The Future of Customs in the EU 2040: Results from a Real-time Delphi survey

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Foreword

This technical report is one of the deliverables produced in the course of an extensive foresight project on the Future of Customs in the EU 2040. This project was performed by the European Commission's Joint Research Centre in collaboration with the European Commission's Directorate General for Taxation and the Customs Union (DG TAXUD). It makes use of foresight to underpin European policy making.
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Executive summary

The Real-time Delphi survey method is a structured expert survey methodology used to gather opinions on different possible developments in the long-term future on a given topic. This type of surveys is a useful way to elicit, collect and synthesise the opinions of a large group of experts and to give ideas to start a debate.

In the Real-time Delphi survey that was carried out within The Future of Customs in the EU 2040 project, the participants were asked to react to 16 statements formulated as if they were taking place in the year 2040. They cover different issues related to customs, such as the role of customs, trade, digital and technological development, human resources, and corruption and fraud.

For each statement, respondents were asked to answer four sub-questions: an estimate of the likelihood of the statement happening, the timeframe by when it might occur, an indication of which domains of EU action would be influential on the statement, and a suggestion of which EU action could support the achievement of the statement (or its prevention, depending on the case). People were also encouraged to explain their response.

The following points are based on the analysis of the outcomes of the Delphi survey. From a total of 750 people contacted between April 5th and May 5th 2019, 332 people answered, 94% from an EU country and 6% from outside of the EU. The most represented professional categories were Government (57%), Trade (14%) and International organisations (10%):

- Respondents are in broad agreement regarding developments on the role of customs. The majority perceive the mission of customs authorities as already having evolved into a broad scope, contributing to the welfare of society well beyond merely collecting VAT and customs duties. Further, it is seen as likely that EU customs’ authorities continue on a path to increased data exchange with all stakeholders and achieving to do so in a safe and efficient manner. A majority of respondents also think that it is likely that eventually (most think at 2025 or beyond), EU customs will be integrated into a larger body dealing with border control and migration management. This implies that there would be support of the creation of “EU customs” instead of ‘customs in each EU Member State’. When it comes to the public perception, however, there is not a united view on whether the EU public will ever value the customs highly. A point that was mentioned repeatedly is communication: according to several respondents, European citizens do not know enough about what customs do for them on a daily basis and therefore cannot value it.

- The culture of the customs’ institutions was also a salient issue. Many respondents invoked a need for change: moving away from the financial perspective with taxation at the core, to a more general approach which includes protecting the environment, ensuring welfare, encouraging a circular economy model, supporting migration management etc. This could, as was suggested, happen if the Customs Union works more closely with other policy domains, both at EU level and national level. This goes hand in hand with re-thinking the customs mission and vision, and better defining the Customs Union strategy and objectives. The creation of a single European Customs Agency or Authority was also mentioned several times.

- The developments related to trade triggered contrasting response patterns. While most respondents think that it is likely that the EU and its customs system will have the capacity to ensure safe and fair trade for all, they disagreed on when. Most respondents believe that it is unlikely that border infrastructure for trade in goods will lose a lot of its importance due to a more circular economy and value chains becoming shorter (closer to places of consumption). An important aspect to consider here is that even though trade will evolve and infrastructure might become more digital than physical, the control will not lose importance. Moreover, because of an assumed increase in international trade, new trade routes could emerge, meaning new customs. Furthermore, opinions diverge also on the likelihood that the EU becomes less of a model for development and less of an economic and strategic partner for third countries, leading to strongly increased risk of fraud from global supply chains. They also diverge on whether the competition between EU Member States will lead to reduced controls on trade flows as well as to a weakening of the EU internal market.

- Issues related to digital and technological developments generated a debate about the level of technological advancements considered likely to be achieved in the next 20 years. It also shed light...
on diverging views on what may be new structures or responsibilities of customs in the future. For example, there are different opinions on whether in the future there will be duties on cross-border data exchanges and if so, if it would be the task of the customs to collect (and hence be regarded as revenue from the customs) or not. While respondents mostly believe that collaboration between the public and private sector will increase in relations to customs, a strong majority considers unlikely that EU customs would be privatised and governed by big online platforms. What is considered more likely is that more than 30% of goods will be transported by cargo drones and hyper-loops by 2040 (or sooner). In general, respondents believe that new technologies will play a very important role for customs in the future, mainly to fight illegal trade, ensure efficient controls and increase the level of cybersecurity. But to make this happen, support from the EU is necessary to invest in research, innovation and infrastructure development. There is clear disagreement on whether artificial intelligence (AI) and robot-performed controls could replace all manual controls by 2040 and lead to the customs workforce decreasing by 50%. Several respondents explain that their standpoint is that AI and robots will replace many controls, but not all; and that the number of customs officers will indeed decrease, but not to that extent.

- On the **human resources** challenge, most respondents had no opinion or found it unlikely that many in the young generation will be interested to work in the customs sector in the future. Regarding the **future skills** need, IT skills are clearly in high demand but many respondents highlighted the fact that customs should also enrol young people with specific skills in domains that are not traditional for customs such as environmental protection, social welfare etc.

- In relation to **corruption and fraud** respondents were very much aligned, with a majority arguing that terrorism and organised crime value chains have already shifted from the physical to the cyber-world, representing the biggest threat for the EU customs system as data owner. Moreover, within a period of 10-15 years, most respondents find it likely that AI, automation and integration across the EU customs system will have led to significantly reduced corruption and illegal trade. Respondents also said that customs need a serious **anticipatory capacity** not only to deal with change and trends from trade (e.g. e-commerce, Chinese Silk Road project etc.), geopolitics and technology, but also to deal with security, safety and fraud risks. Such an anticipatory capacity would allow customs to act fast and pro-actively.

As the results show, many EU policy areas can have an influence on the future of the EU customs system, as there are more or less direct interlinkages between developments in different policy areas and implications for customs. The domains of EU action that were considered influential by the respondents in most instances were Budget and Taxation, Trade, Digital, and Business and Industry. Other policy areas which were considered influential by most respondents with regards to specific statements were Transport; Security and Defence; Public Health, Food safety and consumer protection; Justice and Home affairs; Education; and Research and Innovation.

The boxes below display all 16 statements about the future of customs in the EU which were included in the Real-Time Delphi survey, classified according to how high their estimated likelihood was in the survey. Box 1 presents the statements that a majority of respondents believe are likely to happen between today and 2040 or beyond, Box 2 presents those that were deemed unlikely to happen and Box 3 those for which there was no clear majority either way.
Box 1. A majority of respondents think that these are likely developments by 2040(+) or sooner

- Customs authorities in the EU exchange data safely and efficiently with all stakeholders (traders, other authorities, banks, other countries).
- The mission of customs in the EU has evolved from ‘we collect customs duties’ to ‘we contribute to the welfare of society’.
- The roles of EU customs, border control and migration management have been combined into a single new powerful body.
- The EU and its customs system have the capacity to ensure safe and fair trade for all.
- More than 30% of goods are transported by hyper-loops and cargo drones.
- Corruption and illegal trade are reduced significantly due to high levels of artificial intelligence, automation and integration across the EU Customs system.
- The terrorism and organised crime value chains have shifted from the physical to the cyber-world and represents the biggest threat for the EU customs system as data owner.

Box 2. A majority of respondents think that these are unlikely developments by 2040

- The economy has become circular and the global value chain has shifted closer to the places of consumption. As a result, border infrastructure for trade in goods has lost a lot of importance.
- EU customs are privatised and governed by big online platforms (e.g. Amazon, Alibaba, etc.).

Box 3. No agreement on the likelihood of these developments by 2040 - the jury is still out

- Many EU citizens value the customs in the EU highly.
- Tariffs and duties resulting from EU policies on climate and sustainable development generate the bulk of revenues collected by EU customs.
- The EU has become less of a model for development and less of an economic and strategic partner for many third countries. This has strongly increased the risk of fraud from global supply chains.
- Competition between EU Member States to attract trade flows reduces controls and ultimately weakens the EU internal market.
- The revenue from trade in data and digital products reaches 60% of the customs’ revenue due to new duties being collected on the cross-border data exchanges.
- Many in the young generation are interested to work in the fast developing customs sector.
- As artificial intelligence and robot-performed controls have replaced all manual controls, the customs workforce has decreased by 50%.
1. Introduction

In the midst of a global landscape in which trade, technologies, geopolitics, the environment and many other issues are fast evolving, the EU Customs Union has celebrated its 50th anniversary recently (2018). While this celebration dwelled on many positive developments over the last 50 years, questions naturally emerged about the next 50 years. After many years of stability, customs are changing rapidly following the new trends in areas mentioned above. But are customs changing fast enough? Is the way they are changing the right way? How adapted will they be to the EU of the future? While this might be perceived by many as threatening, all these changes are also creating new opportunities for the EU Customs Union and its stakeholders. With the aim of increasing anticipatory knowledge about and preparedness for the future of customs, the European Commission is exploring how the customs system could develop over the next 20 years to be able to choose the right way forward.

In response to this need, The Future of Customs in the EU 2040 is a foresight study carried out by the European Commission Joint Research Centre in close collaboration with the European Commission’s Directorate-General for Taxation and Customs Union (DG TAXUD). DG TAXUD develops and implements the European Commissions policies on customs, which is an area for which the EU has exclusive competence. The overall aim of the project is to better understand trends and drivers impacting customs in the EU and possible paths for how they could develop by 2040. Having a participatory approach, the project co-creates knowledge that will support policymakers and stakeholders’ strategic reflections on the EU customs in the long term perspective. The foresight methods that are used in the project helps to map the customs system and its stakeholders, scan the horizon for interesting signals of change, build scenarios, engage decision makers with images of the future and help them define the future that they want for customs in the EU.

Foresight is a collective endeavour. Therefore, the foresight exercises applied in this project must be participatory in nature. To build collective anticipatory intelligence people must make their thoughts and opinions about the future explicit, share their knowledge and have the possibility to exchange and confront each other’s opinions. One method that serves that purpose while engaging a large number of experts is the Real-time Delphi survey.

A Real-time Delphi survey was therefore used, within the framework of the project, to collect the opinion of experts, practitioners, and stakeholders related to the customs system on how they perceive and assess different possible future developments. To the knowledge of the project team, no other Real-time Delphi survey has so far been carried out on the topic of the future of customs.

The results of the Real-time Delphi survey give insights into experts’ judgements on the future of EU customs in the context of uncertainty, and spurs reflection of the likelihood on certain developments. The survey furthermore complements the other foresight techniques used in the project, since the results of it as well feed into the scenario building process.

This report presents the results of the Real-time Delphi survey which was carried out between April 5th and May 5th 2019.

The methodology of the Real-time Delphi study is described in section two of the report and the composition of the panel of respondents in section three. Section four presents the results from the survey (divided by categories), followed by concluding remarks. In the annex the questions posed in the survey can be found. A list of all the answers and comments given in the survey can be provided upon request.

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2. Methodology

2.1 A few words on the Delphi method

The Real-time Delphi survey method is an adaptation of the traditional Delphi method, a structured expert survey methodology developed towards the end of the 1950’s which has commonly been used to gather opinions on different possible developments in the long-term future.\(^4\) This type of surveys is a useful way to elicit, collect and synthesise the opinions of a large group of experts on a certain topic. In addition to gathering experts’ judgements, the Delphi method also aims at starting a debate, facilitating the exchange of views, and achieving a degree of convergence of opinion. Since there are no facts about the long-term future, what is needed is the subjective input – which the Delphi method helps to deliver.\(^5\)

The traditional Delphi survey was conceived as an iterative survey in several (typically four) rounds: after the first round the participants see the survey results and can adjust their initial responses in view of what everyone else responded. The new survey results are then shared with everyone again and participants are asked if they want to adjust their responses further. Confronting respondents with other experts’ opinions generates ideas and debate, as well as stimulates people to justify their answers in contexts of high uncertainty. This approach used to take a long time to perform because of the successive rounds of mailing.

The arrival of digital communications made the development of online Delphi surveys possible – among them the Real-time Delphi survey. This can be seen as “a roundless Delphi”.\(^6\) In such a case, the survey is carried out online, the responses are uploaded immediately and the response statistics updated in real time. The responses then become instantly visible to each survey respondent. Participants are allowed and encouraged to revisit their online questionnaire as many times as they wish to change their responses in view of possible changes in the results as more and more participants provide their answers. However, often only few participants actually revisit the real-time Delphi survey and re-estimate their answers. This is an important weakness of the method.\(^7\)

In a Delphi survey, care must also be taken not to ask questions that can be answered using more suitable techniques. A Delphi survey is best applied to questions that need expert judgements and for which there are no factually right answers. The strength of the method is precisely its ability to explore and collect judgements from large numbers of experts, and to make explicit the reasons behind the views expressed about possible future developments.

2.2 The statements on the future of customs

In the Real-time Delphi survey that was carried out within the Future of Customs in the EU 2040 project, the participants were asked to react to 16 statements formulated as if they were taking place in the year 2040. The 16 statements were developed by the project team on the basis of three main sources:

- The report of DG TAXUD’s ‘Think Tank’ work on the future of customs performed in 2018;

- The input provided under the form of an ice-breaker during the scoping and system definition workshop held at the start of the project (February 2019); and

- The results of an internal horizon scan on the future of customs.

First, a draft ‘long list’ of statements was developed by the project team to cover all the issues that were perceived as sufficiently important for the long-term future of customs in the EU and providing a sufficient breadth of coverage of the key aspects of customs such as the role of customs in the EU, trade, digital and technological development, human resources and corruption and fraud.

The statements had to be both clear and provocative enough without sounding completely unrealistic. This ‘long list’ was then checked with DG TAXUD to reduce the number of statements to 16 and to reformulate them in a way that made most sense in the policy context of the EU Customs Union.

Once the final list of 16 statements was agreed, a set of four sub-questions were defined that could apply to each. They were asking for an estimate of the likelihood of the statement happening, the timeframe by when

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\(^6\) [http://www.millennium-project.org/rtd-general/](http://www.millennium-project.org/rtd-general/)

\(^7\) The Millenium Project, Future Research Methodologies: Real-Time Delphi. [https://themp.org/](https://themp.org/)
it might occur, an indication of which domains of EU action would be influential on the statement and a suggestion of what EU action could support the achievement of the statement (or its prevention, depending on the case) (see Annex). Once the survey was launched, respondents were asked to answer the 4 sub-questions for each statement and they were encouraged to explain the reasoning behind each of their responses.
3. Participation statistics

The survey was launched on April 5th, 2019 and sent to approximately 750 people. The survey was open for a period of four weeks until May 5th, 2019. By that date, 332 people had answered, of which 94% were from an EU country and 6% from outside of the EU. The response rate was thus 44%. The most represented professional categories were Government (57%), Trade (14%) and International organisations (10%).

Out of the 220 people who responded to a self-assessment question on expertise on customs, 93 respondents considered themselves Experts or Knowledgeable about the statements and customs in general, 72 Familiar, and a very small number either Unfamiliar or Casually Acquainted (Figure 2). This is important to mention as the respondents were asked to answer in their personal capacity and the results of the survey only represent the views of those who responded. The respondents did not necessarily react to all the 16 statements, resulting in different number of responses for each.

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Footnote:
8 These respondents were from Albania, Australia, Bahamas, Republic of Korea, The Former Yugoslav Republic of Macedonia, Nigeria, Philippines, Republic of Kosovo, Serbia, Sri Lanka, Switzerland, Turkey, United Arab Emirates, and Wallis and Futuna.
4. Results

The results of the survey are grouped under the following categories:

1. **Developments that a majority think are likely by 2040 or sooner**: A majority of respondents answered 'It is likely', 'It is very likely' or 'It will happen' to the statements grouped under this category.

2. **Developments that a majority think are unlikely by 2040**: A majority of respondents answered 'It is unlikely' or 'It is very unlikely' or 'It will never happen' to the statements grouped under this category. The respondents have, in other words, assessed that these developments are unlikely to happen by the time-horizon considered, or that they will never materialise.

3. **Developments for which the jury is still out**: No agreement emerged and responses were either neutral (i.e. not expressing a clear opinion) or showing disagreement (i.e. different groups supporting contradictory opinions distributed between likely and unlikely).

The results for each statement are presented on one page, containing the composition of the responses presented in graphs, a short analysis including the main different views, and in some cases quotes reflecting a viewpoint or another explanation of interest. In the survey the statements were numbered from 1 to 16. In this report this numbering is kept, although the statements are not presented in chronological order but categorised under the categories presented above.
4.1 Developments that a majority think are likely by 2040 or sooner
A strong majority of respondents (78%) are very positive on this statement to occur. Regarding timing, they are very confident that most customs authorities will be able to exchange data safely and efficiently with all stakeholders already within 10 years. Few believe that this will only happen after 2040.

Many respondents think that data exchange is not and will not present a technical issue. They argue that the main pre-requisites to achieve intensified data exchange across all sectors and stakeholders are political decisions and an appropriate legal framework. In their comments, respondents expressed a belief that technology development (e.g. AI, Blockchain etc.) will act as a driver and accelerate the level of exchanges and opportunities that will arise from this.

Even if most see that this statement is likely to happen, there are still some obstacles to overcome in the near future to facilitate efficient data exchange. Apart from having interoperability of IT systems which is the paramount condition for this statement to happen, another obstacle is related to the willingness and trust from all parties involved to exchange data. Data exchange is already happening in the public sector, but not completely with the private sector. Therefore, respondents suggested that the EU should act on improving data exchange with the private sector. Inclusiveness of all stakeholders was identified as an important factor. It was suggested especially to facilitate inclusiveness of small stakeholders, to develop dedicated training and information programmes.

In addition, many respondents highlighted that an adequate legal framework must be put in place for data exchange. For instance, Member States do not have the same privacy legislation which regulates what data can be exchanged and with whom. This is an opportunity for EU leadership and action. Regarding importance, one of the respondents answered: “After the implementation of the Union Customs Code, this will be the main priority”. As for the domains of EU action that could influence the statement, respondents named mostly Trade, Digital, Budget and Taxation.

**Statement 1:**

Customs authorities in the EU exchange data safely and efficiently with all stakeholders (traders, other authorities, banks, other countries).
75% of the respondents think that the role of customs in the EU is expanding and has already evolved towards contributing to the welfare of society. Even if the mission of customs has by now shifted from financial to non-financial domains (e.g. environment and consumers' protection, security, etc.), additional efforts have to be made to empower customs officers with the skills needed following such transition.

Respondents were often referring to two main challenges: the lack of communication between citizens and customs authorities, and changing the institutional culture. Many answers highlight the need to better communicate and explain the role of customs to citizens. At the same time, respondents highlighted the need for customs to change its internal culture and mindset, and employ people with other types of expertise – e.g. environmental protection, or social and communication skills.

Other changes suggested by the respondents are: a significant re-thinking of the customs mission and vision, better defining the customs union strategy and objectives, and the creation of a single European Customs Agency/authority instead of different institutions for all the EU Member States, which could create a level playing field across Member States. In a clear contrast to the responses to other statements, the relevant domains of influence were identified as Trade first, followed closely by Public Health, Food safety and Consumer protection, Budget and Taxation and Business and Industry. This supports the transformation highlighted by the comments under this statement and signals a potentially interesting point of discussion regarding customs in the future.
Statement 5:

The roles of EU customs, border control and migration management have been combined into a single new powerful body.

FIGURE 3.1. Responses on: Likelihood of happening

FIGURE 3.2. Responses on: Timeframe by when this might occur

FIGURE 3.3. Responses on: Influential domains of EU action

Only a slight majority thinks that this statement is likely to happen (54%), and opinions on timing range from 2025 to 2040 and beyond. The main argument explaining the responses to this statement is the fact that it is very hard to do more at EU level when having different customs authorities for all EU Member States. Moreover, many respondents note that the control of external EU borders needs to become more efficient and less fragmented. This goes towards supporting the creation of "EU customs" instead of "customs in each EU Member State".

The concerns of respondents are about the time needed to harmonise legislations across all Member States, and the transfer of competences from National to EU-level. Some respondents also believe that merging all these responsibilities will only enhance bureaucracy and reduce efficiency and the number of workplaces, while others state that the combination of resources is necessary and that the efficiency gains thus obtained will compensate staff reduction. While there is a clear agreement between respondents that cooperation between these different domains is necessary, some highlight that only topics happening at the borders could be managed and influenced by customs authorities (e.g. border protection and migrant admission process) and not for example integration of migrants (e.g. labour market access, protection, healthcare).

When it comes to solutions and EU action, other respondents mention the benefits of the Single Window\(^1\), of greater cooperation between Europol, Frontex, Eurojust, the EU Intellectual Property Office (EUIPO), the European Chemicals Agency (ECHA), DG TAXUD, DG HOME, the development of policies for Integrated or Coordinated Border Management, and a single body which performs the roles of customs.

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\(^1\) A Single Window is defined as a facility that allows parties involved in trade and transport to lodge all information needed for customs with a single entry point.
Statement 6:

The EU and its customs system have the capacity to ensure safe and fair trade for all.

73% of respondents consider that the customs system in the EU is likely to have the capacity to ensure safe and fair trade for all. However, there are very mixed views regarding when this could be reality. Firstly, almost all respondents highlight the fact that this is one of the core missions of EU customs, even if many aspects need to be improved and challenges must be overcome. This might explain the very mixed answers regarding timing.

One of the main challenges highlighted is the lack of an EU-wide common IT customs system that would allow the exchange of information and collaboration, thereby creating the conditions for fair and free trade for all. Respondents also said that customs need a high anticipatory capacity not only to deal with change and trends from trade (e.g. e-commerce, Chinese Silk Road project etc.), geopolitics and technology, but also to deal with security, safety and fraud risks. Such an anticipatory capacity would allow customs to act fast and proactively. Lack of resources could also be a challenge in case the volume and flow of cargo increased dramatically.

Enhanced collaboration was mentioned many times especially when it came to suggestions regarding this statement. Not only is collaboration between Member States crucial, but also the collaboration with the private sector, traders, universities, different European authorities (customs, product safety, competition etc.), third countries’ authorities and other stakeholders. Artificial Intelligence and Machine Learning could also contribute to a more efficient control. Other proposals include putting in place a tracing system and carbon footprint evaluation solutions to support local suppliers, a joint EU Commission strategy to counter unfair trade and fraudulent practices and a common training at EU level for all customs officers.
Almost twice as many respondents think that this statement is likely to happen than not. The matters of time and cost are brought forward as underpinning the likelihood of the statement. Respondents clarified that it may be better to refer to new transport technologies like automated vehicles. Many think that drones will be used to a larger extent and sooner than hyper-loops and that drones will be mainly used for short distances and so-called last mile deliveries. There is more hesitation towards the likelihood of the use of hyper-loops, especially considering ongoing development and the cost constraints foreseen in the near future. Some also doubt that up to 30% of the goods would be transported with such modes of transport.

Most think that this statement will happen after year 2030; the highest number of respondents think even after 2040. The reasons provided were the significant infrastructure changes needed before this type of goods transportation would function (particularly regarding hyper-loops), as well as the need for legal issues and security aspects being addressed.

Transport, Trade, Business and Industry, Digital, and Research and Innovation were the five most indicated domains of EU action that has an influence on the statement.

For the EU to achieve this statement, the suggestions provided by the respondents are to invest in research, innovation and infrastructure development, as well as providing financial support to the development of these types of transport modes. What are also needed are international regulations on for example airspace and securing adequate legislative measures (e.g. considering public safety). Furthermore, there is a suggestion to develop the necessary standards and tools and to deepen collaboration with industrial partners and stakeholders. Moreover, from the customs perspective, technical equipment which can control the goods transported by for example drones should be developed.
A majority of respondents (60%) think that this statement is likely to happen, but many underline that illegal trade and corruption will never be entirely prevented. Emerging technologies will also be used within organised crime and thus enable more advanced criminal activities. One explanation suggests that there may be less small scale corruption in the future, but more large scale, less visible, corruption – using new digital technologies as enablers. Another respondent raises the question of how far the EU is willing to go to fight illegal trade, stating that “the type of intrusive, close surveillance which would be required for automation to weed out illegal trade may well be unacceptable to society at large”.

Most respondents think that the statement is likely to happen in the period 2030-2035. Digital, Trade, Security and Defence, and Budget and Taxation were the domains of EU action that the respondents considered the most influential on the statement.

Deepened collaboration between EU Member States and the European Commission, as well as complementary data integration with all stakeholders in the cross border supply chain are mentioned as suggestions for actions that the EU should take. In addition, stimulating research on and investments in the development of new technologies, improving detection methodologies and also minimizing human intervention is considered to be needed.

A clear strategy on how to involve AI in the customs system and to create a level playing field for AI and robotics to mature while remaining ethical is suggested as a way forward.
When estimating the likelihood of this statement, 79% of the respondents suggested that it is 'likely', 'very likely' and that 'it will happen' – actually most think it is already the reality today. Cybercrime is increasing and it is representing a higher threat than before, which will also create risks for customs data. However, several respondents underline that an increase in crime and terrorism in the cyber-world does not mean that physical threats will necessarily diminish for the custom authorities. One respondent states that: ‘EU customs databases are sensitive data and of highest interest, not only for the determination of duties and risk management in international trade. On the one hand it is the data itself; on the other hand it is the functionality of the customs infrastructure. Without a properly functioning customs infrastructure, trade and economic strength are at risk’.

The domains of EU action clearly standing out as the ones the respondents think are most influential are Digital, and Security and Defence, followed by Trade.

Many of the suggestions for EU action in relation to this statement centre on increased level of cybersecurity and data protection, the development of adequate technologies, and improved and expanded collaboration between relevant actors. Some more specific examples of the suggestions provided by the respondents are: develop a common data framework for the EU; deploy new EU entities to deal specifically with this type of threats; invest in cybersecurity education at all levels; develop closer cooperation with enforcement agencies (such as Europol, Interpol, and OLAF); ensure a robust system which has reliable data banks and backups; and integrate the customs infrastructure into the general national disaster and crisis plans of the member states.
4.2 Developments that a majority think are unlikely by 2040
A majority of respondents (61%) suggest that the border infrastructure will not lose a lot of importance while acknowledging that future changes in trade patterns will affect it. Some of these trends which will influence trade are: 3D printing, digitalization and AI services, increase in circular economy business models, preference for local consumption and production, globalisation etc. Even though trade will evolve and infrastructure might become more virtual than physical, the need for control will not diminish.

Most respondents who answered that it is unlikely believe that there will always be a need for controls even if the border infrastructure will lose importance. This is happening already today with a part of the controls moving away from the border. Other reasons are related to trade. For example, as a result of the local production more raw materials will be transported than end products. Moreover, other expanding and demanding markets are gaining in importance: see the example of Africa but also the mutual trade with China which is set to accelerate. As a result, international trade will be boosted and new trade routes are emerging, which means new customs needs will emerge. In this case, the need to safeguard and protect EU customs will be even bigger.

Most respondents believe that the changes will occur after 2040, referring mostly to the evolving border infrastructure. The other trends are already affecting trade today, which explains the broader views regarding timing. As for EU action, respondents say that the EU should continue to invest in modern infrastructure and new digital solutions while remaining a reliable trade partner for the world.
Statement 10:

EU customs are privatised and governed by big online platforms (e.g. Amazon, Alibaba, etc.).

This statement was widely met with disbelief: a large majority (81%) of the respondents answered that it is unlikely (53% said it would never happen). The main reason was doubt that a public sector function such as customs would ever be privatised. Nevertheless, many respondents argued that there will likely be more collaboration between the public and private sectors on customs related matters in future and that more customs tasks may be outsourced to companies. However, some domains of customs would always remain in public hands (e.g. safety, fraud prevention and countering public health risks and environmental risks) because of their nature.

Some examples that already show private sector collaboration in customs tasks today are self-assessment and the new role of platforms in VAT on e-commerce. One comment suggests that big online platforms could in the future carry out some customs work such as providing summaries, automated declarations etc. – holding a sort of AEO (Authorised Economic Operator) status for platforms. Another respondent however points out that large online platforms are only the market place used by many other actors and will therefore not be the main players carrying out payment of customs duties etc. Hence they would never be able to take over the governance of customs topics. Other respondents bring up the future role of the post offices in customs, stating that they will take over most of the first line control on e-commerce flow and that they will be entirely or partly owned by big online platforms. Out of those who indicated when they could see that the statement would become a reality, a majority answered in 2040 and beyond.

The most indicated domains of EU action that could have an influence on the statement were Trade, Budget and Taxation, Digital, and Business and Industry. Some of the main suggestions for EU action were: to have a clear strategy for the further development of customs, to continue to inform the public about the usefulness of independent controls of goods, to invest in innovation to stay ‘ahead of the game’, to increase the collaboration and partnerships between the public and the private sector, and to increase the responsibility and empowerment of trustworthy actors in the supply chains. With regards to e-commerce platforms, some suggestions to the EU were to develop principles in relation to the platforms, give them more responsibility, specify principles for compiled submission of custom declarations, and provide them with some kind of certificates for e.g. effective automated classification of goods.
4.3 Developments for which the jury is still out
Statement 3:

Many EU citizens value the customs in the EU highly.

Even if half of the respondents consider that it is likely that European citizens value customs highly, almost a third remained ‘neutral’. The ones who answered ‘Neutral’ and ‘It is unlikely’ argue that the general public has limited understanding of the tasks and competences of customs in the EU and therefore they do not know what customs do for them. In general, customs are known for very specific tasks – e.g. drugs traffic, controls at borders, preventing terrorism, establishing rules for carrying alcohol, tobacco and cash in the EU etc. Many respondents highlighted that events like Brexit may allow citizens to understand customs and their role better.

On the other hand, there is a clear difference between citizens – who might not be completely aware of the customs’ added-value – and economic operators who view customs as an administrative burden. Other respondents refer to customs as ‘an authority’ which cannot be valued, but only respected and trusted. The majority agrees that there is a need to better promote customs’ role among citizens and especially their service function.

Regarding timing, the highest number of respondents sees this happening already in the present, which could mean that solutions exist and can be quickly implemented to achieve a greater result.

When asked about what EU could do for this statement to be achieved, respondents offer the following suggestions: update the customs’ mission, EU should launch information campaigns on the effects of customs on the citizens’ daily lives, promote creative communication channels (e.g. TV series featuring customs in action, YouTube videos etc.), and advertise success stories. This supports again that respondents believe in the achievement of the statement with the help from communicators.
Statement 4:

Tariffs and duties resulting from EU policies on climate and sustainable development generate the bulk of revenues collected by EU customs.

Even if 64% of the respondents think that this statement is unlikely to happen or answered ‘neutral’, they agree on the need to update the mission of customs to allow customs authorities to become more active on environmental and sustainability issues. Respondents use several arguments against this statement. One is that tariffs and duties related to climate and sustainable development will depend on future climate policies decided independently from the Customs Union objectives and strategy. Moreover, current duty rates are based on Free Trade Agreements (FTAs) or the country of origin and do not take into account the production process or the footprint to produce and transport the goods.

In general, respondents are hesitant towards the realisation of this statement because they believe that only a political decision regarding climate action could introduce an environmental fiscal reform to ensure that the right rate of tariff is imposed on the right products. Respondents are convinced that this could be a measure taken by the EU to lead and drive the sustainability agenda around the world.

On the customs side, it will require a new type of monitoring and controlling, but all this could be integrated in the Customs’ mission under “protect from social and environmental dumping”. Even though part of the respondents considers the statement unlikely to happen, many respondents still believe that a change will occur in the future regarding the new economic model which goes hand-in-hand with new models of revenue collection (e.g. higher customs duties to be applied on environmentally damaging goods like plastic straws, heavily polluting industrial goods, etc.).
Statement 8:

The EU has become less of a model for development and less of an economic and strategic partner for many third countries. This has strongly increased the risk of fraud from global supply.

The opinions on this statement were clearly split and most respondents answered either 'unlikely', 'neutral' or 'likely'. The main explanation for giving the answer 'unlikely' was focusing on the first part of the statement: expressing that the EU will continue to be an economic and strategic partner in the future considering its large population and weight as a trade bloc. In the opinion of some respondents the statement is unlikely because it would take a long time before many third countries, especially developing countries, catch up with the EU economically or reconsider the EU's status in potential partnerships. Other respondents answering that the statement is likely to happen, consider that Europe's global position will diminish or is already declining today in relation to other world regions' roles in trade (examples given were China, US, Russia and the Middle East).

Several respondents did not see a link between the two assumptions in the statement, meaning that if the EU becomes less of a model for development and less of an economic and strategic partner it would not necessarily lead to an increased risk of fraud from global supply chains. On the other hand, if the EU’s role would not diminish, the risk of fraud might still increase.

Regarding the timeframe of when the statement might occur, there was again a clear disagreement: one group considers that the statement is already happening today while others see it as only taking place in the very long term, in 2040 or beyond. All the domains of EU action were considered influential on the statement; Trade, Business and Industry, Transport, and Budget and Taxation being the four most indicated.

Suggestions given to how the EU could act to avoid the statement being realised were to prioritise EU economic diplomacy, strengthen the relations and agreements with third countries while also making them more favourable for both parties, and monitor better the implementation of agreements. Moreover, to continue to develop the single market, the recommendations were to keep giving force to an advanced customs law, and to increase investment in research and development. Other suggestions were to develop a strong structure to secure the supply chain, invest in fraud preventive actions, to exchange information on possible frauds, and to involve IT in clearance.
Statement 9:

Competition between EU Member States to attract trade flows reduces controls and ultimately weakens the EU internal market.

FIGURE 13.1. Responses on: Likelihood of happening

FIGURE 13.2. Responses on: Timeframe by when this might occur

FIGURE 13.3. Responses on: Influential domains of EU action

This statement triggered a wide range of opinions. The majority view seems to be that the competition between Member States is already happening today but there is disagreement about whether the competition leads to reduced controls or a weakening of the EU internal market. According to those considering the statement unlikely to happen, competition will not have such negative consequences. Furthermore, respondents point out that the two assumptions underlying the statement may not necessarily be linked: the competition between EU Member States could weaken the EU internal market while not reducing controls, and the amount of controls could decrease independently of the competition among Member States or the strength of the internal market.

The respondents answering that the statement is likely were giving various explanations. For example since the EU does not act as one, the creation of imbalance will lead to a weakening of the internal market; or reduced controls are already a reality today in some of the EU Member States; or the quality of the control and risk analysis could be further negatively impacted due to the competition on time needed for customs clearance. A comment that was bringing in the perspective of the external pressures that could weaken the EU internal market stated that if EU countries started joining China’s Belt and Road Initiative, the process described in the statement would be accelerated because of the expansion and growing power of that initiative.

The most indicated domains of EU action were: Trade, Budget and Taxation, Business and Industry, and Trade. There were many suggestions given on how the EU could act to tackle the issue. Several emphasised further harmonization of national legislation and standardization on EU level for customs control. Some called for a centralised EU customs service/agency. Other suggestions were to monitor closely the level of controls in all Member States and to create EU-wide performance indicators for customs controls. Another comment was to communicate better towards the Member States and the public on the benefits of joint work and the threats facing the EU single market.
The opinions regarding the likelihood of this statement happening are very diverse. The largest number of respondents answered ‘likely’, ‘neutral’ or ‘very unlikely’ in that order. There are disagreeing views on whether duties on data and data exchange are likely to be imposed, first of all. While some argue that there will not be such duties in the future, others foresee taxes on data exchange (as such exchanges are increasing globally) and know-how or other information that is merchandise. Some of the respondents foreseeing taxes on data exchange think that this will fall outside of the responsibilities of customs (which is a cross-border function). According to that group, an example given for why the development in the statement is likely to happen is that the use of 3D printing is already pointing in that direction.

Regardless of the diverging views, a majority of respondents think that if the statement will be realised, it will be in the long term future (2035–2040+). One of the reasons for that long term perspective is that the statement depends on the development of the IT that will effectively monitor and track trade and movement of data.

For this statement the influential domains of EU action that were mostly indicated were Digital, Trade, Budget and Taxation, and Business and Industry.

Those respondents agreeing that cross-border data exchange should be taxed provided several suggestions for how the EU could act to achieve it. Firstly, developing a new policy on it and introducing a new EU legal framework would be needed. A technical approach on how to tax data and digital products as well as monitoring it would also need to be developed, suggestively using blockchain and AI. Furthermore, it is stated that awareness among the EU citizens on the value of data and digital products needs to be enhanced, as well as creating a system where the correct use of data exchange is granted a lot of benefits. For example, one respondent suggests taking inspiration from the VAT: ‘It would require reconsidering the current EU position on a moratorium on duties/tax on non-tangible goods. A fresh look at things has some merit taking into account the limited success so far with a digital corporate tax, and the pervasive use and abuse of consumers/internet users’ data. One could take inspiration from VAT and role of platforms in case of third country sourcing.’

FIGURE 14.1 Responses on: Likelihood of happening

FIGURE 14.2 Responses on: Timeframe by when this might occur

FIGURE 14.3 Responses on: Influential domains of EU action

Statement 11:

The revenue from trade in data and digital products reaches 60% of the customs' revenue due to new duties being collected on the cross-border data exchanges.
Opinions on this statement were leaning towards ‘unlikely’, but most respondents (40%) were ‘neutral’. To summarize the explanations given, the customs officer profession is considered appearing as less attractive to young people because of lack of awareness of what it entails, the salary, lack of career development prospects etc. However, the fact that it is a government job has its advantages (such as stability), the work may be interesting because of the increasing use of IT and of the fight against smuggling and other security threats.

Responses on the time frame were quite split, but most of them seemed to reflect the current situation in 2019. Just as for the other statements, all the domains of EU action could have an influence, but the main ones in this case are Education, Employment and Social Affairs, and Digital.

In general, ensured good pay and career opportunities along with beneficial working conditions are suggested as fundamental to attract the young generation to work in the customs sector. In order to attract more people to pursue an education related to customs, more collaboration with (international) universities should be initiated, and the offer of interdisciplinary education on different levels should increase. In addition, a uniform training concept is suggested where the participants obtain a recognised certificate. Over all, increased investment in spreading information about the benefits of working in the sector is recommended, through for example communicating about customs achievements. Perhaps in the future working remotely will be a higher possibility for the customs sector, which could be an attracting factor for the younger generation.

Statement 15:

Many in the young generation are interested to work in the fast developing customs sector.

FIGURE 15.1. Responses on: Likelihood of happening

FIGURE 15.2. Responses on: Timeframe by when this might occur

FIGURE 15.3 Responses on: Influential domains of EU action
There is almost equal balance between the respondents stating the statement is ‘unlikely’, and those declaring it ‘likely’. Many explanations are based on opinions about the level of technological advancement. A recurring reasoning is that AI and robot-performed controls will replace some customs controls, although not all, and that the customs workforce will decrease, yet not by 50%. Some underline that while the number of customs officers might not decrease drastically from the current levels, their tasks will inevitably change: for example more time may be spent on programming and controlling the robots, strategic issues or controlling non-regular flows and spending more time on tracking the most fraudulent activities.

Most respondents considered that the change presented in the statement might occur after 2040 (or at least after 2025), mainly in view of the time needed for the concerned technologies to be implemented.

Among the suggestions provided for how the EU could act were to: invest in research and in the development of AI and other emerging technologies; conduct specific studies on these technologies for use in specific areas of the customs; invest in AI roadmaps; collaborate with the private sector and industry on new technological matters and share best practices among Member States. Several suggestions also regarded the (re)training of personnel, ensuring sufficient expertise in IT and other technologies, and guaranteeing that knowledge is passed on by experienced customs officers to new staff and machine learning systems.
4.4 Other statements and comments

This section summarises other comments and suggestions for Delphi statements collected under a final question in the survey: "Please add other statement(s) that you think would have an impact on the future of customs in the EU, and explain why."

- **Expansion of Chinese control over critical trade infrastructure in the EU and trading partner countries threatens customs control capabilities.** Today, some 90% of global trade is done by ships; this might diminish by 2040, but will remain considerable. In the five years since the Chinese Belt and Road Initiative was officially announced, China has invested in port projects across the world, including in the EU and North Africa - e.g. its keystone investment in Egypt's Suez Canal, a strategic passage into the Mediterranean on to the EU markets. Add to this controlling stake of ports in Greece, Belgium's Zeebrugge's container port, engagement in Antwerp and Rotterdam, upcoming involvement or control of three ports in Italy and negotiations for the Baltic Sea ports.

- **Realisation of Single window with all stakeholders (including procedures of different EU & UN as well as other multilateral international agreements) with digitalisation shall lead to borderless customs procedures for all trade partner countries.**

- **The role of customs will shift more and more to the law enforcement area.** Revenue is easier to be monitored and controlled, while the security and defence are more challenging by the day.

- **The future evolution of trade (more trade wars or new arrangements in the WTO).** It can change the tax impact of customs in the EU budget or can even reduce the level of international trade.

- **The legalisation of drugs in Europe means that the control of narco-traffic (drug trafficking) is one of the main tasks of Customs in many countries.**

- **Developments in international organisations such as the WCO and the WTO could create shifts in how borders are controlled.** The current order of things related to Customs is based on definitions and rules that have been created in history and formalised in an international setting over the past 70 years (or so). Should there be shifts in these rules customs might be re-engineered to suit them. This might also require a societal change on how we perceive our own borders.

- **Different working conditions and remuneration of customs officers in the Member States.**

- **Global economic crisis.**

- **A federal customs agency is created, leading to more efficiency and harmonization throughout the customs union.**

- **The profile of customs staff has evolved from the more classical military background to a more highly educated and diverse profile (IT specialists, cyber security specialists, language specialists, trade specialists).**

- **The political tendencies (against the EU) will slowly reintroduce national border controls.**

- **Tighter controls on migration will impact the free movement of goods.**

- **New trade alliances.**
5. Concluding remarks

The high response rate (44%) for this Real-Time Delphi survey is witness to the engagement and credibility of the European Commission’s Directorate General for Taxation and the Customs Union (DG TAXUD) with the broad community of stakeholders related to customs. More broadly, it shows the relevance of the customs in the EU for many actors as well as the broad willingness to engage in shaping their future. In many comments the respondents expressed the urgency of acting on several policy issues to achieve a preferred future development. Indeed, the results points to the necessity of having strategic discussions on some topics now, whereas other issues may reach higher positions in the agenda in the next few years.

Overall, the results of this Real-time Delphi survey show that no single view on the future of customs in the EU exists. Similarly, even when people agree broadly on the ideas there is no consensus about when in the future the statements could become a reality. In itself, this is not a surprise as the future is inherently unpredictable. It is also worth looking carefully at the statements for which there was agreement that they will not happen because what is considered unlikely today might still happen in the future if circumstances change. It may as well be of benefit to look closely at the statements for which there was no agreement, since they may shed light on drivers of change that are more uncertain. Dealing with uncertainty is central to foresight and to strategic discussions.

Evidently, and even if more than half of them are working within government, respondents experience customs from very different perspectives (national, business sector, global, etc.). While interpreting the results, the ‘demography’ of the respondents should be borne in mind. Regardless, when looking at the results under each statement, interesting insights emerge about the future. Some point to areas of likely consensus while others clearly show where opinions diverge and yet others where uncertainty dominates. The comments help the understanding of the arguments underpinning the experts’ opinions.

Furthermore, although this survey has triggered people’s imagination about the world of customs in 2040, its results represent the views of the present. Revisiting the statements and debates that arose around this survey will be a useful way to ‘take the pulse’ on experts’ views and to detect changes.
Annex. Sub-questions to all statements in the survey

In the survey template, people were asked to respond to the four following sub-questions:

1. Please estimate the likelihood that what is expressed in the statement will happen.
2. Please indicate by when you think what is stated might occur.
3. Please indicate the domains of EU action that could influence the statement.
4. Please suggest what action the EU could take for the statement to be achieved or avoided.
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