



Brussels, 15 March 2018.

### **DISRUPTIVE TECHNOLOGIES**

#### **- Study Report on Disruptive Technologies -**

#### **(Item XIV. (a) and (c) on the Agenda)**

#### **Background**

1. The March 2015 PTC discussed new and emerging threats and how this would affect the roles and responsibilities of Customs in the future. The discussions resulted in the establishment of a Virtual Working Group on the Future of Customs (VWG FC or Group) under the PTC, consisting of Customs administrations, the private sector, international organizations and academia.
2. The Group, which consists of over thirty members, worked on papers that steered discussions in the PTC meetings on a number of topics, such as the Customs in the 21<sup>st</sup> Century strategic document, 3D printing, drones, biometrics, Internet of Things etc.
3. At its 215<sup>th</sup>/216<sup>th</sup> Sessions in March 2017, the PTC discussed the way forward for the Group, two years after its establishment, to ensure more focused and results-oriented discussions. Consequently, and bearing in mind the importance of exploring new and emerging trends for successful policy making, the PTC decided that the Group would, amongst other, focus on exploring disruptive technologies which were gradually becoming part of people's lives. However, the benefits of these technologies, for Customs and border management, had not yet been fully explored.
4. It was therefore deemed relevant to carry out further exploratory work and research on these topics and to provide more information on their use, benefits, risks, role in the supply chain, in Customs, etc. The aim was also to take into consideration the interlinkages between the different technologies and to gain a more holistic picture of how they impact or support Customs work.
5. At its sessions in October 2017, the PTC explored the topic even further in a break-out session resulting in a list of recommendations. It also decided to have another full day

devoted to this topic at the following meeting. Therefore, item XIV. on Disruptive Technologies will take the whole of Day III of the PTC meeting.

6. In addition, the PTC decided to develop a Study Report on Disruptive Technologies, that will collate all the work already carried out under the Group, including papers developed by a number of its members, and to more broadly bring together relevant information from open source, as well as outcomes of discussions under the PTC and other WCO working bodies and meetings.

### **The Study Report**

#### Objectives

7. The Study Report brings together lessons learnt and recommendations stemming from the research, pilot projects and discussions taking place under the PTC and other WCO bodies. The Study also shares some more aspirational and innovative propositions on their use in the future put forward either by the Members of the VWG FC or the Secretariat.
8. The objective of the Study Report is to raise awareness within the Customs community of the latest technologies and their potentials, by firstly demystifying each of them individually and providing practical examples of how they could support or have an impact on Customs and border management in the future.
9. It is evident that bringing forth specific conclusions and recommendations in this domain is to a large extent a moving target as, on one hand, advances in latest technologies are usually faster than the ability of Customs and governments to follow, and on the other, experiences in their use is not as sufficient and wide-spread as one would expect or desire.
10. Nevertheless, there is a general understanding around the need of keeping abreast of the developments in this field and continuously seeking to understand the challenges and opportunities that latest technologies can bring to Customs and border management. The Study Report will continue to be updated with latest insights and information on pilots that could further enrich the knowledge within the Customs community and contribute to well-informed decision-making in this domain.

#### Structure

11. The Study Report is meant to be a living document, to be updated on a regular basis to include lessons learnt and recommendations stemming from on-going discussions. The structure is therefore simple and adaptable. It includes: Background; Introduction; six chapters covering a different technology each (Blockchain technology, Internet of Things, Artificial Intelligence, 3D printing, biometrics, drones); and Conclusion.
12. Each chapter explores: what the relevant technology is; how it is currently used in Customs, border and supply chain management, as well as more broadly; what are the risks and benefits; potential application in the future etc. In some cases, such as 3D printing and drones, the paper focuses more on the possible impact on Customs and border management in the future, rather than application in Customs.
13. The PTC is invited to provide suggestions on any further topics or aspects of the subject to be covered in the future.

### The way forward

14. Based on the objectives and structure agreed by the PTC, the Study Report could, as a first step, include recommendations and insights stemming from the workshops on disruptive technologies that will take place on Day III of this PTC meeting.
15. Bearing in mind the fluidity of the topic, it is suggested that the VWG FC continues to further develop the Study Report, in the year ahead, to include any other topics and aspects of the subject, pilots, Members' experiences and lessons learnt and to revisit the draft Study Report in the PTC meeting in Spring 2019.

### **Workshops on disruptive technologies on Day III of the PTC**

16. The PTC will discuss different aspects of the subject during the workshops on disruptive technologies which will take place on Day III of this PTC meeting (item XIV.b) of the agenda). Insights, examples and recommendations coming out of these workshops will be reported back in the plenary discussion (item XIV.c) of the agenda), with the aim of eventually feeding into the Study Report during the intersession.

### **Action required from the PTC**

17. With all above-mentioned in mind, the PTC is invited to:
    - discuss the objectives, structure and the way forward for the Study Report on Disruptive Technologies; and
    - Provide feedback from the discussions from the workshops on disruptive technologies during Day III of the PTC meeting with the aim of eventually feeding this into the Study Report during the intersession.
-