles and pre-filled pods sold were tobacco-flavoured. Another operator reported that, if current trends continue, flavoured products would account for 99% of sales by 2031.

UKVIA members consistently state that flavour choice is essential for supporting adult smokers to switch and stay smoke-free. Retailers working directly with local Stop Smoking Services confirm that adults are more successful in quitting when using flavours that do not remind them of smoking. Several businesses note long-term sales data showing a steady decline in tobacco and menthol liquid sales since 2020, with even older adult vapers steadily moving towards non-tobacco flavours. Every respondent said that restricting flavours would significantly impact adult customers, and all pointed to the same root causes of youth uptake: peer influence and social media, rather than legitimate vape shop products. Members were also clear that colour has no bearing on youth appeal.

Most respondents are already sourcing products with manufacturer-provided emissions, toxicology, and heavy-metals testing data, and several conduct emissions testing themselves. Many also emphasise that a robust licensing scheme for specialist vape retailers would better support enforcement, improve standards, and prevent the illicit market from expanding. Independent research mirrors these findings, with studies consistently showing that flavour choice increases adult quit success. Public sentiment aligns with this: the Our Vape Advocacy petition, signed by over 50,000 adults, demonstrates strong support for maintaining flavour variety as part of a harm-reduction approach.

Regulating flavour compounds themselves would be technically complex and risk unintended consequences. Defining what constitutes a “flavour” is inherently subjective. Many tobacco flavoured products contain trace notes of vanilla or caramel, which also occur naturally in tobacco. Belgium’s experience with flavour restrictions highlights the difficulty and inconsistency of defining and enforcing such rules. Several flavour compounds are also found in approved Nicotine Replacement Therapy (NRT) products, underscoring that flavourings are already used across recognised harm reduction tools. The comparison with NRTs shows that flavours can support quitting. NRTs offer limited flavour variety and are less effective than vaping. The 2024 Cochrane Review found that vapes are twice as effective at helping people quit, suggesting that flavour choice is an important factor in switching success. Evidence from multiple jurisdictions shows that when adult access to flavours is removed, smoking rates often rise, with users turning back to cigarettes, illicit products, or home mixing rather than quitting. UKVIA therefore emphasises that regulation should recognise the role of flavours in adult cessation without applying pharmaceutical style rules intended for medicines.

UKVIA believes DHSC to focus on proportionate oversight rather than chemical regulation of flavours. Emphasis should be placed on marketing descriptors, packaging, and labelling that clearly target adults, while discouraging branding or imagery that appeals to youth. Colour restrictions should likewise be evidence-based and proportionate. Colour is a standard feature of adult consumer marketing, permitted in sectors such as alcohol. The issue lies not with colour itself but with youth-oriented design.

On heavy metals, published research consistently shows that risks arise primarily from device materials rather than e-liquid ingredients. Multiple analytical studies demonstrate that metal levels in e cigarette liquids, aerosols, and nicotine pouches are extremely low - often below detection limits and far beneath health agency thresholds for food or drinking water. For example, Halstead et al. (2020) found that metals such as lead, cadmium and chromium were frequently not detectable at all, and when present, existed at concentrations unlikely to

pose a health risk. Gray et al. (2019) reported that metal levels in real world vapour products were thousands of times lower than harmful thresholds and commonly below analytical detection limits. Back et al. (2023) found that nicotine pouches contained metal levels comparable to medically approved nicotine gums. Critically, where metals were detected, studies such as Olmedo et al. (2018) identified the source as device hardware-coils, solder and heating components-rather than the e-liquid itself. These findings align with MHRA emissions data, which show that vapour metal levels sit far below tolerable daily intakes set by regulators such as EFSA and the FDA, often in the nanogram-to-low microgram range per day. By contrast, everyday dietary exposure to metals from vegetables, grains and drinking water is substantially higher. Poorly manufactured or damaged devices can release more metals, especially when coils overheat or degrade, underscoring that the issue is manufacturing quality, not the product category. Testing should therefore remain focused on device based emissions rather than imposing unnecessary requirements on e-liquids. Testing should therefore remain device-based and not be extended unnecessarily to e-liquids.

Nicotine & Delivery Mechanisms:

Vaping products deliver nicotine more slowly and less efficiently than combustible cigarettes, a factor which typically reduces dependence potential. For example, a pharmacokinetic study found that even a new-generation e-cigarette using an 18 mg/ml liquid delivered only around one-third to one-fourth of the nicotine in the bloodstream compared with a cigarette after 5 minutes of use. This suggests that the current 20 mg/ml nicotine cap in the UK and EU may already be conservative in terms of delivery, but the evidence also indicates that for heavier smokers attempting to switch, particularly if they are using less efficient open-system devices, the cap may be a limiting factor in achieving satisfying nicotine delivery.

Many of our members believe the current cap remains proportionate for the bulk of adult users, particularly casual or moderate smokers switching to vaping. Others, however, argue that greater flexibility above 20 mg/ml could support heavier smokers who find that lower strengths or less efficient devices fail to satisfy cravings, thereby undermining switching success. UKVIA members say that some adult consumers are reverting to cigarettes or dual use when they feel their vape setup is inadequate in nicotine delivery.

Further reducing nicotine limits also carries evident risks. Both historical consultation responses and submissions by UKVIA point to a likely increase in illicit-market activity if legitimate regulated products cannot meet adult smokers' needs. The meeting group emphasised that inadequate nicotine delivery may prompt users to consume larger volumes of e-liquid or to switch back to combustible tobacco, thereby undermining harm-reduction outcomes. It also may drive adult smokers toward unregulated, higher-strength products with attendant safety and enforcement issues.

In terms of delivery mechanisms, device design and user behaviour are central. Studies show that open-system refillable at higher power deliver nicotine more effectively than low-power cig-a-like devices. Some data indicates that modern high-efficiency systems can approach cigarette-equivalence in nicotine absorption when used ad libitum, whereas first-generation (cigalike), devices cannot. Regulatory focus on liquid strength without accounting for device efficiency may therefore be misplaced: effective delivery depends not just on concentration but on aerosol generation, power settings, inhalation patterns and nicotine salt

formulations. Any future review of the nicotine cap should recognise that different devices meet the needs of different adult smoker profiles, and that flexibility in both design and formulation is essential for successful switching and sustained abstinence. Current 20 mg/ml is needed to support heavy and longtime smokers who require stronger initial nicotine delivery to switch successfully.

UKVIA members are clear that innovation is vital. As technology evolves, future vape systems will be able to deliver nicotine more effectively and consistently than today's devices, supporting adult smokers to switch and stay smoke-free. Regulation should therefore enable and encourage continued innovation in device design rather than constrain it.

Recent industry trends also show that overall device efficiency has improved significantly. Many retailers now report a shift away from higher nicotine strengths as products have become more effective at delivering nicotine. Data indicates that sales of 10 mg/ml and even 5 mg/ml products are increasingly outstripping 18–20 mg/ml variants, reflecting both technological progress and reduced consumer dependence on higher strengths. This suggests that as coil design and power efficiency have advanced - particularly with pod systems using 0.8 ohm coils - the market is naturally moving toward lower nicotine concentrations. As a result, the industry has contributed to a gradual reduction in average nicotine intake among adult consumers, demonstrating the success of innovation in achieving harm reduction without the need for regulatory intervention.

2. Device Design & Components:

Device design and performance are central to the effectiveness of vaping as a harm-reduction tool. Differences in power output, airflow, coil efficiency, and tank size can substantially influence nicotine delivery, satisfaction, and switching success among adult smokers. UKVIA evidence shows that modern, refillable open-system devices deliver nicotine more consistently and efficiently than earlier disposable or cig-a-like products, resulting in higher quit-success rates and reduced relapse to combustible tobacco. Regulation should therefore recognise that design is not a cosmetic matter but a technical determinant of public-health outcomes.

Discussions within the UKVIA working group highlighted that form factor alone does not determine youth appeal. Adults are more likely to transition away from smoking when devices are appealing, convenient, and reliable. Overly restrictive design controls risk undermining this success, making products less practical for adult users without addressing the root causes of under-age uptake. The priority must remain on enforcing the existing age-of-sale law, not constraining legitimate adult design preferences. The forthcoming licensing framework offers an opportunity to reinforce the message that vaping products are intended solely for adult smokers and ex-smokers.

Regulation around device colour should be proportionate and evidence-based. While colour can influence product appeal, there is little evidence that it drives youth uptake. Young people tend to emulate adult behaviour, selecting the same devices adults use rather than being drawn in by colour alone. Restricting colour options such as bright or pastel tones

would not meaningfully deter youth use but could limit adult consumer choice and innovation. Regulation should instead focus on preventing youth-targeted presentation, such as devices featuring cartoon characters, glitter finishes or novelty shapes, while allowing standard adult-market colour palettes.

The wider challenge in youth vaping has stemmed from irresponsible social-media promotion, influencer marketing, and giveaways that normalised vaping among young audiences. These poor advertising practices, rather than product colour, have had the greatest influence on youth awareness and perception. The focus should therefore be on stricter controls of digital advertising and influencer activity to prevent repetition of these mistakes, ensuring that adult choice and responsible marketing can coexist under clear regulation. It is also important to recognise that the rise in youth vaping followed the post-pandemic surge in disposable products, fuelled by irresponsible advertising and social-media promotion rather than device colour or design. The use of young influencers and 'cool factor' branding played a far greater role than aesthetic choices. Policy should therefore prioritise oversight of marketing and digital promotion to address the root causes of youth uptake, while maintaining design flexibility that supports adult smokers in switching.
Existing limits on tank and bottle capacity, set at 2 ml and 10 ml respectively under the TRPR, are increasingly viewed as outdated. These constraints have created unnecessary waste and consumer inconvenience, while providing no measurable safety benefit. Larger-capacity devices, particularly when designed to be child-resistant and tamper-proof, are more environmentally sustainable and less accessible to young people due to higher price points. The UKVIA supports reform of these limits, noting that increased capacity would reduce single-use plastic waste, enhance product longevity, and strengthen responsible-use patterns.

Safety and quality standards should continue to evolve with technology. The association supports mandatory child-resistant features across all refill mechanisms, robust battery-safety requirements, and clear product labelling. However, innovation should not be stifled. Smart features such as puff counters, adjustable wattage, and app-linked age verification can enhance consumer awareness and regulatory compliance. By contrast, gaming or entertainment interfaces that might attract youth should be prohibited.

Device design also has a direct bearing on nicotine delivery. Focusing solely on liquid concentration without considering device performance risks misrepresenting the overall risk profile of vaping. Regulatory approaches should instead evaluate product systems as a whole; device, liquid, and user behaviour combined.

Digital screens are an important feature of modern vape devices, but only ones that serve functional purposes. Screens allow users to view critical information such as wattage level, battery status, coil resistance, and puff count, helping them manage nicotine intake and device performance safely and effectively. These mechanical and digital features enhance the user experience by enabling control and consistency, allowing users to fine-tune wattage or track puff counts that support gradual nicotine reduction. It is essential that regulation recognises these features as harm-reduction tools and not as aesthetic or youth-targeted elements. Devices should be permitted to incorporate practical display screens while avoiding unnecessary flashing lights or child-like visual effects that serve no functional purpose.

In summary, a balanced, evidence-led approach to device regulation, one that supports innovation, ensures high manufacturing standards, and focuses on genuine risk factors, will protect young people while maintaining the effectiveness of vaping as the UK's most successful harm-reduction intervention.

3. Licensing Scheme:

UKVIA strongly supports the creation of a comprehensive national licensing scheme for vape retailers, importers, distributors, and manufacturers. A well-designed scheme would strengthen enforcement, drive up industry standards, and provide sustained funding for Trading Standards, while maintaining adult smokers' access to compliant, affordable products. Licensing must serve as a mechanism for accountability and consumer protection, not as a barrier to legitimate trade.

The UKVIA's working group emphasised that an effective scheme should mirror established models in alcohol and tobacco retailing, combining a premises licence with a personal licence for responsible individuals. This dual structure would ensure both business-level compliance and individual accountability. Revenue from licence fees should be ring-fenced specifically for enforcement activities, such as test purchasing, compliance inspections, and action against illicit imports, to address the current shortfall in local-authority resources. A self-funding model would deliver long-term consistency without requiring additional public expenditure.

The association's proposed framework, published in 2024, sets out proportionate entry requirements for retailers, including VAT registration, staff age-verification training, and proof of compliance with MHRA notification rules. It also proposes escalating penalties, from temporary suspension to permanent revocation, for persistent non-compliance. Extending licensing upstream to importers and distributors is essential to close existing loopholes that allow illegal or unnotified products to reach the market. Licensing data should be integrated with HMRC and border-control systems to enable full traceability from manufacturer to point of sale.

UKVIA supports the introduction of meaningful penalties for those who breach licence conditions. In line with the Retail and Distributor Licensing Framework for the Vape Sector (UKVIA, 2024), fines of up to £10,000 should apply for serious or repeated offences, alongside the loss of the right to sell vaping products. This level of financial deterrent would ensure that rogue traders face clear and proportionate consequences while protecting compliant businesses from unfair competition.

While models from alcohol and tobacco regulation provide useful reference points, licensing for vaping products should go beyond this to ensure proactive enforcement. Evidence shows that enforcement in alcohol licensing has often been reactive rather than preventative; the UKVIA model seeks to change this by ensuring Trading Standards teams have the funding and mandate to act proactively against non-compliance. The focus should be on deterrence through meaningful, ring-fenced penalties that fund enforcement activity, while maintaining a proportionate approach to compliant retailers.

The scheme should also clearly define who is required to hold a licence - whether premises, operators, or both - to prevent confusion once implemented. Clarification within legislation will be essential to ensure consistency and fairness in application.

UKVIA proposes that the scheme should not restrict the overall number of stores eligible for a licence. A 'grandfathering' provision should protect existing compliant businesses to prevent negative impacts on jobs, investment, and the local economy. However, licensing should distinguish between legitimate retail environments – such as vape specialists and general convenience stores – and businesses primarily aimed at children, such as sweet or toy shops, which should not be eligible to sell vaping products.

In practice, convenience retailers that already sell tobacco products and vape stores whose turnover is overwhelmingly (around 90%) derived from vaping products are well positioned to operate responsibly within a licensing model. This reflects the existing TRPR carveout for ‘tobacconists’, where a high proportion of turnover determines eligibility and regulatory expectations. Applying a similar principle here would ensure that sales remain in adult oriented environments while excluding retailers whose primary business model is inherently child focused.

This balance would maintain accessibility for adult consumers while removing inappropriate retail settings from the market.

Equally important is proportionality. The licensing process must avoid unnecessary bureaucracy or arbitrary limits on the number of outlets. Adult smokers rely on accessible, trusted retailers to maintain their quit journey. Over-restriction would only drive consumers toward unregulated or online sources, undermining harm-reduction goals. Consultation with industry, public-health experts, and enforcement authorities will be key to ensuring that the scheme achieves both safety and accessibility.

Transparency should also form part of the design. A publicly accessible licence register, featuring QR codes displayed in-store and online, would enable consumers and enforcement officers to verify legitimate operators easily. Linking this register to compliance history would enhance trust and encourage continuous improvement across the retail sector.

UKVIA believes that licensing is not about adding red tape but about embedding accountability. A proportionate, well-resourced licensing scheme would create a level playing field, protect responsible businesses from unfair competition, and generate sustainable funding for enforcement.

UKVIA has already published a Retail and Distributor Licensing Framework, developed with major retailers, distributors and compliance specialists. The framework - available at https://ukvia.co.uk/wp-content/uploads/2024/02/Vape-club_licensing-framework-document_v8.pdf - sets out clear eligibility requirements, licence conditions, traceability rules and proportionate penalties. It provides a practical model for a centralised database of licensed operators, upstream licensing for importers and distributors, and ringfenced funding for proactive Trading Standards enforcement. By adopting this framework, DHSC can deliver a scheme that raises standards, removes rogue traders, and saves local authorities

significant resources by reducing illicit trade pressures while preserving access to safe, compliant products for adults.

4. Product Registration:

At present, enforcement capacity varies markedly across local authorities. Budget constraints and competing enforcement demands mean many Trading Standards teams are only able to conduct a limited number of inspections or test-purchases. The Chartered Trading Standards Institute has warned that teams are 'spread very thinly' while dealing with a large influx of non-compliant vapes.

Industry modelling commissioned by the Association of Convenience Stores suggests around 1 in 3 vape products may be non-compliant. And while detailed regional data are scarce, such levels would seriously undercut law-abiding retailers and expose consumers to untested products. This inconsistency in enforcement and product compliance undermines public confidence in vaping as a legitimate harm-reduction tool.

UKVIA believes that the UK should introduce a more transparent and practical system of product registration and approval. In shaping a reformed registration model, a number of operational issues within the current framework need to be addressed. These include the inconsistent and outdated notification process for herbal products, vulnerabilities in the vaping product notification system such as multi-brand tagging and low quality toxicology submissions, and uncertainty around the legal remit of Trading Standards and the MHRA in assessing novel products. Evidence from international schemes also highlights the value of ISO-accredited testing and manufacturing, the benefits of clear, proportionate and efficient approval steps for new products, and the risks of creating systems so complex that large proportions of the market become unregistered, as seen in the United States. Market pressures, including tax driven illicit trade and inconsistent product quality, further demonstrate the need for annual product reviews covering ingredients, emissions data, QC records and updated labelling. A modernised UK system should require clear premarket information - including emissions results from accredited laboratories, robust toxicology assessments, device schematics, ISO manufacturing certification and safety documentation - supported by proportionate fees, periodic QC testing, and strong enforcement capacity funded through the licensing scheme. Under the current MHRA notification framework, products are only listed as 'notified' rather than 'approved', leaving retailers uncertain about which products are legally authorised for sale in the UK. There is no central repository (or online register) accessible to non-specialist retailers to verify compliance, creating confusion and risk within the supply chain.

To address this, UKVIA recommends the creation of a comprehensive, publicly accessible database of approved vaping products that clearly distinguishes between notified and legally marketable items. Packaging and labelling should form part of the approval process to ensure full compliance before products reach the market. This reform would increase transparency for retailers, simplify enforcement for regulators, and provide consumers with greater confidence that the products they buy are safe, compliant, and legal.

The association advocates a ring-fenced national enforcement fund, financed through revenues from the proposed licensing scheme. Dedicated funding would enable proactive,

intelligence-led enforcement, including laboratory testing, covert test-purchasing, and coordinated operations across local authorities. Enforcement efforts should prioritise the most serious breaches: illegal sales to minors, non-notified imports and counterfeit goods, rather than punishing minor administrative errors by compliant retailers.

Simplifying the penalty framework would also strengthen deterrence. Current reliance on lengthy court proceedings makes enforcement slow and costly. Granting Trading Standards the power to issue on-the-spot fines for clear, proven violations would deliver faster and more visible justice. Penalties should be substantial enough to outweigh any profit from illegal trade, ensuring non-compliance is no longer seen as a low-risk business model.

National coordination is equally vital. The current patchwork of enforcement bodies, Trading Standards, HM Revenue & Customs, border agencies and local authorities, needs a unified framework for intelligence-sharing. The association recommends a central coordination hub, potentially under the Office for Product Safety & Standards, to manage data, prioritise cases and work jointly with industry.

The association's 'Be Vape Vigilant' initiative, which enables public reporting of suspected illegal traders, already demonstrates how collaborative intelligence can deliver results. Trading Standards fully supports the Be Vape Vigilant campaign, and UKVIA is proud to run it in close collaboration with Trading Standards teams nationwide. As Kate Pike, Lead Officer for Vaping at Trading Standards, explained: "Trading Standards fully supports the campaign and hopes it will be effective in encouraging people to report instances of retailers selling to children or vapes that are either counterfeits or non-compliant with UK regulations. Most retailers work hard to ensure they only sell to adults, so any intelligence which enables us to target enforcement at those who are breaking the law is very much welcomed."

This shared approach, where enforcement authorities and responsible industry actively support one another, illustrates how partnership and intelligence-sharing can raise standards, protect consumers and level the playing field for compliant retailers.

Simplifying penalties would strengthen deterrence, allowing Trading Standards to issue on-the-spot fines for clear violations. National coordination is vital; UKVIA supports a central enforcement hub under the Office for Product Safety and Standards. Trading Standards fully supports UKVIA's *Be Vape Vigilant* campaign, run collaboratively to target illegal sellers and protect consumers. Public education must complement enforcement through a mass campaign highlighting that regulated vaping is far less harmful than smoking, as confirmed by the Royal College of Physicians. Innovation in age-verification technology and transparent publication of enforcement outcomes will further build public confidence and ensure consistent, effective regulation.

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