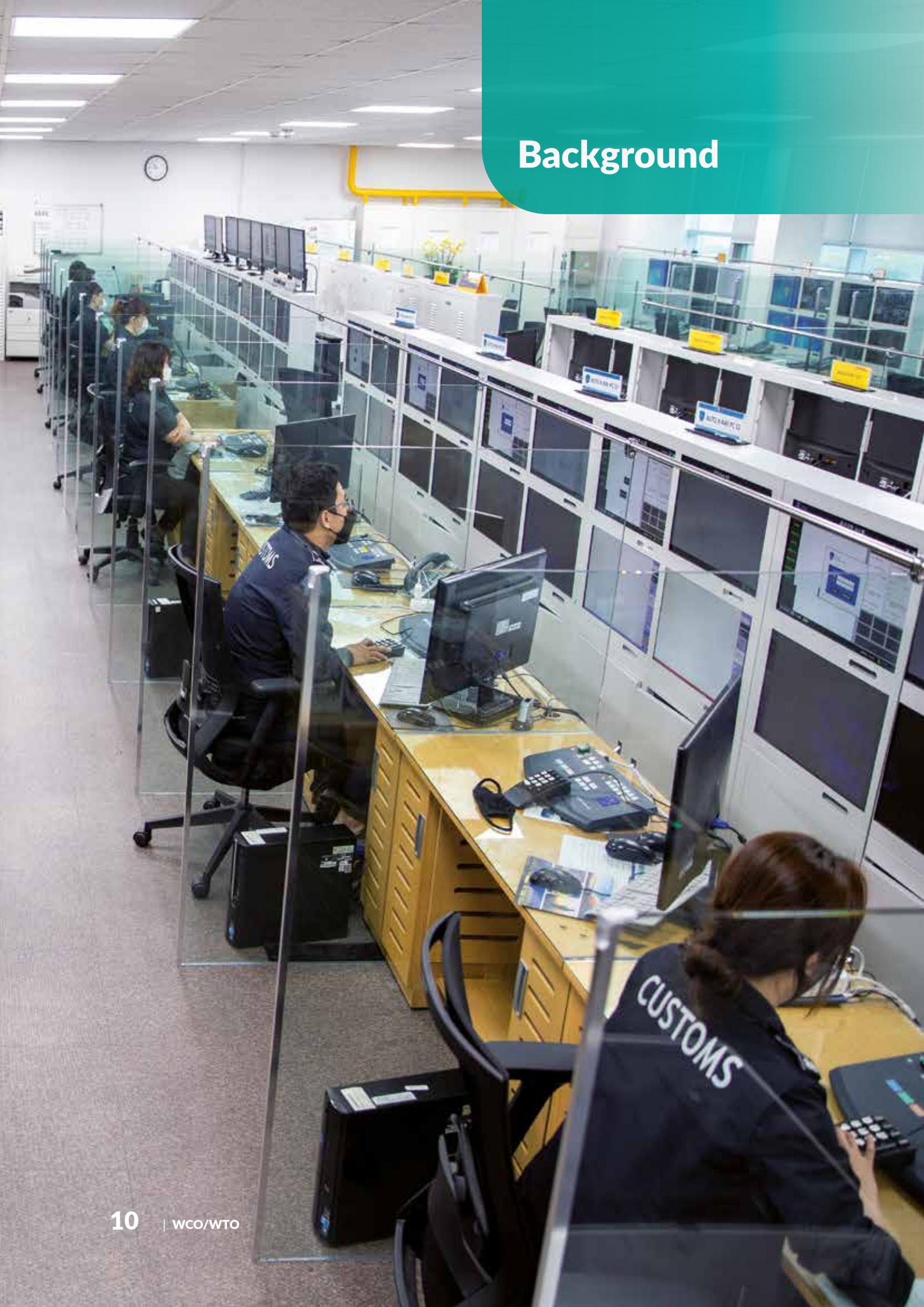Based on the proposal submitted by the WCO Permanent Technical Committee (PTC) delegates, the Future of Customs topic was launched at the 207th/208th Sessions of the PTC in March 2015. This came as a result of discussions on the role of the PTC, where it was agreed that the Committee would take a more active role in discussing strategic matters and future-oriented topics.

The March 2015 PTC discussed new and emerging threats, and how these 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) under the PTC, consisting of Customs administrations, the private sector, international organizations and academia.

The Group, which consisted 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 21st Century strategic document, 3D printing, drones, biometrics, the Internet of Things (IoT), etc.

At its 215th/216th Sessions in April 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 things, 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.

The first version of the Study Report was published in 2019, and had the objective of raising awareness within the Customs community of the latest technologies and their potentials, providing practical examples and case studies.

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 and 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.

The PTC moved on to the development of the Study Report on Disruptive Technologies, collating all the work already carried out, including papers developed by a number of its Members, and, more broadly, bringing together relevant open-source information, as well as the outcomes of discussions in the PTC and other WCO working bodies and meetings, including the WCO IT Conferences.

The first version of the Study Report was published in 2019, and had the objective of raising awareness within the Customs community of the latest technologies and their potentials, providing practical examples and case studies, but also sharing some more aspirational and innovative propositions on their use in the future.

Bearing in mind the fluidity of the topic, 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 ongoing discussions. Hence, this 2022 version of the Study Report incorporates some of the developments and findings collected in the course of the past three years.

In early 2021, the WCO partnered with the World Trade Organization (WTO) in the work on disruptive technologies, which resulted in the collection of survey results on the use of particular disruptive technologies by Customs and the development of a joint paper, "The Role of Advanced Technologies in Cross-border Trade: A Customs Perspective", that is summarized in more detail below in the section on joint WCO-WTO initiatives.

During the course of 2021 and 2022, two TECH-CONs and a number of WCO regional workshops on disruptive technologies were held with the aim of further raising awareness of the possibilities these technologies offer in facilitating and better controlling the cross-border movement of goods through the sharing of recommendations and lessons learnt.

The results of the survey, the paper, and the regional workshops have been incorporated into this update of the Study Report, which has been carried out jointly by the WCO and the WTO.

Lastly, the case studies from the 2019 version were updated, where relevant, or removed if considered redundant. New case studies that describe some of the latest projects using disruptive technologies were provided by Members and other stakeholders and annexed to the Study Report.