



Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco

Final Report

Volume 3 – Annexes

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Directorate General for Taxation and Customs Union
Directorate C – Indirect Taxation and Tax Administration
Unit C.2 – Indirect Taxes other than VAT
E-mail: TAXUD-UNIT-C2@ec.europa.eu

*European Commission
B-1049 Brussels*

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ABBREVIATIONS AND ACRONYMS

bn	Billion
CN	Combined Nomenclature
COP	Conference of the Parties
DG COMP	Directorate-General for Competition
DG SANTE	Directorate General for Health & Food Safety
DG TAXUD	Directorate General for Taxation and Customs Union
EB	Eurobarometer
EC	European Commission
ECHI	European Core Health Indicators
EDT	Excise Duty Table(s)
EDY	Excise Duty Yield
EHIS	European Health Interview Survey
EMCS	Excise Movement and Control System
EMI	Euromonitor International
EU	European Union
FCT	Fine Cut Tobacco
FCTC	Framework Convention on Tobacco Control
FESS	Functional Excise System Specification
HICP	Harmonised Index of Consumer Price
HTP	Heated Tobacco Products
ITEG	Indirect Tax Expert Group
MED	Minimum Excise Duty
MPPC	Most Popular Price Category
MTT	Minimum Total Tax
mn	million
MS	Member State(s)
NDL	Non-Domestic Legal
NGO	Non-Governmental Organisation
OLAF	European Anti-fraud Office
OPC	Open Public Consultation
OST	Other Smoking Tobacco
RIP	Relative Income Price
RfC	Releases for Consumption
RYO	Roll Your Own
SME	Small and Medium-sized Enterprise
ToR	Terms of Reference
TPD2	Tobacco Products Directive 2014/40
UTC	Unrecorded Tobacco Consumption
VAT	Value added Tax
WAP	Weighted Average Retail Selling Price
WCO	World Customs Organisation
WHO	World Health Organisation

ANNEX A – SYNOPSIS OF STAKEHOLDER CONSULTATIONS

A.1 Background

Council Directive 2011/64/EU (the 'Directive') sets out EU rules on the structure and rates of excise duty applied to manufactured tobacco. The purpose of the Directive is to ensure the proper functioning of the internal market and a high level of health protection. It sets the structure and overall minimum rates of the excise duty for the different categories of manufactured tobacco, in particular: cigarettes, cigars and cigarillos, and smoking tobacco.

The European Commission is required to prepare every four years a Report on the functioning of the Directive, accompanied - if appropriate - by a proposal for revision. To this purpose, the Commission has launched an evaluation¹ of the Directive that included, among other things, a comprehensive consultation of EU citizens and stakeholders.² The intended objective of the consultation was to gather the views of all interested parties on the functioning of the current EU provisions on the excise duty rates and structures for manufactured tobacco and the possible scenarios for their revision. The consultation also covered the tax treatment of novel products, such as 'heated tobacco products' and 'electronic cigarettes' (e-cigarettes), which are currently not explicitly covered by the Directive.

A.2 Overview of consultation activities carried out

The consultation strategy has been designed to address comprehensively the different stakeholders' groups by means of tailored tools and questionnaires. In particular, the following activities were carried out:

- **Targeted consultation of Member States authorities**, further subdivided into two separate questionnaires addressing respectively:
 - (i) Tax and customs authorities. Total respondents: 24 Member States.
 - (ii) Public health authorities. Total respondents: 15 Member States.
- **Open Public Consultation** online, addressing all interested parties, including economic operators, non-governmental organisations, academics, and individual citizens of the EU and third-countries. It is useful to remind that the OPC methodology is based on spontaneous responses so it does not bear any statistical representativeness. Total respondents: 11,388 from 28 MS.³
- **In-depth interviews** with selected stakeholders, including tax, customs and public health authorities, economic operators and trade organisations representing both the conventional tobacco products and novel products such as e-cigarettes and heated tobacco products. Total interviewees: 52 from 43 different entities.
- **Email consultation of e-cigarettes stakeholders**, to complement and expand the above interview programme, and including trade organisations, consumers associations, businesses and consumers. Total respondents: 52 from 10 countries.

¹See: https://ec.europa.eu/info/law/better-regulation/initiative/1570/publication/169694/attachment/090166e5b85a1dea_en

²See: https://ec.europa.eu/taxation_customs/sites/taxation/files/consultation_strategy_tobacco_taxation_final_en.pdf

³ The total records received amounted to 11,410 but 22 records appeared as duplicate submissions from the same entity so were excluded from the analysis. Possible duplicate submissions from individual citizens were instead not excluded given the possibility of homonyms.

- **Attendance to international conference and events** concerning tobacco control and public health policies or fight against illicit trade of tobacco. Total events: 4 (Spain, Bulgaria, Belgium and the UK).

Altogether, the consultations allowed to gather relevant information of four main kinds:

- (1) factual information on the legal and operating framework in the Member States, as well as on the situation and dynamics of the corresponding national markets;
- (2) evaluative information on the performance of the current legislation and the perceived existing issues;
- (3) predictive statements on the possible future evolution of legal frameworks and markets;
- (4) normative statements on stakeholders' expectations and preferences among different policy scenarios proposed.

A.3 Summary of consultation results

A.3.1 Overall evaluation of the Directive

➤ PERCEIVED COHERENCE AND RELEVANCE

The results of the Study indicate that all in all the objectives and measures laid down in the Directive are coherent and aligned with other EU policies and international obligations. This judgment is confirmed by the majority of key stakeholders consulted. In particular, with few exceptions (notably cigarillos) the excise definitions of products are consistent with customs classification, while no major competition issue was ever raised against the Directive (some legal interpretations were occasionally required). The Directive has taken up the FCT guidelines' recommendations on effective tax policies and the objectives of the EU and FCTC policies against illicit trades although according to public health stakeholders the Directive's provisions seem not fully geared towards the achievement of major results in these areas.

When compared to national priorities the objectives of the Directive are generally but not always aligned. By far the most important aim of national tax policies is to maintain a stable and predictable tax revenue, but such aim is not explicitly considered or acknowledged in the EU excise legislation. Conversely, there is a close alignment between MS and EU priorities as concerns ensuring and effective monitoring and control of tax compliance. To ensure fair competition and harmonised classification rules are both national and Directive's objectives, while reducing the tax differential between MS (hence cross-border shopping) is a major EU objective that rank fairly low among MS priorities.

Tobacco control objectives are also not a main priority for tax authorities although they are evidently so for public health authorities. Regarding the relevance of the Directive for tobacco control stakeholders acknowledge the contribution of measures like EU minima or the approximation in the taxation of cigarettes and FCT, whereas little can be said, according to public health experts, on the 'convergence' of tax levels between MS since it is an area poorly investigated. Another area frequently voiced as not sufficiently in line with the needs of the public health community is the lack of any explicit quantifiable public health objective in the Directive, particularly in the light of the fact that these are now available within the framework of the FCTC as a whole and could therefore serve as reference benchmarks.

➤ **PERCEIVED IMPACT OF THE DIRECTIVE**

A vast majority of respondents to the targeted consultation of fiscal authorities have acknowledged the Directive had some impact on informing their tax policies and setting their duty levels. Such impacts regard primarily raising national tax levels on manufactured cigarettes and FCT, both directly (i.e. to comply with requirements) or indirectly to keep-up with neighbouring MS and general trends. For the other tobacco products, a more indirect role of the Directive in shaping prices and influencing the market is reported, although in a few cases the impact was a major one (i.e. the phasing-out of special definitions of cigars and cigarillos for a couple of MS).

Most of the added value generally recognised to the Directive is first of all of a technical nature. The Directive represents the indispensable legal framework for the coherent classification of tobacco products across Europe and for the establishment of a harmonised tax collection mechanism compatible with the single market. This is acknowledged by the majority of tax authorities. In line with the results of the analysis, there is far more scepticism that the Directive might have represented a viable mechanism to promote the convergence of tax levels across MS or in specific macro-regions of the EU. This limited effect can be seen in both the markets for cigarettes and FCT, with significant convergence reported by just a couple of MS. On the other hand, it is acknowledged that the Directive have prompted the harmonisation of excise duty structure for cigarettes but this had limited concrete effects on the overall tax and price convergence between MS.

As a result of this limited harmonisation, it is little surprise that a somewhat modest direct impact of the Directive in decreasing cross-border shopping is reported. The added value of the Directive is therefore mainly perceived as a stabilisation mechanism to avoid price wars between MS and prevent major market disruptions in trade flows. Interestingly, the majority of fiscal authorities still see some benefits in the fact that the Directive works to discourage 'competitive taxation' of tobacco products. However, this mechanism is not considered having relevant effects in ensuring fairer competition between large and small players.

This widespread perception that the Directive has overall succeeded in avoiding fiscal competition between countries but could do relatively little to achieve a real convergence can be found also among respondents to the targeted consultation of public health authorities. These authorities generally recognised that the reduction in smoking prevalence would have probably been lower without the contribution of the Directive, particularly as far as impact on the young is concerned. Only one respondent dissented with this opinion assuming that the Directive *de facto* pre-empted the adoption of much bolder policy stances from public health perspective.

On the other hand, according to public health stakeholders the smoking prevalence has not decreased as it should have been in the period considered, and most of them attribute this failure, at least in part, to insufficient taxation, generally speaking. In this sense, various interviewees saw some link between the 'conservative' minimum rates envisaged in the Directive and the fact that taxation has not increased enough in a number of MS (including those that were already compliant with EU minima).

➤ **PERCEIVED EFFICIENCY OF THE DIRECTIVE**

By its own nature the Directive does not pose major problems with implementation or cause major administrative burdens on MS. Coherently, there is a general consensus among the respondents to the targeted consultation of the fiscal authorities that the administrative burden imposed on them by the tobacco excise legislation can be considered as acceptable and fully justified by the benefits it produces. Since no major

changes were introduced in 2011, practically all respondents agree in considering that this administrative burden has remained fairly stable over time.

The appearance of 'bulk' tobacco as an illegal way of circumventing excises for fine cut tobacco has highlighted the definition of 'smoking tobacco' as potentially inefficient and deserving possible refinements. This was compounded with the impact of stricter definitions reportedly adopted in some MS following the CJEU ruling C-638/15 in 2017. Issues with the classification of tobacco refuses are mentioned by only a minority of relatively large Member States where large tobacco factories are located, but hardly an issue for the others. Past experience of problems with the definition of cigars and cigarillos and its misalignment with the customs CN definition is still reported as a major problem by a handful of Member States but already perceived as much less severe or as no problem at all by all the others. The case of heated tobacco seems quite different, and there is overwhelming consensus that a harmonised approach to the taxation of heated tobacco should indeed be established at the EU-level to avoid legal fragmentation and the underlying administrative costs of reconciling shipments made under different tax systems, even if this came at the cost of overhauling the existing IT systems of all MS by introducing a new category.

Finally, a majority of respondents seems inclined not to consider waterpipe tobacco as an issue serious enough to justify the establishment of a separate tax category and therefore they do not also appear ready to bear the related adaptation costs. Only two Member States consider it worth the effort the establishment of a dedicated tax category for waterpipe tobacco, with all the ensuing operational costs.

Business-respondents to the open public consultation were given the possibility to indicate more specific regulatory burdens imposed on their economic activities by the EU excise legislation. In practice, none of respondents indicate any burden of such kind, largely confirming the limited effects of the Directive in this respect. The few answers received, have come from e-cigarette operators lamenting the effects of national tax regimes in their country of origin, but this remains outside of the scope of the Directive.

A.3.2 Feedback on proposed policy options

➤ REVISION OF EU MINIMUM RATES

The results of the consultation of tax authorities of the Member States returned a mixed picture on the revision of the current EU minima. Overall, there is a quite widespread consensus on the fact that the fixed minima levels laid down in the Directive have now become obsolete and there is need to update them. On minimum incidence requirements positions seem more conservative, and if those supporting a revision slightly prevail, modest changes seem generally preferred. However, it is important to mention that the number of MS that are instead against a revision of the current minima is not negligible, often representing a quarter or more of respondents. These are typically countries that saw steep tax increases in the previous period and where affordability of tobacco – in relation to domestic income – is among EU-lowest. More specifically:

- As regards cigarettes, most of respondents are in favour of mechanisms revising the fixed minimum amount to keep it aligned at least with income and inflation growth or higher. More varied positions are registered as concerns the relative minimum rate (four MS also in favour of its removal), as well as on the escape clause mechanism (five MS would remove it).
- Minimum rates on fine cut tobacco remains a fairly divisive issue. All respondents agree that both fixed and relative minima requirement criteria should be maintained, but views on possible revisions are diverging. Reaching a common position on the

subject is made difficult by the wide disagreements on the optimal ratio with the tax levels of manufactured cigarettes: respondents' indications generally range from 68% to 75%, but for some hardliners (5 MS) there should be no substantial gap between the two products.

- Some two thirds of respondents would be in favour of at least a moderate increase in the minimum rates for cigars and cigarillos and almost half of them would like it to be substantial. Broadly similar patterns of consensus emerged as regards the revision of the minima for other smoking tobacco.

As regards more general implementation modalities, there is substantial agreement that any change to the minimum rates should be implemented gradually and possibly leaving countries lagging particularly behind more time to comply (the so-called 'transitional period'), although on the latter point there is disagreement from five MS, and more generally various MS would like to see somehow less gradualism in the implementation than in the past.

The results of the Open Public Consultation show that stakeholders have quite diverging perceptions on the current price levels of cigarettes in their countries. This polarisation reflects the different 'interest' of OPC participants in the subject matter: so, the near totality of public health stakeholders considers prices too low while most of tobacco stakeholders perceive them as too high. The respondents' views were largely consistent with actual market conditions, so prices were more frequently perceived as too high in countries where they are actually higher than EU average (in purchasing power terms) and *vice versa*. Coherently with the above, the demand for a tax increase on cigarettes prevails among public health stakeholders.

A similar although 'milder' outlook emerges from the 'targeted' consultation of MS public health authorities: nearly half of respondents expressed dissatisfaction with the current tax levels of tobacco products, but interestingly this rate is much lower in the case of cigarettes.

➤ **REVISION OF EXCISE DUTY STRUCTURES**

The opinions of tax authorities on the mixed structure requirement for cigarettes are roughly equally split between those that would like to see a greater harmonisation in the excise duty structures across the EU and those that see no need for change. The first group would apparently prioritise the possible contribution of a closer harmonization of structures to the broader 'convergence' effort, while the second group seems emphasizing the advantages of the current very flexible rules. Three MS noted the absence of clear rationale in this requirement – especially with the current ample implementation margins – and would favour its removal. Those who would support greater harmonisation, however, have radically different views on how this should be achieved. Some would revise the two thresholds in a balanced way, increasing the lower threshold and lowering the upper one, but others propose more radical and unidirectional change, such as pushing the lower thresholds up to 60%, or capping the upper thresholds at 50%. Overall there is limited appetite for extending the mixed structure requirements to products other than cigarettes.

On this technical matter few other respondents have a clear position. In general, the industry would not change the current picture to avoid unpredictable market disruption, while public health respondents generally demand higher levels of specific excise duty, evidently perceived as more effective for tobacco control.

Overall, tax authorities seem to have little interest for any revision of the provisions on the minimum excise duty, but the vast majority requires a clarification of the current rules for measuring its compliance with the mixed structure obligation. This position is

largely shared by the industry, who lament that such uncertainties may enable an excessive recourse to this mechanism by MS authorities. Finally, on the possibility of allowing the application of a 'dynamic' minimum excise duty, MS authorities are almost equally divided.

➤ **HARMONISATION OF NOVEL PRODUCTS**

As far as heated tobacco products (HTP) are concerned, there seems to be an almost unanimous support from tax authorities to establish a harmonised approach at the EU level. This seems related to a widespread acknowledgement that these products do not really fit in any of the existing tax categories and that the solution adopted so far by MS were mostly transitional. The majority of MS authorities also agree on the fact that HTP, albeit different in various respects, is largely a substitute product of conventional cigarettes so the respective tax treatments should be set to ensure a fair competition. For one-third of respondents this relates also to tax revenues and the risk that substitution of cigarettes with HTP may result in revenue losses. Tax authorities seem to give limited consideration on the public health impact of HTP. Less than one-fifth of respondents have considered the less harmful profile of HTP or conversely the risk that it may represent a 'gateway' for nicotine addiction as relevant arguments underpinning the tax treatment of HTP in their countries. A vast majority of MS authorities would be in favour of setting an EU minimum rate for HTP, and only three respondents would opt for a zero rate. But there is disagreement on the appropriate tax base (some would set the tax 'by weight' of products while others 'by unit'), and the level of the minimum rate.

As regard e-cigarettes it can be interesting to note that most of MS having *ad hoc* taxation in place did it to allow a better monitoring of market and operators and, secondly, to ensure fair competition between product and offset tax revenue loss from conventional tobacco. Only a few mentioned public health considerations. Similarly, just one non-taxing MS mentioned public health reasons behind its decision not to tax e-cigarettes. Others mentioned practical argument such as: a market simply too small to justify the effort, or enforcement difficulties and costs due to the characteristics of e-liquids, or insufficient information to properly design a suitable tax regime. The impact of *ad hoc* national tax regimes appears mixed, with tax receipts below expectations and flows of non-tax compliant products difficult and expensive to control. Against this background, the majority of MS would support the establishment of a harmonised fiscal category on e-cigarettes in the EU excise legislation (only two countries seem clearly against it), in order to redress the current market fragmentation and allow a better monitoring of flows and consumption. Most of MS would be in favour of a specific taxation per volume of e-liquid, irrespective of the nicotine contents, but there are some diverging views in this respect, as well as there is no clear consensus on the minimum rates that should be applied on e-cigarettes.

The public health community appear profoundly divided as concerns the best approach towards e-cigarettes. It seems almost equally split between those who consider e-cigarettes as less harmful than conventional ones and those who strongly disagree with this statement. As a consequence of this, there is also lack of consensus on whether e-cigarettes should be considered as a valid smoking cessation support tool or not. The only areas where a reasonable degree of consensus among respondents can be reached concern the following statements: (1) not enough evidence is available on the health risks of e-cigarettes, so a cautious attitude should apply and (2) e-cigarettes can represent a gateway to nicotine addiction. Despite these doubts, a majority of public health authorities call for their taxation at EU level (only one MS is against it), but while there is some consensus on the underlying rationale (setting a tax rate high enough to discourage the young from initiating consumption), there is no consensus at all that the

level of taxation should be commensurate to the quantity of nicotine contained in these products.

The idea that taxation should be broadly commensurate to the health risks of e-cigarettes (assuming such metrics one day ever became available) appears to be gaining ground in line of principle, and just one public health authority opposes it. One MS went that far to propose that in the future all tax rates, including those of conventional products, should be set at a proportionate level with a standardised measure of their health risk.

As far as other categories of respondents (industry, consumers etc.) are concerned, there is an evident polarisation of positions on novel products. At the general level, it emerged that e-cigarettes stakeholders do clearly differentiate between e-cigarettes and HTP, while all other stakeholders tend to provide similar answers for the two products. More specifically it emerged that:

- Stakeholders from all subgroups mostly agree that novel products are possibly less harmful than conventional tobacco smoking, but on HTP there is more discrepancy of views. A similar positive feedback was registered with the support offered by novel products to smoking cessation although, again, views on HTP are more polarised. E-cigarettes stakeholders firmly rejected the argument that these products may represent a 'gateway' for nicotine addiction, all other subgroups posted mixed and often conflicting views in this respect.
- Novel products stakeholders generally agree that while HTP is essentially a substitute for conventional cigarettes, e-cigarettes are quite less so. The position of other stakeholders on e-cigarettes were quite mixed, but to some extent they seem to agree that HTP should be treated as a substitute product to ensure fair competition. At the same time the majority of respondents in all subgroups (except individual respondents) consider HTP as different from other tobacco products thus requiring a separate tax category.
- Of all the possible 'arguments' tested a high degree of consensus was found with the need to harmonise HTP taxation to avoid the drawbacks of legal and administrative fragmentation among countries. The same argument referred to e-cigarettes appear more divisive, also within the e-cigarette's stakeholder subgroup.
- Finally, stakeholders generally agree that the lack of data and information should not represent an obstacle for the tax harmonisation novel products.
- Overall, e-cigarettes stakeholders anticipate a vast range of negative impacts that would follow taxation: and namely: massive shifts of current consumers to 'do-it-yourself' practices, or to illicit products, or to conventional tobacco products, as well as possible competitive disadvantages for SMEs against big players. All other stakeholders expressed more mixed positions.

ANNEX B – CONSULTATION QUESTIONNAIRES

B.1 - Tax authorities consultation questionnaire

RESPONDENT'S DATA

Country:	
Respondent Name (contact person):	
Function:	
Authority/Unit:	
Other respondents and services involved:	

A) ASSESSMENT OF THE EU EXCISE LEGISLATION ON MANUFACTURED TOBACCO

1. The harmonisation of tax regimes across Member States

1.1 Which objectives primarily guided the tobacco tax policy in your country, in the period 2011-2017? Which objectives are likely going to guide it in the next five years (i.e. 2018-2023)?

Please, rate from "1=very low" to "5=very high" the importance of the following policy objectives in your country for the indicated periods.

	Importance in the <u>2011-2017</u> period	Importance in the <u>2018- 2023</u> period
	Ratings: 1=very low 2=low 3=intermediate 4=high 5=very high 0=don't know	Ratings: 1=very low 2=low 3=intermediate 4=high 5=very high 0=don't know
Reduce the consumption of tobacco products in general, to protect public health		
Avoid that very low priced products are placed on the market		
Ensure fair competition among economic operators in the national market		
Safeguarding the competitiveness of small and medium-size economic operators		
Adjust the tax applied to different tobacco products to prevent/reduce the substitution of more taxed products (i.e. cigarettes) with less taxed ones		
Reduce the tax differences with other EU countries to reduce the 'cross-border shopping'		
Avoid strong tax measures that might push more consumers to buy illegal tobacco		
Maintain a stable and predictable tax revenue		
Establish appropriate classification rules to avoid that any product has undue access to more favourable taxation due to uncertain definitions		
Allow a simple and effective monitoring and control of tax compliance to contribute to fighting tax fraud		
Simplify tax collection mechanisms and reduce the administrative cost of it		

Other relevant objectives for both the 2011-2017 period and/or the 2018-2023 period.	
--	--

1.2 The EU tobacco excise legislation contains various provisions aimed at harmonising the tax treatment of tobacco products across Member States, including excise duty structures, minimum rates, definition and classification of products etc. To what extent the EU rules had an impact on your country's tax policies in the period 2011 – 2017?

Please indicate whether the impact of following provision was 'direct' – i.e. the national policy had to be changed to comply with specific EU rules – or 'indirect' – i.e. the national policy was influenced / inspired by EU objectives and rules.

	Direct impact	Indirect impact	No impact	Don't know
Impact of EU minimum rates on the national excise duty levels for cigarettes				
Impact of EU minimum rates on the national excise duty levels for fine-cut-tobacco				
Impact of EU minimum rates on the national excise duty levels for cigars and cigarillos				
Impact of EU minimum rates on the national excise duty levels for other smoking tobacco				
Impact of the mixed structure requirements on the national excise duty structures for cigarette (i.e. the mix of specific and <i>ad valorem</i> component)				

Other relevant impact of EU excise legislation on national tax policy	
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1.3 One of the main objectives of the EU tobacco excise legislation is to reduce differences in the tax regimes applied to tobacco products across Member States. How do you rate the results achieved in this respect in the period 2011-2017?

	Very satisfactory	Quite satisfactory	Somehow satisfactory	Not satisfactory	Don't know
Reduction of differences in tax levels of cigarettes across the whole EU					
Reduction of differences in the tax levels of cigarettes in your country's geographical region					
Reduction of differences in the tax levels of fine-cut tobacco in your country's geographical region					
Harmonisation of excise duty structures for cigarettes (the mix of <i>ad valorem</i> and specific component)					
Harmonisation of excise duty structures for other tobacco products					
Coherence in the classification of tobacco products across the EU, based on the harmonised categories					
Harmonisation of tax collection mechanisms					

If not satisfied, please explain the main reasons and/or which measures should have been taken to achieve better results.	
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1.4 To what extent have the harmonisation of tax regimes delivered concrete benefits for the functioning of market and competition in your country?

	To a high extent	To a moderate extent	To a limited extent	Not at all	Don't know
Reduction of tax-related 'cross-border shopping'					
Fairer competition between domestic operators and operators from other EU countries					
Fairer competition between different tobacco product categories					
Fairer competition between large and small players					
Enhanced/better stability of prices and demand in the domestic market					

Other market and/or competition benefits, please specify	
--	--

1.5 The current EU minimum rates have been in force since 1 January 2014, however certain Member States were granted a transitional period of three years to in order to reach these levels.

In retrospective, and considering the objectives of the Directive, this transitional period was:

	[choose one]
Much too long	
Slightly too long	
All right	
Slightly too short	
Much too short	
Don't know	

1.6 Please, indicate whether the EU excise legislation provisions below have ever caused specific problems in your country and rate the severity thereof on a scale from '0=not a problem' to '3=major problem'.

Where relevant, please describe the type and the magnitude of the problem caused.

	Problem rating: 0 = not a problem, 1 = minor problem 2 = moderate problem 3 = major problem	Type of problem caused, e.g.: legal disputes, uncertainties, tax circumvention, administrative burden etc. Quantification, e.g.: frequency of adverse events, estimated tax losses, staff costs etc.
Art 5(1)a on 'smoking tobacco' and the clarity of the provision: " <i>capable of being smoked without further industrial processing</i> "		
Art 5(1)b on 'smoking tobacco' and the clarity of the provision: " <i>tobacco refuse put up for retail sale</i> "		
The definition of 'cigars and cigarillos' laid down in Art 4.1 and the misalignment with the corresponding customs definition of the Combined Nomenclature		
The lack of a specific definition and separate tax category for 'water-pipe tobacco'		

Please indicate any other definitions or categorisations of the EU excise legislation that resulted not sufficiently clear and effective, and the adverse effects caused	
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1.7 Overall how do you rate the regulatory burden imposed on Member States authorities by the EU excise legislation? Please indicate the perceived overall magnitude.

Note: the 'regulatory burden' includes the costs (financial and staff costs) of all required actions needed to administer, implement and oversee the provisions of EU legislation. It does not include the costs that national authorities would have incurred anyway, i.e. even in the absence of the requirements of the EU legislation.

Definitely excessive	Slightly excessive	Acceptable	Don't know

If the estimated regulatory burden is deemed excessive and/or increasing, please specify which measures are considered particularly burdensome and why.	
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1.8 How has the regulatory burden evolved in the 2011-2017 period?

Note: the 'regulatory burden' includes the costs (financial and staff costs) of all required actions needed to administer, implement and oversee the provisions of EU legislation. It does not include the costs that national authorities would have incurred anyway, i.e. even in the absence of the requirements of the EU legislation.

Increased	Stable	Decreased	Don't know

2. The issue of 'unrecorded' tobacco consumption'

2.1 'Unrecorded tobacco consumption' indicates the share of tobacco products that are **not taxed** in the country of consumption. It includes two main components:

- **Non-domestic legal** products, i.e. products that are duty-paid in another EU country or duty-free products legally purchased by travellers in non-EU countries.
- **Illegal products**, i.e. contraband and counterfeited products including 'illicit whites' and the like.

The quantification of 'unrecorded tobacco consumption' is notoriously difficult, due to its informal / illicit nature. Which approach and methods are used in your country to monitor and estimate it? Please, check all that apply.

	[multiple choice]
Extrapolation from customs' seizure data	
Interview survey of consumers	
'Empty pack survey' data	
Models and estimates based on secondary data	
None of the above	

Please, provide more details on the monitoring system in place and/or indicate other methods used in your country, as well as possible strengths and limitations.	
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2.2 Overall, how has 'unrecorded tobacco consumption' evolved in your country since 2011?

	Significantly increased	Moderately increased	Not changed	Moderately declined	Significantly declined	Don't know
The illicit trade of <u>counterfeited and contraband</u> cigarettes of foreign origin has...						
The illicit trade of cigarettes <u>illegally manufactured</u> in your country has...						
The consumption of legal cigarettes purchased in other Member States <u>for private use</u> has...						
The consumption of legal cigarettes purchased in other Member States <u>and resold illicitly</u> has...						
The consumption of illegal tobacco products other than cigarettes has ...						

2.3 (a) Please, fill in the detailed table below with the monitoring data and estimates collected and computed in your country concerning the consumption of 'unrecorded tobacco', for all available years since 2011.

Alternatively, you may forward in attachment to this questionnaire any relevant document containing statistics and other available information on 'unrecorded tobacco consumption', in your country.

b) Data concerning the consumption of <u>illegal</u> products	2011	2012	2013	2014	2015	2016	2017
Total quantity of illegal <u>cigarettes</u> seized by national authorities, in million units							
Total quantity of illegal <u>cut tobacco</u> * seized by national authorities, in tonnes							
Estimated total quantity of illegal <u>cigarettes</u> consumed in the country, in million units							
Estimated total quantity of illegal <u>cut tobacco</u> * consumed in the country, in tonnes							
Estimated share (in % of the total) of illegal products <u>originating in non-EU</u> countries							
Estimated ' <u>tax gap</u> ' due to illicit products, expressed in <u>national currency</u>							

* *illegal 'cut tobacco' includes both fine-cut tobacco and 'bulk' smoking tobacco typically sold in unbranded bags outside the legitimate channels.*

c) Data concerning the consumption of <u>non-domestic legal</u> products	2011	2012	2013	2014	2015	2016	2017
Estimated total quantity of non-domestic legal <u>cigarettes</u> consumed in the country (in million units)							
Estimated share - in % of the total quantity indicated in point (i) - of - of non-domestic <u>legal cigarettes</u> that is <u>illicitly resold</u> in the country (i.e. not used for own consumption)							
Estimated total quantity of non-domestic legal <u>fine-cut tobacco</u> consumed in the country (in tonnes)							
Estimated share - in % of the total quantity indicated in point (iii) - of non-domestic legal <u>fine-cut tobacco</u> that is <u>illicitly resold</u> in the country (i.e. not used for own consumption)							
Estimated ' <u>tax gap</u> ' due to non-domestic legal products, expressed in <u>national currency</u>							

d) Information on the geographical origin of 'unrecorded tobacco'	
Estimated main countries of origin of <u>illegal tobacco</u> products consumed in your country	
Estimated main countries of origin of <u>non-domestic legal</u> tobacco products consumed in your country	

e) Estimated average price of illegal products in the 'black market' in your country (in 2017)	Price in national currency	Price of illegal products as a % of the average price of legal products
Cigarettes (pack of 20 pieces)		
Cut tobacco* (per Kg)		

* illegal 'cut tobacco' includes both fine-cut tobacco and 'bulk' smoking tobacco typically sold in unbranded bags outside the legitimate channels

2.4 What is the importance of the following drivers of illegal tobacco consumption in your country?

	Major importance	Moderate importance	Minor importance	Not important	Don't know
High prices as compared to other countries					
Corruption					
Permeability of borders (insufficient detection and enforcement capacity)					
Insufficient consumers' education on the consequences of buying illegal cigarettes					

Other drivers, please specify	
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2.5 Which main policy, administrative and/or enforcement measures (if any) have been adopted in your country in the period 2011-2017 to prevent and fight illicit trade and tax fraud of tobacco.

	[multiple choice]	Year of adoption of the measures and short description
Measures to improve the <u>capacity to inspect and detect</u> illicit trade movements		
Measures to improve the monitoring of the value chain and <u>prevent</u> illicit trade		
Measures to <u>fight 'black market'</u> retail selling		
Stronger <u>sanctions</u> against fraudsters		
Measures to <u>educate consumers</u> against the consumption of illegal products		
Measures to fight <u>corruption</u> at border points		
<u>Cooperation with other Member States</u> (exchange of information, joint operations etc.)		
<u>Cooperation with non-EU countries</u> (exchange of information, joint operations etc.)		

Other measures, please specify	
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2.6 To what extent have the tax and price levels of other countries - and the related risk of tax-driven cross-border flows of cigarettes - influenced tax level decisions in your country, in the period 2011-2017?

	Very high	High	Intermediate	Low	Very low	Don't know
Tax and price levels in other neighbouring EU Member States						
Overall tax and price levels in the whole EU						
Tax and price levels in non-EU countries (of origin of illicit trade of cigarettes)						

2.7 If your country has increased the tax levels for cigarettes to comply with the EU minimum rates requirements, what were the consequences on cross-border flows?

	Significantly increased	Moderately increased	Not changed	Declined	Don't know
The inflow of duty-paid cigarettes from lower-taxing EU countries has...					
The outflow of duty-paid cigarettes from your country to higher-taxing EU countries has...					
The inflow of illegal cigarettes from non-EU countries to your country has...					

2.8 Please indicate your degree of satisfaction with the relevance and coherence of EU excise legislation with the broader policies to fight illicit trade of tobacco and fraud, both at the national and supranational levels.

	Very high	high	intermediate	low	Very low	Don't know
Coherence of EU excise legislation with the EU strategy on fight against illicit trade in tobacco (i.e. <i>COM(2013) 324</i> and related measures)						
Coherence of EU excise legislation with the Framework Convention on Tobacco Control and the <i>Protocol to eliminate illicit trade in tobacco products</i>						
Relevance of EU excise legislation to the policy needs and priorities in your country on the fight against illicit trade of tobacco and tax fraud						

If not satisfied, please explain the main reasons	
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3. Tax-driven substitution of cigarettes with fine-cut tobacco and/or other tobacco products

3.1 The difference in tax levels may encourage consumers to switch from high to low-taxed tobacco products. Please, indicate how big is the problem of 'tax-driven substitution' of cigarettes with the following tobacco products in your country.

	Major problem	Moderate problem	Minor problem	Not a problem	Don't know / Not applicable
Fine-cut tobacco					
Cigarillos					
Cigars					
Pipe tobacco					
Water-pipe tobacco					
Heated tobacco products*					
Electronic cigarettes					

* Only for Member States where heated tobacco is currently commercialised

3.2 Please, indicate – if available - the lowest and the average price for the following product categories in your country, in 2017 (or nearest year).

	Prices in national currency
Price of the <u>least expensive cigarettes</u> on the market (per 1 000 pieces)	
Price of the least expensive <u>fine cut tobacco</u> on the market (per Kg)	
Weighted <u>average price of fine cut tobacco</u> on the market (per Kg)	
Price of <u>the least expensive cigarillos</u> on the market. (Please <u>specify the unit</u> used in your country - pieces or Kg)	

3.3 In setting the tax level applied to fine-cut tobacco in your country, what is the importance attributed to the following possible policy objectives and criteria?

	Major importance	Moderate importance	Minor importance	Not important	Don't know
<u>Neutralise the 'tax-driven' substitution</u> - i.e. setting tax levels taking into account the price elasticity of the demand of both fine-cut tobacco and cigarettes					
<u>Reduce as much as possible the gap</u> between the tax level of fine cut tobacco and of cigarettes, to avoid undermining tobacco control objectives					
Preserve <u>the competitiveness</u> of fine-cut tobacco vis-à-vis cigarettes, taking into account that it is often produced by <u>smaller companies</u> , who have a lower 'tax-bearing' capacity					
Apply lower taxes to fine-cut tobacco so that it may represent a ' <u>legal</u> ' alternative to 'black market' products for low-income consumers					

Other relevant objectives / criteria. Please, specify	
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3.4 The EU excise legislation aims at bringing the tax level for fine-cut tobacco closer to the level applicable to cigarettes. Overall, are you satisfied with the results achieved at EU level in this respect, in the period 2011 – 2017?

Very satisfied	Fairly satisfied	Neutral	Fairly unsatisfied	Very unsatisfied	Don't know

If not satisfied, please explain the main reasons and/or which measures should have been taken to achieve better results.	
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4. Public health protection

4.1 One of the main objective of the EU tobacco excise legislation is to ensure a high level of health protection (in line with Article 168 of the Treaty). This objective is supported by measures such as the minimum rates for cigarettes and other tobacco products.

Please indicate your degree of satisfaction with the following aspects of the EU excise legislation concerning public health protection.

	very high	high	intermediate	low	very low	Don't know
Clarity of EU excise legislation objectives on public health protection						
Degree to which the measures laid down in the EU excise legislation are fit and sufficient to achieve its general public health objectives						
Coherence of EU excise legislation with the EU tobacco policy (Tobacco Product Directive and related policies)						
Coherence of EU excise legislation with the international <i>Framework Convention on Tobacco Control</i> objectives and measures for the protection of public health						
Extent to which the EU excise legislation is supporting your national policy needs concerning tobacco control and public health protection						

If not satisfactory, please explain and indicate which other EU measures can be envisaged to enhance public health gain?	
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4.2 Does the tobacco tax policy in your country contain a specific public health objective and/or target?

YES	NO

If YES, please specify	
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4.3 Which tax measures, if any, have been adopted in your country with the specific purpose of contributing to public health protection (2011-2017 period)?

	[multiple choice]
Increased tax levels for cigarettes	
Increased tax levels especially for the low-price segment of cigarettes (e.g. 'minimum excise duty')	
Increased tax levels for fine-cut tobacco	
Increased tax levels especially for low-price segment of fine-cut tobacco (e.g. 'minimum excise duty')	
Increased tax levels for cigars and cigarillos	
Increased tax levels especially for low-price segment of cigars and cigarillos (e.g. 'minimum excise duty')	
Increased tax levels for other smoking tobacco	
Introduction of <i>ad hoc</i> taxes on electronic cigarettes	
Introduction of <i>ad hoc</i> taxes on heated tobacco products	

Other measures, please specify:	
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4.4 To what extent can the reduction of smoking prevalence in your country in the 2011-2017 period be attributed to increase in tax levels?

Almost entirely	The major share of it	A minor share of it	Almost nil	Don't know

Please, add comments if relevant	
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B) ASSESSMENT OF POSSIBLE REVISIONS OF THE EXCISE DUTY LEGISLATION ON TOBACCO PRODUCTS

5. Revision of EU minimum rates

5.1 The 'EU minimum rates' require that Member States levy an excise duty on cigarettes of at least EUR 90 per 1000 cigarettes. In 2017, the EU average excise duty level was approximately EUR 146 per 1000 cigarettes.

Against this background, is there a need to revise this requirement? Please, choose one of the following options.

	[choose one]
The EUR 90 minimum amount should be adjusted only to keep up with income growth and inflation trends in the EU	
The EUR 90 minimum amount should be increased more than the amount needed to keep up with income growth and inflation trends in the EU	
It should not be modified	

There is no need for this requirement and it should be removed	
Don't know	

Please, comment and/or indicate your proposed revision of the current requirement	
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5.2 The EU rules require also that the excise duty level in Member States is no less than 60% of the weighted average price of cigarettes. In 2017, the EU average proportion between excise duty and weighted average price was approximately 62%.

Is there a need to revise this requirement? Please, choose one of the following options.

	[choose one]
The 60% reference value should be increased	
The 60% reference value should not be modified	
The 60% reference value should be decreased	
There is no need for this requirement and it should be removed	
Don't know	

Please, comment and/or indicate your proposed revision of the current requirement	
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5.3 According to EU rules, Member States that levy an excise duty in excess of EUR 115 per 1000 cigarettes (measured at the 'weighted average price' level) can derogate from the above '60% requirement'. In 2017, six countries met this condition and levied an excise duty as low as 55% of the weighted average price.

Is there a need to revise this requirement? Please, choose one of the following option.

	[choose one]
The EUR 115 threshold should be revised by the same proportion of a possible revision of the abovementioned EU minimum amount (currently EUR 90 per 1000 cigarettes).	
The EUR 115 threshold should be increased more than the corresponding increase of the abovementioned EU minimum amount, so as to restrict the access to this exemption to a smaller number of countries	
The EUR 115 threshold should be increased less than the corresponding increase of the abovementioned EU minimum amount, so as to extend the access to this exemption to a greater number of countries	
It should not be modified	
There is no need for this provision and it should be removed	
Don't know	

Please, comment and/or indicate your proposed revision of the current requirement	
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5.4 With respect to the implementation of revised minimum rates for cigarettes, please express your level of agreement with the following possible accompanying measures.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
The minimum rates shall be increased gradually in order to allow stakeholders to adapt and avoid excessive disruptions.						
It is necessary to envisage a transitional period for Member States that are currently well below the proposed level of increase.						

Other accompanying measures needed, please specify	
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5.5 What equivalence is used in your country's policies – if any - to convert fine-cut tobacco into cigarette units? Please indicate the conventional weight in grams of one cigarette made with fine-cut tobacco.

	grams
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5.6 The EU excise legislation states that it is necessary to bring the excise duty level of fine-cut tobacco closer to the level of cigarettes, but no specific target is indicated.

What should the proportion between the excise duty levied on one 'average' stick made of fine-cut tobacco and one 'average' factory-made cigarettes be?

	%
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5.7 The EU minimum rates for fine-cut tobacco are set to further increase in two subsequent steps (2018 and 2020) to reach the level of EUR 60 per Kg or 50% of the weighted average price. Having this in mind, is there need to revise the current targets?

	Major increase required	Modest increase required	No change required	No need for this requirement, removal suggested	is	Don't know
Fixed minimum target (EUR 60 per Kg)						
Relative target (50% of the weighted average price)						

Please, comment and/or indicate your proposed revision of the current requirement	
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5.8 With respect to the implementation of revised minimum rates for fine-cut tobacco, please express your level of agreement with the following possible accompanying measures.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
The minimum rates shall be increased gradually in order to allow stakeholders to adapt and avoid excessive disruption						
A transitional period for Member States that are currently well below the proposed level of increase is needed						

The EU Directive should indicate an 'optimal' proportion (in %) between the excise levied on fine-cut tobacco and the excise levied on cigarettes						
The EU Directive should indicate an appropriate equivalence to convert for tax policy purposes a Kg of fine-cut tobacco into a unit number of cigarettes						

Other accompanying measures needed, please specify	
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5.9 The EU minimum rates for cigars and cigarillos are currently EUR 12 per Kg or 1 000 items or 5% of the retail selling price. Is there need to revise these requirements?

	Major increase required	Modest increase required	No change required	No need for this requirement, removal suggested is	Don't know
Fixed minimum amount (EUR 12 per Kg or 1 000 items)					
Relative minimum rate (5% of retail selling price)					

Please, comment and/or indicate your proposed revision of the current requirement	
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5.10 The EU minimum rates for other smoking tobacco (e.g. pipe and water-pipe tobacco) are currently EUR 22 per Kg or 20% of the retail selling price. Is there need to revise these requirements?

	Major increase required	Modest increase required	No change required	No need for this requirement, removal suggested is	Don't know
Fixed minimum amount (EUR 22 per Kg)					
Relative minimum rate (20% of retail selling price)					

Please, comment and/or indicate your proposed revision of the current requirement	
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5.11 What main impacts do you expect from an increase of EU minimum rates?

	Major impact	Moderate impact	Minor impact	No impact	Don't know
Reduction in consumer demand and smoking prevalence					
Reduction of outflows of tobacco products from your country to other EU countries					
Reduction of inflows of tobacco products to your country from other EU countries					
Increase in the consumption of illicit products					
Increase in the tax revenues collected					

Other impact, please specify	
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5.12 If the current EU minimum rates will not be revised, how are tax levels likely to evolve in your country in the next five years (i.e. until 2023), as compared to the last five years (2013-2017)?

	Tax levels will grow faster than before	Tax levels will grow at about the same pace as before	Tax levels will grow slower than before	Tax levels will not increase	Don't know
Cigarettes					
Fine-cut tobacco					
Cigars and cigarillos					
Other smoking tobacco					

6. Revision of EU rules on excise duty structures and the 'minimum excise duty' (MED) instrument

6.1 The EU rules require that cigarettes are taxed according to a 'mixed structure' including a 'specific component' (a certain monetary amount) and an 'ad valorem component' (a percentage of the retail selling price). Furthermore, the specific component cannot be more than 76.5% of the total tax burden on cigarettes (inclusive of VAT) and less than 7.5%.

Is there a need for a further step towards the harmonisation of excise duty structures between Member States?

a) Overall need to revise the mixed structure rules	[choose one]
Yes, a greater harmonisation of excise duty structures across the EU is needed	
No, the mixed structure obligation and related thresholds are not effective and/or useful, so they should be removed	
There is no need to revise the current rules	
Don't know	

b) If a revision of upper and lower thresholds of the mixed structure is deemed necessary, please indicate the suggested new thresholds	In %
Revised upper threshold for the specific component of the mixed structure (currently 76.5%)	
Revised lower threshold for the specific component of the mixed structure (currently 7.5%)	

c) Please, comment and/or add further indications on a possible revision of the mixed structure obligation for cigarettes.	

6.2 Is there a need for introducing mixed structure obligations for tobacco products other than cigarettes? Please check all that applies.

	[multiple choice]
Fine-cut tobacco	
Cigars and cigarillos	
Other smoking tobacco	
None of the above	

Please, comment and/or add further indications on a proposed mixed structure obligation for tobacco products other than cigarettes	
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6.3 If the current EU rules on the excise duty structure for cigarettes will not be revised, how are structures likely to evolve in your country and in the EU in the next five years (i.e. until 2023)?

	Increase	Remain stable	Decrease	Don't know
The share of the specific component over the total tax burden at the country level will...				
The share of the <i>ad valorem</i> component over the total tax burden at the country level will...				
Overall, the degree of harmonisation in the excise duty structures across the EU will...				

6.4 The EU rules give Member States the option to levy a 'minimum excise duty' (MED) on tobacco products that essentially consists of a tax 'floor' that prevents that taxes fall below a certain level. For cigarettes only, the MED should also comply with the 'mixed structure' requirements. This instrument is used by nearly all Member States but in very different ways, which have sometimes caused legal issues or competition concerns.

Please, express your agreement / disagreement with the following possible options to reform the MED.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
Introducing a 'cap' on MED so that it can be applied only to a minority of products on the market and never to the majority of them						
Removal of the obligation for MED on cigarettes to comply with the 'mixed structure' requirements						
The obligation for MED on cigarettes to comply with the 'mixed structure' should be clarified, indicating how the MED component on the excise duty should be calculated						
Allowing the application of 'regressive' MED mechanisms, i.e. where the lower the selling price the higher the amount of MED applied						

Please, comment and/or add further indications on a proposed revision of MED rules	
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6.5 The 'minimum excise duty' (MED) can also be levied on other tobacco products. In this case, there is no 'mixed structure' requirement to comply with.

Please, express your agreement / disagreement with the following possible options to reform the MED for other tobacco products.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
Introducing a 'cap' on MED so that it can be applied only to a minority of products on the market and never to the majority of them						

Allowing the application of 'regressive' MED mechanisms, i.e. where the lower the selling price the higher the amount of MED applied						
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6.6 Please, indicate in the table below the estimated share (in %) of the market of cigarettes and fine-cut tobacco subject to the application of MED in your country, overtime (if available).

	2011	2012	2013	2014	2015	2016	2017
% of cigarettes market subject to MED							
% of fine cut tobacco market subject to MED							

7. Other miscellaneous legislative and administrative revisions

7.1 Please, indicate whether there is need to revise the following definitions / product classification in the EU excise legislation and, if YES, your suggested approach to it.

	Need for revision [multiple choice]	Suggested approach for revision
Clarification of Art 5(1)a as concerns the sentence: " <i>capable of being smoked without further industrial processing</i> "		
Clarification of Art 5(1)b as concerns the sentence: " <i>tobacco refuse put up for retail sale</i> "		
Alignment of Art 4.1 on 'cigars and cigarillos' with the customs CN definition.		
Introduction of a separate tax category for 'water-pipe tobacco'		
Introduction of a definition / clarification of the concepts of 'smoke' and 'smoking' (e.g. as opposed to 'heating')		

7.2 Please, indicate whether there is need for the following further general revisions of EU tobacco excise legislation and/or of the EU excise duty system at large EU and, if YES, your suggested approach to it.

	Need for revision [multiple choice]	Suggested approach for revision
To more explicitly include stability and predictability of national tax revenues among the objectives of the EU excise legislation		
To more explicitly include the need to avoid tax-induced substitution between different products among the objectives of the EU excise legislation		
To introduce a specific target for the public health protection objective of EU excise legislation		
To enhance the alignment of the EU excise legislation with the EU tobacco control policy		
To enhance the alignment of the EU excise legislation with the EU policy to fight illicit trade of tobacco		
To consider the introduction of stricter measures to mitigate cross-border flows of legal products in the EU excise system at large		
To simplify and reduce the regulatory burden of the EU excise legislation for Member States		

Other suggested revisions of the EU tobacco excise legislation and/or of the EU excise duty system at large	
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C) ASSESSMENT OF NOVEL PRODUCTS TRENDS, ISSUES AND LEGISLATIVE APPROACHES

Note: In this section, any reference to the taxation of electronic cigarettes and heated tobacco products always refers to the consumable parts - i.e. refill containers, liquids, disposable items etc. in the case of electronic cigarettes, sticks and capsules in the case of heated tobacco products - and never to the hardware (i.e. the electronic device) component.

8. Novel products – market trends

8.1 Which methods and sources are used in your country to monitor and estimate the market and consumption of e-cigarettes and heated tobacco products?

	[multiple choice]
Sales and consumption data provided by operators, in accordance with Directive 2014/40 (Tobacco Product Directive)	
Interview survey of consumers	
Tax declarations / tax stamps (where applicable)	
None of the above	

Other sources or methods. Please, specify:	
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8.2 Overall, how do you expect the consumption of novel products will evolve in your country in the next five years (i.e. until 2023)?

Note: assuming no major change in the current market and legal conditions.

	Fast growth	Moderate growth	No or limited variation	Decline	Don't Know / Not applicable
E-cigarettes					
Heated tobacco products*					

*Only for Member States where heated tobacco products are currently commercialised

8.3.(a) Please, fill in the detailed tables below with all the monitoring data and estimates collected and computed in your country (including by third-parties), concerning the consumption of 'novel products'.

Alternatively, you may forward in attachment to this questionnaire any relevant background documents and statistics on novel products available in your country.

b) Market and consumption data concerning e-cigarettes. <i>Note:</i> Please insert data from 2017 or the latest year available (please specify)	Unit	Answer	Year of reference
Estimated number of regular consumers of e-cigarettes (i.e. weekly consumer) in the country	Number of consumers		

Estimated share of e-cigarettes consumers who are ex-smokers	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarettes consumers who are 'dual users' (i.e. of both e-cigarettes and conventional tobacco)	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarettes consumers who never smoked tobacco	<i>In % of e-cigarettes consumers</i>		
Estimated overall value of e-cigarettes market in the country	<i>In national currency</i>		
Estimated share of <u>consumables</u> (e-liquids, cartridges etc.) on the overall value of e-cigarettes market in the country	<i>In %</i>		
Estimated share of online sales to the total sales value	<i>In %</i>		
Estimated number of business-to-business operators in the country (manufacturers, importers, wholesalers etc.)	<i>Number of registered enterprises</i>		
Estimated number of business-to-consumer operators in the country (retailers – both offline and online shops)	<i>Number of consumers</i>		

c) Market and consumption data concerning heated tobacco products. <i>Note: Please insert data from 2017 or the latest year available (please specify)</i>	Unit	Answer	Year of reference
Estimated number of regular consumers of heated tobacco products (i.e. weekly consumer) in the country	<i>Number of consumers</i>		
Estimated sales of heated tobacco products consumed	<i>Number of pieces</i>		
<u>OR, alternatively</u> , sales of heated tobacco products consumed	<i>By weight, in Kg</i>		

Note: (*) these questions are only for Member States where heated tobacco products are commercialised

9. E-cigarettes – taxation and policy issues

9.1 Are e-cigarettes subject to an *ad hoc* tax in your country (including tax already approved but not yet into force)?

YES [go to 9.2]	NO [go to 9.8]

[The following questions 9.2 – 9.7 apply only to e-cigarettes taxing Member States]

9.2. (a) Please specify the regime applied to e-cigarettes in your country, including which products are subject to the tax, and the tax rate applied.

(b) Please indicate any scheduled modification of the above tax regime, and the date it will enter into force

9.3 The taxation of e-cigarettes can be underpinned by various policy objectives.

Please, select in column (A) the policy objectives that are deemed relevant in your country (multiple choice is allowed), then rank them by importance in column (B).

Notes: objectives that are deemed not relevant or legitimate should not be selected in column A and should not be ranked in column B.

The ranking scale starts from "1=most important" and develops in accordance with the number of items selected in column A. For instance, if you have selected two items in column A the scale will go from "1=most important" to "2=least important"; if you have selected four items the scale will go from "1 most important" to "4=least important" etc.

Possible policy objectives	A Objectives that are deemed relevant [choose one]	B Ranking by importance [from "1=most important" onwards]
E-cigarettes are potentially harmful for health		
E-cigarettes are particularly appealing to young people and may represent a gateway to nicotine addiction		
E-cigarettes are essentially a substitute product of conventional cigarettes so they should be treated consistently to ensure a fair competition		
The consumers' substitution of cigarettes with e-cigarettes may cause undue tax revenue losses that should be avoided		
A tax regime may allow a better monitoring of market and operators		

Other objectives, please specify	
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9.4 Please, describe the salient features of the mechanisms envisaged to implement the e-cigarette tax in your country.

	[multiple choice]
Fiscal warehouse obligation for producers / traders	
Financial guarantees requested for producers / traders	
Obligation of electronic documents for the movement of products	
Obligation to pay the duty at production / import site (no suspension allowed)	
Obligation to place tax stamps on the products	
Payment based on tax declarations of the operators	
Ban of online sales	
Registration fee for operators	
None of the above	

Other relevant mechanisms. Please, specify.	
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If a registration fee is requested to operators. Please, indicate the amount and the periodicity	
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(annually, only once etc.)	
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9.5 What is the regulatory burden of implementing and enforcing the e-cigarette tax in your country?

Please, rate on a scale from "0=nil to 3=significant" the estimated burden for national authorities that derived from the following possible activities.

Note: the 'regulatory burden' includes the costs (financial and staff costs) of all required actions needed to administer, implement and oversee the e-cigarette tax in your country.

	Rating: 0=nil 1=modest 2=moderate 3=significant	If 'significant' (rating=3) please, provide an estimate of the <u>nature</u> and the <u>magnitude</u> of the burden.
Adapting national legislation including implementing acts		
Adapting the IT system and other administration tools		
Training staff		
Dealing with operators' authorisation and requests for clarifications		
Costs related to collecting the new tax		
Costs related to monitoring and control		

Other burdens, please specify	
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9.6 What is the amount of tax receipts collected in your country from the e-cigarette tax since its introduction?

	2015	2016	2017
Amount in <u>national currency</u>			

9.7 To what extent did the following factors affect the amount of tax receipts collected in 2017 as compared to initial expectations?

	Significantly	Moderately	No effect	Don't know
Cross-border flows of products from non-taxing countries				
Illegal manufacturing and sale within the country				
Consumers switching to 'do-it-yourself' products				
General decline in the demand of e-cigarettes				

Other factors, please specify:	
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What is the estimated overall economic value of illegal non-taxed e-cigarette products consumed in your country in 2017? (in national currency)	
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[The following question 9.8 apply only to Member States who do not tax e-cigarettes]

9.8 If your country has not introduced an *ad hoc* tax on e-cigarettes, what are the main reasons? Please, select in column (A) the reasons that are relevant in your country (multiple choice is allowed), then rank them by importance in column (B).

Notes: reasons that are deemed not relevant or legitimate should not be selected in column A and should not be ranked in column B.

The ranking scale starts from "1=most important" and develops in accordance with the number of items selected in column A. For instance, if you have selected two items in column A the scale will go from "1=most important" to "2=least important"; if you have selected four items the scale will go from "1 most important" to "4=least important" etc.

Possible reasons for not taxing	A Relevant reasons [choose one]	B Ranking by importance [from "1=most important" onwards]
E-cigarettes are much less harmful than conventional tobacco products		
E-cigarettes may support smoking cessation		
E-cigarettes are not tobacco products so they should not be subject to excise legislation		
E-cigarettes market is small and the potential revenues is not worth the effort of implementing and enforcing a tax regime		
The taxation on e-cigarettes would have <i>de facto</i> a disproportionate effect on SMEs competitiveness		
A harmonised approach to the taxation of e-cigarettes should be established at EU-level and not at the national level		
E-cigarettes products can be easily produced and moved illicitly, so the enforcement of taxation and control against frauds would be difficult and expensive		
There is insufficient data and information on e-cigarettes market to properly design a tax regime		

Other reasons, relevant please specify:	
--	--

[From now on questions are for all respondents]

9.9 Overall, is there a need to act at the EU-level to harmonise the fiscal approach to e-cigarettes across the Member States? Please, indicate your preferred approach to it.

	[choose one]
To adopt a common fiscal category for e-cigarettes in the EU excise legislation, but no mandatory minimum excise duty rate	
To adopt a common fiscal category <u>and</u> a minimum excise duty rate for e-cigarettes	
To adopt non-binding guidance for Member States on the taxation of e-cigarettes	
To refrain from any EU-level legislative intervention in this area	
Don't know	

9.10 Please, express your views on the most appropriate features of a possible EU harmonised tax category for e-cigarettes.

a) As concerns the tax base. [choose one]	All substances intended for use in a e-cigarette device	Only nicotine-containing substances	Don't know
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Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco

The harmonised tax should regard...			
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b) As concerns the tax structure. [multiple choice]	In volumetric terms (i.e. per millilitres of substance)	In proportion to the mg of nicotine contained	Proportionally to the retail selling price (ad valorem)	Don't know
The tax should be calculated...				

c) As concerns the EU minimum rate. [choose one]	More than 50%	Between 30% and 49%	Between 10% and 29%	Between 1% and 9%	Nil	Don't know
The hypothetical EU minimum rate should represent a share of the selling price equal to...*						

* Reference is made to the current 'weighted average selling price' of a container of 10 ml of e-liquid in your country.

d) Please, express your views on the possible implementation features of a EU harmonised tax category for e-cigarettes.	Definitely needed	Partly needed	Not needed	Don't know
Simplified regimes and exemption to reduce the burden for small and medium enterprises are...				
A transitional period to allow stakeholders to adapt before taxation is introduced is ...				

e) Please, indicate other suitable criteria to set a tax regime for e-cigarettes at EU-level	
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9.11 If a EU-level tax regime for e-cigarettes is introduced, what is the likelihood of the following impacts in your country?

	Very unlikely	Unlikely	Likely	Very likely	Don't know
Increased cross-border activities of e-cigarette domestic operators					
Fairer competition between domestic operators and operators based in other countries					
Improved control and monitoring of e-cigarettes domestic market					
A massive switch by consumers to 'do-it-yourself' products					
A massive switch by consumers to illicit non-taxed products					
SMEs significantly penalised against big players					
E-cigarette consumers may largely go back to conventional tobacco					
Increased administrative burden to comply with EU legislation					
Increased risk of disputes with domestic e-cigarettes operators					

Other impacts, please specify:	
---------------------------------------	--

9.12 Conversely, if no action is taken at EU level to harmonise the taxation of e-cigarettes, how is the market and legal framework likely to evolve in your country in the next five years (i.e. until 2023)?

	Increase significantly	Increase moderately	Remain stable	Decrease moderately	Decrease significantly	Don't know
The disparities in the tax treatment of e-cigarettes between your country and the other EU Member States will...						
The obstacles and constraints to cross-border trade for domestic operators will...						
The share of consumers that will turn to 'do-it-yourself' will...						
The competitiveness of smaller e-cigarette operators will...						
The risk of legal and administrative disputes over the taxation of e-cigarettes will...*						
The share of non-taxed illicit e-cigarettes products will...*						

Note: (*) only for e-cigarettes taxing Member States.

Other relevant trends, please specify:	
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10. Heated tobacco products – taxation and policy issues

10.1 Are heated tobacco products (also known as 'heat-not-burn') commercialised in your country? If so, when were they introduced?

YES	NO

Year and month of first introduction

10.2. (a) What is the approach to the categorisation and taxation of heated tobacco products that has been adopted / is going to be adopted in your country?

Please, also specify the regime applied, including any scheduled modification of the tax regime in the next years

	[choose one]
Categorised as 'cigarettes' and taxed accordingly	
Categorised as 'fine cut tobacco' and taxed accordingly	
Categorised as 'other smoking tobacco' and taxed accordingly	
Taxed according to a non-harmonised tax category	
Not taxed	
Not yet decided	
Don't know	

b) Please specify the tax regime envisaged for heated tobacco, including how is the tax calculated (per units, per weight etc.) and the tax rate applied.	
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c) Please indicate any scheduled modification of the above tax regime, and the date it will enter into force.	
--	--

10.3 What is the amount of tax receipts collected* in your country from heated tobacco products since their introduction?

	2016	2017
Amount in <u>national currency</u>		

* Only for EU countries where heated tobacco is commercialised

10.4 What are arguments underpinning your country's approach to the taxation of heated tobacco products? Please check all that apply.

Note: the question is applicable also to Member States where these products are not commercialised, assuming that they might be introduced in the future.

	[multiple choice]
Heated tobacco is less harmful than the conventional products	
Heated tobacco may represent a gateway to nicotine addiction for non-smokers	
Heated tobacco is essentially a substitute product of conventional cigarettes so it should be treated consistently to ensure a fair competition	
Heated tobacco may support smoking cessation	
The consumers' substitution of cigarettes with heated tobacco may cause excessive tax revenue losses that should be avoided	
Heated tobacco is essentially a different product from conventional tobacco products so it cannot be classified under any of the existing harmonised tax categories	
Heated tobacco needs to be classified under existing tax harmonised categories so that it is subject to the requirements of the EU excise duty system, including the EMCS	
A harmonised approach to the taxation of heated tobacco should be established at EU-level and not at national level to avoid legal fragmentation	
There is insufficient data and information on heated tobacco market to properly design a tax regime	

Other relevant arguments, please specify:	
--	--

10.5 Is the current different status of heated tobacco across EU countries causing any legal / administrative issue to your country? Please, provide a brief description of the problems incurred and a gross estimate of their magnitude.

	Summary problem description	Estimated burden of the problem (e.g., frequency of issues, estimated tax losses, staff and financial costs etc.)

Issues with the movement of heated tobacco <u>from</u> your country		
Issues with the movement of heated tobacco <u>to</u> your country		
Issues with the movement of heated tobacco <u>through</u> your country		

10.6 Overall, is there a need to act at EU-level to explicitly harmonise the fiscal approach to heated tobacco products in Member States? Please, indicate your preferred approach to it.

	[choose one]
To explicitly include heated tobacco in one of the existing tax categories of the EU excise legislation	
To establish a new fiscal category for heated tobacco, but no mandatory minimum excise duty rate	
To establish a new fiscal category <u>and</u> a minimum excise duty rate for heated tobacco	
To adopt non-binding guidance for Member States on the taxation of heated tobacco products under the current excise legislation	
To refrain from any EU-level legislative intervention in this area	
Don't know	

If your preferred approach is to include heated tobacco in one of the existing tax categories, please indicate in which one.	[choose one]
Revised/adjusted 'other smoking tobacco' category	
Revised/adjusted 'fine cut tobacco' category	
Revised/adjusted 'cigarette' category	

10.7 Please, express your views on the most appropriate features of a possible harmonised tax category for heated tobacco products.

a) As concerns the tax structure. [multiple choice]	In volumetric terms (i.e. weight in Kg)	In units (i.e. number of pieces)	Proportionally to the retail selling price (<i>ad valorem</i>)	Don't know
The tax should be calculated...				

b) As concerns the EU minimum rate [choose one]	More than 50%	Between 30% and 49%	Between 10% and 29%	Between 1% and 9%	Nil	Don't know
The hypothetical EU minimum rate should represent a share of the selling price equal to...*						

* Reference is made to the current 'weighted average selling price' of heated tobacco products.

c) As regards the implementation of a possible harmonised tax category for heated tobacco products, please indicate whether a transitional period to allow stakeholders to adapt to the new tax regime is needed. [choose one]	Definitely needed	Partly needed	Not needed	Don't know
A transitional period to allow stakeholders to adapt before taxation is introduced is ...				

d) Please, indicate other suitable criteria to set a tax regime for heated tobacco products at EU-level	
--	--

10.8 If a EU-level harmonised tax regime for heated tobacco is adopted, what is the likelihood of the following impacts (intended and unintended), in your country?

	Very unlikely	Unlikely	Likely	Very likely	Don't know
Reduction of administrative burden due to current disparities of classification across the EU					
Improved control and monitoring of movements and consumption in the domestic market					
More widespread commercialisation of heated tobacco products in the country					
New 'borderline' products of difficult classification would appear					
Consumers may largely go back to conventional tobacco					

Other impacts, please specify:	
---------------------------------------	--

10.9 Conversely, if no action is taken at EU level for the harmonisation of the taxation of heated tobacco products, how is the market and legal framework likely to evolve in your country in the next five years (i.e. until 2023)?

	Increase significantly	Increase moderately	Remain stable	Decrease moderately	Decrease significantly	Don't know
The legal and administrative issues concerning the movement and tax collection for heated tobacco products will...						
The disparities in the tax treatment of heated tobacco between your country and the other EU Member States will...						
The variety in the typology of heated tobacco products available on the market will...						

END OF SURVEY – THANK YOU FOR YOUR PARTICIPATION

B.2 Public health authorities consultation questionnaire

RESPONDENT'S DATA

Country:	
Respondent Name (contact person):	
Function:	
Authority/Unit:	
Other services involved:	

1. National public health policies on tobacco

1.1 Please, indicate in the table below the main policy documents in your country, concerning the protection of health against tobacco harm, summarising the measures envisaged and the specific targets set.

Policy document	Years covered	Main measures envisaged	Main target set (e.g. 'decrease of smoking prevalence by X% before year Y')
[free text]			

1.2 What is the role of taxation policy in your country to achieve the target of the above public health policy? Please indicate whether any of the following tax measures were adopted in your country to specifically address public health objectives.

	[multiple choice]
Increased tax levels for cigarettes	
Increased tax levels for fine-cut tobacco	
Increased tax levels for cigars and cigarillos	
Increased tax levels for other smoking tobacco	
Appropriate taxation of heated tobacco products	
Appropriate taxation of e-cigarette consumables (i.e. refill containers and e-liquids in general)	

Other relevant tax measures, please specify	
---	--

1.3 To what extent can the current tax levels on tobacco products and novel products in your country be considered satisfactory for the purpose of the public health policy?

	Very high extent	High extent	Moderate extent	Low extent	Very low extent	Don't know
cigarettes						
fine cut tobacco						
cigars and cigarillos						
other smoking tobacco						
heated tobacco products						
e-cigarettes						

If not satisfactory, please explain the main reasons	
--	--

2. Trends and drivers of smoking prevalence

2.1 Which data are used in your country to monitor and estimate smoking consumption trends for policy purposes? Please, indicate the source(s) used for the data and provide a weblink to the relevant documents, if available.

	Source(s) of data used	Relevant weblink
Smoking prevalence		
Smoking intensity (e.g. number of cigarettes per day)		
Specific prevalence of fine-cut tobacco use		
Prevalence of electronic cigarettes use		
Statistics on substitution between tobacco and electronic cigarettes		
Overall 'burden' of tobacco (estimates of the economic and social cost of tobacco consumption in the country)		

Please indicate other relevant national reports or studies on the <u>relationship between taxation / price and smoking prevalence</u> in your country	[free text]
Please indicate other relevant national reports or studies investigating the relative <u>weight of taxation vis-à-vis other factors in curbing consumption</u> in your country	[free text]
Please indicate other relevant national reports or studies investigating the <u>adverse effects of illicit trade / cross-border shopping on curbing consumption</u> in your country	[free text]

2.2 Has the trend in smoking prevalence in your country evolved in line with expectations / policies or plans, in the 2011-2017 period? Please indicate the degree of satisfaction in the following areas.

	Very high	high	intermediate	low	Very low	Don't know
Reduction of <u>overall</u> smoking prevalence in the country population (i.e. % of smokers)						
Reduction of smoking prevalence among <u>young people</u>						
Reduction of smoking prevalence among <u>women</u>						
Reduction of smoking prevalence among <u>low-income</u> population						
Reduction of smoking <u>frequency</u> among smokers (i.e. the average number of cigarettes per day)						

If trends were not in line with expectations / policies or plans, please indicate whether this was mostly due to taxation or other factors.	[choose one]
Unsatisfactory results were mostly caused by insufficient taxation	
Unsatisfactory results were partly caused by insufficient taxation	
Unsatisfactory results were mostly caused by factors other than taxation	
Don't know	

If insufficient taxation was a cause of unsatisfactory reduction of smoking prevalence, to what extent can this failure be attributed to ineffective EU excise legislation?	[choose one]
To a high extent	
To a moderate extent	
To a modest extent	

Not at all	
Don't know	

2.3 What have been the main driving factors behind reduction in smoking prevalence in your country in the period 2011-2017?

Please indicate the share (in %) of the total reduction observed that can be roughly attributed to the following measures / policies possibly adopted in your country.

Note: for instance, if the observed reduction in prevalence was of 8 percentage points and you think that half of it is due to tax increases, type '50%' in the first cell. The total must add up to 100%.

	Share of total reduction attributable to this driver (out of a total 100%)
Increase in overall price levels driven by tax increases	...%
Health warnings on tobacco packs	...%
Advertising bans	...%
Regulation on smoke-free environments	...%
Campaigns to prevent smoking uptake and encourage cessation	...%
Smoking cessation health support services (including quit smoking aids and therapies)	...%
Total	100%

Please indicate other drivers and/or add comments to explain your assessment above [free text]

2.4 Has any category or population groups proved particularly responsive or non-responsive to changes in tax levels in your country, i.e. reducing their smoking behaviours well above or below the population average? If so, please explain.

Note: categories and population groups may be defined by age, gender, education, income, nationality/ethnic group etc.

[free text]

3. The impact of EU excise legislation on public health objectives

3.1 Overall, are you satisfied with the objectives and measures laid-down in the EU tobacco excise legislation to ensure a high level of health protection?

Please indicate your degree of satisfaction with respect to the following aspects.

	Very high	high	intermediate	low	Very low	Don't know
Effectiveness in reinforcing public health protection in Member States						
Clarity of EU excise legislation objectives on public health protection						
Relevance of the specific measures laid down in the EU excise legislation with its general health objectives						
Coherence of EU excise legislation with the EU tobacco policy (i.e. the Tobacco Product Directive* and related policies)						
Coherence of EU excise legislation with the international Framework Convention on Tobacco Control objectives and priorities concerning the protection of public health						

*Directive 2014/40

If you are not satisfied with the contribution of the EU excise legislation to your country's public health objectives, please explain the reason why.

[free text]

If you are not satisfied with the contribution of the EU excise legislation to the objectives of the overall EU tobacco control policy and/or with the provisions of the Framework Convention for Tobacco Control, please explain the reason why.

[free text]

3.2 What would have been the reduction in smoking prevalence in your country without the minimum rates and the other provisions introduced by Directive 2011/64 (i.e. maintaining the previous EU legislation)?

	Much lower	Lower	No difference	Higher	Much higher	Don't know
The reduction of <u>overall</u> smoking prevalence would have been...						
The reduction of smoking prevalence <u>among youth</u> would have been...						

Please, explain your answer

[free text]

3.3 What are the priorities for a possible revision of the EU excise legislation from a public health policy perspective?

Please indicate the importance from a public health perspective of the following hypothetical measures

	Major importance	Moderate importance	Minor importance	Not important	Don't know
Introduce in the EU excise legislation a measurable public health target					
Increase the EU minimum rates on cigarettes					
Increase the EU minimum rates on fine-cut tobacco					
Increase the EU minimum rates on cigars and cigarillos					
Increase the EU minimum rates on other tobacco products					
Reduce the tax level gap between fine-cut tobacco and cigarettes to prevent substitution					
Clarify uncertainties in the tax classification of certain cigarillos					
Clarify uncertainties in the tax classification of certain raw tobacco					
Establish rapid increases of minimum rates to enhance the impact on the reduction of the demand					
Adopt measures to prevent excessive cross-border shopping of legal cigarettes					
Strengthen measures to prevent and fight the consumption of illegal non- taxed cigarettes					

Please, indicate other relevant measures and/or explain your answers above.	[free text]
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4. Approach to novel products

Note: In this section, any reference to the taxation of electronic cigarettes and heated tobacco products *always refers to the consumable parts - i.e. refill containers, liquids, disposable items etc. in the case of electronic cigarettes, sticks and capsules in the case of heated tobacco products - and never to the hardware (i.e. the electronic device) component.*

4.1 Some Member States have adopted different approaches to the taxation of electronic cigarettes and heated tobacco products, based on different policy considerations and goals.

Please indicate, from a public health perspective and with reference to the situation in your country, your agreement / disagreement with the following statements.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
E-cigarettes are much less harmful than conventional tobacco products						
E-cigarettes may represent a gateway to nicotine addiction for non-smokers						
E-cigarettes are particularly appealing to young people						
There is not sufficient evidence on the health risk of e-cigarettes so due caution should apply						
E-cigarettes may support smoking cessation						
Heated tobacco is less harmful than the conventional products						
Heated tobacco may represent a gateway to nicotine addiction for non-smokers						
Heated tobacco may support smoking cessation						
There is not sufficient evidence on the health risk of heated tobacco so due caution should apply						

Is there evidence in your country of novel products' contribution to either smoking cessation or, conversely, enticing new consumers or ex-smokers into resuming tobacco smoking?

Please indicate the source of evidence used, if any, and add a weblink to relevant reports / documents.

	Source(s) of data used	Relevant weblink
E-cigarettes		
Heated tobacco products		

Overall, are you in favour or against the taxation of e-cigarettes for public health purposes?

Please add weblink references to any published opinion or statement on this subject adopted by public authorities in your country.

In favour of taxation		Please provide weblink reference to any published statement or report in your country
Against taxation		Please provide weblink reference to any published statement or report in your country
Don't know		

4.2 Overall, is there a need to act at the EU-level to harmonise the fiscal approach to e-cigarettes across the Member States?

Please, indicate your preferred approach to it.

	[one choice]
To adopt a common fiscal category for e-cigarettes in the EU excise legislation, but no mandatory minimum excise duty rate	
To adopt a common fiscal category <u>and</u> a minimum excise duty rate for e-cigarettes	
To adopt non-binding guidance for Member States on the taxation of e-cigarettes	
To refrain from any EU-level legislative intervention in this area	
Don't know	

Please, indicate other suitable approaches to the harmonisation of the taxation of e-cigarettes at EU-level

[free text]

4.3 Assuming that a EU-harmonised tax regime for e-cigarettes is designed, what should its guiding criteria be? Please express your agreement / disagreement with the following criteria

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
To commensurate taxation to the level of nicotine contained in products						
To set a tax rate that effectively deter consumption by young people						
To set a tax rate that would not discourage switching from conventional tobacco						
To set a tax rate that is proportionate to the agreed health risk of e-cigarettes (assuming a robust and independent estimate is available)						

Please, indicate other suitable criteria to set a tax regime for e-cigarettes at EU-level

[free text]

4.4 Is there a need to act at EU-level to explicitly harmonise the fiscal approach to heated tobacco products in Member States?

Please, indicate your preferred approach to it.

	[one choice]
To explicitly include heated tobacco in one of the existing tax categories of the EU excise legislation	
To establish a new fiscal category for heated tobacco, but no mandatory minimum excise duty rate	
To establish a new fiscal category <u>and</u> a minimum excise duty rate for heated tobacco	
To adopt non-binding guidance for Member States on the taxation of heated tobacco products under the current excise legislation	
To refrain from any EU-level legislative intervention in this area	
Don't know	

If your preferred approach is to include heated tobacco in one of the existing tax categories, please indicate in which one.	[One choice]
Revised/adjusted 'other smoking tobacco' category	
Revised/adjusted 'fine cut tobacco' category	
Revised/adjusted 'cigarette' category	
Don't know	

Please, indicate other suitable criteria to define the tax regime for heated tobacco products at EU-level

[free text]

4.5 Do you have other comments on the possible harmonisation of excise duty for e-cigarettes and/or heated tobacco products?

B.3 Questionnaires for e-cigarettes stakeholders

Part 1 – Taxing countries

A) QUESTIONNAIRE FOR E-CIGARETTE INDUSTRY / TRADE ASSOCIATIONS

1. General details of the respondent

Name of the organisation:	
Country:	
Contact person:	
Mission and main objectives of the organisation	
Number of members	

2. Please fill in the table below with data and/or estimates on the level of demand, the size and structure of the market, and the production of e-cigarettes in your country in 2017 (or the nearest year available).

When official data are not available, please insert the industry's best estimates.

Data 'ranges' (e.g. "20%-30%" or "€ 50 – 80 million") are also suitable.

a) Demand	Unit	ANSWER	YEAR (if not 2017)
Estimated number of <u>regular (i.e. weekly) consumers</u> of e-cigarettes in the country	<i>Number of population</i>		
Estimated share of e-cigarette consumers who are <u>ex-smokers</u>	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarette consumers who are ' <u>dual users</u> ' (i.e. of both e-cigarettes and conventional tobacco)	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarette consumers who <u>never smoked</u> tobacco	<i>In % of e-cigarettes consumers</i>		
Estimated average <u>weekly expenditure</u> of regular consumers of e-cigarettes	<i>Amount in national currency</i>		
Estimated <u>number of new vapers</u> last year	<i>Number of population</i>		
Estimated number of ex-vapers who <u>quit e-cigarettes</u> last year	<i>Number of population</i>		
Estimated share of ex-vapers who eventually <u>returned to tobacco</u> last year	<i>In % of ex-consumers of e-cigarettes</i>		
b) Market size and structure	Unit	ANSWER	YEAR (if not 2017)
Estimated overall value of the e-cigarette market in the country – only <u>devices</u>	<i>Amount in national currency</i>		
Estimated overall value of the e-cigarette market in the country - only <u>consumables products</u> (e-liquids, cartridges etc.)	<i>Amount in national currency</i>		
Estimated overall <u>volume of e-liquids</u> consumed last year	<i>In hectolitres</i>		

Estimated share of <u>nicotine-free</u> e-liquids of the total e-liquids consumed	<i>In %</i>		
Estimated share of <u>online</u> sales of the total <u>value of sales</u> (including both devices and consumables)	<i>In %</i>		
Estimated share of liquids for ' <u>do-it-yourself</u> ' vaping of the total e-liquids consumed	<i>In %</i>		
Estimated number of <u>business-to-business operators</u> in the country (manufacturers, importers, wholesalers etc.)	<i>Number of registered enterprises</i>		
Estimated number of <u>business-to-consumer operators</u> in the country (retailers – both offline and online shops)	<i>Number of registered enterprises</i>		
Estimated total employees in the e-cigarettes sector	<i>Number of full-time employees</i>		
Estimated market share of small and medium size enterprises	<i>In % of the total market value</i>		
c) Production	Unit	ANSWER	YEAR (if not 2017)
Estimated share of e-liquids that are manufactured <u>in the country</u> of consumption	<i>In % of the e-liquids market value</i>		
Estimated share of e-liquids that are manufactured <u>in other EU countries</u> of consumption	<i>In % of the e-liquids market value</i>		
Estimated share of e-liquids that are manufactured <u>in non-EU countries</u> of consumption	<i>In % of the e-liquids market value</i>		

3. What is the expected growth rate of the e-cigarette market in your country in the next few years? (baseline year: 2017)

	Next year <i>Growth rate (in %)</i>	Next five years <i>Cumulated growth rate (in%)</i>
Number of regular (i.e. weekly) vapers		
Economic value of the e-cigarette market		

4. What have been the impacts of the introduction of consumption taxes on e-cigarette consumables (e-liquids, cartridges, etc.) in your country? Please indicate the perceived magnitude of the following impacts:

	Very High	High	Moderate	Modest	No impact	Don't know
Overall decline in consumption						
Increased demand for 'do-it-yourself' products						
Increased cross-border purchase from non-taxing countries						
Better and safer products for consumers						
Improved market monitoring by public authorities						
Reduced competitiveness for small players <i>vis-à-vis</i> larger players.						
More administrative and bureaucratic costs for economic operators						
Market 'barriers' for foreign players to operate on your country's market						
Increased illicit/informal trade						

Other relevant impact(s), please specify:						
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5. What is the estimate share of the overall e-cigarette consumables (e-liquids, cartridges etc.) consumed in your country that are not taxed due to cross-border shopping, illicit/informal trade, etc.

	In %
Taxed products consumed (in %)	
Not taxed products consumed (in %)	
Total	100%

6. To what extent have the following factors possibly affected the competitiveness of the e-cigarette industry in your country?

Please rate each factor from '1=no threat' to '4=major threat' then add a brief explanation (if relevant).

	Rating: 1=no threat 2=minor 3=moderate 4=major threat	Brief explanation
Increase in prices caused by taxation		
Administrative costs related to the tax regime obligations		
Other EU regulatory obligations, such as the notification obligations required by the Tobacco Products Directive 2014/40 (please specify: _____)		
Other regulatory obligations introduced in my country (please specify: _____)		
Unfair competition from foreign players		
Other factor(s), please specify: _____		

7. Please indicate below the main information sources on the e-cigarette market and consumption available in your country – such as studies, reports, surveys databases etc. – and weblink (if available).

Sources	Weblink

B) QUESTIONNAIRE FOR ECONOMIC E-CIGARETTE OPERATORS

1. Please indicate the main activities of your business.

Activities	Select all that apply
Manufacturing / assembling of e-cigarette hardware / devices	
Import / distribution (business-to-business) of e-cigarette hardware / devices	
Manufacturing / assembling of e-cigarette consumables (e-liquids, cartridges etc.)	
Import / distribution (business-to-business) of e-cigarette consumables (e-liquids, cartridges etc.)	
Retail sale of e-cigarettes – online shops	
Retail sale of e-cigarettes – offline, 'physical' stores	

Other related activity(ies), please specify: _____	
---	--

2. What has been the impact of the introduction of a national tax on e-cigarette consumables on your business?

Please compare the current situation with the situation prior to the introduction of the tax.

For manufacturers / wholesalers of e-liquids and other consumables		
Change in the average wholesale price of products	increase in %	
	decrease in %	
Change in the annual sales volume	increase in %	
	decrease in %	
For retailers of e-liquids and other consumables		
Change in the average retail price of products	increase in %	
	decrease in %	
Change in the annual sales volume	increase in %	
	decrease in %	

3. What are the administrative obligations required by the tax regime? Can you roughly estimate the extra costs imposed on your business?

	Select all that apply	Provide a quantitative estimate of the costs incurred – monetary amounts and/or staff/days
Obligation to set up a fiscal (bonded) warehouse to store taxable products and related costs		Only one time: Annually:
Obligation to pay a financial guarantee on the products under 'suspension of duty' (if applicable), and related financial costs		Annually:
Obligation to move products using electronic documents, and related cost to set up and operate the IT infrastructure		Only one time: Annually:
Obligation to prepare periodical tax declarations, and related staff costs		Annually:
General staff costs related to dealing with tax authorities (including inspections and controls)		Annually:

Other relevant costs, please specify:	
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4. **[Only for manufacturers / wholesalers]: If your average wholesale selling prices have increased since the introduction of the tax, what are the main reasons?**
Please indicate the most important reason as well as other relevant reasons.

	<i>Main reason [choose only one]</i>	<i>Other relevant reasons [multiple choice]</i>
The sheer amount of the tax introduced		
The administrative costs related to the tax regime obligations		
Other EU regulatory obligations (such as the notification obligations required by the Tobacco Products Directive 2014/40)		
Other regulatory obligations introduced in my country		
Increased production / distribution costs		
Other reason(s), please specify: _____		

5. **[Only for retailers]: If your average retail selling prices have increased since the introduction of the tax, how have the consumers changed their purchasing patterns (if changed)?**
Please indicate the most important change as well as other relevant changes.

	<i>Main change [choose only one]</i>	<i>Other relevant changes [multiple choice]</i>
Consumers spend more for the same amount of products		
Consumers tend to buy less and consume less		
The share of consumers opting for 'do-it-yourself' has increased		
The share of consumers purchasing online from non-taxing countries has increased		
Other change(s), please specify: _____		

6. **What has been the impact of taxation on the competitive environment for your business? Please express your agreement / disagreement with the following statements.**

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
The number of competitors has decreased						
The profit margins have been reduced						
Big players have gained competitive advantages with regard to small players						
There are 'bad players' who do not pay taxes and severely distort the competition						
It has become more difficult for foreign players to operate in my country						
Other competitive issue(s) caused by taxation, please specify: _____						

7. **Is your business also operating in other EU markets?**

YES	NO

- If Yes, are your cross-border operations influenced by existing national tax regimes?**

Definitely Yes - We operate <u>only</u> in other EU countries that do <u>not</u> apply taxes on e-cigarettes	
Mostly Yes - We operate <u>preferably</u> in other EU countries that do <u>not</u> apply taxes on e-cigarettes	
No	

8. Are heated tobacco products directly competing with e-cigarettes?

Definitely No - they are two completely different products	
Mostly No - they are quite different products, with some similarities	
Mostly Yes - there are more similarities than differences	
Definitely Yes - they are potentially substitute product	
Don't know	

C) QUESTIONNAIRE FOR E-CIGARETTE CONSUMERS

1. When did you start using e-cigarettes regularly (i.e. each week)?

Month	Year

2. Were you a tobacco smoker when you started using e-cigarettes?

YES	NO

3. Do you currently smoke tobacco?

YES	Occasionally	NO

4. How often do you prepare the vaping liquids yourself ('do-it-yourself')?

Always	Very frequently	Quite frequently	Seldom	Never

5. How often do you buy vaping liquids / cartridges online from another country?

	Always	Very frequently	Quite frequently	Seldom	Never
Other EU countries					
Other non-EU countries					

6. How much do you spend on e-cigarettes per week on average (not including devices / hardware)?

Amount in national currency	
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7. If you previously used to smoke tobacco, how much did you spend on cigarettes and/or other smoking tobacco per week on average?

Amount in national currency	
-----------------------------	--

8. In case of a hypothetical increase in the price of e-cigarettes consumables (e-liquids, cartridges etc.), would you change your consumption behaviour? And if Yes, how? Please choose one answer for each of the three proposed scenarios.

	<i>Scenario one Price increases by 20%</i>	<i>Scenario two Price increases by 50%</i>	<i>Scenario three Price increases by 100%</i>
Yes, I would reduce consumption			
Yes, I would buy less expensive products			
Yes, other change(s), please specify:			
No change			

9. Do you use heated tobacco products?

YES	Occasionally	NO

10. In your opinion, can heated tobacco be a substitute of e-cigarettes?

Definitely No - they are two completely different products	
Mostly No - they are quite different products, with some similarities	
Mostly Yes - there are more similarities than differences	
Definitely Yes - they are very similar product	
Don't know	

Part 2 – Non-taxing countries

A) QUESTIONNAIRE FOR E-CIGARETTE INDUSTRY / TRADE ASSOCIATIONS

1. General details of the respondent

Name of the organisation:	
Country:	
Contact person:	
Mission and main objectives of the organisation	
Number of members	

2. Please fill in the table below with data and estimates on the level of demand, the size and the structure of the market, and the production of e-cigarettes in your country in 2017 (or the nearest year available).

When official data are not available, please insert the industry's best estimates.

Data 'ranges' (e.g. "20%-30%" or "€ 50 – 80 million") are also suitable.

d) Demand	Unit	ANSWER	YEAR (if not 2017)
Estimated number of <u>regular</u> (i.e. weekly) consumers of e-cigarettes in the country	<i>Number of population</i>		
Estimated share of e-cigarette consumers who are <u>ex-smokers</u>	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarette consumers who are ' <u>dual users</u> ' (i.e. of both e-cigarettes and conventional tobacco)	<i>In % of e-cigarettes consumers</i>		
Estimated share of e-cigarette consumers who <u>never smoked</u> tobacco	<i>In % of e-cigarettes consumers</i>		
Estimated average <u>weekly expenditure</u> of regular consumers of e-cigarettes	<i>Amount in national currency</i>		
Estimated <u>number of new vapers</u> last year	<i>Number of population</i>		
Estimated number of ex-vapers who <u>quit e-cigarettes</u> last year	<i>Number of population</i>		
Estimated share of ex-vapers who eventually <u>returned to tobacco</u> last year	<i>In % of ex-consumers of e-cigarettes</i>		
e) Market size and structure	Unit	ANSWER	YEAR (if not 2017)
Estimated overall value of the e-cigarette market in the country – only <u>devices</u>	<i>Amount in national currency</i>		
Estimated overall value of the e-cigarette market in the country - only <u>consumables products</u> (e-liquids, cartridges etc.)	<i>Amount in national currency</i>		
Estimated overall <u>volume of e-liquids</u> consumed last year	<i>In hectolitres</i>		
Estimated share of <u>nicotine-free</u> e-liquids of the total e-liquids consumed	<i>In %</i>		
Estimated share of <u>online</u> sales of the total <u>value of sales</u> (including both devices and consumables)	<i>In %</i>		

Estimated share of liquids for 'do-it-yourself' vaping of the total e-liquids consumed	In %		
Estimated number of <u>business-to-business operators</u> in the country (manufacturers, importers, wholesalers etc.)	Number of registered enterprises		
Estimated number of <u>business-to-consumer operators</u> in the country (retailers – both offline and online shops)	Number of registered enterprises		
Estimated total employees in the e-cigarettes sector	Number of full-time employees		
Estimated market share of small and medium size enterprises	In % of the total market value		
f) Production	Unit	ANSWER	YEAR (if not 2017)
Estimated share of e-liquids that are manufactured <u>in the country</u> of consumption	In % of the e-liquids market value		
Estimated share of e-liquids that are manufactured <u>in other EU countries</u> of consumption	In % of the e-liquids market value		
Estimated share of e-liquids that are manufactured <u>in non-EU countries</u> of consumption	In % of the e-liquids market value		

3. What is the expected growth rate of the e-cigarette market in your country in the next few years? (baseline year: 2017)

	Next year Growth rate (in %)	Next five years Cumulated growth rate (in%)
Number of regular (i.e. weekly) vapers		
Economic value of the e-cigarettes market		

4. In your opinion, what do you think the potential impact of the introduction of consumption taxes on e-cigarettes consumables would be in your country? Please indicate the expected magnitude of the following possible impacts.

	Very High	High	Moderate	Modest	No impact	Don't know
Overall decline in consumption						
Increase demand of do-it-yourself products						
Increase cross-border purchase from non-taxing countries						
Better and safer products for consumers						
Improved market monitoring by public authorities						
Reduced competitiveness for small players <i>vis-à-vis</i> large players.						
More administrative and bureaucratic costs for economic operators						
Market 'barriers' for foreign players to operate on your country's market						
Increased illicit trade						

Other relevant impact, please specify:	
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5. To what extent have the following factors possibly affected the competitiveness of the e-cigarette industry in your country?

Please rate each factor from '1=no threat' to '4=major threat' then add a brief explanation (if relevant).

	Rating: <i>1=no threat</i> <i>2=minor</i> <i>3=moderate</i> <i>4=major threat</i>	Brief explanation
EU regulatory obligations, such as the notification obligations required by the Tobacco Products Directive 2014/40 (please specify: _____)		
Regulatory obligations introduced in my country (please specify: _____)		
Other factor(s), please specify: _____		

6. Please indicate below the main information sources on the e-cigarette market and consumption available in your country – such as studies, reports, surveys databases etc. – and weblink (if available).

Sources	Weblink

B) QUESTIONNAIRE FOR ECONOMIC E-CIGARETTE OPERATORS

1. Please indicate the main activities of your business.

Activities	Select all that apply
Manufacturing / assembling of e-cigarette hardware / devices	
Import / distribution (business-to-business) of e-cigarette hardware / devices	
Manufacturing / assembling of e-cigarette consumables (e-liquids, cartridges etc.)	
Import / distribution (business-to-business) of e-cigarette consumables (e-liquids, cartridges etc.)	
Retail sale of e-cigarettes – online shops	
Retail sale of e-cigarettes – offline, 'physical' stores	
Other related activity(ies), please specify:	

2. In your opinion, what do you think the potential impact of the introduction of consumption taxes on e-cigarette consumables (e-liquids, cartridges, etc.) would be in your country?

Please indicate the expected magnitude of the following possible impacts:

	Very High	High	Moderate	Modest	No impact	Don't know
Overall decline in consumption						
Increased demand for 'do-it-yourself' products						
Increased cross-border purchase from non-taxing countries						
Better and safer products for consumers						
Improved market monitoring by public authorities						
Reduced competitiveness for small players <i>vis-à-vis</i> larger players						
More administrative and bureaucratic costs for economic operators						
Market 'barriers' for foreign players to operate on your country's market						
Increased illicit trade						
Other relevant impact(s), please specify:						

**3. In case of a hypothetical tax on e-cigarettes consumables (e-liquids, cartridges etc.), to what extent would these translate into an increase in prices?
Please indicate the extent of the tax the would 'pass-through' on prices.**

For manufacturers / wholesalers of e-liquids and other consumables	Choose one
The wholesale price increase would be greater than the tax	
The wholesale price increase would be of the same amount as the tax	
The wholesale price increase would be smaller than the tax	
For retailers of e-liquids and other consumables	Choose one
The retail price increase would be greater than the tax	
The retail price increase would be of the same amount as the tax	
The retail price increase would be smaller than the tax	

4. Is your business also operating on other EU markets?

YES	NO

If Yes, are your cross-border operations influenced by existing national tax regimes?

Definitely Yes - We operate <u>only</u> in other EU countries that do <u>not</u> apply taxes on e-cigarettes	
Mostly Yes - We operate <u>preferably</u> in other EU countries that do <u>not</u> apply taxes on e-cigarettes	
No	

5. Are heated tobacco products directly competing with e-cigarettes?

Definitely No - they are two completely different products	
Mostly No - they are quite different products, with some similarities	
Mostly Yes - there are more similarities than differences	
Definitely Yes - they are potentially substitute product	
Don't know	

C) QUESTIONNAIRE FOR E-CIGARETTE CONSUMERS

1. When did you start using e-cigarettes regularly (i.e. each week)?

Month	Year

2. Were you a tobacco smoker when you started using e-cigarettes?

YES	NO

3. Do you currently smoke tobacco?

YES	Occasionally	NO

4. How often do you prepare the vaping liquids yourself ('do-it-yourself')?

Always	Very frequently	Quite frequently	Seldom	Never

5. How often do you buy vaping liquids / cartridges online from another country?

	Always	Very frequently	Quite frequently	Seldom	Never
Other EU countries					
Other non-EU countries					

6. How much do you spend on e-cigarettes per week on average (not including devices / hardware)?

Amount in national currency	
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7. If you previously used to smoke tobacco, how much did you spend on cigarettes and/or other smoking tobacco per week on average?

Amount in national currency	
-----------------------------	--

8. In case of a hypothetical increase in the price of e-cigarettes consumables (e-liquids, cartridges etc.), would you change your consumption behaviour? How?
Please choose one answer for each of the three proposed scenarios.

	<i>Scenario one Price increases by 20%</i>	<i>Scenario two Price increases by 50%</i>	<i>Scenario three Price increases by 100%</i>
Yes, I would reduce consumption			
Yes, I would buy less expensive products			
Yes, other change(s), please specify: _____			
No change			

9. Do you use heated tobacco products?

YES	Occasionally	NO

10. In your opinion, can heated tobacco be a substitute of e-cigarettes?

Definitely No - they are two completely different products	
Mostly No - they are quite different products, with some similarities	
Mostly Yes - there are more similarities than differences	
Definitely Yes - they are very similar product	
Don't know	

B.4 Questionnaire for the Open Public Consultation

OBJECTIVE AND SCOPE

Council directive 2011/64/EU sets out EU rules on the structure and rates of excise duty applied to manufactured tobacco. In particular, it defines and classifies various tobacco products according to their characteristics and lays down the relevant minimum rates and structure of excise duty. The purpose of the Directive is to ensure the proper functioning of the internal market and a high level of health protection.

Every four years, the European Commission is required to submit a Report to the Council, accompanied - where appropriate - by a proposal for the revision of the legislation. The next Report is planned for 2019.

This consultation is intended to gather the views of EU stakeholders on the current tobacco taxation in the EU, as well as on novel products (e-cigarettes and heated tobacco products) and appropriate options for a possible revision of Directive 2011/64/EU. Individual citizens, economic operators, business organisations, non-government organisations, advisory and public administration bodies are invited to participate in the consultation.

The questionnaire is divided into 3 sections, namely:

- Section A - on respondent's profile and details;
- Section B - on the taxation of conventional tobacco products;
- Section C - on 'novel' products, in particular 'electronic cigarettes' and 'heated tobacco products'.

Sections B and C include general questions as well as questions concerning technical aspects of the EU excise legislation that are more suitable for respondents who are familiar with the provisions and the functioning of Directive 2011/64.

A) RESPONDENT'S DETAILS

1. *Please select whether you participate to this consultation as:

A) Individual / private capacity	
B) Economic operator	
C) Public administration	
D) Business organisation (e.g. a trade association) or advisory body (e.g. law firm, consultancy)	
E) Non-government organisation	
F) Other, please specify	

2. *Please provide your name or the name of your organisation.

Please note you can still opt for your answers to remain anonymous when results are published.

3. [only for group D, E & F] If your organisation is included in the Transparency Register, please indicate your Register ID number.

If your organisation is not registered, we invite you to register [here](#), although it is not compulsory in order to reply to this consultation. [Why a transparency register?](#)

4. *[only for group B] Please indicate if your business is involved in manufacturing and/or distribution and trade of any of the following products.

Cigarettes	
Cigars and cigarillos	
Fine-cut tobacco	
Pipe tobacco	
Water-pipe tobacco	
Heated tobacco products	
Electronic cigarettes products	

5. [only for group B] Please indicate the current number of full-time employees in your enterprise.

If you are active in multiple sectors, please provide estimates only for the tobacco / e-cigarette activities.

Self-employed	
Less than 10 employees	
Between 10 and 49 employees	
Between 50 and 249 employees	
More than 250 employees	

6. *In which country are you based?

Organisations operating in more than one country should indicate the location of their EU headquarters. Individuals may choose to indicate the country of residence or the country of origin.

Belgique/België	
България	
Česká republika	
Danmark	
Deutschland	
Eesti	
Éire/Ireland	
Ελλάδα	
España	
France	
Hrvatska	
Italia	
Κύπρος	
Latvija	
Lietuva	
Luxembourg	
Magyarország	
Malta	
Nederland	
Österreich	
Polska	
Portugal	
România	
Slovenija	
Slovensko	
Suomi/Finland	
Sverige	
United Kingdom	
Other (please specify)	

7. [only for group B] Does your company have subsidiaries in more than one country?

YES	
NO	

8. *Please note: The European Commission will prepare a report summarizing the responses. Contributions received are thus intended for publication on the Commissions website (see specific privacy statement). Please indicate whether your reply:

Can be published, including your name or that of your organisation (I consent to publication of all information in my contribution)	
Can be published in an anonymous way (I consent to publication of all information in my contribution except my name/the name/Register ID of my organisation)	

B) TAXATION OF CONVENTIONAL TOBACCO PRODUCTS

9. Considering that taxes represent a large portion of the price of tobacco products, how do you rate the current levels of prices of the following products in your country?

	Much too high	Slightly high	too	All right	Slightly too low	Much too low	Don't know
Cigarettes							
Fine-cut tobacco for hand rolling							
Cigars and cigarillos							
Pipe tobacco							
Water-pipe tobacco							

10. Consumers may react to taxes by switching to less expensive products. To what extent are the following behaviours a problem in your country?

	Major problem	Moderate problem	Minor problem	Not a problem	Don't know
Smokers replacing cigarettes with other less expensive tobacco products					
Smokers purchasing less expensive (legal) cigarettes in other EU countries					
Smokers purchasing less expensive illegal cigarettes on the black market					

11. What should the main goals of the EU legislation be as regards the taxation of tobacco products? Please rate the importance of the following possible goals from 'very high' to 'very low'.

	Very high	high	intermediate	low	Very low	Don't know
Reduce the differences in tax levels between EU countries, so that price differences are also reduced						
Ensure that tax regimes applied by EU countries to tobacco products do not distort						

competition between market operators						
Ensure that tax regimes applied by EU countries to tobacco products sufficiently protect public health						
Ensure stability and predictability in the tax receipts collected by EU countries						
Establish rigorous and clear common rules to define and classify tobacco products subject to taxation						
Help EU countries to curb illicit trade of tobacco and tax fraud						
Reduce and simplify as much as possible the burden of the tax system on national authorities and market operators						

Other relevant goals, please specify	
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The following questions concern technical aspects of Directive 2011/64. Respondents not familiar with the subject may wish to skip to Section C

12. The EU minimum rates on cigarettes consist of two requirements:

- a) **The fixed minimum amount: EU countries should levy an excise duty of at least EUR 90 per 1000 cigarettes.**
- b) **A relative minimum: the excise duty level in EU countries should be no less than 60% of the weighted average price of cigarettes. This requirement can be derogated if EU countries levy more than EUR 115 per 1000 cigarettes.**

In 2017, the EU average excise duty level was approximately EUR 145 per 1000 cigarettes, while the average proportion between excise duty and weighted average price across EU countries was approximately 62%.

Against this background, is there a need in your opinion to revise the EU minimum rates?

	Major increase needed	Moderate increase needed	No change needed	This provision should be removed	Don't know
Fixed minimum amount (EUR 90 per 1000 cigarettes)					
Relative minimum (60% of weighted average price).					
Threshold for derogation to relative minimum (EUR 115 per 1000 cigarettes)					

Please, add any relevant comment	
----------------------------------	--

13. Please express your agreement with the following implementation measures for the revision of minimum rates.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
The minimum rates should be increased gradually in order to allow stakeholders to adapt and avoid excessive disruptions.						
It is necessary to allow a transitional period for EU countries that are currently well below the proposed new thresholds.						

Minimum rates should be increased rapidly, in order to maximize the impact on reducing demand.						
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14. An increase in taxation of cigarettes may have various impacts. Please indicate the likelihood of the following in your country.

	Very likely	Likely	Neutral	Unlikely	Very unlikely	Don't know
Greater reduction of smoking prevalence						
Increased substitution of more expensive tobacco products with cheaper ones						
Increased substitution of conventional tobacco products with e-cigarettes and/or heated tobacco products						
Increased purchasing of legal cigarettes from other cheaper EU countries						
Increased purchasing of illegal tobacco products						
Adverse economic effects in the tobacco value-chain (employment, income etc.)						
Increased tax revenue for the State						

15. Assuming that the EU minimum rates on cigarettes are increased, how much should the EU minimum rates on other tobacco products be increased?

Please indicate whether the revision should lead to maintaining, reducing or increasing the current 'tax gap' between cigarettes and the other products.

	The current tax gap with cigarettes should reduce significantly	The current tax gap with cigarettes should reduce moderately	The current tax gap with cigarettes should be maintained	The current tax gap with cigarettes should increase	Don't know
Fine cut tobacco					
Cigars and cigarillos					
Other smoking tobacco (e.g. pipe and water-pipe tobacco)					

16. The EU rules require that cigarettes are taxed according to a 'mixed structure' including a 'specific component' (i.e. a fixed monetary amount) and an 'ad valorem component' (i.e. a percentage of the retail selling price). Furthermore, the specific component cannot be more than 76.5% of the total tax burden on cigarettes (inclusive of VAT) and less than 7.5%.

Is there a need to revise these rules? If YES, how? Please, choose one of the following option.

(i) The current thresholds of the specific component of the mixed structure should be revised	
(ii) The mixed structure rules are not effective and/or useful, so they should be removed	
(iii) No revision of current rules is needed	
(iv) Don't know	

If you selected option (i) 'revision of current thresholds', please indicate your proposed revised thresholds.	
Lower threshold (currently 7.5%)	Upper threshold (currently 76.5%)

17. The EU rules give EU countries the option to levy a 'minimum excise duty' (MED) on tobacco products that essentially consists of a tax 'floor' that prevents taxes falling below a certain level. For cigarettes only, the MED should also comply with the 'mixed structure' requirements.

Please, express your agreement with the following possible options to reform the MED.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
There is a need to establish a 'cap' on MED so that it can be applied only to a minority of products on the market and never to the majority of them.						
The obligation for MED on cigarettes to comply with the 'mixed structure' should be removed.						
The MED rules should explicitly allow 'regressive' mechanisms i.e. where cheaper products may be subject to a relatively higher amount of MED						

Please, add any relevant comment	
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18. The EU excise legislation defines the different categories of excisable tobacco products, with a view to ensure that similar products are classified and treated in the same way across the EU, thus ensuring neutral conditions of competition. For this purpose, definition and classification rules need to be clear and robust so as to avoid legal uncertainties, tax circumvention and abuse.

Please, indicate whether the provisions below have ever caused specific problems in your country and rate the severity thereof on a scale from 0=not a problem to 3=major problem.

Please, also indicate whether there is a need to revise the corresponding provisions in the Directive 2011/64.

	Problem rating: 0 = not a problem, 1= minor problem 2= moderate problem 3 = major problem	Need for regulatory change at EU-level (select all that applies)
Art 5(1)a on 'smoking tobacco' and the clarity of the provision: " <i>capable of being smoked without further industrial processing</i> "		
Art 5(1)b on 'smoking tobacco' and the clarity of the provision: " <i>tobacco refuse put up for retail sale</i> "		
The definition of 'cigars and cigarillos' laid down in Art 4.1 and the misalignment with the corresponding customs definition of the Combined Nomenclature		
The lack of a specific definition and separate tax category for 'water-pipe tobacco' in the Directive		
The absence of a clear definition of 'smoke' and 'smoking'		

Please, add comments and/or indicate other problematic definitions or provisions of the EU excise legislation

19. [Only for economic operators] Overall, is the regulatory burden imposed on your business by the EU excise legislation acceptable? Please also describe the type and the magnitude of such burden for your business.

Note: the 'regulatory burden' includes the costs (financial and staff costs) of all required actions needed to comply with the provisions of EU legislation, but it does not include the costs that economic operators would have incurred anyway, i.e. even in the absence of the EU legislation.

C) TAXATION OF ELECTRONIC CIGARETTES AND HEATED TOBACCO PRODUCTS

Note: In this section, any reference to the taxation of electronic cigarettes and heated tobacco products always refers to the consumable parts (i.e. refill containers, sticks and capsules etc.) and never to the hardware (i.e. electronic device) component.

20. EU countries have adopted different approaches towards the taxation of e-cigarettes. Please express your agreement with the following arguments in favour or against the taxation of these products.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
E-cigarettes are much less harmful than conventional tobacco products						
E-cigarettes may represent a gateway to nicotine addiction						
E-cigarettes may support smoking cessation						
E-cigarettes are essentially a substitute product of conventional cigarettes so they should be treated consistently to ensure fair competition						
E-cigarettes are not tobacco products so they should not be subject to tobacco excise legislation						
The consumers' substitution of cigarettes with e-cigarettes may cause undue tax revenue losses that should be avoided						
E-cigarettes products can be easily produced and moved illicitly, so the enforcement of taxation and control against frauds would be difficult and expensive						
There is a need to harmonise the taxation of e-cigarettes at EU-level to avoid that national taxes become an obstacle to the functioning of the EU market						
There is insufficient data and information on the e-cigarettes market to properly design a tax regime						

21. EU countries have adopted different approaches towards the taxation of heated tobacco products. Please express your agreement with the following arguments concerning the most appropriate taxation of these products.

	Disagree	Partly disagree	Neutral	Partly agree	Agree	Don't know
Heated tobacco is much less harmful than conventional tobacco smoking						
Heated tobacco may represent a gateway to nicotine addiction for non-smokers						
Heated tobacco is essentially a substitute product for conventional cigarettes so it should be treated consistently to ensure fair competition						
Heated tobacco may support smoking cessation						
The consumers' substitution of cigarettes with heated tobacco products may cause undue tax revenue losses that should be avoided						
Heated tobacco is essentially a different product from smoking tobacco so it cannot be comprised under any of the existing tax categories						
There is a need to explicitly harmonise the taxation of heated tobacco at EU-level to avoid diverging national approaches becoming an obstacle to the functioning of the EU market						
There is insufficient data and information on the heated tobacco market to properly design a tax regime						

22. What would the optimal ratio between tax and retail price of novel products be?

Note: this question does not necessarily imply a hypothetical tax proportional to selling price, the effects of any type of tax are considered here.

	E-cigarettes products	Heated tobacco products
Between 30% and 49% of retail price, plus VAT		
Between 10% and 29% of retail price, plus VAT		
Between 1% and 9% of retail price, plus VAT		
Only VAT		
Don't know		

The following questions concern technical aspects of the taxation of novel products. Respondents not familiar with the subject may skip to the end of the questionnaire.

23. Which measures should a hypothetical EU-level tax regime for e-cigarettes contain?

Please, select from the following options the measures that you might be in favour of (multiple answers are possible)

To adopt a common fiscal definition and category for e-cigarettes in EU excise legislation	
To establish a EU minimum excise duty rate for e-cigarettes	
To set the tax as a fixed amount per volume of products (e.g. millilitres of liquid for e-cigarettes)	
To set the tax in proportion to the actual content of nicotine	
To envisage simplified regimes and exemptions for SMEs in this sector	
To envisage a transitional period to allow operators to adapt before taxation is introduced	

24. If a EU-level tax regime for e-cigarettes is introduced, what is the risk of the following consequences in your country?

	High risk	Moderate risk	Low risk	Negligible / no risk	Don't know
A massive switch by consumers to 'do-it-yourself' products					
A massive switch by consumers to illicit non-taxed products					
SMEs significantly penalised against big players					
A massive return of consumers to conventional tobacco products					

25. Which measures should a EU-level harmonised tax regime for heated tobacco products contain?

Please, select from the following options the measures that you might be in favour of (multiple answers are possible)

To adopt a common fiscal definition and category for heated tobacco products in EU excise legislation	
The introduction of a clear definition of 'heating'	
To establish a dedicated EU minimum excise duty rate	
To envisage a transitional period to allow operators to adapt before taxation is introduced	

26. Do you have other comments on the possible harmonisation of excise duty for e-cigarettes and/or heated tobacco products?

You may upload here an additional document on the subject of this consultation. All additional documents provided will be published on the Commission website.

[Select file to upload]

END OF SURVEY – THANK YOU FOR YOUR PARTICIPATION

ANNEX C – OPEN PUBLIC CONSULTATION SUMMARY

C.1 Overview of the Consultation and Respondents

➤ OVERVIEW

The consultation of stakeholders involved various activities, including an Open Public Consultation (OPC) of general public, whose results are reported here.⁴ The OPC was intended to gather the views of any interested party – from economic operators, to non-government organisations (NGOs), to individual citizens etc. on two main issues:

- The current taxation of conventional tobacco products (cigarettes, cigars and cigarillos, and smoking tobacco) and specifically the level of rates and structures;
- The status of novel products, in particular 'electronic cigarettes' and 'heated tobacco products', which are not explicitly covered by the Directive.

The OPC was carried out through an online questionnaire translated in all EU official languages (except Gaelic) and administered through the EU Survey platform. The OPC was launched on the 23rd of May and closed on the 3rd of September 2018.

The questionnaire consisted of 26 questions, including both general questions and more technical ones. None of the question was mandatory, so respondents could focus on certain sections of the questionnaire and skip others, based on their knowledge and interest. On average, respondents replied to some 77% of the questionnaire, with some questions answered by 99% of respondents while others by 'only' 65% of them.⁵

➤ PROFILE OF RESPONDENTS

Overall, the OPC received 11,388 valid responses⁶, of which the vast majority (96%) from citizens responding on an individual capacity and some 4% from representatives of industry, NGOs, public administrations, academic institutions and other corporate entities. The high rate of response among individual citizens is primarily explained by the parallel petition launched by various e-cigarettes consumers organisations. The petition attracted some 50,000 supporters who were also called to take part in the OPC to "*defend the right of access to tax-free vaping throughout Europe*".⁷ In this sense, the feedback from the +10,000 EU citizens who took part in the OPC should be seen as representing primarily the views of the vape-supporting communities. This occurrence is in line with OPC nature and purpose, which is not to provide a statistically-significant representation of EU population (as in the case of Eurostat surveys or the Eurobarometer) but to allow all interested parties to contribute their views in the EU policy process. In this respect, any OPC is by design subject to 'self-selection bias', since participants are more likely to have a direct interest in the subject matter (as consumers or economic operators etc.) than the 'average' EU citizen or entity. It is essential to keep in mind such bias for a correct analysis and interpretation of answers.

⁴ This Summary Report provides a brief analysis of the most relevant results. For a complete overview of results see the consultation webpage:

https://ec.europa.eu/info/consultations/public-consultation-excise-duties-applied-manufactured-tobacco-and-possible-taxation-novel-products_en

⁵ These figures do not include introductory questions (regarding the profile of respondents) and open-ended questions.

⁶ The total replies received amounted to 11,410 but 22 records appeared as duplicate submissions from the same entity so were excluded from the analysis. Possible duplicate submissions from individual citizens were instead not excluded given the possibility of homonyms.

⁷ See: <https://www.change.org/p/european-commission-act-now-to-stop-the-eu-vape-tax>. Last access: 15.09.2018.

Some half of non-individual respondents are economic operators, including both businesses operating in the e-cigarettes sector and in the 'conventional' tobacco products sector. The sub-sample of economic operators includes both large companies (11%), SMEs (68%), and self-employed entrepreneurs (21%). It should be highlighted that some national affiliates to large corporations self-classified themselves as SMEs. If all such entities were classified as their parent companies, the share of SME in the sample would reduce to 58%.

As regards the other categories of respondents, some 0.8% qualified themselves as business organisations or advisory body, 0.5% as NGOs, some 0.1% as public administrations⁸ and the remaining 0.6% as other miscellaneous entities. It should be noted that a review of self-categorisations revealed some inconsistencies in the way respondents interpreted and selected these categories with, for instance, trade organisations qualified as NGOs, medical societies qualified as business organisations and academics scattered across different categories. Some possible inconsistencies were also detected in the 'individuals' and 'economic operators' categories due to the fact that in about 13% of cases (1,461) the name of respondent was absent, incomplete or invalid (e.g. 'nicknames').⁹

For the analysis presented in this report, an alternative classification has been elaborated, which focuses on the apparent 'direct interest' of respondents on the subject matter rather than on its juridical status (see Table 1). This classification regards only non-individual respondents and it is based on respondents' declarations and/or the nature or mission of the concerned entity. According to this classification, out of a total of 434 non-individual respondents, some 44% consists of entities with direct interest on e-cigarettes sector, 20% of respondents have direct interest in the tobacco sector, and 9% have interests in both sectors (e.g. retailers of both tobacco and e-cigarettes, big companies with subsidiaries in all sectors etc.). Some 12% of responses came from stakeholders with an apparent affiliation to or direct interest in public health and tobacco control, while the remaining 15% include other type of businesses (e.g. consultancies), intermediate bodies (generalist employers and trade associations, like chambers of commerce etc.), academicians, think-tanks, local administrations and a few other miscellaneous entities.¹⁰

The 'tobacco' and 'cross-sector' subgroups can be further segmented by category of product. Obviously, in this case interests are often overlapping since operators generally produce or trade different types of products. At this level the distribution appears quite balanced, with some half of the subgroup showing 'interests' in cigarettes, fine-cut tobacco (FCT) and cigars and cigarillos and about one-third with 'interests' in pipe tobacco and heated tobacco products.

⁸ The apparent low rate of responses from public administration should be seen in the light of the fact that tax, customs and public health authorities of the Member States were surveyed in parallel through an *ad hoc* and more detailed consultation. Nearly all administrations who took part to the OPC were in fact local administrations.

⁹ In the other cases, some 53% (6,048) respondents asked to remain anonymous while the remaining 34% consented to the publication of his/her name.

¹⁰ Of course, it cannot be ruled out that also the 'other' subgroup members have a direct interest on the subject matter, but this is not immediately recognizable as it is in the case of tobacco or e-cigarettes producers, retailers trade associations etc.

Table 1 – Classification of non-individual respondents by possible interest in the subject matter

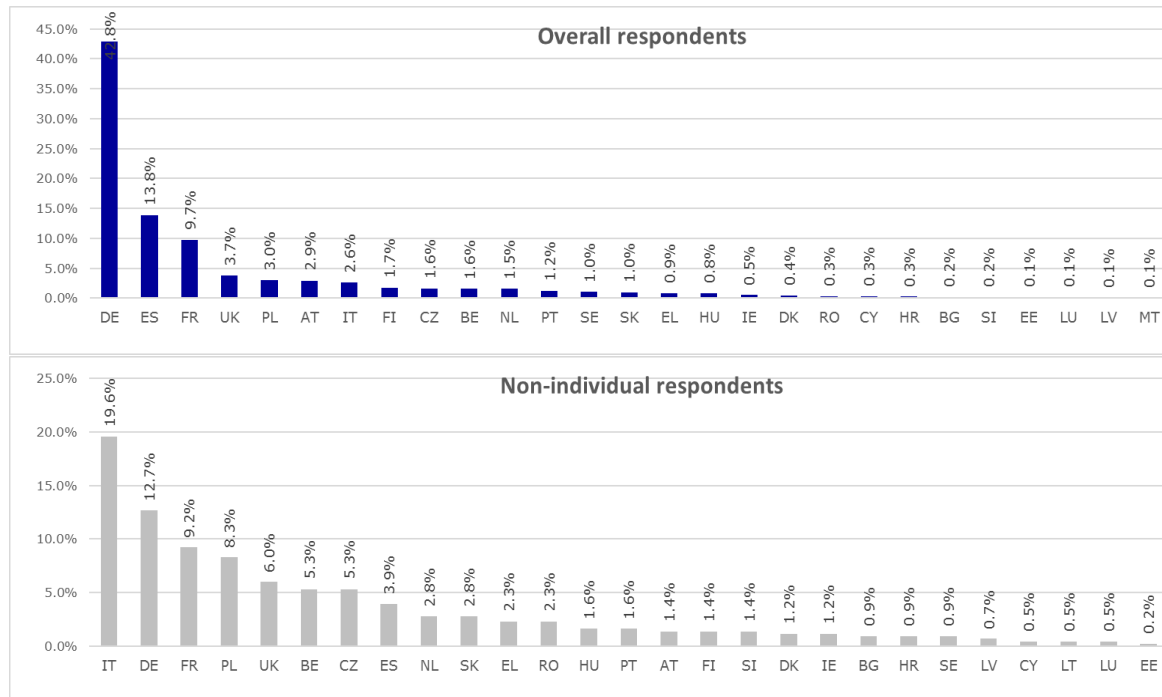
Subgroup	No.	%
Public Health (NGOs, medical societies, and other entities active on tobacco control and public health protection)	50	12%
E-cigarettes (operators exclusively active in this sector, consumers and trade associations, advocacy bodies, promoters etc.)	191	44%
Tobacco (operators exclusively active in this sector – manufacturers, distributors, retailers, growers etc. – consumers and trade associations)	86	20%
Cross-sector (operators active in both e-cigarettes and tobacco sectors, such as manufacturers, distributors and retailers).	40	9%
Other (no direct interest identified, including economic entities, public administration, NGOs and civil society organisations not linked to tobacco control, universities, research institutes, academicians etc.)	67	15%
TOTAL	434	100%
Sub-classification of tobacco and cross-sector stakeholders by product*	No.	%
Cigarettes	69	55%
Cigars and cigarillos	72	57%
Fine-cut tobacco	66	52%
Water-pipe tobacco	19	15%
Pipe tobacco	41	33%
Heated tobacco products	37	29%
General (e.g. raw tobacco) or unspecified	33	26%
TOTAL	126	n.a

Note: (*) this classification regards all stakeholders with a possible interest on tobacco products including also those who might have also a simultaneous interest in e-cigarettes (such as retailers or certain large manufacturers). These subcategories are evidently not mutually exclusive.

➤ **GEOGRAPHICAL DISTRIBUTION OF RESPONSES**

Nearly 93% of answers come from EU-based respondents, some 2% from non-EU countries, while for the remainder the origin is not specified. All EU countries are represented in the respondents' sample, but the distribution is skewed, with three Member States (DE, ES and FR) accounting for 66% of total responses. However, considering only responses from non-individual entities the distribution appears significantly more balanced and coherent with MS size, as shown in Figure 1 below.

Figure 1 – Geographical distribution of respondents



Note: the 'Other' category includes both non-EU countries and unspecified responses.

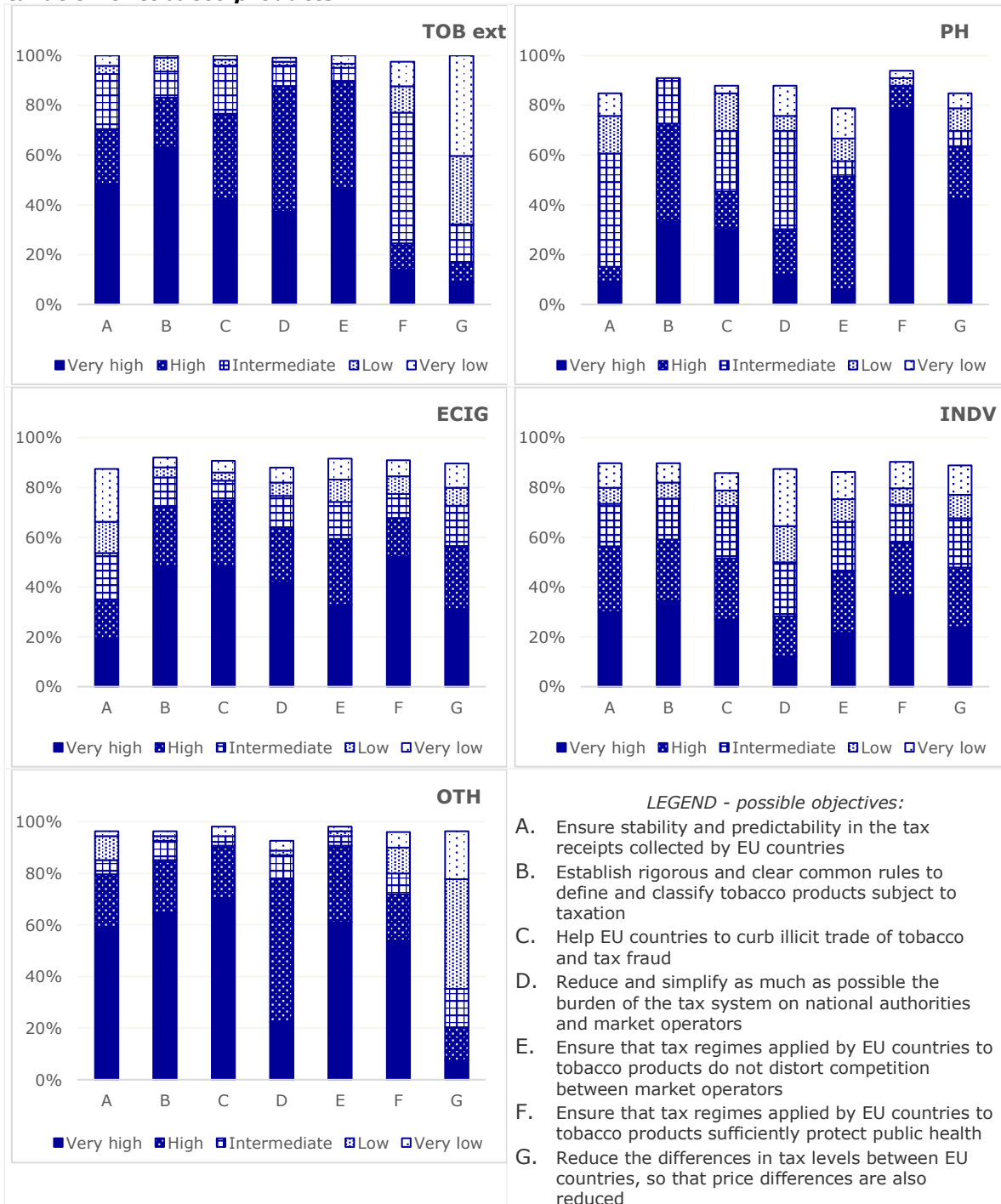
C.3 Summary of Results – Conventional Tobacco Products

➤ OVERALL PURPOSE OF EU LEGISLATION

One of the main questions in the OPC regards the importance that stakeholders attribute to the possible objectives of the Directive. In particular, respondents were asked to rate from 'very high' to 'very low' the importance of seven policy objectives (see the legend of Figure 2 below). Unsurprisingly, answers vary greatly across sub-groups and outcomes can be summarised as follows:

- The policy objective that received the highest degree of support regards the harmonisation of rules, tax categories and definitions of products. All sub-groups of respondents recognised it as a most important task of the EU legislation.
- Conversely, there is limited support to one of the other main objectives of the Directive, that is to reduce the difference in tax (hence price) levels between MS. The tobacco stakeholders and other economic stakeholders were particularly negative in this regard while a clear support came only from public health stakeholders.
- For tobacco stakeholders (as well as the 'other' subgroup) it is also important that the EU framework fosters fair competition and prevents market distortion.
- Needless to say, the most important objective for public health stakeholders is the contribution of the Directive to public health protection – a goal largely shared by the majority of e-cigarettes stakeholders and individual respondents.
- E-cigarettes stakeholders and the 'other' subgroup mentioned also the contribution to the fight of illicit trade and fraud as a major objective of the Directive.
- Finally, there seems to be limited interest on the administrative simplification of excise duty systems and on the effects of the Directive on tax revenue stability (with the partial exception of individual respondents and the 'other' subgroup).

Figure 2 – Question: What should the main goals of the EU legislation be as regards the taxation of tobacco products?



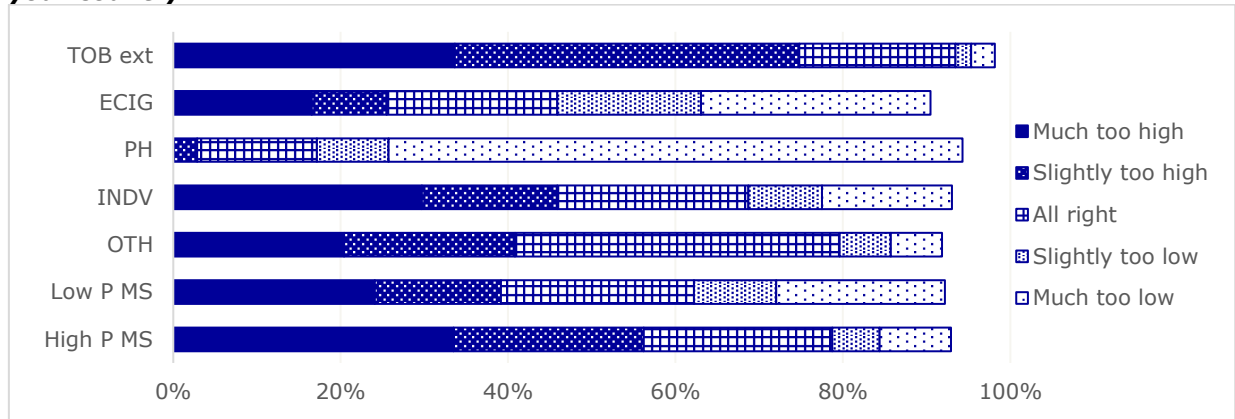
Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

➤ **TAX AND PRICE LEVELS OF CIGARETTES**

As Figure 3 shows, the respondents' view on the current price of cigarettes is highly polarised, with the near totality of public health stakeholders considering prices too low while most of tobacco stakeholders perceiving them as too high. E-cigarettes stakeholders tend to agree with public health stakeholders, while for the majority of individual respondents price levels are too high. This discrepancy is evidently coherent

with the diverging interest of the subgroups concerned. Respondents' outlook was largely consistent with actual market conditions, so prices were more frequently perceived as too high in countries where they are actually higher than EU average (in consumers' purchasing power terms) and *vice versa*.

Figure 3 – Question: (...) How do you rate the current levels of prices of cigarettes in your country?

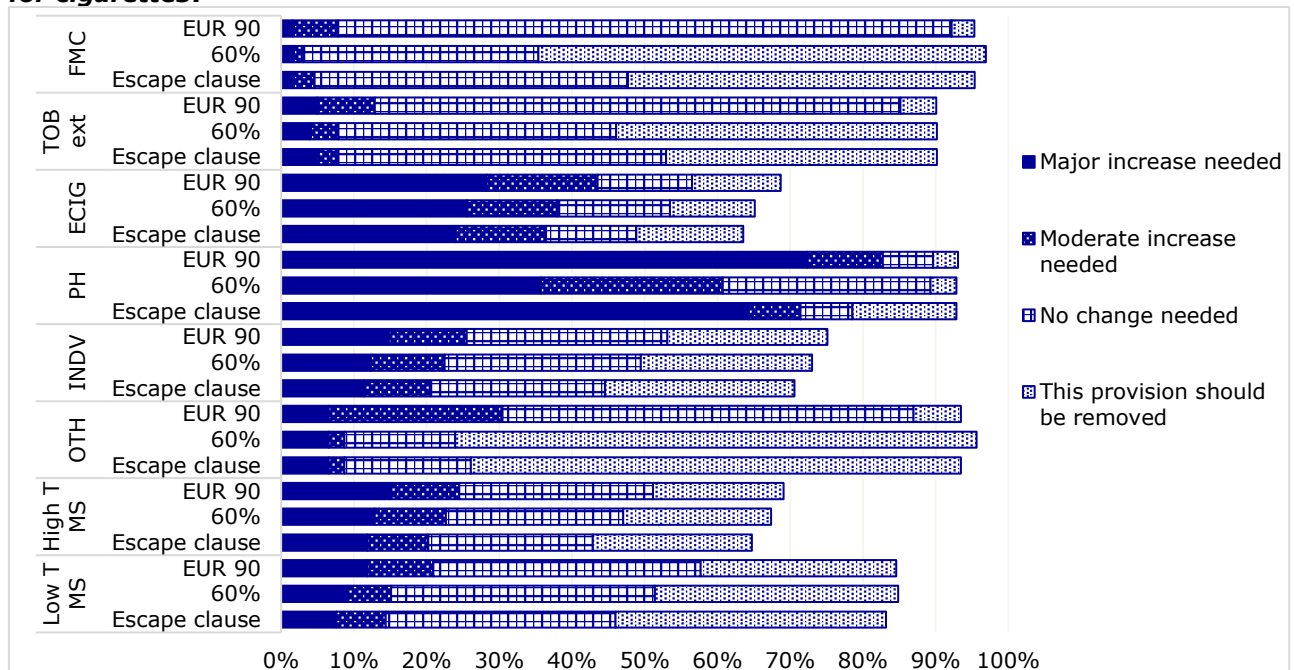


Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. 'Low/High P MS' - non-individual replies from the 5 MS with the lowest / highest price in purchasing power parity terms. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

Coherently with the above, the demand for a tax increase on cigarettes prevails among public health stakeholders and to a smaller extent among e-cigarette stakeholders (who in many cases opted also for an agnostic position). Predictably, such demand is instead very low among tobacco stakeholders - and particularly cigarettes stakeholders - as well as among individual respondents. It is interesting to remark how the demand for an increase of EU minimum rates is somehow greater in countries where taxes are higher in nominal terms, which are also the countries where such measures would have no effects - whereas stakeholders from low-taxing countries would mostly prefer to maintain the current levels. This clearly reflects the fact that on the one hand high-taxing countries are more negatively affected by large disparities in price levels between countries, on the other the incidence of taxation is often higher in low-taxing countries than in high-taxing ones, so there is smaller room for further increases (see Figure 4).

Finally, it can be noted that all subgroups support more often an increase of the minimum fixed amount (€ 90 per 1000 sticks) than an increase of the relative minimum (60%) or the related 'escape clause' threshold (€ 115 per 1000 sticks). Actually, the vast majority of tobacco stakeholders and a non-negligible share of individual and 'other' respondents would agree with the removal of the relative minimum rate.

Figure 4 – Question: (...) Is there a need in your opinion to revise the EU minimum rates for cigarettes?



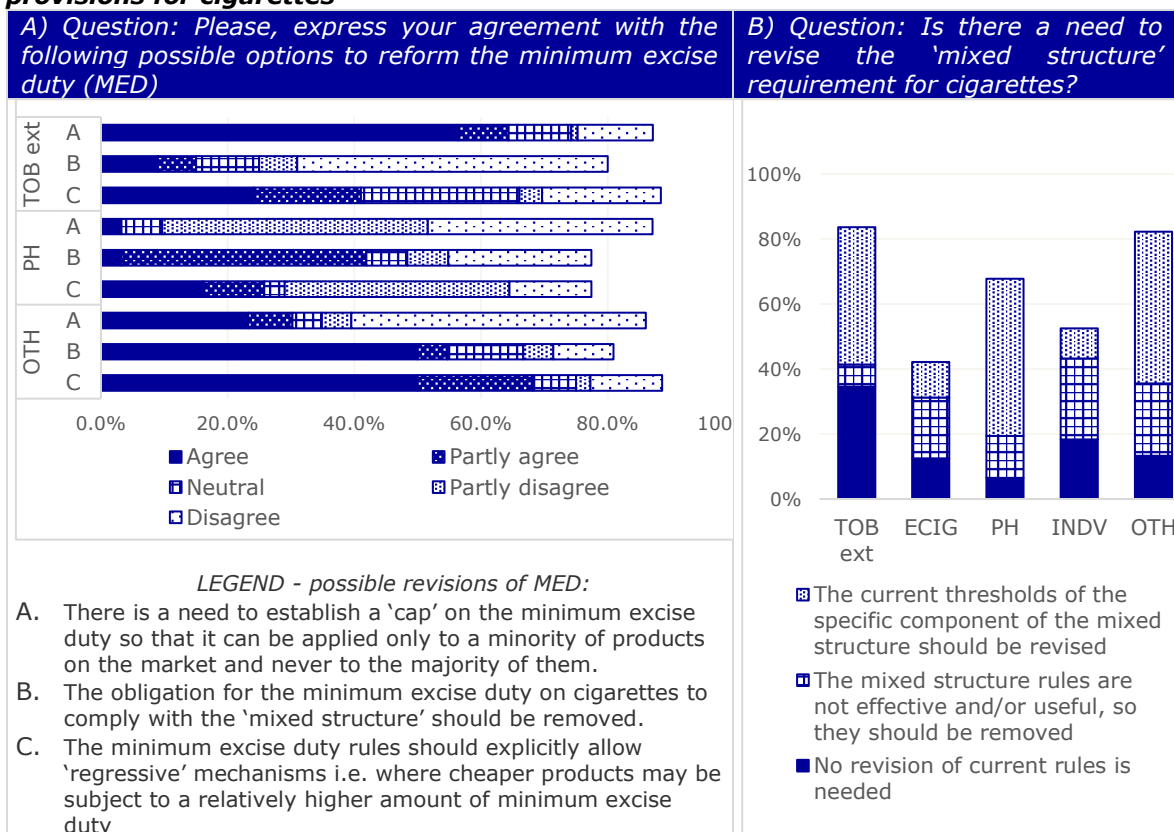
Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. 'Low/High T MS' - non-individual replies from the 5 MS with the lowest / highest tax level in nominal terms. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

Respondents were also surveyed on the revision of Directive's provisions regarding excise duty structures, and in particular (1) the obligation to apply a 'mixed structure' to cigarettes i.e. including a 'specific component' (i.e. a fixed monetary amount) and an 'ad valorem component' (i.e. a percentage of the retail selling price), and (2) the 'minimum excise duty' (MED) that allows MS to set a sort of tax floor. Both matters are quite technical so, as expected, various respondents skipped these questions or declared they do not have a view on them.

With respect to 'mixed structure' obligation for cigarette, it is interesting to note how tobacco stakeholders appear almost evenly divided between those that would support a revision of current rules and those that see no need for change. Public health stakeholders and the 'other' subgroup are instead more frequently in favour of a revision, while a relative majority of individual respondents would remove such obligations. The current rules require in particular that the specific component of the mixed structure is comprised between 7.5% and 76.5%. When asked about a possible revision of such thresholds, only a few respondents indicated alternative levels. In general, public health respondents demand higher levels of specific excise duty, whereas the tobacco stakeholders more frequently support a balanced convergence of both lower and upper thresholds.

As regards the MED, it should be registered again a clear divergence between tobacco stakeholders - who demand the re-introduction of a 'cap' on MED level and that to maintain the obligation to respect the mixed structure rules - and public health stakeholders who are in favour of a MED mechanism not constrained by caps or mixed structure obligations. On the possibility of a 'regressive' MED - i.e. a mechanism where the amount of MED applied is inversely related to selling price - positions are more mixed with only the 'other' subgroup clearly in favour of it.

Figure 5 – Stakeholders feedback on a possible revision of excise duty structure provisions for cigarettes



Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

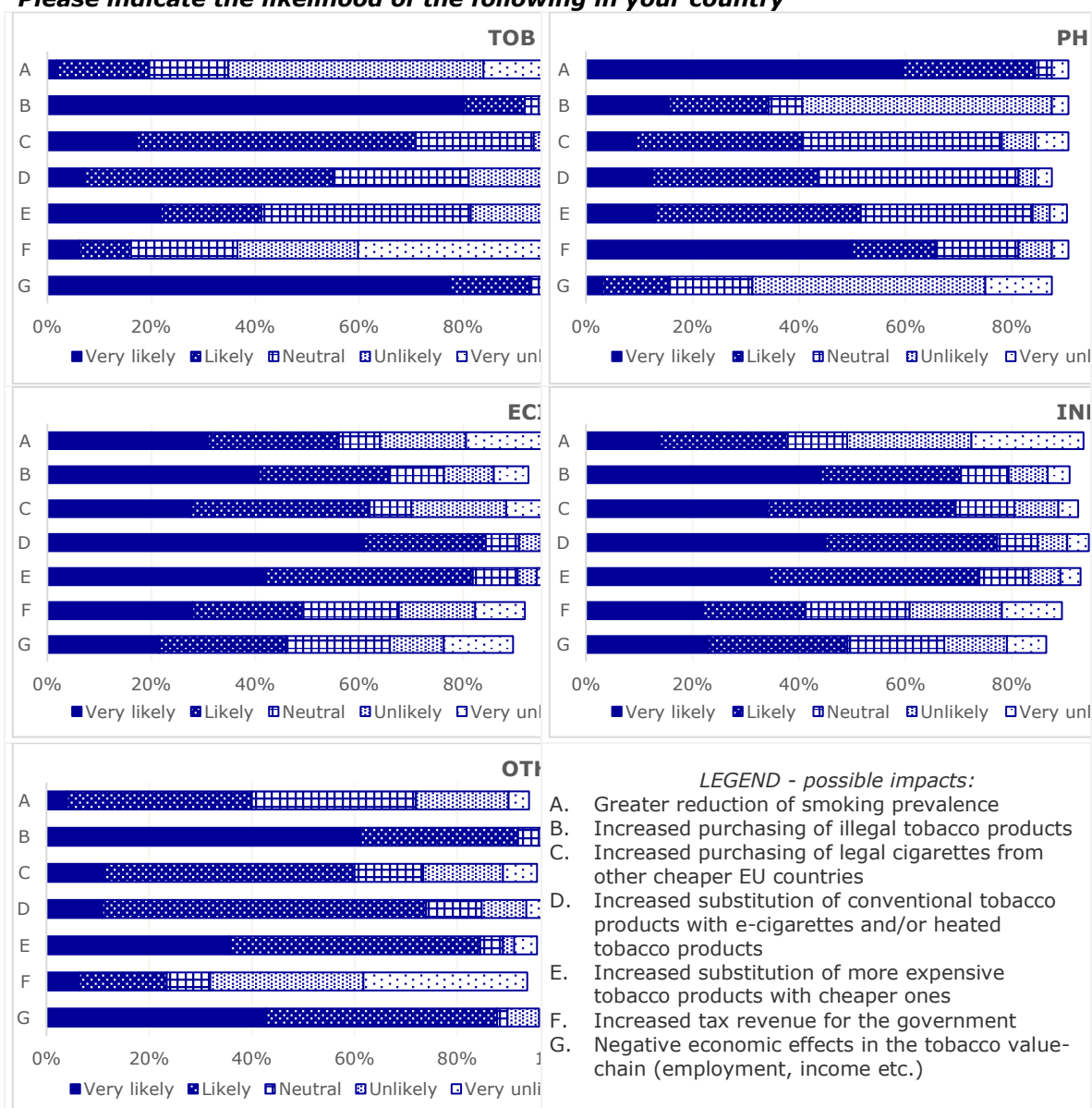
On the expected impacts of an increased taxation of cigarettes, stakeholders' views again diverge (see Figure 6). In particular there are four highly divisive matters:

- public health stakeholders anticipate a reduction of smoking prevalence that tobacco stakeholders (and to a lesser extent e-cigarettes and individual respondents) consider unlikely;
- an increase of illegal consumption is expected by tobacco stakeholders as well as by most of other stakeholders, except the public health sub-group;
- in line with that, tobacco stakeholders foresee negative economic effects on their value-chain (i.e. adverse effects on income, employment etc.) which are instead unlikely for public health and e-cigarettes stakeholders;
- finally, public health stakeholders expect an increase in tax revenues whereas tobacco stakeholders anticipate a decline.

On the other hand, there seems to be a higher degree of consensus stakeholders on a few likely effects of an increase in the taxation of cigarettes:

- an increase in the volume of 'cross-border shopping' from low-price to high-price EU countries;
- an increase in the substitution of cigarettes with 'novel products' such as e-cigarettes and heated tobacco (considered likely especially by e-cigarettes stakeholders);
- moderately likely substitution of cigarettes with other tobacco products.

Figure 6 – Question: An increase in the taxation of cigarettes may have various impact. Please indicate the likelihood of the following in your country



Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

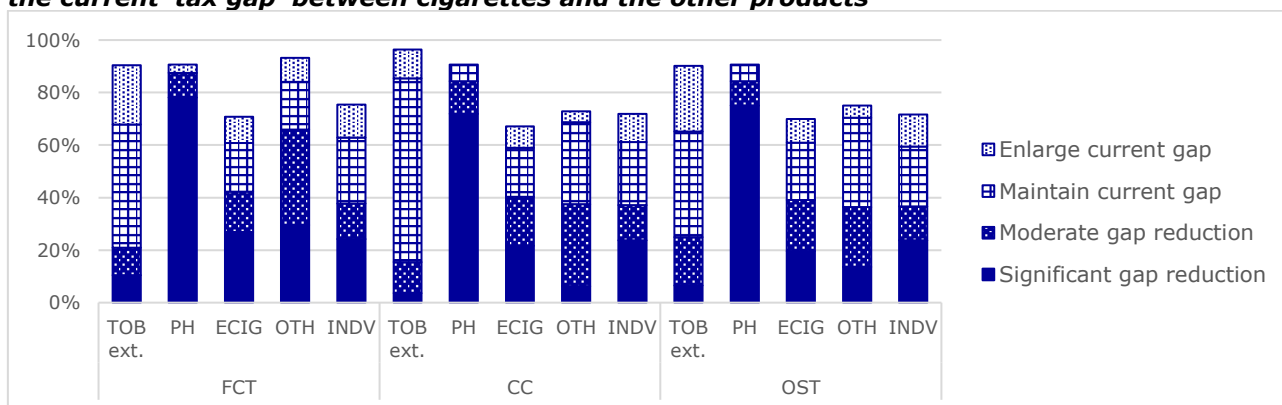
➤ **OTHER TOBACCO PRODUCTS**

As regards tobacco products other than cigarettes, the OPC investigated stakeholders' perceptions on current price levels in their countries and whether the current 'tax gap' between the level of taxation of cigarettes and of other products should be maintained, reduced or enlarged in the future. This also relates to the issue of cross-product substitution, which is considered a 'major problem' by the majority of public health stakeholders and to a more limited extent also by tobacco stakeholders and the 'other' subgroup. Coherently, in public health stakeholders' view the price of all tobacco products are invariably 'too low', whereas the positions of other stakeholders appear more articulated:

- as regards fine-cut tobacco (FCT), positions did not differ from those on cigarettes, with tobacco stakeholders and to a less extent individuals considering prices as too high, e-cigarettes stakeholders viewing them as too low, and the majority of 'other' subgroup stating they are all-right;
- the price level of cigars and cigarillos seems generally fine for tobacco stakeholders, while it is too high for most of individual respondents;
- pipe tobacco prices are appropriate or so for large shares of respondents (except public health stakeholders), but water pipe tobacco appears as too expensive according to tobacco stakeholders or too affordable according to the 'other' subgroup.

From the results summarised in Figure 7, it emerges that within all groups of stakeholders – except tobacco ones – the positions in favour of tax gap reduction prevail. This seems particularly the case with FCT, while for other products 'no change' views were slightly more frequent.

Figure 7 – Question: (...) Please indicate whether a possible revision [of minimum rates for products other than cigarettes] should lead to maintaining, reducing or enlarging the current 'tax gap' between cigarettes and the other products



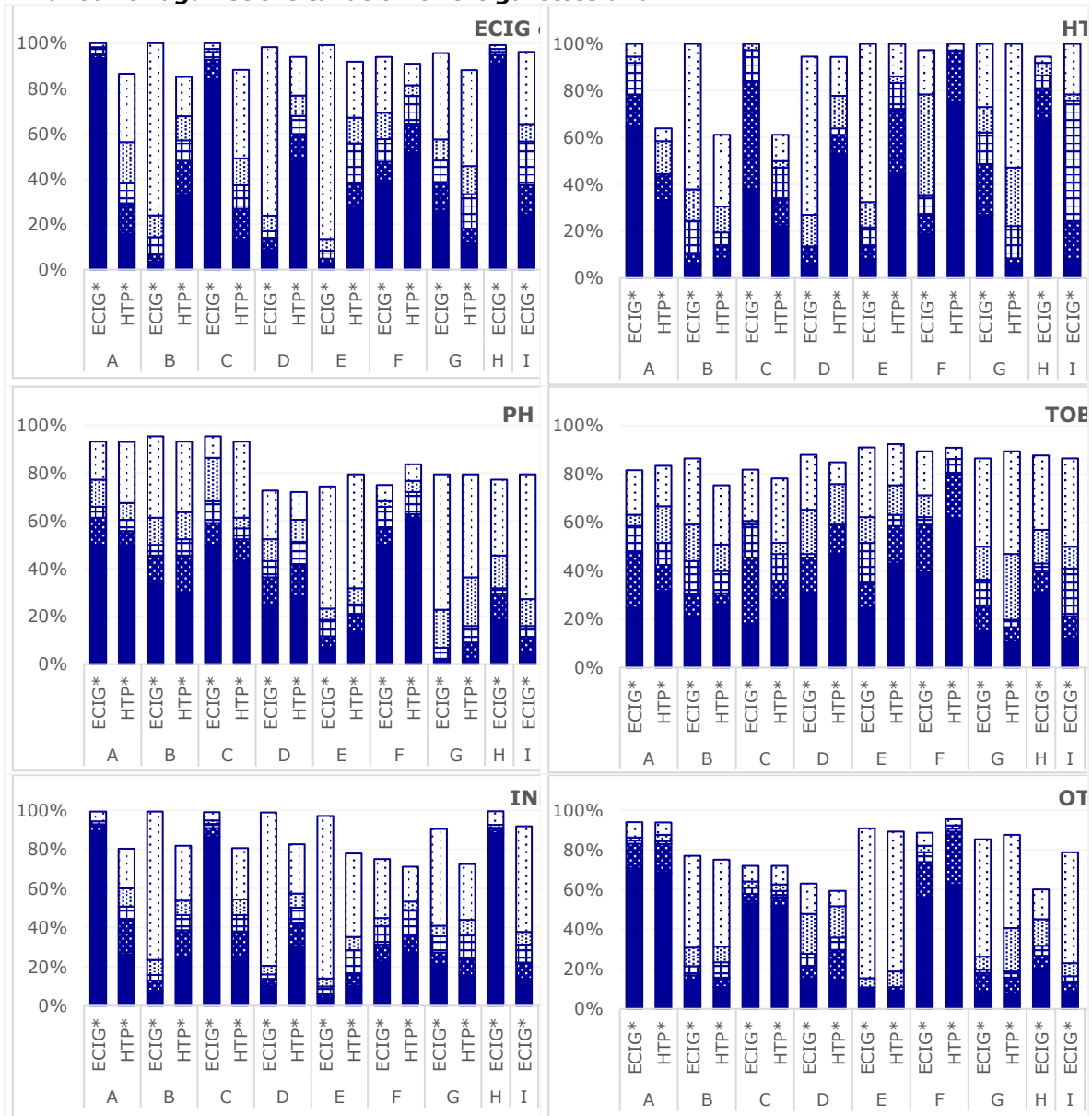
Notes: 'TOB ext' - tobacco and cross-sector stakeholders; 'ECIG' - e-cigarettes stakeholders; 'PH' - public health stakeholders; 'OTH' - other non-individual stakeholders; 'INDV' - individual respondents. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

D.4 Summary of Results – Novel Products

The last part of the OPC questionnaire regarded novel products and in particular e-cigarettes and heated tobacco products (HTP). In the first place, stakeholders were asked to provide their feedback on a set of possible underlying arguments variously raised in favour or against the inclusion of such products among excisable goods. As expected, positions vary between stakeholders' groups, although on a few subjects there is some consensus (see Figure 8). The individual respondents' feedback was generally coherent with e-cigarettes stakeholders' view, confirming that this group was primarily made of e-cigarettes consumers.¹¹

¹¹ This clearly emerged also from qualitative answers in the questionnaire and the contents of the additional statements submitted.

Figure 8 – Question: (...) Please express your agreement with the following arguments in favour or against the taxation of e-cigarettes and HTP



Legend: arguments in favour or against the taxation of e-cigarettes and HTP

- A. It is much less harmful than conventional tobacco products
- B. It may represent a gateway to nicotine addiction for non-smokers
- C. It may support smoking cessation
- D. It is essentially a substitute product of conventional cigarettes so it should be treated consistently to ensure fair competition
- E. The consumers' substitution of cigarettes with it may cause undue tax revenue losses that should be avoided
- F. There is a need to harmonise its taxation at EU-level to avoid that national taxes become an obstacle to the functioning of the EU market
- G. There is insufficient data and information on its market to properly design a tax regime
- H. **E-cigarettes are not tobacco products so they should not be subject to tobacco excise legislation
- I. **E-cigarettes products can be easily produced and moved illicitly, so the enforcement of taxation and control against frauds would be difficult and expensive
- L. **Heated tobacco is essentially a different product from smoking tobacco so it cannot be comprised under any of the existing tax categories

- Disagree
- ▨ Partly disagree
- ▤ Neutral
- ▧ Partly agree
- Agree

Notes: 'ECIG ext' – e-cigarettes and cross-sector stakeholders; 'TOB' – tobacco (only) stakeholders; 'PH' – public health stakeholders; 'OTH' – other non-individual stakeholders; 'INDV' – individual respondents; 'HTP' – HTP stakeholders. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

(*) In bar-charts ECIG* and HTP* (marked with an asterisk) refer to the product and not to the stakeholder group. (**) these statements refer to only one of the two novel products, so no comparison of results is envisaged.

At the general level, the results of the OPC indicate that while e-cigarettes (and partly HTP) stakeholders do differentiate between products, all other stakeholders tend to provide similar answers for the two products. It is also notable the overall scarcity of neutral feedbacks and the fact that quite frequently views within the same subgroup are split. At a more granular level, the following results emerged:

- Stakeholders from all subgroups mostly agree that novel products are possibly less harmful than conventional tobacco smoking. On HTP there is more discrepancy of views, with mixed opinions among tobacco stakeholders and individual respondents, and substantial disagreement among e-cigarettes stakeholders. A similar positive feedback was registered with the support offered by novel products to smoking cessation although, again, views on HTP are more polarised. E-cigarettes stakeholders firmly rejected the argument that these products may represent a 'gateway' for nicotine addiction, but seems to agree that this could be the case with HTP. All other subgroups posted mixed and often conflicting views in this respect, clearly reflecting how the matter is still highly controversial.
- Novel products stakeholders generally agree that while HTP is essentially a substitute for conventional cigarettes, e-cigarettes are less so. The position of other stakeholders on e-cigarettes were quite mixed, but to some extent they seem to agree that HTP should be treated as a substitute product to ensure fair competition. At the same time the majority of respondents in all subgroups (except individual respondents) consider HTP as different from other tobacco products thus requiring a separate tax category. Irrespective of their substitution potential, only a small share of respondents – especially among tobacco stakeholders – concur that these products can cause losses of tax revenues for the MS.
- Of all the possible 'arguments' tested a high degree of consensus was found with the need to harmonise HTP taxation to avoid the drawbacks of legal and administrative fragmentation among countries. The same argument referred to e-cigarettes appear more divisive, also within the e-cigarettes subgroup.
- Finally, stakeholders agree that the lack of data and information should not represent an obstacle for the tax harmonisation of HTP. A similar view was expressed on e-cigarettes by all stakeholders except novel products ones. Similarly, stakeholders did not see major problems linked to the difficulty or cost of enforcing a tax regime on e-cigarettes with the exception, again, of novel products stakeholders that have more neutral or conflicting views on this point.

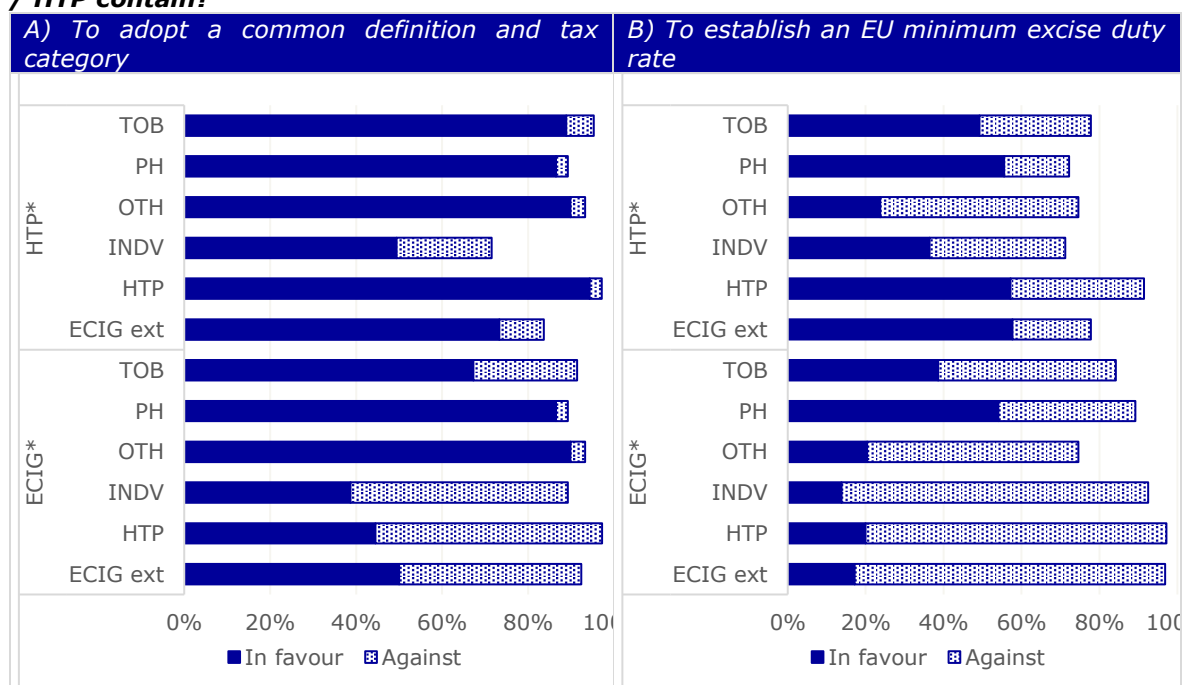
The following Figure 9 shows stakeholders' position with respect to two hypothetical EU-level measures for novel products, namely (1) the adoption of a common fiscal definition and category (irrespective of setting a positive tax) and (2) to establish a (positive) EU minimum excise duty rate on them. Evidently the two measures are connected and in particular the first would be a pre-requisite for the second.

The results indicate a vast support to the explicit harmonisation of HTP tax regime at EU-level including – with some exceptions – the setting of a minimum rate. Interestingly, also most of HTP stakeholders would be in favour of an EU minimum rate. This seems explained by the fact that often HTP stakeholders at all levels have also an interest on various categories of tobacco products, and in this respect a EU minimum rate may reduce the risk of distortive tax-induced substitution between products. The relative majority of tobacco stakeholders and of e-cigarettes stakeholders would support a taxation of HTP between 30% and 50% of its retail price (plus VAT), while the majority

of individual respondents, public health stakeholders and the 'other' subgroup were in favour of a lighter taxation (i.e. less than 10% of retail price plus VAT or VAT only).

When it comes to e-cigarettes, stakeholders' positions are less clear-cut. For novel products stakeholders the adoption of a harmonised tax category at EU level is divisive, and also among individual respondents – who are at large extent e-cigarettes consumers – unfavourable feedbacks outnumbered favourable ones by little. All other respondent subgroups are instead clearly in favour of such measure. As regards the establishment of an EU minimum rate, favourable feedbacks prevail only among public health stakeholders. The tobacco stakeholders appeared divided on this matter while all other subgroups are clearly against it. Coherently, according to e-cigarettes stakeholders and individual respondents the tax burden on the price of e-cigarettes should be limited to VAT, whereas for a minority but non-negligible share of public health stakeholders (ca. 28%) there is need to tax e-cigarettes significantly.

Figure 9 – Question: Which measures a hypothetical EU-level tax regime for e-cigarettes / HTP contain?



Notes: 'ECIG ext' – e-cigarettes and cross-sector stakeholders; 'TOB' – tobacco (only) stakeholders; 'PH' – public health stakeholders; 'OTH' – other non-individual stakeholders; 'INDV' – individual respondents; 'HTP' – HTP stakeholders. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

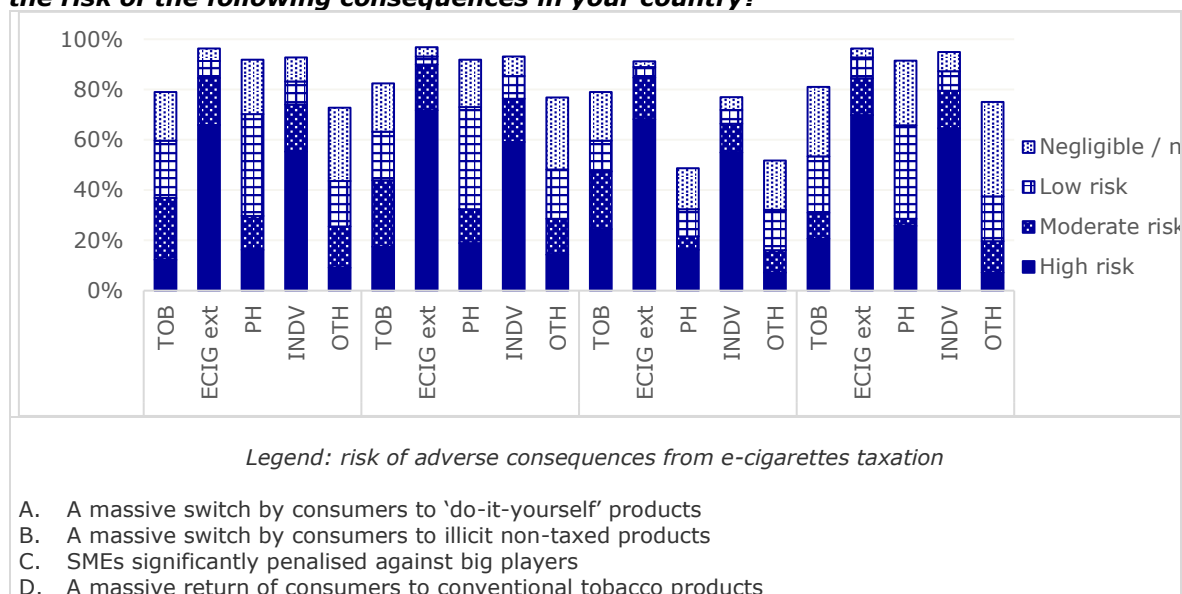
(*) In bar-charts ECIG* and HTP* (marked with an asterisk) refer to the product and not to the stakeholder group.

Finally, the OPC collected the stakeholders' outlooks on the possible risks of unintended consequences deriving from the taxation of e-cigarettes, and namely massive shifts of current consumers to 'do-it-yourself' practices, or to illicit products, or to conventional tobacco products, as well as possible competitive disadvantages for SMEs against big players. In these respects, respondents' view is essentially polarised by subgroup with limited differentiation across the type of effects expected. Specifically, e-cigarettes stakeholders – and to similar degree individual respondents – anticipate high risks for all the adverse effects considered¹², while public health stakeholders – and to similar degree the 'other' subgroup – expect limited or no risk at all. Tobacco stakeholders are

¹² Evidently, it is unclear how the majority of consumers can switch at the same time to illegal products, 'do-it-yourself' and back to conventional tobacco, so the feedback from these subgroups should be probably interpreted as a general perceived risk of a massive market disruption and, perhaps, the impossibility to foresee clearly its direction.

mostly in a halfway position: they mostly anticipate some risk of consumers' switching to illicit products and to 'do-it-yourself', but much less that consumers could possibly go back to conventional tobacco products (Figure 10).

Figure 10 – Question: If an EU-level tax regime for e-cigarettes is introduced, what is the risk of the following consequences in your country?



Notes: 'ECIG ext' – e-cigarettes and cross-sector stakeholders; 'TOB' – tobacco (only) stakeholders; 'PH' – public health stakeholders; 'OTH' – other non-individual stakeholders; 'INDV' – individual respondents. Questions left blank are not computed in the statistics; 'don't know' answers are computed but not displayed.

D.5 Conclusions

The stakeholders' opinions on the issues raised in the OPC generally diverge in accordance with the specific interests of the respondent. So public health stakeholders invariably support stricter tax measures on tobacco, while the tobacco industry and trade stakeholders advocate for minimal or no revision of the current situation. If any, a revision of fixed amount minima seems comparatively more supported than a revision of the minimum incidence. Whether higher tax rates would lead to a reduction of smoking prevalence or to an increase of illegal products are very divisive issues. Conversely, there is a moderate agreement that some substitution of cigarettes with other tobacco products, or novel products, as well as an increase of cross-border shopping are likely consequences.

With respect to novel products, it should be registered the widespread concern among e-cigarettes stakeholders and consumers about the possible adverse effects of e-cigarettes taxation, although a significant share of operators would seemingly support a harmonised definition with no minimum rate attached to it. More consensus can be found on the need to harmonise heated tobacco products – a need that is supported by the industry itself to overcome the current legal fragmentation. The establishment of positive rates on novel products inevitably call into cause arguments related to their relative risk and contribution to smoke quitting, but as the OPC results show, the positions of public health stakeholders on this are still not uniform.

ANNEX D – THE EVALUATION MATRIX

This Annex contains the evaluation matrices developed for the 17 evaluation questions of the Assignment, subdivided by evaluation criterion as in the original Terms of Reference and our Inception Report. For each question, the following elements of the evaluative framework are displayed:

- **Judgment criteria** (or 'success' criteria), i.e. the main dimensions examined in order to respond to the evaluation question.
- Objectively measurable **indicators** connected to the judgment criteria (both of quantitative and qualitative nature, for a proper 'triangulation' of evidence).
- **Sources of information**, i.e. the datasets, fact finding tools and main analytical methods used to measure the above indicators.

With some exceptions, due to data availability and reliability, the following matrices have informed the Report findings and conclusions.

➤ EVALUATION QUESTIONS #1-4_DESCRIPTIVE QUESTIONS

Evaluation questions	Judgment criteria	Indicators	Information sources
1. What is the current situation (background, legal framework context and objectives)? How has the situation (rates and structures of excise duty applied to manufactured tobacco) evolved since Directive 2011/64/EU entered into force.	n/a	1) Applicable EU provisions (different tobacco categories, overtime) a) Minimum rates b) Structures c) MED d) Derogations 2) Targets and benchmarks	<ul style="list-style-type: none"> • Deskwork (Directive and background documents) (1, 2) • Interviews (EU and MS authorities) (1, 2)
2. How are the rates and structures implemented by MS? How has the price of tobacco products evolved in relation to taxation? What was the general trends in tax receipts collected by MS?	n/a	3) Excise duty structures and rates in MS (different tobacco categories, overtime) 4) Excise duty revenues from tobacco (and share over total tax budget) 5) Minimum and average price levels trends (cigarettes, FCT) 6) 'Pass-through' rate 7) Market volume, trends 8) Market value (in EUR), trends	<ul style="list-style-type: none"> • EDT (3, 4, 5, 7, 8) • EMI (5, 7, 8) • TC (5) • Econometrics (6) • EcigIntel (8) • Interviews ('gap filling') (7,8)
3. How has the demand / market size evolved, considering also cross-product substitution and 'unrecorded tobacco consumption'? How has overall smoking prevalence evolved?	n/a	9) Volume and value of cross-border shopping, trends by MS 10) Volume, value and revenue losses of illicit trade, trends by MS 11) Substitution rate cigarettes/FCT 12) Smoking prevalence (overall, youth and vulnerable groups) 13) Smoking intensity (stick/day)	<ul style="list-style-type: none"> • Data analysis (seizure, empty pack survey, Eurostat etc.) (9, 10) • EB (12, 13, 10) • TC (9, 10, 11, 12) • Econometrics (9, 10, 11) • Deskwork (scientific literature) (all) • WHO (12, 13) • Interviews (all) (9, 10, 11)
4. How has the regulation of new products evolved in MS? How has demand / market size evolved?	n/a	14) MS applying consumption tax on new products and rates. 15) Tax revenues from new products	<ul style="list-style-type: none"> • EcigIntel (14, 16, 17, 18) • EB (18, 19) • TC (14, 15, 16, 18, 19)

Evaluation questions	Judgment criteria	Indicators	Information sources
		16) New products market size (hardware / consumable) 17) Price levels of new products in MS 18) ‘Vaping’ prevalence (sole use / dual use) 19) Rate of substitution conventional / new products	<ul style="list-style-type: none"> Interviews/ e-cig consultation (16, 17, 18, 19)

Notes: Since descriptive questions do not have an evaluative purpose the ‘judgment criteria’ do not apply.

In the ‘information sources’ column, the number in brackets refers to the identified ‘indicators’. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO).

➤ EVALUATION QUESTIONS # 5_COHERENCE

Evaluation questions	Judgment criteria	Indicators	Information sources
<ul style="list-style-type: none"> 5. Are the rates and structures of excise duty applied to manufactured tobacco coherent with other EU policies and international obligations? 	A. Specific coherence with public health policies targets and means (TPD2, FCTC etc.) B. Specific coherence with the EU policies and initiatives on fight against fraud in tobacco C. Specific coherence with other EU tax policies (Dir 118, EMCS) and customs policies. D. Overall coherence with internal market functioning principles and rules E. Overall coherence with policy orientations (MS, TPD2, FCTC) regarding new products	1) EU authorities’ perceived policy coherence (all) 2) MS authorities’ perceived policy coherence (all) 3) PH stakeholders’ perceived policy coherence (A, B, E) 4) EO perceived policy coherence (C, D, E) 5) Degree of alignment with sectoral objectives and targets (A, B) 6) Frequency of competition and legal cases concerning Dir 64 (D)	<ul style="list-style-type: none"> Interviews (all) (1, 2, 3, 4) TC (2, 3) OPC (3, 4) Deskwork (analysis of policy document and Commission databases) (5,6)

Notes: Most of indicators are expressed in terms of stakeholders’ perception. In practice, each of these indicators can be further broken down by the number of questions that are included in the questionnaires.

In the ‘indicators’ column, the letter in brackets refers to the corresponding judgment criterion. In the ‘information sources’ column, the number in brackets refers to the identified ‘indicators’. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO).

➤ EVALUATION QUESTIONS # 6-8_RELEVANCE

Evaluation questions	Judgment criteria	Indicators	Information sources
6. Do the current minimum rates and structures still correspond to the objectives of the Directive?	A. Relevance of EU minima to the current rates applied in MS B. Relevance of EU mixed structure requirements to the current	1) Gap b/w cigarettes EU minima and MS current rates, and overtime trends (A) 2) Gap b/w mixed structure thresholds and current level of ad valorem and specific duty in MS, and overtime trends (B) 3) Gap b/w other tobacco products EU minima and MS current rates, and overtime trends (A)	<ul style="list-style-type: none"> EDT data analysis (1, 2, 3, 4) EMI data analysis (4) TC (4, 5) OPC (5) Interviews PH, EO (4, 5)

Evaluation questions	Judgment criteria	Indicators	Information sources
	structures applied in MS	4) Share of market below cigarettes MED 'kick-in' level, and overtime trends (A, B) 5) Stakeholders' perceived relevance of the current minimum rates and structures (for convergence and public health protection need).	
7. Do they correspond to the needs of the national tax administrations, ministries of health and subsequently other stakeholders (economic operators, NGO's and citizens)?	C. Specific relevance for market functioning needs D. Specific relevance for tobacco control and public health targets E. Specific relevance for anti-fraud needs	6) MS authorities' perceived relevance for domestic needs (all) 7) PH stakeholders' perceived relevance for current policy target (D, E) 8) EO stakeholders' perceived relevance for market functioning (C) 9) Citizens' perceived alignment with all needs (all) 10) Degree of alignment with (selected, concrete) specific national policies and targets (D, E)	<ul style="list-style-type: none"> • OPC (7, 8, 9) • TC (6, 7) • Interviews (all) • Deskwork – analysis of selected MS policies (10)
8. Is there a need for separate harmonised tax categories and definitions for new products?	F. Functioning of the internal market of new products G. Effectiveness of MS tax frameworks	11) Degree of fragmentation of national tax regimes for e-cigarettes (F) 12) Degree of fragmentation of national tax regimes for HTP (F) 13) Perceived competition distortion (including for SMEs) (F) 14) Level of integration of EU internal market of e-cigarettes and perceived obstacles (F) 15) Extent of disputes and litigations (F, G) 16) Actual/planned tax collection on new products (G) 17) Perceived extent of tax circumvention (G)	<ul style="list-style-type: none"> • EcigIntel (11, 12, 14, 16, 17) • TC (13, 14, 15, 16, 17) • OPC (13, 14) • Interviews EO (13, 14, 15, 17)

Notes: Some indicators are expressed in terms of stakeholders' perception. In practice, each of these indicators can be further broken down by the number of questions that are included in the questionnaires.

In the 'indicators' column, the letter in brackets refers to the corresponding judgment criterion. In the 'information sources' column, the number in brackets refers to the identified 'indicators'. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO).

➤ EVALUATION QUESTIONS # 9-12_EFFECTIVENESS

Evaluation questions	Judgment criteria	Indicators	Information sources
9. To what extent have the current minimum rates helped and supported in ensuring the proper functioning of the internal market (including competition)? Has the gap between the lowest and highest taxing Member States decreased? Were 'low-taxing' Member States forced to increase their rates due to the obligations of Directive 2011/64/EU? To what extent price levels and differentials between	A. Overall convergence of tax regimes across MS B. Overall convergence of price levels across MS C. Stability and market functioning at MS level D. Decline in tax / price differential	1. Extent of tax increase in MS attributable to EU minima (direct and indirect and considering derogations) (A) 2. Tax differentials trends (excise duty components, overall tax burden, MED) (A) 3. Price differentials trends (WAP, accessibility price) (B) 4. Estimated 'pass-through' of taxes onto prices (B)	<ul style="list-style-type: none"> • EDT data analysis (1, 2, 3, 5, 7) • EMI data analysis (3, 5) • WHO data analysis (3) • Econometrics (1, 4, 6) • Deskwork (scientific literature) (4, 6) • TC (8) • OPC (8)

Evaluation questions	Judgment criteria	Indicators	Information sources
<p>MS were influenced by taxation? To what extent the differential of tax levels has enhanced substitution between cigarettes and FCT? What was the estimated overall effects of these trends on tax revenues?</p>	<p>between FCT and cigarettes (MS and EU levels) E. Stability and predictability of tax revenues</p>	<p>5. Price trends at MS level (price 'bands' shares, share under MED) (C) 6. Cross-price elasticity of cigarettes and FCT and extent of substitution (D) 7. Tax revenue trends and extent of fluctuations (E) 8. Perceived contribution of EU minima to convergence and stability (A, B, D, E)</p>	<ul style="list-style-type: none"> Interviews (8)
<p>10. To what extent have the current minimum rates helped and supported in fighting against tax fraud, tax evasion and illegal cross-border shopping? To what extent price difference between MS caused cross-border trade of duty-paid products? How has the share of illicit products consumed evolved in relation to tax and price levels in MS and non-EU countries? What is the amount of tax losses for MS due to unrecorded tobacco consumption and how has it evolved?</p>	<p>F. Decline in the cross-border flow of products intra-EU (both private consumption and 'bootlegging') G. Decline in the flow of illicit products (from the external borders or illegally manufactured in the EU) H. Decline in tax losses for MS (absolute and distributional impacts).</p>	<p>9. Magnitude and share of UTC in MS, trends (F, G) 10. Estimated breakdown of UTC by illegal, legal for illicit reselling, and legal for own consumption products, trends (F, G) 11. Estimated tax/price – induced substitution of domestically duty-paid with UTC of different origin (F, G) 12. Amount of tax losses and re-distribution between MS and EU-wide, trends (H) 13. Perceived contribution of EU minima to cross-border flows, vis-à-vis other factors (policy, enforcement etc.) (F, G)</p>	<ul style="list-style-type: none"> Data analysis of mixed sources (statistics on production and movement, seizures, MS data, EB, surveys, scholars' studies, <i>SUN</i> and industry data) (9, 10) TC (9, 10, 12, 13) OPC (13) Analytical model (11) Interviews (9, 10, 11, 13)
<p>11. To what extent have the current minimum rates helped and supported in provide a high level of health protection? How have the accessibility price and overall affordability of tobacco evolved? To what extent smoking prevalence have decreased in relation to fiscal measures How the uptake of new products is affecting the demand of conventional tobacco products? What are the estimated public health impacts attributable to the observed reduction of prevalence?</p>	<p>I. Reduction in the accessibility and affordability of tobacco (cigarettes and FCT) J. Contribution of fiscal policies to reduce the smoking prevalence K. Contribution of new products to reduce the smoking prevalence L. Reduction in the public health burden of tobacco</p>	<p>14. Affordability of tobacco by income level (WAP and accessibility price) (I) 15. Price elasticity of the demand (J) 16. Extent of tax-induced reduction in tobacco demand, driven by EU minima (differential impact across sub-groups) (J) 17. Estimated effects on smoking prevalence of substitution across products and/or UTC (J) 18. Estimated effects on smoking prevalence of tobacco control policies (J) 19. Extent of substitution b/w conventional and new products (considering 'dual use') (K) 20. Estimated ultimate public health impact (mortality, healthcare costs, etc.) of the variation in smoking prevalence (L) 21. Perceived relative importance of factors reducing smoking prevalence (I, J, K)</p>	<ul style="list-style-type: none"> EB data analysis (14, 16, 17, 18, 19) Deskwork (MS surveys, literature) (14, 15, 17, 18, 19, 20) Econometrics / analytical model (14, 15, 16, 17, 18, 19, 20) TC (16, 17, 18, 19, 20, 21) OPC (21) Interviews PH (all) Interviews EO (19) Interviews (all) (21)

Evaluation questions	Judgment criteria	Indicators	Information sources
12. What is the estimated impact of tax-induced trends on market value / employment in this sector, in particular on SMEs?	M. Unintended reduction of employment due to market decline in conventional products N. Estimated employment in the new products sector	22. Trends in the market value of conventional products (M) 23. Trends in the market value of new products (N) 24. Estimated variation in employment level (based on market value / value-added), by enterprise size (M, N)	<ul style="list-style-type: none"> Analytical model (based on EDT, EMI) (22) Analytical model (based on EcigIntel) (23) Interviews EO (22, 23, 24) Deskwork (22, 23)

Notes: Some indicators are expressed in terms of stakeholders' perception. In practice, each of these indicators can be further broken down by the number of questions that are included in the questionnaires.

In the 'indicators' column, the letters in brackets refers to the corresponding judgment criteria. In the 'information sources' column, the numbers in brackets refers to the identified 'indicators'. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO), Unrecorded Tobacco Consumption (UTC).

➤ EVALUATION QUESTIONS # 13-14_EU ADDED-VALUE

Evaluation questions	Judgment criteria	Indicators	Information sources
13. What is the additional value of the minimum rates and structures of Directive 2011/64/EU, compared to what could have been expected from Member States acting on national level?	A. Estimated difference in MS tax levels trends in the absence of Directive 2011/64 ('counterfactual scenario') B. Net effectiveness of the Directive against the counterfactual scenario	1. Perceived contribution of EU minimum rates and structure to national policy decisions (A) 2. Projected trends (convergence) in tax and price levels in the absence of EU minima increase (A) 3. Difference between the actual tax revenues and the hypothetical revenues under the 'counterfactual scenario' (B) 4. Difference between the actual smoking prevalence and the hypothetical prevalence under the 'counterfactual scenario' (B)	<ul style="list-style-type: none"> TC (1) OPC (1) Interviews (all) (1, 2) Deskwork (benchmarking) (2) Analytical model (3, 4)
14. Is EU intervention in this area still justified? Are there needs and priorities (e.g. concerning new products) that the current policy framework does not address? Can they be effectively solved by MS without any EU-level intervention?	C. Satisfaction with the current harmonisation level D. Satisfaction with the current tax treatment of new products	5. Stakeholders' appreciation of the current and perspective EU added value of the Directive (minimum rates, structures, definitions) (C) 6. Stakeholders' appreciation of the current absence of a harmonised treatment of new products (D)	<ul style="list-style-type: none"> TC (5, 6) OPC (5, 6) Interviews (MS, EO) (5, 6)

Notes: Some indicators are expressed in terms of stakeholders' perception. In practice, each of these indicators can be further broken down by the number of questions that are included in the questionnaires.

In the 'indicators' column, the letters in brackets refers to the corresponding judgment criteria. In the 'information sources' column, the numbers in brackets refers to the identified 'indicators'. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO).

➤ **EVALUATION QUESTIONS # 15-17 _EFFICIENCY**

Evaluation questions	Judgment criteria	Indicators	Information sources
15. To what extent are the current rates and their structure cost effective in achieving the desired results? Would it be possible to achieve the same results (benefits) at less costs? (*)	A. Net efficiency of the Directive against alternative policy scenario(s) (to be developed)	<ol style="list-style-type: none"> 1. Perceived deviation of current tax levels from the levels that minimise substitution with FCT and maximise tax revenue (A) 2. Perceive deviation of current tax levels from the levels that optimise reduction of smoking prevalence while minimising impact on revenues (A) 3. Perceived alternative policy scenarios enhancing efficiency (in the above areas) (A) 	<ul style="list-style-type: none"> • TC (3) • Scenario analysis (1, 2, 3) •
16. Is there potential to reduce inefficiencies or simplify the rates and structures of excise duty applied to manufactured tobacco without undermining the intended objectives?	<p>B. Existence of potential to simplify the current Directive provisions</p> <p>C. Estimated unnecessary regulatory costs and burden</p>	<ol style="list-style-type: none"> 4. Hypothetical effect of selective simplification of minimum rates and structures provision (fixed, relative minima, escape clause, mixed structure obligations) (B) (*) 5. Hypothetical effects of revising MED provisions (B) (*) 6. Stakeholders' perceived unnecessary / inefficient provisions (B) 7. Estimated administrative costs / burden for MS administration due to uncertain / unnecessary / inefficient provisions (C) 8. Estimated excessive burden for MS administration to properly enforce and control the excise duty legislation and system (C) 9. Estimated regulatory costs / burden for economic operators (administrative, compliance) due to the Directive 	<ul style="list-style-type: none"> • Analytical models (4, 5, 6, 8, 9) • TC (6, 7, 8) • OPC (6, 9) • Interviews MS (4, 5, 6, 7, 8) • Interviews EO (4, 5, 6, 9)
17. What would be the regulatory costs / cost savings of introducing new tax categories for new products? How do they compare to benefits? (*)	D. Extent of regulatory cost / cost savings from the harmonisation of new products	<ol style="list-style-type: none"> 10. Estimated costs / burden of harmonising new products for administrations and EO (distributive effects across MS) (D) 11. Estimated enforcement issues for monitoring and control (D) 12. Estimated reduction in the current level of tax losses (in concerned MS) (D) 	<ul style="list-style-type: none"> • Analytical model (benchmarking of similar cases) (10, 12) • TC (10, 11) • Interviews (10, 11, 12)

Notes: () evaluation questions /indicators pertinent for the forward-looking component of the Assignment*
Some indicators are expressed in terms of stakeholders' perception. In practice, each of these indicators can be further broken down by the number of questions that are included in the questionnaires. Among sources, 'analytical model' designates the development of estimates and scenarios based – where feasible – on the econometrics model or alternatively on 'theory-based' models built around stakeholders' estimates and/or benchmarking with similar policies or situations. In the 'indicators' column, the letters in brackets refers to the corresponding judgment criteria. In the 'information sources' column, the numbers in brackets refers to the identified 'indicators'. When numbers are in italics the corresponding source will be mostly use to complement / triangulate other sources.

Legend: Excise Duty Tables (EDT), Euromonitor International (EMI), Eurobarometer (EB), Targeted Consultation of Member States authority (TC), Open Public Consultation (OPC), Public Health (PH), Economic Operator (EO).

ANNEX E – THE ECONOMETRIC ANALYSIS

E.1 Demand system estimation

In order to estimate own- and cross-price elasticities of national demand for tobacco products we employ a model of continuous choice for differentiated products (Deaton and Muellbauer, 1980a,b; Hausman *et al.*, 1994; Davis & Garcés, 2010).

In particular, we estimate a three-level choice model where consumers are supposed to choose: (1) the level of expenditure on tobacco products in the country; (2) how to allocate that expenditure between the different types of tobacco products; (3) how to allocate the total expenditure on cigarettes across two market segments: premium cigarettes and low-med cigarettes.¹³

The top-level equation is the following isoelastic demand function:

$$\ln Q_{it} = \beta_{0i} + \tau_t + \beta_1 \ln P_{it} + \beta_2 \ln Y_{it} + \beta_3 \ln P^*_{it} + \beta_4 \mathbf{Z}_{it} + \varepsilon_{it} \quad (1)$$

where the total demand of tobacco products in country i at time t (Q_{it}) is assumed to be a log-linear function of prices – domestic (P_{it}) and foreign (P^*_{it}) –, income (Y_{it}), as well as a demographics and a number of other factors at the country level (\mathbf{Z}_{it}), plus common unobserved time-variant factors (τ_t) as well as country-specific unobserved time-invariant factors (β_{0i}).

In particular, in equation (1):

- ⑩ $\ln Q_{it}$ is the natural log of the Törnqvist volume index (reference year 2015):

$$\ln Q_{it} = \sum_k \frac{w_{ikt} + w_{ik0}}{2} (\ln q_{ikt} - \ln q_{ik0}) \quad (2)$$

where q_{ikt} is the quantity of product k (cigarettes, cigars, cigarillos and fine cut tobacco) released for consumption in country i at time t and w_{ikt} is the expenditure share for product j in the same country and period;

- ⑩ $\ln P_{it}$ is the Stone (1954) index of domestic prices, a share-weighted average of (logs of) domestic prices of tobacco products, deflated using the domestic Harmonized Index of Consumer Prices excluding tobacco products (HICP, source: Eurostat):¹⁴

$$\ln P_{it} = \sum_k w_{ikt} \ln p_{ikt} \quad (3)$$

where p_{ikt} is the price of product k in country i at time t and w_{ikt} is the product expenditure share.¹⁵

¹³Under particular assumptions on the functional form of the utility function, this three-stage process can be shown to be equivalent to solving a single constrained utility-maximization problem (see Deaton & Muellbauer 1980a,b; Hausman *et al.*, 1994; Davis & Garcés, 2010, Ch. 9). The demand functions estimated at the second and third stage are termed “conditional” as they are conditioned on a given level of expenditure.

¹⁴We estimated also a specification substituting the Törnqvist price index for the Stone price index: although the sign and significance of the coefficients is preserved, the point estimates of the price elasticity of tobacco products was slightly higher (0.5 instead of 0.4).

¹⁵In equation (3), P is a weighted geometric average of individual prices, with weights given by expenditure shares (a Cobb-Douglas price index). It is possible to use other indexes to aggregate individual prices. Deaton and Muellbauer (1980b) show that even if it is possible to construct different price indexes to preserve the equivalence of the multi-level

- ⑩ $\ln P^*_{it}$ is a weighted average of the Stone price indexes in the foreign countries, deflated using the domestic HICP ex. tobacco;¹⁶
- ⑩ $\ln Y_{it}$ is the log of GNI (Gross National Income) of country i in period t (source: World Bank database), deflated using the domestic HICP ex. tobacco;¹⁷
- ⑩ Z_{it} includes the following controls:
 - i) the Gini index (source: WB), to control to some extent for the effect of income distribution on the demand of tobacco products if preferences are not homothetic;
 - ii) the percentage of population over 65 and the percentage of population with less than secondary education and secondary education (reference category excluded: tertiary education) (source: Eurostat), to control for the role of demographic structure and education in the demand for tobacco;
 - iii) the (log of) the number of daily equivalent smokers of e-cigarettes, to control for the possible role that the diffusion of e-cigarettes might have played in the demand for the more traditional tobacco products. The daily equivalent number of smokers of e-cigarettes (vapers) is computed multiplying the gross total number of vapers by the “daily vaping equivalent coefficient”, that is the EU average of the ratio between the adjusted total of vapers and the gross total of vapers, where the adjusted total is calculated as the weighted sum of daily, weekly, monthly and less than monthly vapers, with the following weights: daily 1; weekly 0.5; monthly 0.7; less than monthly 0.015;
 - iv) the total Tobacco Control Scale (TCS) score, to control for the strength of anti-smoking policies in the country (source: Joossens and Raw, 2016).

We estimate equation (1) by means of a country and year fixed-effects estimator. Results are reported in Table 1.

In order to obtain an estimate of the trend of demand of tobacco products in case of no changes in relative prices and real GDP, in the regression reported in column (5) of Table 1 we remove the year fixed effects and include a linear trend. The point estimate of the coefficient attached to this variable implies an average annual decrease of 1.7% of demand for factors different from price and income changes.

According to these estimates, the point estimate of the price elasticity of tobacco products is about 0.4, with a 95% confidence interval ranging from 0.15 to 0.7. The income elasticity of demand for

model to a single utility-maximization problem, every index strictly depends on the assumed functional form of the utility function and there is not a best choice.

¹⁶In the computation of $\ln P^*_{it}$, we used two different spatial weights matrices: a row-standardized binary contiguity-based matrix and a row-standardized distance-based matrix (see Le Sage & Pace, 2009). In the former case, $\ln P^*_{it}$ is the simple mean of the Stone price indexes in the neighbouring countries; in the latter, $\ln P^*_{it}$ is the weighted mean of the Stone price indexes in the foreign countries, with weights proportional to the inverse of the distance. The bilateral country distance is in turn the population-weighted distance. The estimates obtained computing $\ln P^*_{it}$ using, respectively, the contiguity- and the distance-based matrices turn out to be fairly similar and in what follows we therefore report only the results obtained with the contiguity-based matrix. In the computation of $\ln P^*_{it}$ we also considered the price level of the following non-EU countries: Belarus, Russia, Serbia and Ukraine.

¹⁷We also estimated a specification adding to the regressors the spatial lag of $\ln Y_{it}$, to control for the other time-variant country-specific factors that can affect the foreign demand of domestic tobacco products. The regressor was not statistically significant and did not change the other estimated coefficient and we therefore decided not to include it in the reported specification.

tobacco products is positive and statistically significant, with a point estimate lower than 0.5. When we control for time-invariant country-specific factors and time-variant common factors, the coefficients attached to the other regressors are rather small and never statistically significant, although usually with the expected signs.

Prices could be endogenous in equation (1) because observed quantities and prices can both change if shifts in supply occur. We control somehow for this issue in equation 1, as we include a number of controls at the country-level for the factors potentially correlated with shifts in demands (average level of education, demographic structure of the population, enforcement of anti-smoking national policies, etc.) as well as fixed-effects at the country level, to control for all the country-specific time-invariant unobserved factors.

To better account for the biases arising from the endogeneity of prices, we also run instrumental variable regressions using the first lag of the log of the lowest viable prices, defined as the price level at which the price is equal to the total tax burden, to instrument the Stone price index of tobacco products.

The lowest viable price for cigarettes in country i and period t is computed as:

$$TB_{it}^c = \max\left(\frac{MED_{it}^c}{1 - VAT_{it}}, \frac{SP_{it}^c}{1 - AD_{it}^c - VAT_{it}}\right) \quad (4)$$

where MED^c is the Minimum Excise Duty (MED) on cigarettes, VAT is the Value Added Tax rate on tobacco products, SP^c is the specific component of the excise duty on cigarettes and AD^c is the respective ad valorem excise duty. In the same way, we compute the lowest viable price for fine cut tobacco (Tb_{it}^{fct}).

The results are reported in Table 2. In particular, in the first column the table shows the first and second stage results of the IV FE regression with the Stone price index of tobacco products instrumented using only the first lag of the log of the lowest viable price of cigarettes. In the first stage regression the coefficient attached to the excluded instrument is strongly statistically significant and with the expected sign (a 1% increase in the lowest viable price of cigarettes is associated with a 0.33% increase in the average price of tobacco products). The instrument is not weak and passes all the weak ID tests. In this regression, the price elasticity of the demand for tobacco products is slightly higher (-0.65), with a 95% confidence interval ranging from 0.31 to 0.98.

The second column of Table 2 shows the results of the IV FE regression where, in addition to the first lag of the lowest viable price of cigarettes, we use the first lag of the lowest viable price of fine cut tobacco to instrument the Stone price index of tobacco products. The coefficient attached to the latter instrument is not statistically significant in the first stage regression, although the two instruments together passes the weak ID tests and the Hansen J overidentification test. In this specification, the point estimate of the price elasticity of the demand for tobacco is closer to the value obtained in Table 1 (0.54), with a 95% confidence interval ranging from 0.24 to 0.85.

In the second-level, the demand for each category of tobacco products (cigarettes, fine-cut smoking tobacco, cigars and cigarillos), conditional on the total expenditure in tobacco, is assumed to be a log-linear function of the average selling price of each category as well as country-specific time-invariant factors and common time-specific factors:

$$\ln Q_{it}^j = \gamma_{0i}^j + \tau_t + \sum_k \gamma_1^{jk} \ln P_{it}^k + \gamma_2^j \ln E_{it} + v_{it}^j \quad (5)$$

where Q_{it}^j is the total demand for category j of tobacco products in country i at time t (j = cigarettes, cigarillos, cigars, fine cut tobacco), E_{it} is the total expenditure in tobacco products in country i at time t , P_{it}^k is the weighted average price for category k (k = cigarettes, cigarillos, cigars, fine cut tobacco) and v_{it}^j is the error term.

In equation (5), the parameters γ_1^{jk} are the conditional own- and cross-price elasticities of product category j . The system of equations (3) (one for each category) is a log-linear differentiated product demand system (see Hausman et al., 1994; Davis & Garcés, 2010, Ch. 9).

The system of four equations (3) was first estimated without imposing any restriction by means of an unconstrained Seemingly Unrelated Regression Equations (SURE) estimator with country and time dummies. The results are summarized in Table 3.¹⁸ The same Table reports the p-values of the statistical tests for homogeneity and unitary expenditure elasticity.

The point estimates of the coefficient give the own- and cross-price conditional elasticities. The main results are the high sensitivity of the conditional demand for fine-cut tobacco to the price of cigarettes (a 1% increase in the price of cigarettes produces a 2% increase in the demand of fine cut tobacco) and the lower own-price elasticity of the conditional demand for fine cut tobacco compared to the other categories of tobacco products. The expenditure elasticity of cigarettes is greater than one while that of fine cut tobacco is lower than one.

To account for the possible endogeneity of prices, we run FE IV regressions on a reduced system of equations where we consider only the main categories of tobacco products, cigarettes and fine cut tobacco, together accounting on average for more than 95% of the total expenditure in tobacco products, and we use as instruments of prices the corresponding lowest viable price (equation 4).

The results are reported in Tables 4 and 5. In particular, Table 4 summarizes the results of the unconstrained SURE estimator on the reduced second-level system of demand equations. Table 5 reports the results of the IV FE estimator, which shows that the excluded instruments works quite well and the point estimates are roughly similar.

The results of the constrained SURE estimator, where we impose the homogeneity restriction, are reported in Table 6. Although the hypothesis of the homogeneity restriction is rejected by the data for the demand of fine cut tobacco, we impose this condition to assure consistency between the first and second level equations. The results of the constrained SURE estimator are reported in Table 6.

Finally, in the third-level, the conditional demand for each category of cigarettes at the country-level – $Q^{c(s)}_{it}$, where s is the market segment (premium or low-medium) – is assumed to be a log-linear function of the total expenditure in (legal) cigarettes (E_{it}^c) and the average selling price in each

¹⁸It is also possible to estimate each equation (3) (for any given j) separately since these equations consists of several regression equations, each having its own dependent variable and (potentially different) sets of exogenous explanatory variables. The SURE estimator is in theory more efficient (as it exploits the covariance of the error terms across equations) although it requires that all the equations are correctly specified. Since this assumption is a stronger assumption than the assumption that a single demand equation is correctly specified, before attempting the simultaneous estimation, we looked at the single equation estimates. The results do not significantly differ and we report only the SURE estimates.

segment ($P^{c(h)}_{it}$), plus country- segment specific time-invariant factors ($\lambda^{s_{0i}}$) and segment-time-specific factors common to all countries:

$$\ln Q_{it}^{c(s)} = \lambda_{0i}^s + \tau_t^s + \sum_h \lambda_1^{sh} \ln P_{it}^{c(h)} + \lambda_2^s \ln E_{it}^c + \epsilon_{it}^s \quad (6)$$

The system of two equations (6) is another log-linear differentiated product demand system from which one can derive estimates of the (conditional) own- and cross-price elasticities for the different segments (λ_1^{sh}).

In order to estimate the system of equations (6), we started from the Euromonitor International database, that contains data on price and quantities at the level of the single brand of cigarettes in each country and year. By using the data on prices, for each country and year we computed the deviation between the price of each brand and the average price:

$$\Delta p_{ijt} = p_{ijt} - p_{i.t} \quad (7)$$

For each brand and country, we compute the time-mean of these deviations $\Delta p_{ij.}$. Then, in each country, we look at the distribution of these values and consider as premium brands those having a value greater than the 66-percentile of the distribution, and low-med the others. This way, a third of all brands sold in each country since 2005 have been classified as premium. This notwithstanding, as we consider time-mean deviations, we do not superimpose market shares and allow the prices and the market shares of the segments to vary across time.¹⁹

Having identified the brands in each country belonging to each segment, we compute in each country, year and segment the corresponding Stone price index:

$$\ln P_{it}^s = \sum_{j \in s_i} w_{isjt} \ln p_{ijt} \quad (8)$$

where w_{isjt} is the market share of brand j , in segment s , country i and year t .

Table 7 summarizes the results of the unconstrained SURE estimates. Having tested for the homogeneity restriction and the assumption of unitary expenditure elasticity, we impose these conditions. The results of the constrained SURE estimator are reported in Table 8. Results show that the (conditional) price elasticity of the premium segment is significantly larger than the price elasticity of the low-med segment (we firmly reject the null of equal price elasticities, p-value = 0.000).

¹⁹We tried also to classify the brands as premium on the base of the percentiles of the distribution of the time-mean of the prices deflated using the percentage change in the weighted average price of all cigarettes. The results were not qualitatively and quantitatively different.

E.1.2 Estimation of the demand for smuggled cigarettes

For the demand of smuggled cigarettes, we estimate the following isoelastic demand function:²⁰

$$\ln q_{it} = \beta_{0i} + \tau_t + \beta_1 \ln p_{it}^c + \beta_2 \ln p_{it}^{fct} + \beta_3 \ln P_{it}^* + \beta_4 \ln Y_{it} + \beta_5 \ln Y_{it}^* + \beta_6 Z_{it} + \varepsilon_{it} \quad (9)$$

where the total demand of smuggled cigarettes in country i at time t (q_{it}) is assumed to be a log-linear function of: the domestic prices of legal cigarettes (p_{it}^c) and fine cut tobacco (p_{it}^{fct}); the spatial lag of the Stone price index of tobacco products, accounting for the overall price level of tobacco products in the neighboring countries ($\ln P_{it}^*$); the real national income (the income is deflated by using the HICP ex. tobacco products) ($\ln Y_{it}$); the average real income in the neighboring countries ($\ln Y_{it}^*$); other country-specific time-variant factors (Z_{it}), plus common unobserved time-variant factors (τ_t) as well as country-specific unobserved time-invariant factors (β_{0i}). As for the country-specific time-variant factors, we include in the regression almost the same factors we consider in Equation 1, namely: the percentage of population over 65 and the percentage of population with less than secondary education and secondary education; the total Tobacco Control Scale (TCS) score; the log of the number of daily equivalent smokers of e-cigarettes.²¹

The results are summarized in Table 9. Columns 1-4 reports the estimates of the FE models whereas the last column of the table (column 6) shows the results of the FE-IV model, where we consider as endogenous variables the price of cigarettes and fine cut tobacco and use as instruments the correspondent lowest viable price, as we did before.

It is worth noting, since the price of smuggled cigarettes is not observed, in the regressions the price of smuggled cigarettes does not appear among the regressors. This notwithstanding, as far as it is reasonable to assume that this price is a certain fraction of the price of legal cigarettes (possibly different among countries but time-invariant or different across periods but changing in the same way in EU), the coefficient attached to the log of the price of legal cigarettes is measuring the overall impact of a change in the price of cigarettes on legal markets. In fact, this overall impact is the sum of two different and opposite effects: the increase of the demand of smuggled cigarettes because of the increase of the price of legal cigarettes (cross-price elasticity); the decrease of the demand of smuggled cigarettes due to the fact that the increase of legal prices also produces a proportional increase of the price of smuggled cigarettes (own-price elasticity).

According to our estimates, the demand for smuggled cigarettes is rather sensitive to the price of legal cigarettes: in the preferred specifications the point estimate of the coefficient is 1.24-1.06, always higher than one (an increase of price produces a more than proportional increase in demand), although the standard errors and the associated confidence intervals are rather large.²²

²⁰We decided to not include smuggled cigarettes in the previous demand system and to estimate demand for smuggled cigarettes outside the overall demand system estimation because, as far as smuggled cigarettes are concerned, we have data for a smaller time span and these data are estimated from auxiliary dataset and thus their reliability should not be taken for granted.

²¹Given the smaller sample, we decided not to include in the reported regression the Gini index, whose inclusion would have further reduced the sample size.

²²Moreover, since the dependent variable in this case is not directly observed but estimated, this introduces another source of unaccounted variability of the estimates.

Finally, in order to reach an estimate of the patterns of change of total smuggled cigarettes consumption over time for factors not related to relative price and income changes, we estimate the following functional form:

$$Q_t = \alpha_0 + \alpha_1 t^2 + \alpha_2 t + \alpha_3 P_t + \alpha_4 Y_t + \varepsilon_{it} \quad (10)$$

where the total consumption of smuggled cigarettes at the EU level in year t (Q_t) is regressed on a time trend (t), the time trend squared (t^2), the average Stone price index of legal tobacco products at the EU level and the total real income at the EU level.²³

By assuming constant real income and a 2% yearly increase in the overall price level, the model predicts a yearly decrease in the total amount of smuggled cigarettes consumed amounting to 1.9 billion.

²³We decided to estimate a linear form with a squared term instead of a log linear form since it better fits the data as far as the time trend is considered and returns more reasonable estimates.

E.1.3 Analysis of bilateral flows of cigarettes

In order to estimate the impact of price differential across countries on bilateral flows of cigarettes (cross-border shopping), we estimate the following specifications:

$$D_{ijt} = \beta_{0i} + \beta_{0j} + \tau_t + \beta_1 c_{ij} + \beta_2 \ln D_{ij} + \beta_3 \Delta \ln p_{ijt} + \beta_4 \ln E_{it} + \varepsilon_{ijt} \quad (11)$$

$$\ln q_{ijt} = \beta_{0i} + \beta_{0j} + \tau_t + \beta_1 c_{ij} + \beta_2 \ln D_{ij} + \beta_3 \Delta \ln p_{ijt} + \beta_4 \ln E_{it} + \varepsilon_{ijt} \quad (12)$$

Equation (11) is a Linear Probability Model where a dummy equal to one if there are positive bilateral flows of legal cigarettes from country j (source country) to country i (destination country) in year t (D_{ijt}) or zero otherwise is regressed on: origin and destination country-specific dummies (β_{0i} and β_{0j}); time dummies (τ_t); a dummy equal to one if the two countries are neighboring countries (c_{ij}); the (log of) the population-weighted distance between country i and country j ; the log of the total expenditure in national cigarettes in the destination country i , the log difference of destination and origin average prices of cigarettes ($\Delta \ln p_{ijt}$).²⁴

Equation (11) gives an estimate of the marginal impact of price differentials on the probability of a bilateral flow to come into existence. Conditional on existence ($q_{it}>0$), Equation (12) gives an estimate of the effect on the size of the bilateral flow.

Both the equations are estimated also by means of a FE estimator, where the models are estimated without the country dummies and the other time-invariant country-pair factors. Results are summarized in Table 10. The point estimates of the coefficient attached to the log difference of prices in columns (1-2) implies that a 1% increase in the difference between the average price in the destination country and source country increases by about 0.3% the probability that cross-border shopping between the two countries actually take place. In columns (3-4), the coefficient attached to the log difference instead gives the elasticity of an already existent flow to the price differential: a 1% increase in the differential makes the expected flow increase by 0.15-0.3%.

²⁴We also estimate probit and logit models (not reported), whose results are similar to the linear probability model for the marginal effects at the mean.

Table 1: Demand for tobacco products (FE estimator)

	(1)	(2)	(3)	(4)	(5)
ln P	-0.387*** (0.113)	-0.409*** (0.129)	-0.409*** (0.129)	-0.434*** (0.141)	-0.428*** (0.0765)
ln P*	0.0660 (0.0637)	0.0682 (0.0661)	0.0688 (0.0667)	0.0919 (0.0720)	
ln real GNI	0.473** (0.185)	0.457** (0.191)	0.449** (0.197)	0.491** (0.199)	0.502*** (0.121)
ln Vapers		-0.0150 (0.0127)	-0.0151 (0.0127)	-0.0121 (0.0150)	
Total TCS score			-0.000744 (0.00292)	0.000147 (0.00283)	
Gini index				-0.0138 (0.0116)	
Pop over 65 (%)				0.0173 (0.0363)	
Pop with only less than secondary education (%)				0.00275 (0.0103)	
Pop with only secondary education (%)				-0.00602 (0.0109)	
Time dummies	Yes	Yes	Yes	Yes	
Trend					-0.0172*** (0.00372)
Observations	294	271	271	236	294
R ²	0.553	0.559	0.559	0.556	0.684
Number of countries	26	26	26	26	26

Dependent variable: log of the Törnqvist volume index of tobacco products. Country fixed-effects estimator. Robust standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.

Table 2: Demand for tobacco products (IV FE estimator)

	1 st stage regression	
	(1)	(2)
Dependent variable	ln P _{it}	ln P _{it}
ln TB ^c _{i,t-1}	0.330*** (0.089)	0.416*** (0.084)
ln TB ^{fact} _{i,t-1}		-0.143 (0.109)
ln GNI _{it}	0.070 (0.159)	-0.026 (0.205)
ln HICP ex. tobacco _{it}	1.568** (0.571)	1.498*** (0.556)
Time dummies	Yes	Yes
Cragg-Donald Wald F statistic (weak ID test)	80.75	42.19
Kleibergen-Paap rk Wald F statistic (weak ID test)	27.27	22.83
Stock-Yogo weak ID test critical value (10% max IV size)	16.38	19.93
Hansen J statistic (over-identification test) (<i>p</i> -value)	–	0.31
	2 nd stage regression	
	(1)	(2)
Dependent variable	ln Q _{it}	ln Q _{it}
ln P _{it}	-0.646*** (0.171)	-0.544*** (0.156)
ln GNI _{it}	0.516*** (0.188)	0.301 (0.189)
ln HICP ex. tobacco _{it}	0.559 (0.530)	0.361 (0.579)
Time dummies	Yes	Yes
Observations	273	243
Number of countries	26	26

Instrumental variable fixed-effects estimator.

Cluster-robust standard errors in parenthesis (cluster: country). Significance level: * 10%, ** 5%, *** 1%.

Table 3: Second-level conditional demand system (unconstrained SURE estimator)

Dependent variable	ln Q cigarettes	ln Q cigarillos	ln Q cigars	ln Q FCT
ln P cigarettes	-1.093*** (0.040)	0.741 (0.511)	0.513 (0.439)	1.968*** (0.463)
ln P cigarillos	0.144*** (0.021)	-0.951*** (0.267)	-0.361 (0.229)	-0.312 (0.242)
ln P cigars	-0.127*** (0.039)	2.272*** (0.506)	1.922*** (0.435)	0.130 (0.459)
ln P Fine Cut Tobacco	0.0154 (0.0165)	0.0136 (0.213)	-0.228 (0.183)	-0.833*** (0.193)
ln Expenditure in tobacco products	1.103*** (0.015)	-0.241 (0.204)	-0.149 (0.176)	0.511*** (0.185)
Country dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
p -value homogeneity test (null hypothesis: coefficients sum to 0)	0.058	0.000	0.000	0.000
p -value test of unitary expenditure elasticity	0.000	0.000	0.000	0.008
Observations	294	294	294	294
SURE estimator. Breusch-Pagan test of independence p -value: 0.000 Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.				

Table 4: Conditional demand system for cigarettes and fine cut tobacco (SURE estimator)

Dependent variable	ln Q cigarettes	ln Q FCT
ln P cigarettes	-1.004*** (0.014)	2.062*** (0.231)
ln P Fine Cut Tobacco	-0.002 (0.012)	-0.740*** (0.185)
ln Expenditure in cigarettes and FCT	1.046*** (0.011)	0.471*** (0.181)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
Observations	332	332
SURE estimator. Breusch-Pagan test of independence p -value: 0.000. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.		

Table 5: Conditional demand system for cigarettes and fine cut tobacco (IV FE estimator)

	1 st stage regressions		1 st stage regressions	
	(1.1)	(1.2)	(2.1)	(2.2)
Dependent variable	In P cigarettes	In P FCT	In P cigarettes	In P FCT
In TB cigarettes	0.448*** (0.101)	0.123* (0.068)	0.452*** (0.090)	0.141** (0.072)
In TB FCT	0.014 (0.048)	0.396*** (0.101)	0.012 (0.055)	0.404*** (0.095)
In Expenditure in cig and FCT	0.214*** (0.049)	0.055 (0.070)	0.223*** (0.047)	0.094 (0.056)
Time dummies	Yes	Yes	Yes	Yes
Cragg-Donald Wald F statistic (weak ID test)	31.370		31.370	
Kleibergen-Paap rk Wald F statistic (weak ID test)	20.940		20.940	
Stock-Yogo weak ID test critical value (10% max IV size)	7.03		7.03	
	2 nd stage regression		2 nd stage regression	
	(1)		(2)	
Dependent variable	In Q cigarettes		In Q FCT	
In P cigarettes	-0.962*** (0.052)		3.199*** (1.114)	
In P fine cut tobacco	-0.026 (0.068)		-1.189 (1.001)	
In Expenditure in cig and FCT	1.027*** (0.008)		0.132 (0.370)	
Time dummies	Yes		Yes	
Observations	296		265	
Number of countries	26		26	

Instrumental variable fixed-effects estimator. Cluster-robust standard errors in parenthesis (cluster: country). Significance level: * 10%, ** 5%, *** 1%.

Table 6: Conditional demand system for cigarettes and fine cut tobacco (constrained SURE estimator)

Dependent variable	ln Q cigarettes	ln Q FCT
ln P cigarettes	-1.019*** (0.0131)	1.379*** (0.223)
ln P Fine Cut Tobacco	-0.0178* (0.00968)	-1.439*** (0.165)
ln Expenditure in cigarettes and FCT	1.037*** (0.0107)	0.0601 (0.183)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
Observations	332	332

SURE estimator. Breusch-Pagan test of independence p -value: 0.000. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%. Imposed restrictions: homogeneity.

Table 7: Third-level conditional demand system (unconstrained SURE estimator)

Variables	(1)	(2)
	ln Q low-medium	ln Q premium
ln P low-medium	-2.040*** (0.112)	2.241*** (0.168)
ln P premium	1.034*** (0.129)	-2.781*** (0.194)
ln Expenditure in cigarettes	0.960*** (0.0412)	0.891*** (0.0617)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
p -value homogeneity test (null hypothesis: coefficients sum to 0)	0.451	0.010
p -value test of unitary expenditure elasticity	0.332	0.076
Observations	298	298

SURE estimator. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%. Breusch-Pagan test of independence: $\chi^2(1) = 98.7$, p -value = 0.000

Table 8: Third-level conditional demand system (constrained SURE estimator)

	(1)	(2)
Variables	ln Q low-medium	ln Q premium
ln P low-medium	-2.053*** (0.111)	2.294*** (0.175)
ln P premium	1.053*** (0.110)	-3.294*** (0.175)
ln Expenditure in cigarettes	1 (constrained)	1 (constrained)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
Observations	298	298

SURE estimator. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%. Breusch-Pagan test of independence: $\chi^2(1) = 90.2$, p -value = 0.00. Imposed restrictions: homogeneity and unitary total expenditure elasticity.

Table 9: Demand for smuggled cigarettes (Fixed-Effects and FE-IV estimators)

	(1)	(2)	(3)	(4)	(5)
	FE	FE	FE	FE	IV
In p cigarettes	1.399** (0.580)	1.343** (0.586)	1.238** (0.595)	1.065* (0.611)	1.132 (0.960)
In p fine cut tobacco	0.353 (0.356)	0.343 (0.378)	0.309 (0.378)	0.395 (0.281)	0.650 (0.490)
In real GNI (Gross National Income)	-2.388** (0.888)	-2.659*** (0.887)	-2.861*** (0.909)	-3.015*** (0.842)	-1.752* (0.949)
In P^* (spatial lag of Stone price index of tobacco products)	0.480 (0.512)	0.434 (0.599)	0.436 (0.572)	0.190 (0.501)	-0.417 (0.559)
In real GNI* (Spatial lag of GNI)	1.140** (0.454)	1.073** (0.511)	1.008* (0.512)	1.134** (0.441)	0.835** (0.407)
In Vapers		0.00951 (0.0628)	0.000312 (0.0627)	-0.00654 (0.0585)	-0.0653 (0.0646)
Total TCS score			-0.0171 (0.0147)	-0.00235 (0.0126)	0.00606 (0.0124)
Pop over 65 (%)				-0.321* (0.168)	-0.281* (0.147)
Pop with only less than secondary edu (%)				0.0596* (0.0339)	0.0225 (0.0368)
Pop with only secondary education (%)				0.0311 (0.0355)	-0.0424 (0.0314)
Time dummies	Yes	Yes	Yes	Yes	Yes
F-test first stage (Eq. In p cigarettes)					50.57
F-test first stage (Eq. In p fine cut tobacco)					10.73
Observations	211	191	191	191	180
R ²	0.276	0.293	0.303	0.355	
Number of countries	26	26	26	26	26

Dependent variable: log of quantity of smuggled cigarettes. Fixed-effects estimator in columns (1-4). Fixed-effects IV estimator in column (5): endogenous variables In p cigarettes and In p fine cut tobacco. Instrumental variables: In lowest viable price of cigarettes; In lowest viable price of fine cut tobacco. Robust standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.

Table 10: Intensive and extensive margins for cross-border shopping of cigarettes

	(1.1)	(1.2)	(2.1)	(2.2)
		FE		FE
Dependent variable		Dummy equal 1 if there is a flow of cigarettes from origin to destination country	Log of cigarettes from origin to destination country	
log difference of destination and origin price of cigarettes	0.332*** (0.088)	0.327*** (0.0877)	0.145 (0.327)	0.283* (0.149)
ln Expenditure cigarettes in destination country	0.0691 (0.0472)	0.0695 (0.0473)	-0.0523 (0.170)	0.115 (0.121)
ln Population-weighted distance	-0.273*** (0.014)		-0.976*** (0.0652)	
Contiguity	0.0438** (0.0197)		1.013*** (0.0913)	
Year dummies	Yes	Yes	Yes	Yes
Origin and destination country dummies	Yes		Yes	
Observations	5,211	5,211	2,971	2,971
R ²	0.473	0.019	0.693	0.027
Number of countries		756		623

Fixed-effects estimator in columns (2-4). Robust standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.

E.2 Impact of taxes on prices

In this section we analyze the average impact of duties and taxes on the prices of tobacco products. We shall focus in particular on cigarettes and fine cut tobacco.

To start with, Table 1 summarizes the results of the analysis of the pass-through elasticity of duties on prices for cigarettes. Column (1) shows the results of a FE regression of the log weighted average price of cigarettes at the country level on time dummies (to account for unobserved time-specific factors common across countries), the log of the Harmonized Index of Consumer Prices (HICP) excluding tobacco (to account for country-specific inflation dynamics) and the log of the Excise Duty Yield (EDY). The coefficient attached to the last regressor gives a first estimate of the elasticity of cigarette weighted average prices to taxes. According to this estimate, a 1% increase in EDY produces a 0.77% increase in the weighted average price of cigarettes.²⁵

In Column (2), by including the first lag of the regressors, we analyze the dynamics of such impact. According to these estimates, more than 85% of the overall impact of the 1% increase of taxes occurs within a year (+0.67 pp) while the remaining 15% happens in the next year (+0.10 pp).

Since the excise yield in the previous regressions is partly endogenous (the yield is partly determined by ad valorem taxes whose actual level positively depends on the price level), the estimated elasticities are likely upwardly biased. To address this issue, we run an instrumental variable FE regression, where we use the lowest viable price for cigarettes, i.e the price level at which the price is equal to the total tax burden (TB), to instrument EDY. The results are showed in Column (3). In this regression, the elasticity of prices to EDY is still positive and statistically significant and the point estimate slightly lower than before (0.71).

To account also for the possible endogeneity of HICP ex. tobacco, we treat also the overall price level as endogenous and instrument it using its first lag. The results are summarized in the last columns of Table 1 (4). In these regressions, all the coefficients (in the first and second stage) are statistically significant and with the expected signs. The point estimate of the pass-through elasticity of taxes on prices for cigarettes is about 0.7: a 10% increase in taxes produces on average about a 7% price increase for cigarettes. The 95% confidence interval is 0.62-0.77.

Table 2 summarizes the results of the same analysis carried out for fine-cut tobacco. The results of this analysis show that the average pass-through elasticity of taxes for fine cut tobacco is actually lower: a 10% increase in taxes produces on average about a 6% increase of prices.

In Table 3 and 4, we analyze the cross-effects (and the dynamics of such effects) of the changes in taxes on cigarettes and fine cut tobacco on their prices. The results show that the only statistically significant cross-effect is the overall positive impact of cigarette taxes on fine-cut tobacco prices, although this effect is rather small, so there is no strong empirical evidence of substantially significant cross-effects.

In Table 5, we summarize the results of FE regressions of the log of prices on the log of HICP ex. tobacco and the log of EDY for cigarettes plus time-dummies, allowing for country-specific EDY elasticities by interacting the country dummies with \ln EDY. The null hypothesis of equal EDY

²⁵This result is partly due to an increase in prices and partly due to a change in the bundle of brands actually consumed.

elasticities across countries is in fact rejected and the results of this regression can be used to obtain rough estimates of the country-specific pass-through elasticities for cigarettes and fine-cut tobacco.

To study the effects of the different components of taxes on weighted average prices of cigarette and fine-cut tobacco, we regress the log of the weighted average price on the corresponding ad valorem excise duty (AD), the specific excise duty (SP), the Value Added Tax rate (VAT) and the log of the Minimum Excise Duty (MED) plus the price index (excluding tobacco) as well as country and year dummies. Results are summarized in Table 6.

Tables 7 and 8 summarize the results of the analysis at the brand level. This analysis is aimed at analyzing systematic differences between premium and non-premium brands of cigarettes in the way tax increases are transferred to final prices.

In Table 7 we carry out an analysis similar to that summarized in Table 1 and 2 to analyze the elasticity of cigarette price to excise duty yield. Results show that the average elasticity of cigarette price to taxes for brands in the non-premium segment is about 0.6-0.65, where for the premium brands that elasticity is significantly lower (0.5-0.45).

In Table 8 we analyze the effect of the different components of the taxes on non-premium and premium brands. Results show that, as expected, the impact of increasing MED on premium brands is significantly lower (the elasticity to MED is smaller: -0.08). This seems to be the main factor behind the fact that the pass-through elasticity of taxes on prices is lower for premium brands with respect to non-premium brands.

In order to better analyze the impact of tax components on cigarette prices, in Table 9 we summarize the results of quantile regressions where we estimate the effect on, respectively, the 25-quantile (q25) of the distribution of log prices, the median (q50) and the 75-quantile (q75). In particular, in model (3) we include in the regression both time-dummies (different from euro and non-euro countries) and country-dummies, to account for country-specific time-invariant effects. Results show that all the different tax components tend to affect all the prices although they have a different effect on the different quantiles. In particular, while MED is more effective on the lower end of the distribution (a 1% increase of MED is associated with a 0.61% of increase for the 25-quantile whereas it produces only a 0.4% in the 75-quantile), the ad valorem excise duty tends to affect more the right tail (a one percentage point increase of the ad valorem duty increases by 0.6% the 75-quantile while the median increases much less).

Table 1: Average impact of taxes on cigarette prices

	1 st stage regressions				
	(1)	(2)	(3.1)	(4.1)	(4.2)
Dependent variable			ln EDY cigarettes _t	ln EDY cigarettes _t	ln HICP ex. tobacco _t
ln TB cigarettes _t			0.483*** (0.128)	0.527*** (0.134)	-0.019*** (0.004)
ln HICP ex. tobacco _t			1.421** (0.543)		
ln HICP ex. tobacco _{t-1}				0.966*** (0.302)	0.854*** (0.030)
Time dummies			Yes	Yes	Yes
Cragg-Donald Wald F statistic (weak ID test)			339.023	155.466	
Kleibergen-Paap rk Wald F statistic (weak ID test)			19.535	16.342	
Stock-Yogo weak ID test critical value (10% max IV size)			16.38	7.03	
	2 nd stage regressions				
	(1) FE	(2) FE	(3) IV-FE	(4) IV-FE	
Dependent variable			ln P cigarettes _t		
ln EDY cigarettes _t	0.779*** (0.0345)	0.679*** (0.0554)	0.715*** (0.0330)	0.695*** (0.0358)	
ln EDY cigarettes _{t-1}		0.102* (0.0526)			
ln HICP ex. tobacco _t	-0.147 (0.231)	-0.493 (0.346)	0.0565 (0.255)	0.490* (0.280)	
ln HICP ex. tobacco _{t-1}		0.481 (0.426)			
Time dummies	Yes	Yes	Yes	Yes	
Observations	340	312	340	317	
Number of countries	28	28	28	28	

Fixed-effects estimator (1-2) and instrumental variable fixed-effects estimator (3-4). Cluster-robust standard errors in parenthesis (cluster: country). Significance level: * 10%, ** 5%, *** 1%.

Table 2: Average impact of taxes on fine cut tobacco prices

	1 st stage regressions				
	(1)	(2)	(3.1)	(4.1)	(4.2)
Dependent variable			ln EDY FCT _t	ln EDY FCT _t	ln HICP ex. tobacco _t
ln TB FCT _t			0.797*** (0.073)	0.774*** (0.080)	-0.003 (0.008)
ln HICP ex. tobacco _t			-0.357 (0.481)		
ln HICP ex. tobacco _{t-1}				-0.315 (0.418)	0.779*** (0.036)
Time dummies			Yes	Yes	Yes
Cragg-Donald Wald F statistic (weak ID test)			566.941	242.161	
Kleibergen-Paap rk Wald F statistic (weak ID test)			359.634	132.290	
Stock-Yogo weak ID test critical value (10% max IV size)			16.38	7.03	
	2 nd stage regressions				
	(1) FE	(2) FE	(3) IV-FE	(4) IV-FE	
Dependent variable	ln P fine cut tobacco _t				
ln EDY FCT _t	0.633*** (0.0911)	0.629*** (0.102)	0.552*** (0.116)	0.596*** (0.128)	
ln EDY FCT _{t-1}		0.0562 (0.0679)			
ln HICP ex. tobacco _t	0.333 (0.666)	0.106 (0.688)	0.491 (0.680)	0.495 (0.736)	
ln HICP ex. tobacco _{t-1}		0.204 (0.661)			
Time dummies	Yes	Yes	Yes	Yes	
Observations	331	305	297	279	
Number of countries	26	26	26	26	

Fixed-effects estimator (1-2) and instrumental variable fixed-effects estimator (3-4). Cluster-robust standard errors in parenthesis (cluster: country). Significance level: * 10%, ** 5%, *** 1%.

Table 3: Average direct and cross-impact of taxes on prices of cigarettes and fine-cut tobacco

Dependent variable	ln P cigarettes _t	ln P FCT _t
ln EDY cigarettes _t	0.752*** (0.0173)	0.0642* (0.0361)
ln EDY FCT _t	0.0263 (0.0168)	0.614*** (0.0349)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
Observations	325	325
SURE estimator. Breusch-Pagan test of independence p-value: 0.0006. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.		

Table 4: Average direct and cross-impact of taxes on prices of cigarettes and fine-cut tobacco

Dependent variable	ln P cigarettes _t	ln P FCT _t
ln EDY cigarettes _t	0.683*** (0.0402)	0.200** (0.0805)
ln EDY cigarettes _{t-1}	0.112*** (0.0342)	-0.141** (0.0686)
ln EDY FCT _t	-0.0207 (0.0271)	0.593*** (0.0543)
ln EDY FCT _{t-1}	0.0380 (0.0252)	0.0817 (0.0505)
Country dummies	Yes	Yes
Time dummies	Yes	Yes
Observations	299	299
SURE estimator. Breusch-Pagan test of independence p-value: 0.0044. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.		

Table 5: Average direct impact of taxes on cigarette and fine-cut tobacco prices by country

Dep. variable: ln P	(1)	(2)
	Cigarettes	Fine-cut tobacco
ln EDY		
AT	0.510*** (0.0817)	0.540*** (0.0887)
BE	0.755*** (0.0549)	0.486*** (0.0854)
BG	0.756*** (0.0346)	0.534*** (0.0648)
CY	0.402*** (0.142)	
CZ	0.942*** (0.0257)	0.277*** (0.0677)
DE	1.020*** (0.118)	0.707*** (0.223)
DK	0.774*** (0.0554)	0.415*** (0.109)
EE	0.841*** (0.0416)	0.871*** (0.0677)
EL	0.582*** (0.0386)	0.773*** (0.0769)
ES	0.839*** (0.0340)	0.701*** (0.0503)
FI	0.639*** (0.0420)	0.551*** (0.0848)
FR	0.636*** (0.0695)	0.786*** (0.108)
HR	0.812*** (0.0182)	0.343*** (0.0338)
HU	0.995*** (0.0711)	0.511*** (0.123)
IE	0.542***	0.0979

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	(0.0771)	(0.165)
IT	0.777***	0.689***
	(0.0523)	(0.118)
LT	0.766***	0.865***
	(0.0290)	(0.129)
LU	0.950***	0.502***
	(0.0660)	(0.0876)
LV	0.791***	0.339***
	(0.0269)	(0.108)
MT	0.901***	
	(0.0334)	
NL	0.701***	0.854***
	(0.0479)	(0.0916)
PL	0.841***	0.570***
	(0.0274)	(0.0648)
PT	1.009***	0.721***
	(0.0504)	(0.0459)
RO	1.000***	-0.170
	(0.0409)	(0.103)
SE	0.493***	0.524***
	(0.0516)	(0.0737)
SI	0.766***	0.459***
	(0.0358)	(0.0523)
SK	0.753***	0.642***
	(0.0270)	(0.0847)
UK	0.919***	0.136
	(0.0587)	(0.145)
In HICP ex. tobacco	-0.684*	0.634
	(0.250)	(0.379)
Time dummies	Yes	Yes
Observations	340	331
Number of countries	28	26

Fixed-effects estimator. Robust standard errors in parenthesis.
Significance level: * 10%, ** 5%, *** 1%.

Table 6: Average direct impact of the different components of taxes on cigarettes and fine-cut tobacco prices

Dep. variable: ln P	(1)	(2)
	Cigarettes	Fine-cut tobacco
AD	0.514** (0.213)	0.686 (0.715)
SP	0.0017** (0.0007)	0.00491 (0.00401)
VAT	1.066 (1.174)	-0.370 (1.375)
ln MED	0.662*** (0.0802)	0.353** (0.117)
ln HICP ex. tobacco	0.630 (0.555)	-1.210 (0.833)
Time dummies	Yes	Yes
Observations	281	118
Number of countries	28	13

Fixed-effects estimator. Robust standard errors in parenthesis.
Significance level: * 10%, ** 5%, *** 1%.

Table 7: Average impact of taxes on prices of low-med and premium segment

		1 st stage regressions						
		(1)	(2)	(3.1)	(3.2)	(4.1)	(4.2)	(4.3)
Dependent variable				ln EDY low-med _t	ln EDY premium _t	ln EDY low-med _t	ln EDY premium _t	ln HICP ex. tob _t
In TB low-med _t				0.558*** (0.028)	-0.081*** (0.013)	0.572*** (0.028)	-0.082*** (0.013)	-0.018*** (0.001)
In TB premium _t				-0.164*** (0.018)	0.651*** (0.035)	-0.158*** (0.017)	0.660*** (0.036)	-0.019*** (0.001)
In HICP ex. tob (t-1 in eq.4)				0.779*** (0.112)	0.405*** (0.087)	0.571*** (0.078)	0.326*** (0.067)	0.834*** (0.008)
Time-euro/non dummies	euro			Yes	Yes	Yes	Yes	Yes
Cragg-Donald Wald F stat				3472.892			1857.830	
Kleibergen-Paap rk Wald F statistic				229.073			213.161	
		2 nd stage regressions						
		(1) FE	(2) FE	(3) IV-FE		(4) IV-FE		
Dependent variable		ln P _t						
In EDY low-med _t		0.703*** (0.0167)	0.414*** (0.0315)	0.655*** (0.0239)		0.611*** (0.0253)		
In EDY low-med _{t-1}			0.268*** (0.0277)					
In EDY premium _t		0.544*** (0.0221)	0.403*** (0.0405)	0.480*** (0.0359)		0.457*** (0.0332)		
In EDY premium _{t-1}			0.150*** (0.0368)					
In HICP ex. tob _t		-0.0883 (0.0826)	-0.359** (0.150)	0.0735 (0.0974)		0.626*** (0.114)		
In HICP ex. tob _{t-1}			0.463*** (0.149)					
Time-euro/non dummies	euro	Yes	Yes	Yes		Yes		
Observations		6,962	6,451	6,962		6,495		
Number of units		734	727	734		727		

Fixed-effects (1-2) and IV fixed-effects estimator (3-4). HAC-robust s.e in brackets. Significance level: * 10%, ** 5%, *** 1%.

Table 8: Average direct impact of the different components of taxes on prices of low-med and premium segment

AD	0.441 ^{***}
	(0.097)
SP	0.0018 ^{***}
	(0.0003)
VAT	1.022 ^{**}
	(0.439)
In MED	0.567 ^{***}
	(0.027)
AD x Premium	0.0279
	(0.160)
SP x Premium	0.0006
	(0.0006)
VAT x Premium	-1.784 ^{***}
	(0.636)
In MED x Premium	-0.081 ^{***}
	(0.031)
In HICP ex. tobacco	0.282 [*]
	(0.148)
Time euro/non euro dummies	Yes
Observations	5,804
Number of units	687

Dep. variable: ln price. Fixed-effects estimator. HAC-robust standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.

Table 9: Quantile regressions for the direct impact of the different components of taxes on cigarette prices

	(1)			(2)			(3)		
	q25	q50	q75	q25	q50	q75	q25	q50	q75
AD	0.683*** (0.0322)	0.728*** (0.0298)	0.644*** (0.0387)	0.663*** (0.0313)	0.633*** (0.0302)	0.579*** (0.0388)	0.274*** (0.0567)	0.268** (0.106)	0.607*** (0.0848)
SP	0.00177*** (0.000101)	0.00200*** (0.000105)	0.00193*** (0.000149)	0.00171*** (0.000109)	0.00182*** (0.000119)	0.00174*** (0.000142)	0.00185*** (0.000208)	0.00127*** (0.000329)	0.00286*** (0.000236)
VAT	1.371*** (0.199)	2.091*** (0.150)	1.374*** (0.217)	1.460*** (0.184)	2.457*** (0.196)	2.125*** (0.256)	2.051*** (0.466)	1.187** (0.535)	-0.0669 (0.370)
In MED	0.860*** (0.00964)	0.804*** (0.0109)	0.754*** (0.0123)	0.840*** (0.0137)	0.789*** (0.0137)	0.745*** (0.0185)	0.619*** (0.0248)	0.549*** (0.0362)	0.409*** (0.0496)
In HICP ex. tobacco	-0.0706* (0.0400)	-0.254*** (0.0346)	-0.398*** (0.0555)	-0.318* (0.167)	-0.0567 (0.129)	-0.0481 (0.123)	0.00738 (0.128)	0.645*** (0.148)	0.943*** (0.170)
Time euro/non euro dummies				Yes	Yes	Yes	Yes	Yes	Yes
Country dummies							Yes	Yes	Yes
Observations	5,804	5,804	5,804	5,804	5,804	5,804	5,804	5,804	5,804

Dep. variable: ln Price. Fixed-effects estimator. Bootstrapped standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.

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235. OLAF aggregated statistics on seizures of tobacco products.
236. WHO Global Health Observatory data repository on Tobacco Control.

In addition to the abovementioned sources, the Study has been informed by the **written contributions received within the framework of the Open Public Consultation**.

An overall **266 contributions** were received from a range of different entities, including business organisations, economic operators, non-governmental organisations, private individuals and other respondents. The publicly-accessible ones are available on the Commission CIRCABC webpage.²⁶

²⁶ <https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>

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