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# 2021 E-CUSTOMS ANNUAL PROGRESS REPORT



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### 1. OVERVIEW OF E-CUSTOMS PROGRESS PERFORMANCE<sup>1</sup>

Over the last two decades, the rapid technological evolution has created a fast-moving trade environment and a digital wave of changes in the markets. In addition, the COVID-19 pandemic has introduced a new reality, proving that the evolving set of challenges posed by its repercussions and this unceasing technological development requires instant and effective responses.

On this basis, the Customs Union is committed to substantially modernise customs, in line with today's realities, aiming to better equip and protect the Single Market and budgetary resources. DG TAXUD together with the EU Member States play a critical role in managing, defending, and developing the Customs Union as a vital part of securing the external borders of the EU. The Customs Union also supports a swift financial recovery and the transition to a digitalised economy in the EU, by decreasing the compliance costs for businesses and implementing more unified electronic data processes and techniques for all exchanges of information between economic operators and customs authorities. Exploiting the full potential of data analytics and innovative technologies, and strengthening the cooperation with third countries, the Customs Union endeavours to meet the challenges of this globalised and digitalised world.

During the course of 2021, DG TAXUD and the EU Member States achieved several fundamental milestones related to the successful implementation of the ongoing e-Customs reform. The transition to a paperless environment remained a priority for the Member States and the Commission, a commitment reflected in the completion of several legislative, business, IT and operational activities in the e-Customs domain.

Following the objectives outlined in the Commission's ambitious programme "Taking the Customs Union to the Next Level: A Plan for Action", **an interim evaluation of the UCC was initiated at the end of 2021**. The objective of the aforesaid evaluation was to assess the UCC implementation, identify challenges related to the development of the projects and discuss further improvements. **To this end, an EU questionnaire was distributed to the Member States, to share their views and experiences on the current application of the UCC**. The evaluation is expected to be finalised in the beginning of 2022, and all findings will be thoroughly examined by the Commission.

In addition, in 2021, the Commission continued amending the existing legislation and introducing additional measures to strengthen the e-Customs framework for a modern Customs Union. Specifically, amendments to both the UCC DA and UCC IA were made with the objective to harmonise the common data requirements of the electronic customs systems across all Member States. Notably, **the amendment to the UCC IA, which was adopted on 8 February 2021 introduced the revised Annex B**, thus ensuring the alignment between the legal provisions related to the data requirements and the functional and technical specifications for the trans-European systems. Similarly, **preparations for amendments of Annex A both to the UCC DA and the UCC IA were initiated**, aiming to create the legal framework for the data requirements to centralise the management of Customs Decisions and the related guarantees, and to establish a modern structure.

**On 8 March 2021, the Implementing Regulation (EU) 2021/414, which covers technical arrangements (IRTA) for developing, maintaining, and employing electronic systems for the exchange and storage of information was adopted.** In

<sup>1</sup> From a timeline perspective, the information of the report reflects the author's perspective on 1 January 2022.



particular, the aforesaid Regulation, which was thoroughly discussed during 2021, extended the scope of the Implementing Regulation (EU) 2019/1026 to cover the following projects: UCC REX, UCC PoUS, COPIS eAFA, UCC Surveillance<sup>3</sup>, and an update to UCC ICS2. In addition, **on 24 June 2021, the Commission adopted the Implementing Regulation (EU) 2021/1079 laying down detailed rules for implementing certain provisions of Regulation (EU) 2019/880 on the introduction and the import of cultural goods**, including those for the functioning of the system, data model and format for licences and statements.

In parallel, **the Commission delivered on 14 December 2021 the third annual UCC progress report, in pursuance of Article 278a of the UCC**. As indicated in the report, tangible progress was achieved notwithstanding the challenges posed by the continuation of the COVID-19 pandemic outbreak. Additionally, on 1 January 2021, **the Regulation (EU) 2021/444 establishing a Customs programme for cooperation in the field of customs over the 2021-2027 Multiannual Financial Framework (MFF) period came into force** as a successor to the Customs 2020 programme.

A significant contribution to the overall modernisation of the customs domain is the EU Single Window Environment for customs (EU SWE-C). A trade facilitation measure, the EU SWE-C also intends to meet the Commission's commitment for a digitalised approach to EU customs controls. The Commission launched the EU CSW-CVED pilot project in 2015 to enable the automated verification of non-customs health certificates, which was expanded to eight certificates<sup>2</sup> by the end of 2021 with its successor the EU CSW-CERTEX. To further support the EU SWE-C initiative, the Commission initiated activities for a legislative proposal which rests on two pillars of digital administrative cooperation, G2G and B2G. During 2021, the ordinary legislative procedure for the proposal was ongoing. EESC issued its positive opinion on 24 March 2021, the CUG finalised the article-by-article review of the proposal by mid-2021, and IMCO voted on the draft report on 27 September 2021 giving a mandate to the Parliament. Subsequent to the support by the majority of the Member States of the sixth agreed text, **COREPER adopted the text of the regulation on 15 December 2021** and gave the mandate to the Council to enter into negotiations with the Parliament. In parallel with the legislative procedure, DG TAXUD took the initiative and invited Member States to set up a dedicated project group to elaborate on the B2G dimension of a harmonised national Customs Single Window environment.

Following UK's withdrawal from the EU on 31 December 2020, as stipulated in the Withdrawal Agreement, the Commission continued the transformation and the preparation of the customs systems in alignment with the legal requirements provided for in the UCC and the IE/NI Protocol. **On 30 April 2021, the EU-UK Trade and Cooperation Agreement (TCA) came into force** to provide a solid basis for creating a new partnership and preserving a free trade area between the UK and the EU. Additional activities were conducted with the participation of the Member States as well as economic operators to ensure a successful and smooth transition.

Cooperation between the Member States, the Commission, and the economic operators through a range of specialised project groups remained a key area of activity in 2021 despite the constraints imposed by the COVID-19 crisis. Active project groups continued to impel progress on the UCC CDS, UCC CCI, UCC ICS2, UCC NCTS Phase 5 and UCC AES, UCC INF SP, and Import of Cultural Goods. **New Working Groups (WGs) on the digitalisation of proofs of preferential origin certificates (e-PoC) in the Pan-Euro-Mediterranean (PEM) area were established in 2021** in view of the anticipated

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<sup>2</sup> Certificate of Inspection for imports of organic products (COI), Forest Law Enforcement, Governance and Trade (FLEGT), Common Health Entry Document for Plants and Plant Products (CHED-PP), Common Health Entry Document for Feed and Food of Non-Animal Origin (CHED-D), Common Health Entry Document for Animals (CHED-A), Common Health Entry Document for Animal Products (CHED-P), Ozone-depleting Substance (ODS), and Fluorinated Greenhouse Gases (F-GAS) licences.

deployment of a pertinent system that will accelerate the process of digital exchange of customs certificates among customs administrations and economic operators. The WGs examined the legal and organisational framework (WG1) and the system and process design (WG2). Furthermore, a survey was launched by the Commission to collect information and positions pertaining to the proposed target business architecture for the e-PoC initiative, including volumetrics related to the issuance and verification process of certificates. Additionally, **in September 2021, a Wise Persons Group (WPG) was established** to develop innovative ideas and concepts and deliver a report by Spring 2022 that would contribute to a general inter-institutional debate on the future of the Customs Union. Notable progress was also accomplished in the scope of customs IT collaboration through the activities of the ETCIT group. The second expert team **ETCIT II continued its work until December 2021 and extended its activities**, providing advice to the WPG in view of the preparation of its forthcoming report, progressing on two pilot projects, and collaborating around new technologies. Moreover, a Chief Information Officer (CIO) workshop organised in November 2021 inspired **the establishment of a yearly event to discuss strategic issues regarding the IT development and exchange ideas on the IT collaboration**. An extension of the work under a third phase was considered necessary and useful to take the possibilities of IT collaboration further. On this basis, a formal call for interest to participate in ETCIT III was distributed to Member States in August 2021.

2021 was a very active year as concerns the MASP-C projects progress. Substantial efforts were invested in the implementation of various systems. In particular, the **UCC NCTS Phase 5, UCC AES Phase 1, and ICS2 Release 1 successfully went live in March 2021**. Similarly, the UCC REX3 Phase 1, COPIS eAFA Phase 2, EU CSW-CERTEX (CHED-A, CHED-P, F-GAS, and migrated FLEGT and COI), CLASS v1.3.3.0, e-Commerce & CP 42/63 (IOSS VAT e-Commerce), and CRMS2 Release 1 entered into operations. The systems that received “go decision” were the EU CSW CERTEX Dual Use, Import of Cultural Goods, UCC GUM, and UNECE eTIR. In addition, conformance testing was performed for CCN2ng Release 2. Equally important activities were the creation of the Business Cases for UCC CDS v1.26, as well as the Vision Documents for the ICG, EU CSW CERTEX Dual Use (under Release 3), UCC GUM, CUP-MIS, and UCC PoUS Phase 1. Overall, in 2021 the European electronic systems achieved a high availability of 99.88%. **An overview of the MASP-C projects progress can be found in [Annex 2](#)**.

**Figure 1** below depicts the evolution of the UCC IT Implementation progress by the Commission, notably by DG TAXUD Unit B since 2016. The initial development of the UCC IT implementation was planned to be completed in 2020 based on the MASP 2016. However, it was considered to be a very ambitious planning resulting in a re-evaluation during MASP 2017 and MASP-C Revision 2019 with a more realistic approach of the IT implementation of the systems. **A significant progress of 82% of the total UCC IT implementation has been reached in 2021 by DG TAXUD.**



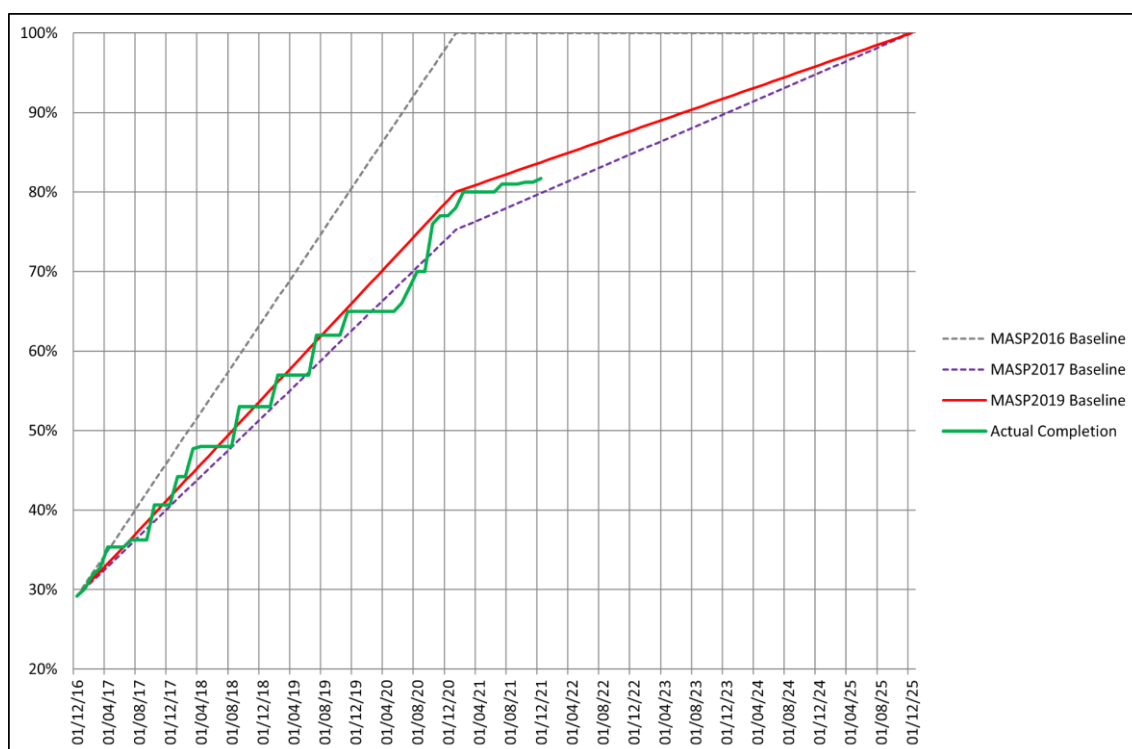


Figure 1: DG TAXUD UCC IT Implementation progress

Aiming to enhance transparency and provide visibility to UCC IT implementation progress, **the Commission launched several communication campaigns** both on the EUROPA website and social media, acquiring significant awareness. Particularly, **the ICS2 campaign reached 4.1 million impressions online**, while **the e-Commerce worldwide campaign collected 7,500,000 million twitter impressions, 2.8 million YouTube views and 2 million impressions on LinkedIn**.

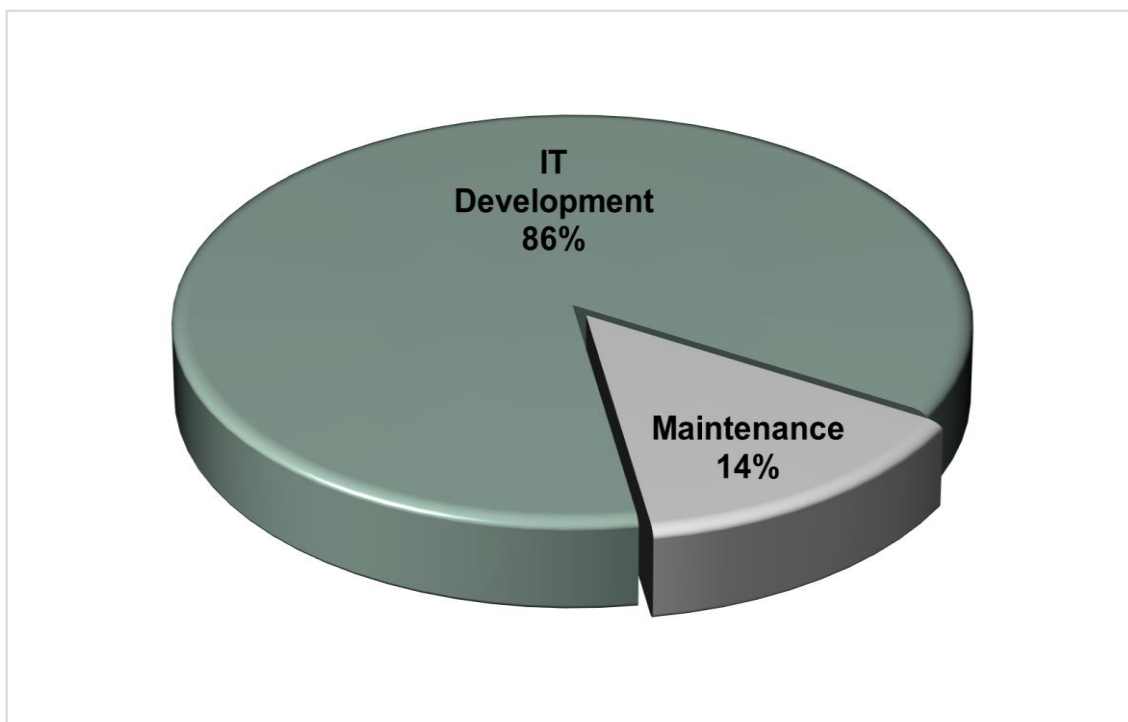
In 2021, the Commission took further steps to support the modernisation of the IT systems. Specifically, notable progress was marked towards the implementation of the IT modernisation programme, which was initially established in 2020 to allow Member States and the Commission to efficiently identify, prepare and manage new challenges in relation to the e-Customs implementation. The Commission organised weekly meetings to synchronise the five tracks addressing different IT related objectives. In addition, **a revision of DG TAXUD's strategies and vision** was triggered to place the focus particularly on the four most vital strategies (the strategy for cloud, the strategy for the CCN, DG TAXUD's vision for DevSecOps, and DG TAXUD security posture and cybersecurity strategy). Furthermore, **a transversal activity related to the IT security was introduced to assess the security posture of the Commission**. As a result, **seven cybersecurity projects were launched and progressed in 2021**.

In 2021, the business continuity remained a core objective of the Commission. **The revamping of DG TAXUD's IT BCMS Phase III project was finalised in March 2021**. Business continuity was also monitored in terms of the performance of the core customs IT systems and infrastructure, via **the CCN which experienced noteworthy growth during 2021, achieving a high availability of 99.99%**. The CCN applications exchanged more than 10.2 billion messages during the year. Additionally, **more than 2 billion messages were exchanged on the key European electronic systems**. Remarkable efforts were also made towards the creation of the Data Lab platform that will serve as a central platform to distribute data across the organisation. In particular, **a data programme was put in place to facilitate the request for new data assets in the Data Lab**, whereby the governance of the platform and of data assets respects the legal basis, information security policy and data protection regulation.

During 2021, the Commission continued the endeavour to provide financial support to the Member States, helping them mitigate the economic repercussions of the COVID-19 crisis and laying down the ground for a more sustainable EU, through **the Recovery and Resilience Facility (RRF)**. The aforesaid temporary financial instrument **entered into force after the adoption of the Regulation (EU) 2021/241 on 12 February 2021**. Additionally, in June 2021, the Commission launched **a new call within the Technical Support Instrument (TSI) cycle**, to support Member States with the implementation of their recovery and resilience plans (RRPs). Further activities on this initiative were organised throughout 2021.

Covering a wide scope of areas, the apparent challenges include the reinforcement of controls to confront fraud and security risks, greater monitoring of the EU customs legislation, the importance to refine efficiency, benefit from innovation, and continue the collaboration with international partners in the field of customs. The e-Customs reform remains a dynamic process as the Commission proceeds with the consolidation of a new legal framework for the Customs Union with new operative methods and IT tools, in cooperation with the Member States.

In agreement with this undertaking, the Member States and the Commission assigned a substantial number of resources to e-Customs activities, both in terms of personnel and investments. **Figure 2** depicts the 2021 budget dedicated by the Member States and the Commission, showing that similar to 2020 and 2019, **the new IT system development remained the core focus, recording more than two-thirds of their overall combined budget**. The remaining one-third of combined expenditure was dedicated to maintenance activities.



**Figure 2: Commission and Member States' total expenditure on IT Development and Maintenance in 2021**

Lastly, **Figure 3** shows the combined cost during 2021 by the Member States and the Commission, which increased by 55.44% in contrast to the previous year. The total amount dedicated to e-Customs activities in 2021 was **EUR 381,271,813.50**, compared to EUR 245,291,612.32 spent in 2020.

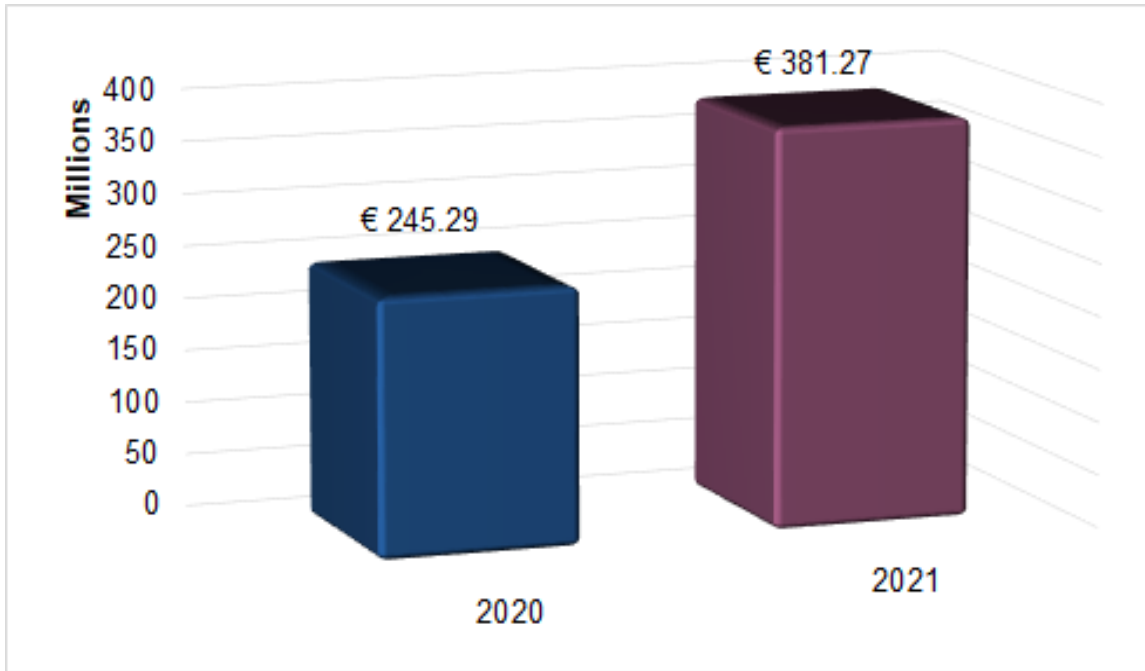


Figure 3: Commission and Member States' grand total on e-Customs activities in 2020-2021

## 2. INTRODUCTION

The 2021 e-Customs annual progress report is the fourteenth report prepared pursuant to Article 12 of the e-Customs Decision (Decision 70/2008/EC)<sup>3</sup>, under which the Member States are required to assess the progress made towards coordinating the implementation of the e-Customs initiative. The Commission<sup>4</sup> prepares a comprehensive report covering the annual operational (from a technical viewpoint) and strategic financial goals of the Member States within the scope of the e-Customs projects and supporting initiatives.

This year the Commission received 26 national e-Customs progress reports. However, only 25 national e-Customs progress reports were taken into account, due to the late submission of one Member State.

## 3. BACKGROUND

### 3.1 e-Customs Initiative

In 2003, the Commission issued an e-Customs Communication<sup>5</sup> that contained proposals about a new simplified paperless environment for customs and trade. The e-Customs Communication carved out an essential path towards radically simplifying customs regulations and procedures and integrating modern, efficient and uniform techniques within the EU Customs Union. The subsequent 2003 Council Resolution<sup>6</sup> endorsed the objectives formulated in the e-Customs Communication, thus establishing the framework for the e-Customs initiative. Decision 70/2008/EC<sup>3</sup> on a paperless environment for customs and trade, also referred to as the e-Customs Decision, is the key legislation related to the e-Customs initiative, promoting a shift to an interoperable electronic customs environment with a unified data system to facilitate communication between economic operators and customs authorities and to enhance security at EU's external borders.

### 3.2 Tasks and Coordination

Articles 5, 6 and 7 of the e-Customs Decision define the main components of the e-Customs systems and regulate the cooperation between the Member States and the Commission by specifying the tasks of both stakeholders for the development and the synchronised implementation of IT projects.

### 3.3 Governance of the e-Customs Implementation

Article 8(2) of the e-Customs Decision provides that the Member States and the Commission should jointly establish a Multi-Annual Strategic Plan for Customs (MASP-C)<sup>7</sup> to ensure the effective management and coordination of all activities and tasks

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<sup>3</sup> Decision No 70/2008/EC of the European Parliament and of the Council of 15/01/2008 on a paperless environment for customs and trade, [OJ L 23, 26/01/2008, p. 21–26](#).

<sup>4</sup> The European Commission is referred to as 'the Commission' throughout the document.

<sup>5</sup> Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee - A simple and paperless environment for customs and trade / [COM/2003/0452 final](#).

<sup>6</sup> Council Resolution of 05/12/2003 on creating a simple and paperless environment for customs and trade, [OJ C 305, 16/12/2003, p. 1–2](#).

<sup>7</sup> Since 2018, the Multi-Annual Strategic Plan is abbreviated as MASP-C, with the suffix of 'C' denoting the specific focus on customs IT systems. This change is due to the elaboration in parallel of a MASP-T for taxation IT systems. Alignment

related to ongoing and future e-Customs projects. As an overall project management and planning tool, the MASP-C lays out the strategic framework and milestones for implementing the e-Customs initiative. It is an essential instrument for ensuring a smooth and coordinated implementation of all e-Customs IT projects while reflecting detailed operational planning. This implementation is based on a three-tier governance model, which consists of the Customs Policy Group (CPG) acting as a steering body at the policy level, the Electronic Customs Coordination Group (ECCG) at the coordination level and several groups consisting of specialists from the Member State administrations at the expertise level. This governance scheme aims to enhance transparency and coordination among all stakeholders.

### 3.4 The Commission's and Member States' Responsibilities

The Member States and the Commission equally share the responsibility of facilitating the customs communication and information exchange systems by coordinating the electronic systems' setup, deployment, and operation at both the European Union and national level.

## 4. E-CUSTOMS KEY MILESTONES AND ACHIEVEMENTS IN 2021

### 4.1 Union Customs Code (UCC) and core legislative framework

In 2021, the EU Customs Union remained a unique example, where all EU Member States work together in unity by applying a uniform legislative framework for handling the import, export, and transit of goods. The Commission continued to fulfil an active role in optimising the customs legal framework and procedures to meet the demand of increasing trade flows, new business models, and a constantly evolving technological environment. In this climate, pursuing a successful and smooth transition towards a paperless environment based on an electronic exchange requires upgrading or creating electronic systems that will change the customs formalities. To this end, in 2012, the Commission outlined a course of action that put forward a vision and a plan of ambitious activities to take the Customs Union to the next level. Following the impact of the substantial legal changes introduced by the Treaty of Lisbon<sup>8</sup>, the UCC<sup>9</sup> was adopted in October 2013. As a critical element to modernise the EU customs, the UCC provides a comprehensive framework for customs rules and procedures, adapted to the new trade realities and modern communication tools.

The UCC legislation consists of a package of legal acts laying out requirements for the comprehensive functioning of the EU Customs Union. During the elaboration of this legislation, the Commission, national customs administrations, and economic operators provided valuable contributions through consultations related to the development of the UCC Implementing Provisions, which were adopted as the Delegated Act (DA)<sup>10</sup>,

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between MASP-C and MASP-T will facilitate a more coherent approach to the implementation of IT systems where the customs and taxation domains interact. Due to this transition, MASP-C and other variations referring to the MASP framework are used interchangeably. The MASP-C Revision 2019 v1.1 serves as the baseline for this report. Nonetheless, its predecessor, MASP Rev. 2017 v1.4 remains a fundamental reference point for the implementation planning of e-Customs projects.

<sup>8</sup> Treaty of Lisbon amending the Treaty on European Union and the Treaty Establishing the European Community, [20 OJ C 306, 17/12/2007, p. 1–271](#).

<sup>9</sup> Regulation (EU) No 952/2013 of the European Parliament and of the Council of 09/10/2013 laying down the Union Customs Code, [OJ L 269, 10/10/2013, p. 1–101](#).

<sup>10</sup> Commission Delegated Regulation (EU) 2015/2446 of 28 July 2015 supplementing Regulation (EU) No 952/2013 of the European Parliament and of the Council as regards detailed rules concerning certain provisions of the Union Customs Code, [OJ L 343, 29.12.2015, p. 1-557](#).



Implementing Act (IA)<sup>11</sup>, and Transitional Delegated Act (TDA)<sup>12</sup> to the UCC. The UCC DA, IA, and TDA entered into force in May 2016 and provided the legal basis for the Commission to take measures to facilitate the transition to electronic customs systems and uniform application of the customs legal framework in the EU.

The complexity of the EU customs digitalisation during the preparation for the systems' deployment led to the amendment of Article 278 of the UCC. Notably, the Regulation (EU) 2019/632<sup>13</sup>, adopted by the Commission in 2019, introduced a transitional period for the parallel operation of the existing electronic and paper-based systems. Concurrently, the new Regulation provided an extension to the initial deadline for the continued transitional arrangements, implying that the deployment of the UCC electronic systems and their possible phases shall be extended to 2022 and 2025, respectively<sup>14</sup>, depending on the system. In addition, Article 278a introduced Commission's obligation to submit an annual report to the Parliament<sup>15</sup> and the Council to inform on the UCC electronic systems' development progress and planning. As a result, Member States must provide updated information on their national planning biannually. Pursuant to Article 278a<sup>16</sup> of the UCC, the third annual report<sup>17</sup> on the implementation of the UCC IT projects was drafted throughout 2021, and it was published in December 2021. The report was based on the Member States' national planning and a survey launched by the Commission, circulated among the Member States and the Commission's key stakeholders and project managers. The purpose of the survey was to gather and consolidate up-to-date information concerning the progress of the different projects to ensure transparency on the activities. The Member States were required to indicate any possible delays against the deadlines included in their national planning and describe the potential challenges that may emerge in implementing the projects. In 2021, further information was gathered from the exhaustive project reporting and monitoring programmes, in place since 2020, for the core decentralised trans-European systems in the areas of transit and export. The 2021 annual report reveals that tangible progress was achieved notwithstanding the evolving set of challenges with respect to the EU customs modernisation related to the complexity and interconnectivity of the electronic systems, the limited availability of resources, as well as the impact of the COVID-19 pandemic. An increasing number of electronic systems were deployed and are now fully operational.

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Commission Delegated Regulation (EU) 2016/651 of 5 April 2016 correcting Delegated Regulation (EU) 2015/2446 supplementing Regulation (EU) No 952/2013 of the European Parliament and of the Council as regards detailed rules concerning certain provisions of the Union Customs Code, [OJ L 111, 27.4.2016, p. 1–2](#).

<sup>11</sup> Commission Implementing Regulation (EU) 2015/2447 of 24 November 2015 laying down detailed rules for implementing certain provisions of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code, [OJ L 343, 29.12.2015, p. 558–893](#).

<sup>12</sup> Commission Delegated Regulation (EU) 2016/341 of 17 December 2015 supplementing Regulation (EU) No 952/2013 of the European Parliament and of the Council as regards transitional rules for certain provisions of the Union Customs Code where the relevant electronic systems are not yet operation and amending Delegated Regulation (EU) 2015/2446, [OJ L 69, 15.03.2016, p. 1-313](#).

<sup>13</sup> Regulation (EU) 2019/632 of the European Parliament and of the Council of 17 April 2019 amending Regulation (EU) No 952/2013 to prolong the transitional use of means other than the electronic data-processing techniques provided for in the Union Customs Code, [OJ L 111, 25.4.2019, p. 54–58](#).

<sup>14</sup> The deadline of 2022 concerns the following national electronic systems: UCC Notification of Arrival (NA), Presentation Notification (PN) and Temporary Storage (TS), the UCC National Import Systems and the UCC Special Procedures. The deadline of 2025 concerns the six trans-European systems: UCC Guarantee Management (GUM), UCC Import Control System (ICS2), UCC Proof of Union Status (PoUS), UCC Centralised Clearance for Import (CCI), UCC New Computerised Transit System (NCTS), UCC Automated Export System (AES).

<sup>15</sup> The European Parliament is referred as 'the Parliament' throughout the document.

<sup>16</sup> Article 278a UCC on Reporting Obligations introduced by Regulation (EU) 2019/632 of the European Parliament and of the Council of 17 April 2019, [OJ L 111, 25.4.2019, p. 54–58](#).

<sup>17</sup> [Report from the Commission to the European Parliament and the Council](#), pursuant to Article 278a of the Union Customs Code, on progress in developing the electronic systems provided for under the Code.

As indicated in the report, the projects which have not yet been deployed are planned to be completed in alignment with the Multi-Annual Strategic Plan for Customs (MASP-C) Revision 2019 milestones and the UCC Work Programme (UCC WP)<sup>18</sup>. The UCC WP, as defined by Article 280 of the UCC, lays down the IT architecture for the development and deployment of electronic systems, as well as the harmonisation and standardisation of interfaces. It sets out the planning for developing and deploying the 17 essential electronic systems<sup>19</sup>. The UCC WP is of pivotal importance for detailing the implementation of the transitional measures related to the electronic systems, and its content is closely linked to the MASP-C. MASP-C Revision 2022 is anticipated to lay out a strategic framework and milestones for all electronic customs initiatives that are legally mandated, including projects under the UCC and a new version of its UCC WP. The revision will introduce new trends, activities, and initiatives in the field of customs that have emerged after the MASP-C Revision 2019. The updates of the UCC WP and MASP-C Revision 2022 will run in parallel to remain aligned. Initial comments and suggestions for preparing the draft of the new UCC WP were provided by the Member States in October 2021.

Since the entry into force of the UCC, ongoing dialogues about relevant legal issues among various stakeholders have led to further additions and amendments to the UCC legal package. A revised Annex B of UCC DA (Commission Delegated Regulation 2021/234)<sup>20</sup> and UCC IA (Commission Implementing Regulation 2021/235)<sup>21</sup> entered into force in March 2021. Annex B was updated throughout 2021 via the Change Management procedure that was introduced in 2020, with the objective to harmonise the common data requirements of the electronic customs systems across all Member States. Similarly, over the course of 2021, preparations for amendments of Annex A both to the UCC DA and the UCC IA were initiated, aiming to create the legal framework for the data requirements to centralise the management of Customs Decisions and the related guarantees and to establish a modern structure. Further details on the amendments and the work on the revision of Annex B can be found in section [4.2](#).

Apart from amendments to the UCC IA and DA, in March 2021, the Commission adopted the Implementing Regulation (EU) 2021/414<sup>22</sup> on technical arrangements (IRTA) for developing, maintaining, and employing electronic systems for the exchange and

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<sup>18</sup> Commission Implementing Decision (EU) 2019/2151 of 13 December 2019 establishing the Work Programme relating to the development and deployment of the electronic systems provided for in the Union Customs Code, [OJ L 325, 16.12.2019, p. 168-182](#).

<sup>19</sup> The UCC projects and related electronic systems included in the UCC WP can be divided into three categories: (i) eleven central trans-European systems to be developed or upgraded by the Commission (often also requiring developments or upgrades of the national systems by Member States, depending on the system architecture), which are the following: UCC Registered Exporter System (REX), UCC Binding Tariff Information (BTI), UCC Customs Decisions (CDS), Uniform User Management & Digital Signature (UUM&DS), UCC Authorised Economic Operators (AEO), UCC Economic Operator Registration and identification (EORI) system, UCC Surveillance<sup>3</sup>, UCC Proof of Union Status (PoUS), UCC Information Sheets (INF) for Special Procedures, UCC Centralised Clearance for Import (CCI), and UCC Guarantee Management (GUM), (ii) three decentralised trans-European systems that have to be developed or upgraded by the Commission but have a major national component to be implemented by the Member States, as follows: UCC New Computerised Transit System (NCTS), UCC Import Control System 2 (ICS2), and UCC Automated Export System (AES), and (iii) three national systems that have to be developed or upgraded exclusively by the Member States, as follows: UCC Notification of Arrival, Presentation Notification and Temporary Storage (NA, PN and TS), UCC National Import Systems (NIS), and UCC Special Procedures (SP).

<sup>20</sup> Commission Delegated Regulation (EU) 2021/234 of 7 December 2020 amending Delegated Regulation (EU) 2015/2446 as regards common data requirements, and Delegated Regulation (EU) 2016/341 as regards the codes to be used in certain forms, [OJ L 63, 23.2.2021, p. 1-385](#).

<sup>21</sup> Commission Implementing Regulation (EU) 2021/235 of 8 February 2021 amending Implementing Regulation (EU) 2015/2447 as regards formats and codes of common data requirements, certain rules on surveillance and the competent customs office for placing goods under a customs procedure, [OJ L 63, 23.2.2021, p. 386-531](#).

<sup>22</sup> Commission Implementing Regulation (EU) 2021/414 of 8 March 2021 on technical arrangements (IRTA) for developing, maintaining and employing electronic systems for the exchange and storage of information under Regulation (EU) No 952/2013 of the European Parliament and of the Council, [OJ L 81, 9.3.2021, p. 37-64](#).

storage of information. The former Implementing Regulation (EU) 2019/1026<sup>23</sup> was amended to include the description of the technical arrangements for the Registered Exporter System (REX), the Proof of Union Status (PoUS), Surveillance 3, the anti-Counterfeit, and anti-Piracy Information System (COPIS) and an update to Import Control System 2 (ICS2) on the Safety and Security Analytics (SSA). With the objective to expand the scope of the Implementing Regulation, the Commission continued its work and thorough discussion with the Member States in the Customs Code Committee – General Customs Legislation section (CCC-GEN) and the Electronic Customs Coordination Group (ECCG).

Additionally, 2021 marked significant progress towards the objectives outlined in the Commission’s ambitious programme “Taking the Customs Union to the Next Level: A Plan for Action”, that was adopted in 2020. Specifically, since January 2017, the Parliament invited the Commission to assess the implementation of the customs legislation and the delivery of electronic systems set out in the UCC, based on five criteria<sup>24</sup>. As a result, the Commission committed to produce an interim evaluation of the UCC. At the end of 2021, the aforesaid evaluation was initiated, with an EU questionnaire being distributed to the Member States, to share their views and experiences on the current application of the UCC. The initial findings identified several challenges in the fields of risk management, e-commerce, IT systems’ implementation, and non-financial risks. The Commission will discuss these issues as well as potential improvements after the final conclusions of the evaluation, which were foreseen in the beginning of 2022.

All UCC related developments required remarkable collective efforts throughout the challenging period of the COVID-19 pandemic outbreak, which affected both customs operations and preparations related to the UCC electronic systems. In light of these challenges, it was deemed essential to design, develop, deploy, operate, and maintain resilient and secure solutions to provide short reaction times. Additionally, the plans for enhancing the existing projects and deploying the new phases of the IT systems reinforced the need to prioritise the activities that should be performed throughout 2021. The objective of this prioritisation was to manage the budget that will be provided for the systems implementation and hence, to further reduce potential delays. As a result, the EU budget necessary for the Customs activities became available after the adoption of the Council Regulation (EU, Euratom) 2020/2093 laying down the new Multiannual Financial Framework (MFF) for the period 2021-2027<sup>25</sup> in December 2021.

#### Key elements

- The third UCC annual progress report was published on 14 December 2021.
- On 08 March 2021, the Implementing Regulation (EU) 2021/414 on technical arrangements (IRTA) for developing, maintaining and employing electronic systems for the exchange and storage of information was adopted.
- An interim evaluation of the UCC implementation was initiated at the end of 2021.

<sup>23</sup> Commission Implementing Regulation (EU) 2019/1026 of 21 June 2019 on technical arrangements for developing, maintaining and employing electronic systems for the exchange of information and for the storage of such information under the Union Customs Code, [OJ L 167, 24.06.2019, p3-17](#).

<sup>24</sup> Effectiveness, relevance, efficiency, coherence, and EU added values.

<sup>25</sup> Council Regulation (EU, Euratom) 2020/2093 of 17 December 2020 laying down the multiannual financial framework for the years 2021 to 2027, [OJ L 433I, 22.12.2020, p. 11-22](#).

- The Council Regulation (EU, Euratom) 2020/2093 laying down the new multiannual financial framework (MFF) for the years 2021 to 2027 was adopted on 17 December 2021.

## 4.2 Revision of Annex B to the UCC DA and UCC IA and Change Management

The Union Customs Code (UCC) and the UCC Delegated Act (DA), together with the UCC Implementing Act (IA), create a single environment for all customs-related data for customs decisions, declarations and the registering and identification of economic operators in Annex A, Annex B, and Annex 12-01, respectively. These annexes are often referred to as “customs data annexes”. At the time of creating the customs data annexes, the design was based on the Single Administrative Document (SAD), reflecting paper-based procedures, and during the development of trans-European IT systems (ICS2, AES, NCTS-P5), several suggestions for practical improvement were received. Hence, a project group was initiated in 2019 with the objective to achieve the harmonisation of the common data requirements between the different electronic customs systems. Subsequent to intensive work and analysis, the Annex B UCC DA amendment (Commission Delegated Regulation 2021/234)<sup>20</sup> was adopted on 7 December 2020, and the UCC IA (Commission Implementing Regulation 2021/235)<sup>21</sup> on 8 February 2021. Both acts were published in the Official Journal<sup>26</sup> on 23 February 2021 and entered into force on 15 March 2021.

The UCC DA amendment contains the common data requirements for the exchange and storage of information between customs authorities as well as between customs authorities and economic operators, to ensure the horizontal harmonisation necessary for interoperability between the customs electronic systems used for the different types of declarations, notifications, and proof of customs status of Union goods. The amending Regulation also establishes the link between the various declarations, notifications, and proof of the customs status of Union goods set out in Annex B and the customs electronic systems provided for in the UCC Work Programme. Furthermore, the Regulation introduced the possibility for Member States to use transitional measures until the update of the customs electronic systems in accordance with the UCC WP.

The UCC IA amendment harmonises the formats and codes for the common data requirements for the exchange and storage of information required for declarations, notifications, and proof of the customs status of Union goods. Similar to the UCC DA, it warrants the interoperability of the electronic customs systems used for the various types of declarations, notifications, and proof of the customs status of Union goods and introduces transitional measures to facilitate the implementation of the new data elements in some specific situations.

Thorough review and discussions on the UCC DA-IA Annex A were ongoing in 2020 and continued throughout 2021 in the project group, with the participation of the Member States and CDS and AEO experts from the Commission. The modifications applied to Annex A followed the structural principles of the new Annex B while utilising the experiences gained from the review of the latter. A draft version of the new Annex A data elements table was prepared and will be further analysed in 2022. The provisional date for the first draft of the legal text for Annex A amendment is anticipated in the first quarter of 2022.

The data harmonisation process required for the trans-European systems, national electronic systems and the systems used by the economic operators necessitates remarkable efforts. To this end, the Commission established a structured mechanism for

<sup>26</sup> [Official Journal of the European Union](#), L 63, 23 February 2021.

submitting, recording, assessing, reviewing, and approving a change request within a predefined period. It clearly defines the roles and responsibilities of different stakeholders in the process of managing a change request. The principles of change management, which is a yearly exercise, are outlined in the document “Change Management Process for UCC Data Requirements”, and version v3.20 was published on 11 February 2021. The change management process for Annex B was launched on 4 June 2021, and 478 change requests were proposed by December 2021 from the Member States and the Commission. The Member States will communicate their comments on the aforesaid change requests to the Commission for thorough discussion and final approval in 2022 during the meetings of the Customs Expert Group and Customs Code Committee on Data Integration and Harmonisation (CEG-DIH and CCC-DIH) forums.

#### Key elements

- The Annex B UCC DA amendment (Commission Delegated Regulation 2021/234) was adopted on 07 December 2020 and entered into force on 15 March 2021.
- The Annex B UCC IA (Commission Implementing Regulation 2021/235) was adopted on 08 February 2021 and entered into force on 15 March 2021.
- A draft version of the new UCC DA-IA Annex A data elements table was prepared in 2021 and will be further analysed in 2022.
- The change management for Annex B was launched on 04 June 2021, and 478 change requests were proposed by December 2021.

### 4.3 EU Single Window Environment for Customs (EU SWE-C)

Each year, the Customs Union facilitates the trade of more than EUR 3.5 trillion worth of goods. Efficient customs clearance and controls are essential to allow trade to flow smoothly while protecting EU citizens, businesses, and the environment. Currently, the formalities required at the EU’s external borders often involve many different authorities in charge of other policy areas, such as health and safety, environment protection, fisheries and agriculture, market surveillance and product compliance, and cultural heritage. Consequently, economic operators must submit information to several authorities, each with its own portal and procedures. This is burdensome and time-consuming for economic operators and reduces the capacity of authorities to jointly act in preventing risks.

In recent years, ‘single window’ initiatives have gained momentum to streamline the border clearance process within and across the EU. The ‘single window’ is a trade facilitation measure, allowing parties involved in trade and transport to lodge standardised information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements, thus reducing duplication, time, and costs. In 2008, the Member States and the Commission committed to promoting an electronic customs environment in the EU<sup>27</sup> by endeavouring to establish a framework of single window services. The 2014 Venice Declaration<sup>28</sup> proposed a progressive action plan to implement an EU Single Window Environment for Customs (EU SWE-C) and develop its legal framework. This was reiterated in the 2016 Communication from the

<sup>27</sup> Decision No 70/2008/EC of the European Parliament and of the Council of 15 January 2008 on a paperless environment for customs and trade ([OJ L 23, 26/01/2008, p. 21](#)).

<sup>28</sup> The Venice Declaration is annexed to the December 2014 Council Conclusions ([ST-16507/14](#)).



Commission on 'Developing the EU Customs Union and its Governance'<sup>29</sup>, which announced the Commission's plans to explore a workable solution for developing and creating an EU SWE-C.

In line with these priorities, the Commission launched a pilot project in 2015, the EU Customs Single Window-Common Veterinary Entry Document (EU CSW-CVED). The project was jointly administered by the Directorate-General for Taxation and Customs (DG TAXUD) and the Directorate-General for Health and Food Safety (DG SANTE) to enable the automated verification of three non-customs health certificates by nine Member States' customs administrations (BG, CZ, EE, IE, CY, LV, PL, PT, SI). Its successor, the EU Customs Single Window Certificates Exchange System (EU CSW-CERTEX), launched in 2017, expanded the scope of regulatory requirements and introduced new functionalities (e.g., quantity management). By the end of 2021, eight certificates<sup>30</sup> were introduced in total, with one participating Member State (EE), while five more Member States (BE, CZ, IT, LU, PL) were in conformance testing. The domains such as DUES, EU CITES, and Product Compliance are being integrated and will be made available in subsequent releases of EU CSW-CERTEX.

The re-engineering of EU CSW-CERTEX was investigated in 2020 with the first releases being deployed in conformance testing in 2020 and 2021, with the objective to integrate several webservices (e.g., EU SW-CVED, EU CSW-FLEGT) into a single webservice that will permit the retrieval of any competent authority document, and will be maintainable, sufficient, and cost effective. The re-engineered EU CSW-CERTEX will also allow standardised and generic information exchanges between the Member States and EU CSW-CERTEX regardless of the type of partner competent authority document. Moreover, new releases will be systematic to fix bugs and incorporate additional formalities.

To further support the EU SWE-C initiative, the Commission started the preparation of an impact assessment under the leadership of DG TAXUD. The draft impact assessment report<sup>31</sup> was submitted to the Commission's Regulatory Scrutiny Board (RSB) in March 2020 and was adopted in July 2020. The Commission subsequently worked closely with the Legal Service to prepare the legislative proposal. In addition, since December 2016, the Commission collaborated closely with the Member States and the Trade Contact Group (TCG)<sup>32</sup> through the EU SWE-C project group to prepare the legislative proposal. This project group collaborated extensively to provide input on different policy options for the EU SWE-C, which were taken forward as part of an external study<sup>33</sup> also to support the impact assessment. This study was launched to assess further these options and the impacts of implementing this environment and its required legislation. Additional collaboration for the development of the legislation was pursued via an interservice steering group, chaired by the Secretariat General (SG), allowing to integrate views of other Directorate Generals (DGs) and services.

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<sup>29</sup> Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee - [COM \(2016\) 813](#).

<sup>30</sup> Certificate of Inspection for imports of organic products (COI), Forest Law Enforcement, Governance and Trade (FLEGT), Common Health Entry Document for Plants and Plant Products (CHED-PP), Common Health Entry Document for Feed and Food of Non-Animal Origin (CHED-D), Common Health Entry Document for Animals (CHED-A), Common Health Entry Document for Animal Products (CHED-P), Ozone-depleting Substance (ODS), and Fluorinated Greenhouse Gases (F-GAS) licences.

<sup>31</sup> COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT REPORT, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013 - [SWD/2020/238 final](#).

<sup>32</sup> Register of Commission Expert Groups: [Trade Contact Group \(TCG\)](#).

<sup>33</sup> European Commission, Directorate-General for Taxation and Customs Union, *Study to support the impact assessment of the initiative for developing an EU Single Window environment for customs: executive summary*, [Publications Office, 2020](#).

In the legislative proposal<sup>34</sup>, the development of the EU SWE-C rests on two pillars of digital administrative cooperation. The first includes government-to-government (G2G) digital cooperation between customs and partner competent authorities through the central component EU CSW-CERTEX to support the automated reception and verification by customs of the documents for goods clearance related to non-customs formalities. This would also allow partner competent authorities to properly monitor and control the quantities of authorised goods imported or exported while enabling customs to better enforce the regulatory policies of partner competent authorities. The second pillar, business-to-government (B2G) digital cooperation, aims at streamlining reporting formalities imposed on trade for the import, export, and transit of specific goods subject to non-customs regulatory formalities. Thus, reporting and procedural redundancies are avoided, and the realisation of the internationally recognised single window concept is enabled by providing economic operators with a single-entry point to fulfil all import, export, and transit-related regulatory requirements.

The proposal also introduces additional facilitation measures to support the G2G and B2G cooperation. Firstly, the measures involve extending the use of the Economic Operator Registration and Identification (EORI)<sup>35</sup> database to partner competent authorities for validation purposes. This means that they can request the EORI number from economic operators in the context of their regulatory formalities and validate it against the EORI database. A second measure involves the appointment of national coordinators in each Member State to coordinate all matters associated with the effective functioning of the EU SWE-C.

The legislative proposal was announced in the new Customs Action Plan<sup>36</sup> and the latter was published in September 2020 as part of President von der Leyen's commitment to take the Customs Union to the next level. The proposal was adopted by the College of Commissioners on 28 October 2020 and submitted thereafter to the Parliament and the Council for review. During 2021, the ordinary legislative procedure was ongoing with multiple activities, including technical meetings with the PT and SI Presidencies and Customs Union Group (CUG) meetings with the Member States, as well as bilateral meetings with the Member states, to discuss the proposed legislative texts look for mutual agreement on complex matters where it was deemed necessary.

The European Economic and Social Committee (EESC) issued its positive opinion on 24 March 2021, the CUG finalised the article-by-article review of the proposal by mid-2021, and the Internal Market and Consumer Protection Committee (IMCO) voted on the draft report on 27 September 2021 giving a mandate to the Parliament. Subsequent to the support by the majority of the Member States of the sixth agreed text, the Committee of the Permanent Representatives of the Governments of the Member States to the European Union (COREPER) adopted on 15 December 2021 its negotiation position for the regulation and gave the mandate to the Council to enter into negotiations with the Parliament. Following the aforesaid two mandates, negotiations will be initiated between the Parliament, Council and Commission in 2022 in the form of tripartite meetings ('trilogues').

In parallel with the legislative procedure, DG TAXUD took the initiative and invited Member States to set up a dedicated project group to elaborate on the B2G dimension of a harmonised national Customs Single Window environment. The project group consisted of experts from 14 national customs and non-customs authorities, TCG

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<sup>34</sup> Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013 - [COM/2020/673 final](#).

<sup>35</sup> EORI is a database managed by DG TAXUD that assigns all economic operators engaging in customs operations with a unique number (the EORI number) that is used as an identifier for all dealings with customs authorities in the EU.

<sup>36</sup> COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, Taking the Customs Union to the Next Level: a Plan for Action – [COM\(2020\) 581 final](#).

representatives and representatives of the Commission (DG TAXUD and DG SANTE). The group members contributed to putting together an implementation concept for the EU SWE-C B2G, i.e., an overall picture of functionalities, requirements, and information to be submitted by the economic operators through a national communication channel to the governments. The aim of such a concept was to provide a comprehensive input for formulating the EU SWE-C B2G framework of EU customs.

In the first half of 2021, the project group focused on analysing the current state (e.g., processes, architecture) of the application and the processing of the CHED certificates as part of fulfilling the customs formalities and produced the related business process model (BPM). The objective of the activities was to understand the present-day processes, and the information and technology architecture, as well as identify the obstacles and problems to be tackled in the future process design. In the second half of 2021, the project group, with the participation of the TCG, addressed the stakeholder needs, requirements gathering, and the future state of the processes. The outcomes of this second phase have been the Requirements Matrix, with different levels of priority, in addition to the draft of the future processes for the import formality with and without pre-lodgement of the customs declaration. Considering that the main purpose of the National Single Window (NSW) is to lodge an integrated dataset to one-single portal, the project group also examined this type of dataset which includes the data elements of the import customs declaration in addition to the data elements required for the non-customs formalities. The investigations of the project group on the integrated dataset were brought up in the CUG and resulted in amending the proposal's text. The discussions of the project group will continue in 2022, including the investigation of the B2G functionalities and defining a business Proof of Concept (PoC) for a pilot project.

#### Key elements

- The ordinary legislative procedure on the proposed regulation was ongoing in 2021:
  - EESC issued its positive opinion on 24 March 2021.
  - IMCO voted on the draft report on 27 September 2021.
  - COREPER adopted its negotiation position on 15 December 2021.
- Following a mandate given to the Parliament by IMCO and another to the Council by COREPER, negotiations will be initiated between the Parliament, Council and Commission in 2022 in the form of tripartite meetings ('trilogues').
- A project group dedicated to the B2G dimension was initiated in 2021 and will continue its investigations and discussions in 2022.

#### 4.4 UK Withdrawal from the EU – Post Activities

Under the procedure outlined in Article 50 of the Treaty of the European Union, since 1 February 2020, the UK has withdrawn from the EU and has become a 'third country'<sup>37</sup>. Both the UK and the EU had agreed that the UK's exit would be followed by a time-limited implementation period which would last until 31 December 2020. During this transition period, common rules remained in place, with the UK adhering to the EU law

<sup>37</sup> A third country is a country not member of the EU.

under the terms set out in the Withdrawal Agreement (WA)<sup>38</sup>. The WA ensures legal certainty in areas such as common provisions, citizen's rights, the financial settlement, governance structure, and further separation issues. After the end of the transition period, the EU rules in the field of customs, and in particular the Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the UCC, including its supplementing and implementing acts, were no longer in force in the UK<sup>39</sup>, whereas the Protocol on Ireland/Northern Ireland (IE/NI Protocol) was applied<sup>40</sup>. The IE/NI Protocol, which responds to the unique circumstances on the island of Ireland intending to protect peace and stability, is subject to periodic consent of the Northern Ireland Legislative Assembly, the initial period of application extending to four years after the end of the transition period<sup>41</sup>. Throughout 2021, the cooperation between the UK authorities and the Northern Ireland Liaison Team (NILT) on NI was regulated following a further expansion of the NILT with Seconded National Experts.

In January 2021, a Brexit note that set out the issues concerning the implementation of the WA and the IE/NI Protocol in customs and tax matters was finalised. The note provided an overview of the state of play of each identified issue, envisaging the development of solutions. On this basis, the Commission introduced a table of open questions with regular updates to assess the WA implementation work's progress and analyse the IT impact of the Northern Ireland (XI) Protocol in the customs area. The Commission also prepared separate fiches for the issues listed in the table to provide an audit trail of the work performed with the UK and collect information as a starting point in case possible infringements would need to be launched. Each fiche provided a short description of the issue, possible solutions and the latest developments on the topic.

Other related activities included the cooperation between DG TAXUD and the Border Force in NI and regular seminars with the UK Revenue and Customs Service (HMRC) to ensure that the commitments made in the IE/NI Protocol would be kept. In addition, on 30 April 2021, the EU-UK Trade and Cooperation Agreement (TCA)<sup>42</sup> came into force to provide a solid basis for creating a new partnership and preserving a free trade area between the UK and the EU. Regular exchange of contact points and essential information for the TCA was provided during the first six months to ensure a common interpretation and implementation of the customs provisions of the WA by the UK and the EU customs.

The Commission continued the transformation of the customs systems and conducted a series of technical seminars, assessments and weekly coordination activities with the Member States and the economic operators to retain a successful and smooth transition. In parallel, coordination meetings were organised with the UK and the Commission to have follow-up discussions, in particular pertaining to the IT systems implementation for customs, VAT, Excise IT issues, "XI" prefix for EORI numbers, and the CCN gateway. Notably, Specialised Committees on Customs Cooperation and Rules of Origin, VAT, and recovery convened periodically during 2021, with the participation of the UK, the Member States and the Commission. Regular conformance testing campaigns were also performed. As such, notable progress was accomplished in the scope of the UK's IT systems readiness, notwithstanding the delays in the related activities due to the outstanding issues with regards to the implementation of the WA and the IE/NI Protocol

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<sup>38</sup> Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, [OJ L 29, 31.1.2020, p. 7-187](#) ("Withdrawal Agreement").

<sup>39</sup> Regarding the applicability of the UCC in Northern Ireland, see Part B of this notice.

<sup>40</sup> Article 185 of the Withdrawal Agreement.

<sup>41</sup> Article 18 of the IE/NI Protocol.

<sup>42</sup> Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part, [OJ L 149, 30.4.2021, p. 10-2539](#).

and the constraints imposed by the COVID-19 crisis. Specifically, as announced in December 2018, the UK remained a member of the Common Transit Convention (CTC)<sup>43</sup>, registering to the existing UCC NCTS system for common transit declarations. On this basis, the UCC NCTS, as well as UCC ECS and UCC ICS2 projects, marked significant progress towards resolving identified issues related to guarantees, indirect exports, and Entry Summary Declarations (ENS).

The UK initiated further activities in collaboration with the Commission concerning the IT systems implementation during the reporting year. In September 2021, a new registrations system was deployed to ensure that traders receive new validated authorisations with “XI” EORI numbers and invalidate and revoke former authorisations. In parallel, HMRC prepared an ‘EORI National Implementation Document’, which indicated the name and address of the customs authorities responsible for registering to the Commission and the national procedure applying for assigning an EORI number.

Additionally, the number of open movements was reduced by the beginning of 2021 due to a coordination programme launched by the UK and the Member States following a grace period foreseen in the WA. In July 2021, a new IT system was put in operation to guarantee the decrease of the open movements with an office of exit in NI. Concurrently, in August 2021, the new IT system of HMRC, which provides surveillance data of NI, went live and connected successfully with SURV-RECAPP.

#### Key elements

- As of 1 January 2021, the Protocol on Ireland/Northern Ireland (“IE/NI Protocol”) was applied.
- Smooth delivery of the Brexit IT systems transition from 31 December 2020 to 01 January 2021.
- The EU-UK Trade and Cooperation Agreement came into force on 30 April 2021.
- A new registrations system has been operational since 14 September 2021 to warrant that traders will receive new validated authorisations with “XI” EORI numbers and invalidate and revoke former authorisations.
- On 22 September 2021, HMRC sent the updated ‘EORI National Implementation Document’.
- In August 2021, the new IT system of HMRC, which provides surveillance data of NI, went live and connected successfully with SURV-RECAPP.

## 4.5 New Trans-European Systems

The UCC legal package that entered into force on 1 May 2016 repealing and replacing the previous framework for customs legislation, mandates that all national administrations update their electronic systems to meet the new legal requirements. Specifically, the trans-European Export Control System (ECS) Phase 2 (P2) and the trans-European New Computerised Transit System (NCTS-P4) were succeeded by the UCC Automated Export System (AES) and NCTS-P5 systems, respectively. The latter includes steps to upgrade and extend the current NCTS processes in alignment with the UCC legal provisions, to introduce new processes such as the pre-lodgement of customs

<sup>43</sup> Convention between the European Economic Community, the Republic of Austria, the Republic of Finland, the Republic of Iceland, the Kingdom of Norway, the Kingdom of Sweden and the Swiss Confederation, on a common transit procedure, [OJ L 226, 13.8.1987, p. 2–117](#).

[A consolidated version of the Convention on a Common transit procedure came into force in 01/06/2021](#).



declarations, the registration of 'en-route' events, information exchanges alignment to UCC data requirements, and upgrade and develop the interfaces with other systems. Although the system incorporates several components to be developed centrally, the main components are to be developed at the national level. Likewise, the UCC AES project focuses on implementing the UCC requirements for export and exit of goods, including export and re-export declarations, Exit Summary Declaration (EXS) and Centralised Clearance for Export (CCE), re-export notifications and an interface with Excise Movement and Control System (EMCS) and NCTS. Comprised of two components, the project entails implementing the UCC simplifications offered to trade to facilitate export of goods for the European companies. The first component relates to the 'trans-European AES', while the second component concerns the upgrade of the National Export Systems (NES).

Over the course of 2021, significant progress was achieved on the UCC NCTS-P5 and the UCC AES-P1 trans-European IT systems. The aforesaid systems were successfully deployed in March 2021 with DE being the first Member State to go live, opening the path to the next generation of interconnected trans-European systems (TES) for the economic operators and the national customs authorities. This important UCC milestone, which was achieved with the close cooperation between the national customs administrations, economic operators and the Commission pioneering a collaborative, iterative and agile working method, initiated a transition phase for the TES. The legacy and new systems will be operational in parallel in the same environment during the transitional phase, for the period 2021-2023, posing the challenge to warrant business continuity and smooth transition of the Member States and the economic operators by December 2023, while applying significant changes in the applicable data and process models.

To this end, it was decided that national administrations would adapt their respective implementation plan and development for this transition period according to their resources, as well as technical and economic operators' constraints. In parallel, the Central Information Exchange Converter Application (C/ieCA) system went in operation to facilitate the transition period by converting the exchanged messages in AES upon request from the legacy format to the UCC transitional format. Further initiatives were instigated in 2021 to improve the TES, and particularly the NCTS and AES programmes. Specifically, the Smart Border Project initiative, which was raised by Switzerland and the EU, aimed at digitalising and automating the border crossing processes between Switzerland and their neighbouring countries and between the EU and CTC parties, by capitalising on the existing TES and optimising the use of resources invested by national administrations across Europe. In parallel, the Commission organised meetings related to the European Maritime Single Window environment (EMSWe) and AES, aiming to discuss the synergies and interdependencies between both projects.

### Key elements

- NCTS Phase 5 and AES Phase 1 went live in DE on 15 March 2021.
- The Central Information Exchange Converter Application (C/ieCA) system went in operation in 2021.
- The Smart Border Project initiative was initiated to improve the NCTS and AES projects.

## 4.6 ICS2 Release 1<sup>44</sup>

The UCC Import Control System 2 (ICS2) programme involves a complete overhaul of the existing customs regime from the perspectives of IT, customs risk management and economic operators. The objective of the programme is to strengthen the safety and security of the supply chain for goods moved via all modes of transport and has been defined in close collaboration between Member States, customs authorities, and the Commission. This is to be achieved through better targeted risk-based controls of EU customs authorities on improved ENS data quality, data filing, data availability and data sharing, and through real-time collaborative risk analysis and co-ordinated safety and security controls at the EU entry points.

The Harmonised Trader Specification (HTI) concept has been introduced in the ICS2 programme to reduce the burden on trade, by providing the single messages specification for exchanging data with economic operators from all European countries. This aforesaid specification helped overcoming the challenges of ICS1 having different interfaces at national level. Further to this, ICS2 reduced the cost and staff requirements for Member States, by implementing the centralised Shared Trader Interface (STI) with which DG TAXUD, on behalf of national administrations, developed and started operating the central system used by economic operators from all countries.

The programme implementation consists of three releases. Over the years, the Commission made incremental efforts to ensure a notable progress on the ICS2 project. As a result, on 15 March 2021, covering the obligation on the relevant economic operators (postal operators and express carriers in air transport) to provide the minimum data, ICS2 Release 1 (R1) entered in operation. Since that date, nearly 3 billion different types of messages were exchanged via ICS2 during 2021, without any major incident being reported and with daily traffic steadily increasing.

The ICS2 R1 introduced advance cargo information for postal consignments, enabling customs to address a wide range of unsafe traffic in the context of massive and growing flows of e-commerce. Particularly, in Release 1, express carriers and designated economic operators established in the EU will provide a subset of their ENS data before goods are loaded on aircraft bound for the EU. This Pre-Loading Advance Cargo Information (PLACI) will be analysed by customs with the purpose of detecting immediate threats to Aviation Security (AVSEC)<sup>45</sup>, thus delivering a complementary intelligence-driven layer of consignment-level risk analysis in the context of the EU civil aviation security regime.

Throughout 2021, the Commission launched monitoring activities of the national administrations and economic operators' project plans to assure their alignment with the Commission's central planning against IT milestones. For this purpose, a survey was initiated to receive feedback from the economic operators on the ICS2 R1 conformance testing activities and end-to-end testing experiences, and suggestions for improvement. Following the entry into operations of the ICS2 R1, several bilateral meetings with national customs administrations of the Member States that indicated delays against the deadline of 15 March 2021 took place. During these meetings, the necessary mitigation measures were thoroughly discussed to ensure the implementation of ICS2 R1 in the remaining Member States. Similar monitoring meetings were also organised between the UK and the Commission, aiming to facilitate the UK's activities after the official withdrawal from the EU. Specifically, the second bilateral ICS2 meeting between the UK HMRC and DG TAXUD took place in January 2021, with the objective of addressing the

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<sup>44</sup> Information about UCC ICS2 Releases 2 and 3 can be found in section [1.1.14 of Annex 1](#).

<sup>45</sup> [Aviation security \(europa.eu\)](#).

UK's inquiries regarding Release 1. As a result, ICS2 R1 became fully operational in the national administrations of all Member States<sup>46</sup> by the end of December 2021.

#### Key elements

- ICS2 Release 1 entered in operation on 15 March 2021.
- Since the date of entry into operations, 3 billion different types of messages were exchanged via ICS2 throughout 2021, without any major incident being reported and with daily traffic steadily increasing.
- ICS2 R1 became fully operational in the national administrations of all Member States by the end of December 2021.

### 4.7 e-Customs Governance

The Customs programme supports the essential cooperation between customs authorities across the EU and ensures the financial and economic interests of the EU and its Member States. It has helped to build a modern and innovative Customs Union that guarantees the safety and security throughout the EU, while at the same time facilitating growing global trade. It allows the joint development and operation of major pan-European IT systems and establishes networks, connecting national customs officers from across Europe. On 18 June 2018, the Commission put forward a proposal for a regulation establishing a Customs programme for cooperation in the field of customs over the 2021-2027 Multiannual Financial Framework (MFF) period, a successor to Customs 2020. The regulation<sup>47</sup> was published in the Official Journal on 15 March 2021 and entered into force immediately, and with retroactive application as of 1 January 2021. The Customs programme has a budget of EUR 950 million for the period 2021-2027, an increase from EUR 523 million in the period 2014-2020.

In view of the mid- to long-term nature of the objectives pursued and building on experience gained over time, the regulation was implemented by means of work programmes that should be able to cover several years. The shift from annual, as was foreseen in the Customs 2020 programme, to multiannual work programmes (MAWP) will reduce the administrative burden for both the Member States and the Commission. The first work programme<sup>48</sup> of the Customs programme for cooperation in the field of customs adopted under the new MFF 2021-2027 was approved on 29 April 2021. As defined in the Multi-annual Strategic Plan for Electronic Customs (MASP-C Revision 2019)<sup>49</sup>, a particular emphasis will be put in 2021-2022 on the maintenance and updates of operational IT systems, the design, development and deployment of UCC and non-UCC electronic systems, and support to the Customs Action Plan. The Customs Action Plan<sup>36</sup> put forward a vision and a plan of progressive actions to take the Customs Union to the next level. These actions, to be achieved in the period up to 2025, are intended as a first step towards a 2040 vision that stemmed from a year-long Foresight process on the Future of Customs in the EU for the 2040<sup>50</sup>.

<sup>46</sup> UK did not enter in operations due to the ongoing discussions on the implementation of the IE/NI Protocol.

<sup>47</sup> Regulation (EU) 2021/444 of the European Parliament and of the Council of 11 March 2021 establishing the Customs programme for cooperation in the field of customs and repealing Regulation (EU) No 1294/2013. [OJ L 87, 15.3.2021, p. 1–16.](#)

<sup>48</sup> Annex to the Commission Implementing Decision on the financing of the Customs programme and the adoption of the work programme for 2021-2022 – [C\(2021\) 2875 final.](#)

<sup>49</sup> Electronic Customs Multi-Annual Strategic Plan for Customs – 2019 Revision, [Version 1.1.](#)

<sup>50</sup> The Future of Customs in the EU 2040, [EU Policy Lab.](#)

The Foresight process was launched in 2019 by the Joint Research Centre (JRC) in partnership with DG TAXUD, focusing to better understand trends and drivers impacting the EU Customs ecosystem and possible paths for how this system could develop by 2040. In December 2020, the “Future of Customs in the EU 2040” report<sup>51</sup> was published by the Commission’s JRC. Activities linked to several milestones foreseen in the report started in 2021; notably, the project group discussions on formulating the EU SWE-C B2G framework resulting in an intermediate report that was drafted in December 2021, and the preliminary outline of the MASP-C fiche of the Smart Border initiative. The Smart Border addresses the acceleration of the cross-border traffic, the provision of proof for crossing the border, the reduction of the administrative burden, and the consent for more targeted controls.

The Commission is responsible for the implementation of the Customs 2021-2027 programme and allocates appropriate resources to ensure the effective functioning and modernisation of the EU Customs Union through joint actions such as project groups, expert teams, trainings, and other activities. To this end, and despite travelling restrictions due to COVID-19, 175 e-Customs related meetings with a total of 3,533 participants were convened during 2021 under the auspices of the Customs 2021-2027 programme. More particularly, 17 meetings with a total of 226 participants concerned trainings related to IT systems. Due to the temporary non-availability of the Commission’s data collection tool since 01 December 2021, the provided data covers the period 01 January – 30 November 2021. Further details on the training services for customs officials can be found in section [1.6.3 of Annex 1](#).

The MASP-C Revision 2019 (v1.1) is a management and planning tool drawn up by the Commission in partnership with Member States in accordance with Article 8(2) of the e-Customs Decision<sup>27</sup>. The MASP-C ensures effective and coherent management of IT projects by setting down both a strategic framework and milestones. It is endorsed by the Member States in the Customs Policy Group (CPG) based on expert advice provided by the Electronic Customs Coordination Group (ECCG) and consultations with the economic operators at the Trade Contact Group (TCG). The MASP-C is considered the necessary instrument to justify budgetary requests made by national customs administrations, as well as to ensure overall governance of legal, business and IT-technical aspects of new IT projects in the area of customs. Furthermore, Annex 3 of the MASP-C expounds the three-level governance model (policy, coordination, and expertise levels) and the necessity for a new governance framework for the implementation of the MASP-C and electronic customs projects. The governance scheme aims, among other objectives, to closely supervise the planning and monitoring of projects, clearly define roles and responsibilities, and establish accountability to all the different stakeholders involved.

Following the provision of Article 280 of the UCC<sup>52</sup>, the UCC WP was established by the Commission Implementing Decision (EU) 2014/255<sup>53</sup> to support the development and deployment of electronic systems and to govern the duration of transitional measures for these systems. It contains a list of 17 electronic systems that must be developed for the application of the UCC, either by the Member States (national systems) or by the Member States in collaboration with the Commission (trans-European systems). The Commission

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<sup>51</sup> European Commission, Joint Research Centre, Ghiran, A., Hakami, A., Bontoux, L., et al., The future of customs in the EU 2040 : a foresight project for EU policy, [Publications Office, 2020](#).

<sup>52</sup> Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (recast), [OJ L 269 of 10.10.2013, p. 1](#).

<sup>53</sup> Commission Implementing Decision 2014/255/EU of 29 April 2014 establishing the Work Programme for the Union Customs Code ([OJ L 134, 7.5.2014, p. 46](#)). Repealed and replaced by Commission Implementing Decision (EU) 2016/578 of 11 April 2016 ([OJ L 99, 15.4.2016, p. 6–20](#)).

Implementing Decision (EU) 2016/578<sup>54</sup> specifies that the UCC WP should be aligned with the MASP-C to ensure synchronicity between these planning instruments.

#### Key elements

- The regulation<sup>55</sup> establishing the Customs 2021-2027 programme was published in the Official Journal on 15 March 2021 and entered into force immediately, and with retroactive application as of 01 January 2021.
- The first work programme<sup>56</sup> of the Customs programme for cooperation in the field of customs adopted under the new MFF 2021-2027 was approved in April 2021.
- 175 e-Customs related meetings with a total of 3,533 participants were convened during 2021 under the auspices of the Customs 2021-2027 programme.

## 4.8 Customs IT Collaboration

While the UCC provides a single EU framework for customs rules and procedures, the development and upgrade of IT systems required for the completion of customs formalities are a joint responsibility of the Member States and the Commission. The UCC systems can assume diverse forms, being either decentralised, central, distributed, or hybrid systems. In addition, the Member States operate national IT systems which may require further upgrades. The Commission therefore works closely with the Member States to deliver on many aspects that are key to the realisation of customs IT systems, including common planning, analysis, and systems requirements documents, in accordance with the national budgetary priorities. In this respect, measures are actively taken to avoid duplication of efforts by stakeholders in the development of electronic systems for customs. The scale of upgrades to existing systems and creation of new IT systems, which are necessary to implement the UCC, reinforces the need for cost-effective allocation of resources by the Member States and the Commission. This efficacious budgeting is further provided for in the legislative framework underlying the UCC, establishing the flexibility needed for a diversified IT delivery model.

Throughout 2021, the Commission reaffirmed its commitment to support the Member States in their collaboration on the IT planning and development, despite all difficulties in the fields of communication and cooperation deriving from the COVID-19 pandemic situation. Following the establishment in 2018 of the Expert Team on new approaches to develop and operate customs IT systems (ETCIT I) and based on the conclusions reached during the execution of the group's tasks, the activities and the strategic work continued within the context of the second expert team ETCIT II. Led by SE, the 16 participating Member States<sup>57</sup> cooperate towards the objectives agreed in the Council Conclusions on the way forward to developing Customs IT systems<sup>58</sup>, by carrying out a

<sup>54</sup> Commission Implementing Decision (EU) 2016/578 of 11 April 2016 establishing the Work Programme relating to the development and deployment of the electronic systems provided for in the Union Customs Code ([OJ L 99, 15.4.2016, p. 6–20](#)). Repealed by Commission Implementing Decision (EU) 2019/2151 of 13 December 2019 ([OJ L 325, 16.12.2019, p. 168–182](#)).

<sup>55</sup> Regulation (EU) 2021/444 of the European Parliament and of the Council of 11 March 2021 establishing the Customs programme for cooperation in the field of customs and repealing Regulation (EU) No 1294/2013. [OJ L 87, 15.3.2021, p. 1–16](#).

<sup>56</sup> Annex to the Commission Implementing Decision on the financing of the Customs programme and the adoption of the work programme for 2021-2022 – [C\(2021\) 2875 final](#).

<sup>57</sup> Belgium, Czechia, Germany, Estonia, France, Italy, Cyprus, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Portugal, Romania, Slovakia, and Sweden.

<sup>58</sup> [Council Conclusions on the way forward of developing customs IT systems](#).



study, including the scope of a pilot project, stakeholder analysis, financing options and possible involvement of a permanent structure or shared supplier for IT, in line with the Tallinn Declaration<sup>59</sup> on eGovernment. The work of ETCIT II started in October 2019 with a 24-month-duration. However, the original period was extended by three months, as the initial budget was not consumed due to COVID-19 travelling restrictions.

On this basis, over the course of 2021, ETCIT II settled a structure to identify long-term collaborative methods for the future, aiming to increase efficiency and quality of the IT delivery and operations, by studying novel approaches and analysing legal and governance frameworks. Further objectives included the identification of suitable options for new pilots and recommendations for the way forward towards the implementation of a long-term strategy on Customs IT and putting forward a vision for strategic and operational IT collaboration post-2025. Furthermore, ETCIT II actively contributed to the future of the Customs Union through participation in the Foresight group and the Customs Action Plan, in particular in points 16 and 17. Specifically, point 16 concerns deploying and deepening cooperation mechanisms under the Customs 2021-2027 programme, while point 17 refers to a smarter management of the customs union. Further to this, in order to raise visibility of the project, ETCIT II carried out extensive external communication to involve decision-making bodies and other relevant stakeholders in the strategic and operational progress of the Expert Team, and provided regular information to the ECCG, Customs Union Working Party (CUWP), Directors-General of Customs Forum (DGCF) and CPG.

Moreover, the ETCIT II expert team actively provided advice to the Wise Persons Group (WPG) in developing a report that would contribute to a general inter-institutional debate on the future of EU customs. The aforesaid report will cover a wide scope of topics, such as e-commerce, risk management, non-financial risks, and customs governance. Specifically, to assist the WPG with its work and objectives, the Expert Team provided the vision of ETCIT on future Customs IT collaboration, as well as key proposals. The ETCIT II expert team also engaged in regular meetings at EU and national level, aiming to follow the progress on the 'Presentation Notification and Temporary Storage' (PN/TS) pilot project initiated in 2020, and the recently established Digital Guaranteed (DiG) pilot project of 2021. The PN/TS solution from BE managed to map and deliver the technical specifications for a national application developed to be used in the production of the UCC Notification of Arrival, Presentation Notification and Temporary Storage (NA, PN and TS) system. In addition, the DiG project led by CZ resulted in the joint development of BPMs and the creation of a proposal for standardised information exchange, which was decided to be utilised as the platform for a future pilot project.

Furthermore, the ETCIT II expert team declared interest in collaborating around new technologies. On this basis, in June 2021, two roundtable discussions were held with Member States particularly interested in Blockchain and Artificial Intelligence (AI), attracting several participants and providing relevant and concrete aspects of practical collaboration. In parallel, a Project Group on Automatic Number Plate Recognition System (ANPRS) was established in close collaboration with CELBET to ensure the exchange of data with agreed functionality. A virtual Customs Administration's Chief Information Officer (CIO) seminar in March 2021, where practices of possible collaboration were presented and promoted with the active participation and support of DG TAXUD, stimulated a pertinent workshop for the CIOs of the Member States. The CIO workshop organised in November 2021 and financed by the Customs 2021-2027 programme, was used as a forum to discuss strategic issues regarding the IT development and exchange ideas on the IT collaboration. The success of the aforesaid workshop inspired the establishment of a yearly event to maintain this forum for pilot projects, pooling of resources and strategic discussions on IT collaboration.

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<sup>59</sup> [Ministerial Declaration on eGovernment – the Tallinn Declaration](#).

A third phase of the ETCIT expert team is deemed necessary and useful to take the possibilities of IT collaboration further. ETCIT III, which will establish ETCIT as a facilitation function with the aim to provide tools and guidance to the Member States, is anticipated to begin in March 2022. A formal call for interest to participate in ETCIT III was distributed to Member States in August 2021, and the initial deadline for responses scheduled in October 2021 was prolonged until January 2022. The first nine Member States<sup>60</sup> had confirmed their participation in the third phase of ETCIT by December 2021.

#### Key elements

- Over the course of 2021, the ETCIT II expert team actively contributed with advice to the Wise Persons Group.
- A Digital Guaranteed (DiG) pilot project led by CZ was initiated in 2021.
- In June 2021, two roundtable discussions were held with Member States particularly interested in Blockchain and Artificial Intelligence (AI).
- A formal call for interest to participate in the next phase of the Expert Team (ETCIT III) was distributed to Member States in August 2021.

### 4.9 e-Customs Project Groups

As a successor to Customs 2020, the Customs 2021-2027 programme further facilitates the sharing of the knowledge of experts from the Member States who, together with the Commission, collaborate in project groups<sup>61</sup> to analyse national customs practices and identify challenges in the correct implementation of the EU customs legislation. In this context, various project groups continued their activities and new project groups were established to address specific concerns and render recommendation reports on IT system implementation. Chaired by DG TAXUD, several sessions of these project groups took place in 2021.

The CPG<sup>62</sup> has contributed expertise and advice to the Commission in the field of customs cooperation for more than five decades. In 2021, the CPG provided an update on the activities following the UK's withdrawal from the EU, and the measures taken to address the challenges in the wake of the COVID-19 outbreak, specifically in the areas of risk management and controls. Further actions of the CPG expert group were associated with intensive discussions focused on the optimum recovery for the Traditional Own Resources (TOR) by fighting against fraud, false customs declarations, and undervalued imports. In addition, throughout 2021, the CPG expert group activities were centred on the Joint Analytic Capabilities (JAC), with the prospect of tackling customs financial and non-financial risks, safety and security issues, and matters related to data exchange between economic operators and customs authorities of the Member States. The JAC would assist the Member States in improving the response time against delays in the deployment of the UCC IT systems, shortening the implementation and deployment of services, defining future developments, and enhancing their common risk management procedure. The UCC framework review for the future of customs was also deliberated in the CPG expert group, in light of the Wise Persons Group's contributions.

<sup>60</sup> Belgium, Czechia, Germany, Estonia, Italy, Latvia, Lithuania, the Netherlands, and Portugal.

<sup>61</sup> The UCC project groups are established at expertise level based on the governance model outlined in MASP-C/Annex3.

<sup>62</sup> Commission Decision of 7 June 2018 formalising the Commission Customs Policy expert group, C/2018/3530, [OJ C201, 12.6.2018, p. 3-7](#).

The CPG expert group is made up of director-level representatives of the Member State customs administrations, while formalisation endows it with a greater role in defining policy, strategy, and objectives for the EU Customs Union, in close coordination with the Commission.

The UCC CDS-GUM project group<sup>63</sup> convened periodically throughout 2021, bringing together the contributions of customs experts representing 20 Member States<sup>64</sup> with the objective of identifying, analysing, and developing solutions to operational business issues affecting the UCC CDS. Specifically, over the course of 2021, the UCC CDS-GUM project group discussed open business issues and potential improvements, as well as the amendment of the UCC Annex A in relation to Deferred Payment (DPO) and Comprehensive Guarantee (CGU) authorisations, and the corresponding updates of the system. Further cooperation and consultation with the Customs Expert Group on Data Integration and Harmonisation (CEG-DIH) took place on the change requests to Annexes A and B as an outcome of the CDS-GUM project group activities, in view of the imminent release of the UCC CDS v1.26. Additional objectives of the CDS-GUM project groups held in 2021 included the refinement of the Level 3 (L3) BPMs on GUM and adaptation of the Level 4 (L4) BPMs on CDS concerning GUM related business processes and data.

The UCC CCI IT project group, composed by IT and business experts representing 13 Member States<sup>65</sup> continued its sessions during 2021. The CCI IT project group supported the update of the UCC CCI Phase 1 technical specifications, formally approved on 9 October 2020 by the ECCG. The sessions of the project group were held with the objective of identifying, analysing, and agreeing on the solutions for the required changes and corrections in the technical specifications for CCI Phase 1, in the context of their use by the Member States for developing the national CCI applications. In parallel, the project group contributed in the production of the technical specifications of the UCC CCI Phase 2. Specifically, the design of the UCC CCI Phase 2 technical specifications started in 2021, based on the finalised and formally approved business models and functional specifications of the UCC CCI Phase 2. The aforesaid specifications were created with the support of the “UCC CCI Functional Specifications Phase 2” project group, which was discontinued as its task was finalised and the functional specifications for CCI Phase 2 were delivered successfully. Simultaneously, weekly meetings with two Forerunner Member States<sup>66</sup> were organised by the Commission to support them for the construction and development of the UCC CCI Phase 1 system at a national level.

The project group on the Import of Cultural Goods, coordinated jointly by the business and policy units of DG TAXUD, met during several sessions throughout 2021. Comprised of 12 Member<sup>67</sup> States with representatives from customs administrations and Ministries of Culture of each Member State, the project group continued to pursue its two-fold objective. Firstly, to build an e-Licensing system to be utilised by the economic operators and the competent authorities, which will be interconnected to the customs IT environment. Secondly, to establish the provisions for the Implementing Regulation that will support the system. In 2021, the project group activities included the update and approval of the L3 and L4 BPMs, reflecting the technical and functional requirements of the system, as well as the Vision Document v1.5. The discussions were also focused on the draft Implementing Act, with parallel deliberations with the CEG-DIH regarding the practical implementation of the EORI number in the Import of Cultural Goods (ICG) system prior to the finalisation of the Vision Document. In addition, the ICG project group provided further valuable contributions through the initiation of discussions between DG TAXUD and DG SANTE for the use of an Administrative Assistance and Cooperation

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<sup>63</sup> Since 2020, the UCC CDS project group has incorporated the UCC Guarantee Management (GUM) project as an extension of the UCC CDS.

<sup>64</sup> Belgium, Czechia, Denmark, Germany, Estonia, Ireland, Spain, France, Croatia, Italy, Latvia, Lithuania, Hungary, the Netherlands, Poland, Portugal, Romania, Slovakia, Finland, and Sweden.

<sup>65</sup> Belgium, Germany, Greece, Spain, France, Latvia, Lithuania, Luxemburg, Hungary, the Netherlands, Austria, Portugal, and Finland.

<sup>66</sup> Spain and France.

<sup>67</sup> Belgium, Bulgaria, Germany, Greece, Spain, France, Italy, Latvia, the Netherlands, Austria, Portugal, and Romania.

system, as well as through intensive deliberations regarding the extension of the UCC ICG system under the export domain.

The deployment of new UCC electronic systems and the continuous evolution of the existing ones had led several PEM partner countries to undertake the endeavour of developing e-certification systems. The European Union was thus compelled to engage and develop a modern system, more adapted to the business requirements and the technological possibilities available in the 21st century. To this end, in the first half of 2021, three initial meetings established the work on the digitalisation of proofs of preferential origin certificates (e-PoC) in the Pan-Euro-Mediterranean (PEM) area<sup>68</sup>. In the second half of 2021, two Working Groups (WG) were created to examine the legal and organisational framework (WG1) and the system and process design (WG2). Over the course of 2021, a survey launched by the Commission circulated among the Member States and the PEM partner countries of the European Union to collect information and positions pertaining to the proposed target business architecture for the e-PoC initiative, including volumetrics related to the issuance and verification process of certificates. In addition, WG1 met periodically to discuss the legal basis required in the EU legislation for the implementation of the e-PoC timeline and new provisions, the introduction of a new article in the UCC, and the preparation of an EU position for the amendment of the protocols on transitional rules of origin, adapting several provisions contained in Appendix A of the revised PEM Convention<sup>69</sup>. In December 2021, the first WG2 meeting took place to discuss the technical specifications of the project in view of its deployment in two phases. Phase 1 will be focused on the administrative cooperation module and is expected to be finalised by 2025, while Phase 2 will examine further functionalities post-2025, particularly related to the issuance of certificates.

Following the successful deployment of the UCC Standardised Exchange of Information (INF) system for Special Procedures in 2020, representatives of 14 Member States<sup>70</sup> continued to convene periodically during 2021 within the context of the UCC INF Special Procedures business project group. The aim was to update the existing system and further investigate its business functionalities. Specifically, the project group activities were focused on the discussions on business and important operational issues, as well as on the further use and implementation of the system towards an end-to-end use. In addition, the UCC INF project group served as a key intermediary in identifying issues of unprocessed INFs by the UK authorities under the IP EX/IM<sup>71</sup> procedure and searching suitable solutions through exhaustive discussions with the Member States.

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<sup>68</sup> The system of Pan-Euro-Mediterranean cumulation of origin allows for the application of diagonal cumulation between the EU, EFTA States, Türkiye, the countries which signed the Barcelona Declaration, the Western Balkans and the Faroe Islands. It is based on a network of Free Trade Agreements having identical origin protocols. The 23 Contracting Parties to the PEM Convention are: the EU, the EFTA States (Switzerland, Norway, Iceland and Liechtenstein), the Faroe Islands, the participants in the Barcelona Process (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, Syria, Tunisia and Türkiye), the participants in the EU's Stabilisation and Association Process (Albania, Bosnia and Herzegovina, the Republic of North Macedonia, Montenegro, Serbia and Kosovo), and the Republic of Moldova.

<sup>69</sup> The EU is in the process of amending 21 origin protocols within the pan-Euro-Mediterranean (PEM) area, by implementing an alternative set of rules of origin applicable alongside with the rules of the PEM Convention on a bilateral basis, pending the adoption of the revised Convention. These new rules, which were endorsed by a large majority of PEM Contracting Parties, contain a significant number of improvements and simplifications as compared with the current PEM Convention.

On 27 November 2019 the Commission, acting as the Secretariat of the PEM Convention, chaired the 9<sup>th</sup> meeting of the PEM Joint Committee, to invite all the Contracting Parties to express their position on the formal adoption of the revised rules of origin of the PEM Convention, based on the Proposal for a COUNCIL DECISION on the position to be taken on behalf of the European Union within the Joint Committee established by the Regional Convention on pan-Euro-Mediterranean preferential rules of origin as regards the amendment of the Convention, [COM/2019/482](#).

<sup>70</sup> Belgium, Czechia, Denmark, Germany, Greece, Spain, France, Croatia, Italia, the Netherlands, Poland, Portugal, Romania, and Finland.

<sup>71</sup> IP EX/IM is a customs procedure where the processed products produced from union goods, which were used as equivalent goods, are first placed under the prior export procedure and later the non-union goods, instead of which the union goods were used as equivalent goods, shall be declared for the inward processing procedure.



In support of the continuous evolution of the UCC legal package, the Customs Expert Group on Data Integration and Harmonisation (CEG-DIH) convened periodically throughout 2021. Within this forum, the Member States and the Commission extensively discussed the amendment to the UCC DA and IA with respect to the revision of Annex A. The work was mainly focused on the harmonisation of the common data requirements of the electronic systems for declaration, notifications, and proof of the customs status of Union goods. The related activities were completed with the adoption of a draft version of the new Annex A data elements table that will be further analysed in 2022, in parallel with the adoption of the revised Annex B of UCC DA and UCC IA. The amendment of Annex A will be drafted in alignment with the UCC GUM system, as it is indirectly connected to Annex A through its impact on the level of authorisations and the CGU authorisation in particular, which is encompassed by the CDS system. To this end, a collaborative work between the CDS-GUM project group and the CEG-DIH was initiated in 2021. Other activities of the CEG-DIH included the update of the EU Customs Data Model (EUCDM) guidance document on the newest amendments of the Annex B resulting from the change management procedure.

In September 2021 Commissioner Gentiloni appointed the “Wise Persons Group on Challenges Facing the Customs Union” (WPG) with the primary role to reflect on the development of innovative ideas and concepts and deliver a report by Spring 2022 that contributes to a general inter-institutional debate on the future of the Customs Union. Immediately following its inception, the Group worked in actively identify ideas for customs reforms that would benefit the EU Member States, the EU as a whole, and society at large. Furthermore, the WPG kept the Member States and the Commission regularly briefed about the progress of its work with a focus on e-commerce and risk management, as well as being informed on the work being carried out by existing project groups and subgroups, and studies such as the foresight exercise on “The Future of Customs in the EU 2040.”

#### Key elements

- In 2021, the CPG expert group activities included discussions on the optimum recovery for the Traditional Own Resources (TOR) and the Joint Analytic Capabilities (JAC).
- Preparations for the Vision Document for the Import of Cultural Goods continued in 2021 and were finalised in June 2021, with its version 1.5 being approved.
- Two Working Groups (legal and IT) on the digitalisation of proofs of preferential origin certificates (e-PoC) in the Pan-Euro-Mediterranean (PEM) area was established and initiated its work on 28 April 2021.
- In September 2021, a Wise Persons Group (CPG) was established and initiated its work.

#### 4.10 Supporting Instruments

The Business Process Modelling (BPM) policy is considered an essential instrument for the EU Customs Union in addressing the need for a higher level of uniformity and harmonisation, thus enhancing efficiency. Given the complex business environment of EU customs, the BPMs aim at enhancing the common understanding of the customs process flows and of the practical implications of their implementation. As such, the enhancement of the BPM policy remains a paramount objective for the e-Customs architecture. During 2021, the external review of the Level 1 to Level 4 BPMs for the third release of the re-engineered EU CSW-CERTEX was finalised and communicated to Member States for information. In addition, the DUES domain was migrated on the re-



engineered BPM of the EU CSW-CERTEX for Release 3. Concurrently, updates were delivered for the UCC INF for Special Procedures, the UCC CCI, UCC CDS-GUM, and the UCC PoUS projects, as well as for the Import of Cultural Goods eLicensing and CGM system. The relevant updates are elaborated in the corresponding project fiches under [Annex 1](#) of the present report.

ARIS and ARIS Publisher is a software tool designed to facilitate the development and continuous improvement of the EU Customs BPMs. All EU Customs BPMs are available to the Member States and economic operators via the ARIS Business Publisher. Over the course of 2021, the ARIS Platform and ARIS Publisher achieved 99.9% availability rate for both systems in production and conformance testing. 1,589 new models were created in the TAXUD design and 154 models in TAXUD implementation, reaching a total number of 20,163 models. The total number of ARIS users is 720, including Member States, economic operators, and Commission staff. 10 “MSexportDB” services were provided for delivering BPM content to national authorities of three Member States. 80 publications of BPMs were created for the Member States and DG TAXUD, which represents an increase of 29,03% on this type of service, compared to 2020.

Indispensable to the efficient functioning of the e-Customs architecture is data exchange. The objective is for trans-European IT systems and national customs clearance systems to be based on the EU Custom Data Model (EUCDM). The EUCDM serves as a technical instrument that models the data requirements laid down in the EU Customs legislation and presents a single and genuine source of information for the technical developments of the different IT systems that are used for data processing by customs in the European Union. Besides the legal data requirements for customs data, the EUCDM also contains the mapping of the EUCDM data elements against the World Customs Organisation (WCO) Data Model (version 10), thus allowing the understanding of the EU legal requirements for the international community of customs professionals. Throughout 2021, the EUCDM was updated several times resulting in the current version 6.1. Published in December 2021, Release 2 (R2)<sup>72</sup> was based on the revised Annex B to the UCC DA and to the UCC IA, including all datasets. Annex C of the UCC DA and UCC IA, Annex D of the UCC DA and Annex 21-03 of the UCC IA are integrated in EUCDM v6.1 R2. In addition to all the updates, it has also been noted that the number of visits to the platform and the usage of the EUCDM platform increased by 17,56% during 2021 in comparison to 2020. The total number of pages visited in 2021 was 535,368 compared to 417,504 in 2020. Similarly, the EUCDM average monthly visitors increased from 1,480.33 in 2020 to 1,834.50 in 2021.

In 2021, the Commission continued supporting the electronic exchange of information through the Common Communication Network/Common System Interface (CCN/CSI) and the CCN product services, which achieved a 99.99% availability rate in production. DG TAXUD offered operational management, maintenance, support and services for 49 CCN sites in 36 countries. The high rate of availability supported a traffic volume of more than 79,68 terabytes (TBs) of data between January and December 2021, or the equivalent of more than 10,038 million messages exchanged. Traffic volume and number of exchanged messages both increased between 2020 and 2021, by 38% and 19.9%, respectively. In parallel with the ongoing operation of CCN/CSI, the Commission continued to develop infrastructure enhancements under the CCN2 project.

Equally important for the support of information exchange are diverse tools employed by the Commission to ensure the efficient coordination of the e-Customs projects and the effective collaboration between the Member States and the Commission. The Programmes Information and Collaboration Space (PICS) and the Communication and Information Resource Centre for Administrations, Businesses and Citizens (CIRCABC) are invaluable communication tools, designed to facilitate the flow of information.

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<sup>72</sup> [EU Customs Data Model \(EUCDM\)](#).

is an online working platform used by Customs 2021-2027 programme activities, which supports the exchange of information between the Member States and the Commission. CIRCABC is a web-based application developed by the Commission to share information and resources in workspaces over the web to Member States and other stakeholders.

The Customs Control Equipment Instrument (CCEI) established with the Customs 2021-2027 programme is a policy and financial instrument managed by DG TAXUD. CCEI aims to provide financial support to the customs authorities of the 27 Member States for the purchase, upgrade and maintenance of reliable and state-of-the-art Customs Control Equipment (CCE) that is secure, safe, cyber-resilient and environmentally friendly. According to the Regulation (EU) 2021/1077<sup>73</sup> adopted on 24 June 2021, the CCEI budget will be spent via the provision of dedicated equipment grants to the customs authorities of the Member States who will procure the specialised equipment, related services from the equipment manufactures and/or service providers, making them important external stakeholders to the CCEI programme. The adoption of the first CCEI Multi Annual Work Programme for the period 2021-2022 and the launch of the CCEI call for proposals followed in October 2021. Member States are expected to develop and submit proposals for the financial support received by CCEI, while the Commission is expected to sign respective grant agreements and proceed with the initial pre-financing payments by the end of 2022. Additionally, in November 2021, a dedicated information session was organised by the Commission to present to equipment manufacturers and service providers the policy vision behind the CCEI and discuss the way forward towards the implementation of the instrument. Several bilateral meetings with equipment manufacturers and service providers also took place in November 2021 to help the companies present their products and features relevant to the CCEI. All the companies participating in the information session and the bilateral exchanges were registered in the EU Transparency Register<sup>74</sup>.

The Register of Commission Expert Groups and other similar entities<sup>75</sup> is further enhancing communication and further reaffirming the Commission's commitment to the transparency principle. The Register, which is publicly accessible, provides information on the diverse expert groups, which contribute to the preparation of legislative proposals by the Commission and the implementation of EU legislation. The mission of each expert group as well as information related to the expert groups' activities are included in the Register.

Taking into consideration the need for further modernisation in the collaboration between the Member States and the Commission, the use of Microsoft Teams and WebEx platforms continued acquiring significant growth in 2021. Particularly, Microsoft Teams became the main platform of communication with the Member States, hosting several meetings and serving as a forum for discussion, exchange of opinions and ideas, and sharing files within the activities of the various project groups. In light of the challenges posed by the continuation of the COVID-19 pandemic and the unceasing need for online meetings, the Commission continued the endeavour of enhancing the cooperation with the Member States.

In addition to the tools and instruments employed by the Commission to support the digital transition of the EU Customs Union, DG TAXUD implemented an active training and capacity building programme during the year of 2021. More than 285 eLearning

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<sup>73</sup> Regulation (EU) 2021/1077 of the European Parliament and of the Council of 24 June 2021 establishing, as part of the Integrated Border Management Fund, the instrument for financial support for customs control equipment, [OJ L 234, 2.7.2021, p. 1–17](#).

<sup>74</sup> [Transparency register | European Commission \(europa.eu\)](#).

<sup>75</sup> [Register of Commission Expert Groups and Other Similar Entities](#).

courses<sup>76</sup> were available to users from Member States and Customs 2021-2027 participating countries in several languages. As depicted in **Figure 4** below, a survey on EU Customs Training activities conducted in 2021 showed that 384,696 customs professionals were trained with EU eLearning courses during the reporting year.



**Figure 4: Professionals trained with EU eLearning portfolio**

Furthermore, the English and localised versions of the eLearning courses available at the EUROPA website have been used to train more than 1.2 million professionals, including customs officers and representatives from the private sector. However, a decrease of 31,66% in the overall number of downloads from EUROPA website has been observed in 2021 compared to 2020. The quality of the eLearning courses was indicated by final users, who expressed an overall satisfaction with the customs eLearning services, with an average score of 74,7 out of 100 (according to the principles of Kirkpatrick<sup>77</sup>). The significance of the training possibilities offered is highlighted by the fact that the national administrations have integrated the EU eLearning portfolio as part of their national training. DG TAXUD intends to continue focusing on the localisation of the training courses in the various official EU languages under the 'Centralised Localisation' scheme, thus responding to the increasing requests from the national administrations.

#### Key elements

- The ARIS tool achieved 99.9% availability for systems in production and conformance testing.
- EUCDM was updated to version 6.1 Release2, which was published in December 2021.
- The total number of visits to the EUCDM platform in 2021 was 56,028, leading to an increase of 17,56% in comparison to 2020.
- In 2021, more than 10,038 million messages were exchanged through the Common Communication Network/Common System Interface (CCN/CSI).
- The Customs Control Equipment Instrument (CCEI) was established with the Customs programme 2021-2027 as a policy and financial instrument managed by DG TAXUD.

<sup>76</sup> All data regarding training activities is based on the DG TAXUD's training report accessible via Access to Documents procedure.

<sup>77</sup> **Kirkpatrick Learning Model:** D. Kirkpatrick's four levels of training evaluation is the most widely used training evaluation model in the world. A focus of this program is the exploration of how to ensure that what is learned transfers to on-the-job behaviours. According to Kirkpatrick, evaluations of the effectiveness of any employee learning process, should follow four steps: reaction, learning, behaviour and results.

- 384,696 customs officials were trained with EU eLearning courses in 2021.
- Throughout 2021, the English and localised versions of the eLearning courses available at the EUROPA website have been used to train more than 1.2 million professionals, including customs officers and representatives from the private sector.

#### 4.11 VAT e-Commerce

The Value Added Tax (VAT) e-Commerce package entered into force on 1 July 2021<sup>78</sup>, introducing several changes to the VAT rules on cross-border business-to-consumer (B2C)<sup>79</sup> e-Commerce activities. The rationale for these changes was to overcome the barriers to cross-border online sales and address challenges arising from the VAT regimes for distance sales of goods and the importation of low value consignments. The introduction of the VAT e-commerce package was smooth, without major operational problems.

Under the new rules, the VAT exemption at importation of small consignments of a value up to EUR 22 was abolished, making all goods imported in the EU a subject to VAT. Similarly, a new special scheme, the Import One-Stop Shop (IOSS)<sup>80</sup>, was created to simplify the declaration and payment of VAT, for distance sales of low goods imported from third territories or countries. Finally, simplification measures for distance sales of imported goods in consignments not exceeding EUR 150 was introduced, in cases of special arrangements, where the IOSS would not be used.

A High-Level Seminar under the SI Presidency, which brought together DGs of Member States' customs administrations with representatives of the Wise Persons Group and private e-Commerce stakeholders<sup>81</sup>, was launched in October 2021. The aforesaid seminar aimed at sharing the first experiences regarding the new VAT e-Commerce rules, addressing the main challenges of e-Commerce, and discussing possible solutions to pave the way towards a more digitalised EU. The High-Level Seminar addressed three main subjects, namely the increased tasks for customs administrations under the new VAT e-Commerce rules, the impact of these new obligations on customs working processes and customs controls, and the cooperation with other authorities to exchange information at national and international level, as a potential solution that could be integrated into the e-Commerce project.

The outcome of the seminar confirmed the need to improve cooperation between Member States and third countries' customs authorities and the Commission. Moreover, the seminar accentuated the importance of improving data quality by initiating actions on different levels, continuing the communication campaign to raise awareness of operators and consumers at national and international level, especially at the WCO and Universal Postal Union (UPU). Further conclusions included the need to work towards a

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<sup>78</sup> The VAT e-Commerce package became applicable to all 27 Member States, and the Northern Ireland.

<sup>79</sup> Business-to-consumer (B2C) is an Internet and electronic commerce (e-Commerce) model that denotes a financial transaction or online sale between a business and consumer. B2C involves a service or product exchange from a business to a consumer, whereby merchants sell products to consumers.

<sup>80</sup> The Import One-Stop-Shop (IOSS) is a scheme that facilitates the import into the EU of goods of a value of EUR 150 or less. The previous VAT exemption threshold of EUR 22 no longer applies: VAT is due on all imported goods and should be charged to customers at the time of sale. With the IOSS scheme, Not Established Taxable Persons (NETP) benefit from a simplified import procedure for faster imports, and a single monthly VAT return filing for all their imports into the EU. Besides that, customers do not need to pay any additional import fees or import VAT, which improves their overall experience. Both non-EU and EU sellers who import into the EU can register for IOSS; for EU businesses, they can register in their home country, while non-EU sellers need to appoint an intermediary.

<sup>81</sup> Slovenian Post, DHL Express and Amazon.

harmonised and effective implementation of customs and VAT legislation at EU level, in line with the new policy for the digital economy.

Preparations for a draft assessment report on the VAT e-Commerce system were also initiated during 2021. The aforesaid report is expected to be finalised and released in January 2022, leading to a more comprehensive analysis of the VAT e-Commerce package after six months of application of the rules. In this respect, Member States' tax and customs administrations will be required to reply to a targeted questionnaire through an EU survey.

#### Key elements

- On 1 July 2021, the Value Added Tax (VAT) e-Commerce system entered in operations.
- The launch of the VAT e-commerce package was smooth, without major operational problems.
- A High-Level Seminar under the SI Presidency was launched on 13 October 2021 to share the first experiences with the new VAT e-commerce rules, address the main challenges of e-Commerce and discuss possible solutions to pave the way towards a more digitalised EU.

#### 4.12 IT Modernisation and Security

The EU's Customs Union is the foundation of the Single Market, providing revenues for the EU budget, facilitating trade, and protecting citizens and businesses from unsafe and illegal goods. The COVID-19 pandemic has also highlighted the importance of EU customs in assisting Member States in times of crisis. However, EU customs faces major challenges. The volume, complexity, and speed of trade has grown, and business models and supply chains have evolved for a digital age. In addition, the COVID-19 crisis accentuated the need for customs to remain agile and reactive to effectively respond to future emergencies. On this basis, since 2020, an IT modernisation programme has been focusing on the improvement of the IT service provided to the Member States, as well as to internal stakeholders. This endeavour complements the upgrades of the systems and infrastructure, as defined in the IT strategy of Annex 5<sup>82</sup> of MASP-C, with the necessary reusable architecture components and with modern, agile, and flexible software development approaches.

The IT modernisation programme aims to allow Member States and DG TAXUD to reduce the time-to-operation for new and upgraded systems, increase flexibility in addressing new challenges and remain relevant from a technological standpoint in today's IT market. DG TAXUD's Directorate B is having a lead role and is closely involved in the management of this programme in an effort to ensure coherence in its implementation. Throughout 2021, the IT modernisation programme continued to be divided into five tracks, with each track addressing different IT related objectives:

- Track 1: IT governance, programme and project management;
- Track 2: IT architecture and infrastructure;
- Track 3: IT service continuity;
- Track 4: Agile software development;
- Track 5: Development, Security and Operations (DevSecOps).

<sup>82</sup> [IT strategy – MASP-C Annex 5 Revision 2019](#).



Track 1 touches upon horizontal governance, programme, and project management activities. Those activities include the change of the traditional project management methodology into PM<sup>2</sup> <sup>(83)</sup>, which is a Commission-wide methodology, harmonisation of project templates and progress reporting, streamlining of quality assurance processes, and implementation of comprehensive information security and data protection strategies. Track 2 concerns the IT architecture and infrastructure, as set out in MASP-C fiche 4.7. More specifically, Track 2 aims at the implementation of all architecture and infrastructure layers that are required for the deployment and operation of central services by 2022 for the trans-European systems to be highly available, flexible, and secure. In this context, Track 2 relates to various platforms, such as the SPEED2ng or the CCN2ng, Gold service level, optimised infrastructure, cloud evolution, and technical debt reduction. Track 3 aims to address the objectives outlined in the MASP-C fiche 4.9, the DG TAXUD's IT Business Continuity Management System (IT BCMS) initiated in 2018, and the business objectives and priorities of the Customs community by raising the maturity of processes, organisation, standards, and guidelines to adequate levels. In particular, this is to be achieved through the update of various crucial IT BCMS documents, such as the IT Business Continuity Plan (BCP), the Disaster Recovery (DR) Plans, and the negotiation of new Service Level Agreements (SLAs) to support the new Gold service level.

Agile software development is the focus of Track 4. To reduce time-to-market, costs, and risks of obsolescence, the development teams from DG TAXUD and the Member States need to embrace the agile software development approach where justifiable, in addition to reviewing the application lifecycle management and the usage of a common reference architecture (CoRA). Unlocking the benefits of a modern architecture and infrastructure, DevSecOps, which consists, among others, of infrastructure as Code (IaC) and centralised continuous delivery, is the key enabler to drastically reduce delays and to shorten implementation and deployment of services. As described under track 5, key DevSecOps capabilities are being built to improve the efficiency and effectiveness of its end-to-end Software Development Life Cycle (SDLC). The objective is to foster a collaborative culture between development and operations contractors across the application and infrastructure landscape. Additionally, particular emphasis is given to embedding security aspects throughout the process.

2021 marked significant progress towards implementing the IT modernisation programme, which triggered a revision of DG TAXUD's strategies and vision, as well as their alignment with Commission's corporate instances. The focus was placed especially on four vital strategies:

- The strategy for cloud;
- The strategy for the CCN;
- DG TAXUD's vision for DevSecOps;
- DG TAXUD security posture and cybersecurity strategy.

The Commission organised weekly IT Modernisation Tracks synchronisation meetings, in close collaboration with pertinent units and departments. Specifically, in pursuance of the objectives defined in Track 1, significant progress was achieved towards the adoption of the corporate standard PM<sup>2</sup> project management methodology by DG TAXUD's IT project and business managers. On this basis, during 2021, project templates and progress reporting were harmonised by the development teams, streamlining of quality assurance processes was initiated, and updates on the IT security and data protection plans were performed. DG TAXUD participated in the first revamped IT security awareness training in March 2021. Further collaboration with the Local Information

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<sup>83</sup> [About the PM<sup>2</sup> methodology | PM<sup>2</sup> Project Management Methodology \(europa.eu\)](#).

Security Officer (LISO) led to the enhancement of the IT risk management strategy, the integration of IT Security Risk Management (ITSRM) v.2 methodology, and the development of DG TAXUD IT Security Strategy. In addition, the Commission devoted a substantial amount of work to identifying a methodology and designing a data collection tool to enable analytical IT cost accounting on a more comprehensive level.

In relation to Track 2, during 2021, progress was accomplished on the implementation of a strategy for the use of cloud services and the selection of components for the containerisation infrastructure. Further emphasis was placed on the revision of the inventory of Configuration Items (CIs), the identification of existing data assets, and the management of data in an adequate manner.

Substantial progress was also achieved in Track 3, especially pertained to the introduction of the Gold service level. In particular, in 2021, the Commission initiated thorough discussions regarding the scope of the activities for a Gold service enablement. In the last quarter of 2021, Gold service on infrastructure level was proven (network done, middleware & database layer already working for some to-be gold systems), and the development units were able to start adapting their information systems to make full use of the Gold service. The aforesaid service level is foreseen as of the third quarter of 2022 and aims to provide a 99.8% information system availability, increasing significantly the existing Bronze and Silver services with the availability of 99.4% and 99.6%, respectively. In support of the IT service continuity, SPEED2ng and CCN2 Platforms went live in February 2021. To maintain the achievement of the objectives outlined in Track 3, DG TAXUD closely collaborated with the Member States and DG DIGIT.

Concurrently, the agile methodology mentioned in Track 4 was used by several Member States throughout 2021, to help reduce the implementation timeframe of the UCC IT systems. DG TAXUD IT project managers continued participating in several training activities related to the Commission's corporate PM<sup>2</sup> Agile methodology.

Subsequent to the objectives set in Track 5, over the course of 2021, the preparatory work of the SOFT-DEV framework contract initiated jointly with DG DIGIT led to the release of the Application Lifecycle Management platform (ALM) to support the management of customs and taxation projects, following an update of DIGIT-TAXUD Memorandum of Understanding (MoU). The acceptance of the platform, the confirmation of its tools, and the purchase of the respective licences was successfully completed in the beginning of 2021. In parallel, all DG TAXUD's applications were moved to the ALM platform, in view of its development as the central DG TAXUD platform by 2022. Simultaneously, a pilot project for the DevSecOps platform was initiated to automate and orchestrate the continuous application delivery pipelines, as well as migrate projects to it. Finally, a Competence Centre dedicated to DevSecOps was installed.

Throughout 2021, the IT modernisation programme also introduced a transversal activity related to IT security, which marked notable advancement. Particularly, DG TAXUD assessed its security posture based on the SANS Institute<sup>84</sup>, with a result of three out of five on the maturity level. Consequently, DG TAXUD's Directorate B identified the areas with the utmost impact and proposed two axes to increase the overall IT security posture maturity. Firstly, thirteen cybersecurity projects<sup>85</sup> for areas such as infrastructure,

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<sup>84</sup> [SANS Institute | Cyber Security Europe \(cseurope.info\)](https://www.cseurope.info/).

<sup>85</sup> (1) Security Devices optimisation, (2) e-mail protection (servers and platforms), (3) Generic Web Application Firewall (WAF) in blocking mode for all critical platforms facing Internet, (4) Privileged Identity Management (PIM) across all platforms, (5) Security Awareness training, (6) Security Dashboard (SD) for a short-term period and Governance Risk and Compliance (GRC-ServiceNow) software for long-term period, (7) Security Operations Centre (SOC), (8) External Rapid Response team while building a SOC, (9) Vulnerability Management System & Services, (10) EDP/R for all nodes (corporate alignment), (11) yearly Security Risk Posture review, (12) central Public Key Infrastructure (PKI) management for all platforms, and (13) Data Loss Prevention analysis and implementation.

business application products or services were identified, while seven<sup>86</sup> of these projects were launched and progressed throughout 2021. Secondly, the risk management is to be improved by adopting the corporate ITSRM2 and revising the IT Security Plans of TAXUD's information systems. To this end, a three-phase plan was prepared. The initial phase is expected to be finalised in 2022, including the completion of 36 IT Security Plans.

Lastly, DG TAXUD has continued its participation in the Digital Solutions Modernisation plan, its contribution to the Data Platform sub-cluster, and its collaboration in the context of EU ACCESS project, specifically with DG TAXUD's user authentication and authorisation component, leading to the evolution of UUM&DS and further convergence to common components. DG TAXUD also supported the corporate Reusable Solutions Platform (RSP), including the adoption of SERV4DEV in addition to the Cloud. Moreover, DG TAXUD closely collaborated with DG DIGIT for the set-up of the Dual-Pillar approach, leading to its endorsement by the IT and Cybersecurity Board of the Commission.

#### Key elements

- Throughout 2021, the Commission organised weekly IT Modernisation Tracks synchronisation meetings, in close collaboration with pertinent units and departments.
- In the last quarter of 2021, Gold service on infrastructure level was proven.
- Following the preparatory work of the SOFT-DEV framework contract jointly with DG DIGIT, and an update of DIGIT-TAXUD Memorandum of Understanding, the Application Lifecycle Management platform (ALM) was released to support the management of Customs and Taxation projects.
- In 2021, the IT modernisation programme introduced a transversal activity related to IT security.
- Throughout 2021, seven out of thirteen cybersecurity projects were launched and progressed.

### 4.13 IT Business Continuity Management System (IT BCMS)

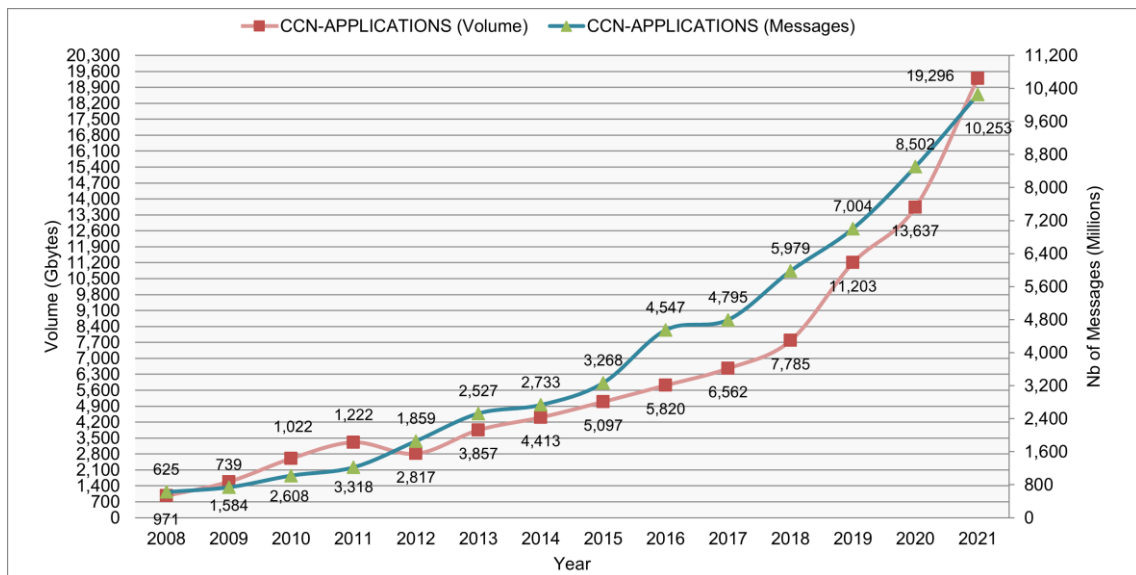
IT business continuity focused on IT service continuity in support and alignment with the overarching business continuity. The objective was to ensure that DG TAXUD investments in preparedness in the preceding years were effectively reflected in recoverability when required, in alignment with its business aims and priorities. In this respect, the IT Business Continuity Management System (IT BCMS) has been aligned with all other existing levels of business continuity management arrangements and considered all the inter-dependencies within the Commission complex ecosystem to effectively meet its stakeholders' IT service continuity needs.

Following the recommendations made on the IT BCMS revamping Phase II, the revamping of DG TAXUD's IT BCMS Phase III project was initiated in summer 2020 and finalised in March 2021. The aim of the third phase was to further raise the overall maturity of the system through the review, refresh and standardisation of the new Availability and Continuity Service levels as adopted in Phase II and the continuous

<sup>86</sup> (1) Security Devices optimisation, (2) Privileged Identity Management (PIM) across all platforms, (3) Security Awareness training, (4) Security Dashboard (SD) for a short-term period and Governance Risk and Compliance (GRC-ServiceNow) software for long-term period, (5) Security Operations Centre (SOC), (6) Vulnerability Management System & Services, and (7) central PKI management for all platforms.

update of various crucial IT BCMS documents, such as the IT Business Impact Analysis and Risk Assessment, the IT Business Continuity and Crisis Management Plans and the Disaster Recovery Plans.

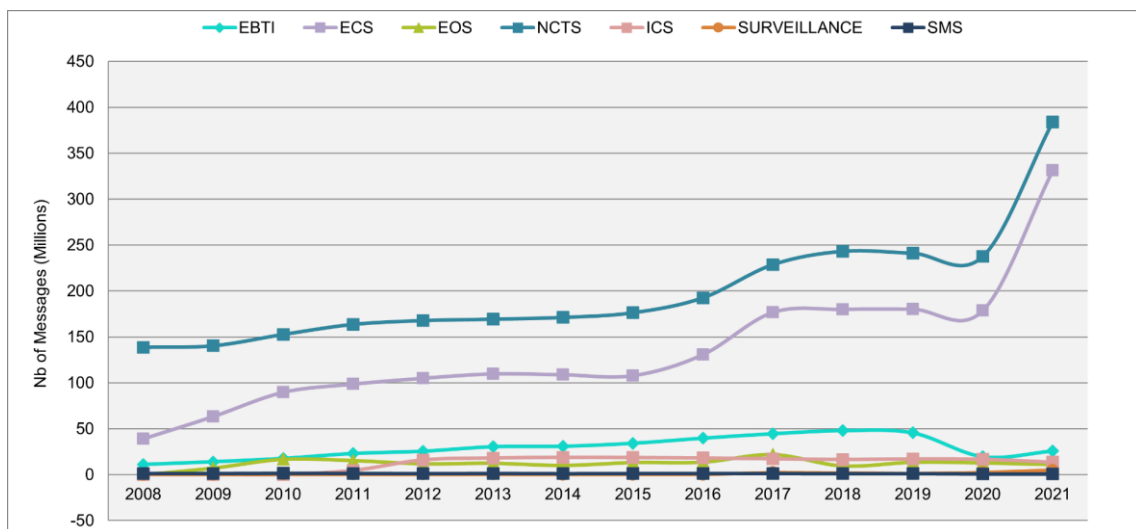
DG TAXUD monitors business continuity in terms of the performance of core customs IT systems and infrastructure. One of the current measurements of the performance of the business continuity of the IT systems is indicated via the Common Communication Network (CCN), which experienced noteworthy growth during 2021. The CCN applications exchanged more than 10.2 billion messages during the year, with an increase of 20.6% compared to 2020, when 8.5 billion messages were exchanged. This increase in the quantity of messages exchanged has coincided with a volume growth of 41.91%, from 13.6 TBs in 2020 to 19.3 TBs in 2021. **Figure 5** below illustrates the evolution of CCN message quantities and volume exchanged since 2008.



**Figure 5: Evolution of CCN message quantities/volume**

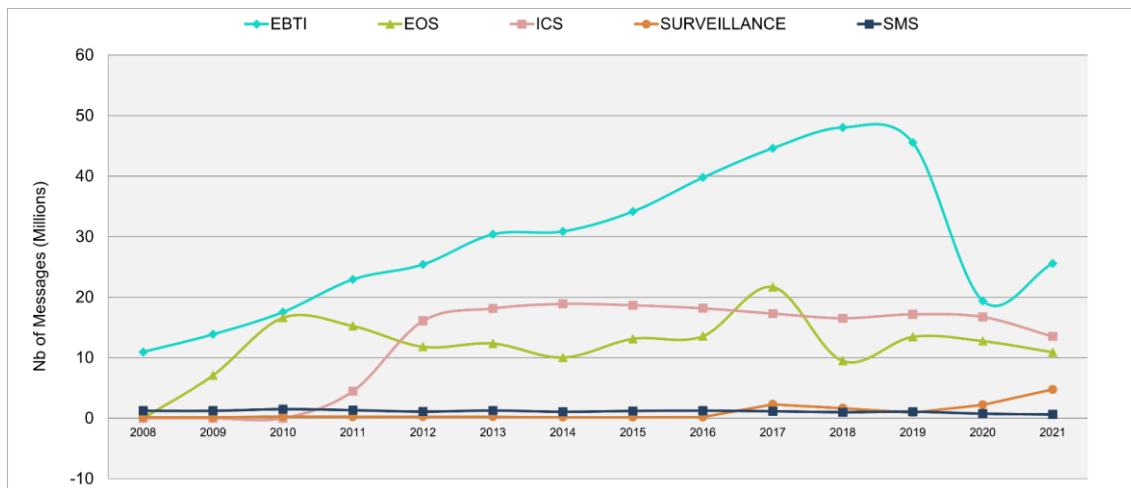
**Figure 6** and **Figure 7** depict the progress of the exchanged message quantities since 2008 for the European Binding Tariff Information (EBTI), Export Control System (ECS), Economic Operators System (EOS), New Computerised Transit System (NCTS), Import Control System (ICS), Surveillance, and Specimen Management System (SMS) projects.

Specifically, as depicted in the **Figure 6** below, in comparison to 2020, a considerable increase was observed for ECS (85.41%) and NCTS (61.71%) during 2021.



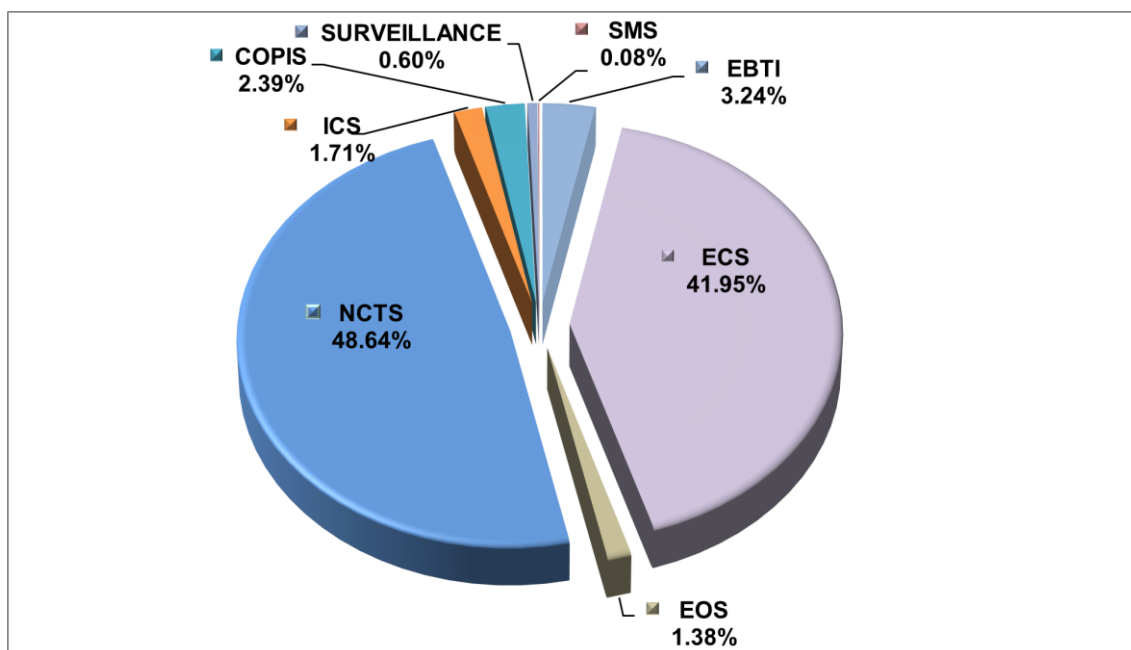
**Figure 6: Evolution of exchanged messages for specific systems**

In addition, an increase was also observed for Surveillance (115.39%) and EBTI (31.85%), whereas ICS (19.29%), EOS (14.43%), and SMS (17.05%), experienced some decrease, as illustrated in **Figure 7**.



**Figure 7: Evolution of exchanged messages for specific systems**

In 2021, more than 2 billion messages were exchanged on the key European electronic systems. **Figure 8** presents the distribution of messages exchanged per system (EBTI, ECS, EOS, NCTS, ICS, COPIS, Surveillance and SMS). The quantity of messages exchanged by the movement systems, such as NCTS, ECS, and ICS represents 92.30% of the total number of messages exchanged by all systems, compared with 88.88% in 2020. As noted, there was a 3.86% increase between 2020 and 2021 in the percentage of the messages exchanged, with a notable part used by the TES systems.



**Figure 8: CCN messages distribution per system**

**Key elements**

- The revamping of DG TAXUD’s IT BCMS Phase III project initiated in 2020 was finalised in March 2021.



- The CCN applications exchanged more than 10.2 billion messages during 2021, with an increase of 20.6% compared to 2020.
- The increase in the quantity of messages exchanged has coincided with a volume growth of 41.91%, from 13.6 TBs in 2020 to 19.3 TBs in 2021.
- In 2021, more than 2 billion messages were exchanged on the key European electronic systems.

#### 4.14 Service Level Agreement (SLA) and Terms of Collaboration (ToC)

Service Level Agreement (SLA) and Terms of Collaboration (ToC) documents define the rights and obligations of all parties, and the success of the Customs TES depends upon their proper implementation. All national administrations must ensure that their SLAs are consistent with the ToC. The documents are prepared by the Commission and adopted by the Member States.

The Security Plan is part of the SLA and ToC documentation package, and its review is planned every two years during the last quarter. The Member States accepted the SLA and ToC in June 2020, while in March 2021 the Commission presented the customs TES ToC and SLA Security Plan for approval by the ECCG members. The Security Plan was also shared with the UK for approval by written procedure, while the countries preparing for accession (especially to the Common Transit Convention) were invited to consider and verify the Security Plan and apply the defined security measures. The SLA and ToC are composed of several other documents, which are the ToC for Customs TES, ToC for Single Portal for Entry or Exit of Data (SPEED), SLA for Service Desk, SLA Availability Management, Service Catalogue, Guidelines for National Service Desks (NSDs), Capacity Plan, and Availability Plan.

Out of the 25 reporting Member States, only 10 (BG, EE, IE, HU, AT, PL, SI, SK, FI, and SE) reported an impact on the delivery model. Six of them (EE, IE, HU, AT, SK, and SE) informed that no impact was brought to their delivery model from the 2020 ECCG approved e-Customs SLA. Two Member States (BG and SI) reported that they are not in a position to give information about the impact.

BG is not in a position to analyse the impact. However, BG dedicated internal and external capacities to implement the SLA and the delivery of the ToC capabilities.

SI reported ongoing investigation on possible impact.

Only two Member States (PL and FI) reported an impact on their work after the 2020 approved SLA and ToC, in contrast with the corresponding 2017 versions. PL dedicated internal and external capacities to implement the SLA and the delivery of ToC capabilities. PL took part in the trainings related to the NCTS-P5 and the SLA. Moreover, PL informed that the delivery of SLA and ToC capabilities for NCTS-P5 and the remaining TES under MASP-C is included in a framework contract of 2021. The aforesaid contract has been signed between the Ministry of Finance and a consortium of Polish IT companies which were involved in the previous years in the design and delivery of Poland's IT TES.

FI informed that the capacity requirements for the infrastructure and IT systems increased because of e-Commerce and ICS2. Specifically, the required analysis, updates of IT systems and the numerous installations and testing led to extra costs.

EE reported that compared to the 2017 SLA, the 2020 SLA did not bring any substantial costs to the delivery model. Additionally, EE informed that while they did not organise special supporting activities for SLA actions, all the necessary activities for the development project were carried out.

IE informed that UCC Change Management Unit (UCC CMU) has provided as much assistance as possible for Customs officials in relation to the implementation of the Automated Import System (AIS) and continue to do so where necessary.

#### Key elements

- The Member States accepted the SLA and ToC in June 2020. In addition, the TES SLA and ToC Security Plan was approved in 2021.
- In 2021, out of the 10 Member States that reported on the impact of SLA and ToC on their delivery model, only two informed that there was an impact in their delivery model while six reported that there was no impact.

### 4.15 Innovative Technology Solutions

In 2021, the Commission continued its efforts on the Blockchain@TAXUD initiative to explore the possible use of blockchain technology in the context of e-Customs and taxation policies. More specifically, DG TAXUD closely collaborated with DG DIGIT and DG CNECT with the view to evaluate whether the European Blockchain Services Infrastructure (EBSI) could be a suitable platform to build next-generation decentralised TES, starting with the IOSS. This decentralised version of the IOSS Distributed Registry (IOSS-DR) will enable national customs and taxation administrations to share VAT identifiers used in the context of the import scheme, in a trusted manner and without the operational involvement of the Commission. Furthermore, it will facilitate the transition towards more complex decentralised systems and “smart contracts” based on common trusted data. In cooperation with DG DIGIT’s EBSI technical office, DG TAXUD successfully implemented a Proof of Concept (PoC) leveraging the EBSI. In addition, DG CNECT’s team of legal experts helped DG TAXUD perform a data protection impact assessment in order to ensure that the proposed architecture will not raise issues with respect to the General Data Protection Regulation (GDPR). Lastly, the Joint Research Centre (JRC) security expert team contributed to the identification of the required technical and operational security measures.

Throughout 2021, DG TAXUD continued its consideration of additional innovative technology solutions, with a strong focus on data. Data is at the heart of DG TAXUD’s emphasis on shaping policies to support the design of modern and interoperable electronic systems. As such, DG TAXUD and the Member States’ customs administrations have always been at the forefront of data harmonisation and of the compliance with international standards.

Responding to the Commission’s strategic intent to become a data-driven organisation, DG TAXUD issued a document already at the end of 2019 presenting the DG TAXUD Data Strategy as a means to maximise the value from data assets while remaining in alignment with the Commission Data Strategy<sup>87</sup>. This data strategy is intended to facilitate data exploitation, as well as the integration of the data in the daily operations of the organisation. Such a strategy is deemed essential in order to deal with data in an efficient and effective manner. Within this context, people, data value and tools have been identified as the key enabling factors of DG TAXUD’s data strategy. Particular emphasis has been placed on the operationalisation of the right roles to manage and exploit data as well as on the identification of existing data assets and the management of data in an adequate manner. Further to this, the creation of a Data Lab has been considered as a possible effective tool for exploiting data. Setting up the proper Data Governance and providing a platform that will facilitate data usage through analytical

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<sup>87</sup> [European Data Governance Act](#).

tools can support DG TAXUD towards the achievement of the objectives set by the Commission with regards to data driven policy making.

In 2021, DG TAXUD marked a remarkable progress towards the creation of a Data Lab, laying the foundation for a central data platform that will be used to distribute data across the organisation. DG TAXUD deals with a large amount of data related to the establishment and facilitation of customs procedures and the development and implementation of policies and legislation, among others. Creating a single data platform, where all this information is accessible to everyone, is vital for any data-driven organisation and contributes substantially to maximising the value of the data. Moreover, the Data Lab provides the required data analytical tools, equips staff in a data analyst position with the right tools, and offers computing resources in terms of storage, processing, and memory. Data can be uploaded, easily accessible, shared, and processed, with full compliance of the personal data protection legislation and principles. To this effect, the activities for the creation of the aforesaid platform continued in 2021 and are expected to be finalised in the first quarter of 2022.

The main objective of establishing such platform is to enforce a data architecture that promotes good governance, re-usage of resources and minimisation of errors. Specifically, Data Lab aims at allowing the consolidation of data assets in a single data environment to facilitate performance and strategic analysis, creating a computing environment to support policy officers in the policy making lifecycle, such as the design, impact assessment, monitoring, and evaluation, raising the data literacy of the service to make it a relevant partner for Member States in data-intensive policy initiatives, and contributing to the ambition of creating and disseminating relevant open data for the EU citizens on Customs and Taxation. To further support the initiative and the aforesaid objectives, in 2021 a data programme was put in place to facilitate the request for new data assets in the Data Lab, whereby the governance of the platform and of data assets respects the legal basis, information security policy and data protection regulation.

#### Key element

- In 2021, a data programme was put in place to facilitate the request for new data assets in the Data Lab.

### 4.16 The Recovery and Resilience Facility

The COVID-19 crisis presented Europe with a challenge of historic proportions. The European Union and its Member States had to adopt emergency measures to preserve the health of the citizens and prevent a collapse of the economy. The considerable impact of this COVID-19 outbreak, both from a social and an economic perspective, required an unprecedented effort and an innovative approach to foster convergence, resilience and transformation in the European Union. Therefore, the pandemic led the Commission, the Parliament, and the EU leaders to agree upon a recovery plan with the objective to alleviate the consequential damage and to pave the way towards a more sustainable EU. The Recovery and Resilience Facility (RRF) is the centrepiece of NextGenerationEU (NGEU), the temporary instrument designed to boost this recovery, and it aims to provide financial support for reforms and investments undertaken by the Member States. This financial support, in the form of grants and loans, serves a two-fold objective: to help Member States mitigate the economic repercussions of the pandemic and to make the EU economies and societies more resilient and better prepared for the emerging challenges in view of the green and digital transitions.

Following the adoption of the Regulation (EU) 2021/241<sup>88</sup> of the European Parliament and of the Council of 12 February 2021, the RRF entered into force in February 2021 and the fund became accessible to the Member States. This led to the necessity to define a methodology for reporting social expenditure. To this end, on 1 December 2021, the Delegated Regulation (EU) 2021/2105<sup>89</sup> entered into force to supplement the aforesaid Regulation.

Over the course of 2021, the Commission worked on a document that would provide Member States with a detailed explanation of how to address the challenges identified in the country-specific recommendations. The objective of this document was to assist the Member States with the preparation of their national recovery and resilience plans (RRPs). As a result, in 2021, 26 Member States<sup>90</sup> submitted their draft national RRP, most of which were successfully endorsed and funded.

DG TAXUD participated actively in the RRF exercise, and when required, the Customs Country Desk Team (CCDT) supported the finalisation of Member States' RRP, participating at bilateral meetings with the relevant stakeholders and providing elements to relevant DGs to progress on the validation of RRP milestones, including Customs aspects and consequent funding. Concomitantly, the Commission launched various discussions with Member States to agree on operational arrangements, which set the framework for monitoring the plans' implementation. The RRF has entered in the implementation phase, progressing quickly according to the timeline of reforms and investments set by the Member States, with the first payment request fully processed in 2021. The progress in the implementation of the plans can be followed live on a platform, the 'Recovery and Resilience Scoreboard'<sup>91</sup>, set up by the Commission in December 2021. The Scoreboard website contains dedicated sections on the fulfilment of milestones and targets, as well as RRF disbursements.

At the same time, to further support the Member States with the RRP's implementation, the Commission also launched a new call within the Technical Support Instrument (TSI) cycle in June 2021. The scope of this call was to provide Member States with technical support for the design or implementation of reform projects in 2022, including strategic and legal advice, studies, training, and expert visits on the ground. As regards the main objectives of the Customs Action Plan, DG TAXUD stipulated a number of notable proposals which required further consideration. On this basis, particular emphasis has been placed on the digitalisation of customs system (UCC IT implementation), the national single windows for customs and the risk assessment improvement. Additionally, Member States submitted requests for technical support in a broad range of areas, such as green and digital transition, diversity, public and private finance, migration, business environment, health, and education. Member States were also able to request technical support for the implementation of their RRP. In 2021, more than 140 projects contributed to carrying out the national RRP.

Throughout 2021, the Commission also started the necessary preparations for an initial report on the implementation of the RRF, with the objective of monitoring the performance of the RRF, considering the commitment to investments and reforms embedded in this unique instrument. The report is anticipated to be finalised by 2022. In this context, the information provided in the report will be based on the content of the

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<sup>88</sup> Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility, [OJ L 57, 18.2.2021, p. 17–75](#).

<sup>89</sup> Commission Delegated Regulation (EU) 2021/2105 of 28 September 2021 supplementing Regulation (EU) 2021/241 of the European Parliament and of the Council establishing the Recovery and Resilience Facility by defining a methodology for reporting social expenditure, [OJ L 429, 1.12.2021, p. 79–82](#).

<sup>90</sup> Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, and Sweden.

<sup>91</sup> [Recovery and Resilience Scoreboard \(europa.eu\)](#).

adopted plans, as assessed by the Commission, on the data reported by the Member States until November 2021 as part of their biannual reporting obligation, and on the progress of the implementation embedded in this unique instrument. The report is anticipated to be finalised by 2022. In this context, the information provided in the report will be based on the content of the adopted plans, as assessed by the Commission, on the data reported by the Member States until November 2021 as part of their biannual reporting obligation, and on the progress of the implementation of the RRF until the end of January 2022.

### Key elements

- Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility (RRF) was adopted on 18 February 2021 and the RRF entered into force on 19 February 2021.
- On 30 June 2021, a new call within the Technical Support Instrument (TSI) cycle was launched to provide capacity building support to the Member States for implementing their national recovery and resilience plans.
- On 1 December 2021, the Delegated Regulation (EU) 2021/2105 entered into force to supplement the Regulation (EU) 2021/241 of the European Parliament and of the Council establishing the Recovery and Resilience Facility by defining a methodology for reporting social expenditure.
- The Recovery and Resilience Scoreboard website was launched on 15 December 2021.



## 5. COSTS

### 5.1 Costs incurred by DG TAXUD on IT systems development in 2021

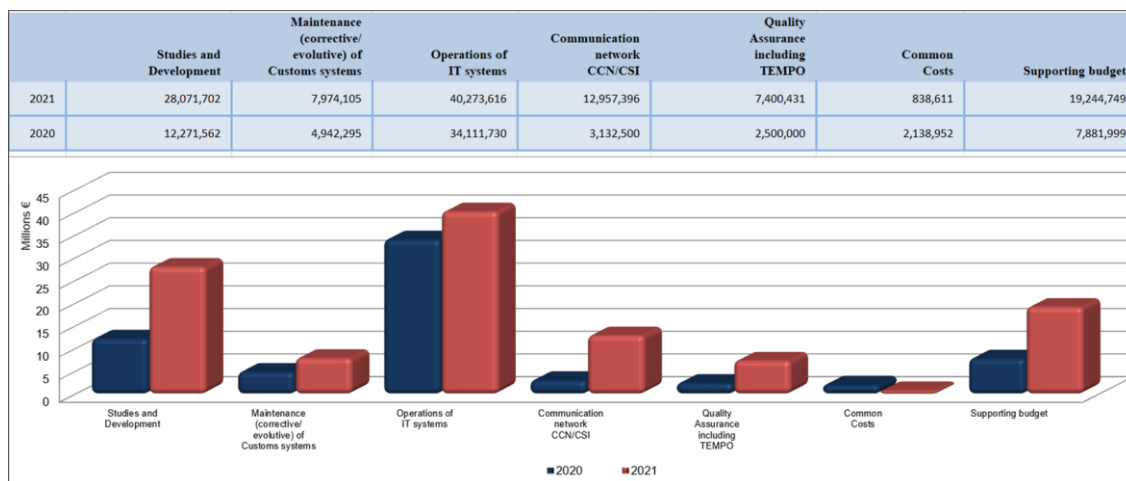
Figure 9 outlines the Commission's costs committed under the 2021 budget for IT system development and maintenance as well as customs coordination. The common Customs 2021 joint action budget pertains to participation costs in the programme events, such as the ECCG and the technical sub-group meetings.

System/Activity		Commission Committed budget for 2021 (EUR)	
Studies and Development projects	UCC Customs Decisions System (CDS)	2,350,000.00	
	UCC AEO and impacts of MRA	400,000.00	
	UCC Automated Export System (AES)	800,000.00	
	UCC New Computerised Transit System (NCTS)	1,950,000.00	
	UCC Registered Exporters (REX)	125,950.00	
	UCC Guarantee Management (GUM)	300,000.00	
	UCC Centralised Clearance for Import (CCI)	800,000.00	
	UCC Proof of Union Status (PoUS)	830,000.00	
	UCC Import Control System 2 (ICS2)	9,089,163.30	
	UCC Standardised Exchange of Information Special Procedures (INF SP)	100,000.00	
	<b>UCC project</b>		
	Import of Cultural Goods (ICG)	150,000.00	
	EU CSW- e-PoC	100,000.00	
	EU CSW- B2G	150,000.00	
	EU CSW- CERTEX	500,000.00	
	EU Single Window environment for customs (EU SW-C) other	400,000.00	
	<b>Single Window (EU SW-C)</b>		
	Central Services / Management Information System (CS/MIS2)	800,000.00	
	Classification Information System (CLASS)	281,000.00	
	Customs Union Performance (CUP-MIS)	400,000.00	
	anti-COunterfeit and anti-Piracy Information System (COPIS eAFA)	200,000.00	
	Customs Risk Management System (CRMS2)	700,000.00	
	VAT e-commerce	160,000.00	
	<b>Other Customs projects</b>		
	IT Architecture Customs	620,000.00	
	Conformance Test Application (CTA)	898,827.50	
	IE Conversion Application (ieCA)	650,000.00	
	ARIS (Modeler Publisher)	297,950.00	
	Collaboration with DG DIGIT	4,588,811.15	
	EUCDM (EU Customs Data Models)	380,000.00	
	Supporting Activities related to Business Process Modelling (BPM)	50,000.00	
	<b>Supporting Activities</b>		
<b>Studies and Development Subtotal:</b>		<b>28,071,701.95</b>	
Maintenance (corrective/evolutive) of Customs systems		7,974,105.32	
<b>Maintenance (corrective/evolutive) of Customs systems Subtotal:</b>		<b>7,974,105.32</b>	
Operations of IT systems		28,059,926.25	
Enterprise Architecture		2,210,383.67	
Specs Manager		100,000.00	
ALM		150,000.00	
IT Collaboration and Enterprise Architecture		100,000.00	
HW/SW maintenance		11,713,689.91	
DevSecOps/Containerization/Hybrid Cloud strategy		500,000.00	
<b>Operations of IT systems Subtotal:</b>		<b>42,833,999.83</b>	
Development and maintenance of the platforms		8,217,268.81	
ICS2 - Common Repository		360,000.00	
UUM&DS		1,820,000.00	
Intra-muros services		349,743.24	
<b>Communication network CCN2 Subtotal:</b>		<b>10,747,012.05</b>	
Quality Assurance including TEMPO		7,400,431.45	
<b>Quality Assurance including TEMPO Subtotal:</b>		<b>7,400,431.45</b>	
Common costs Customs 2021	E-customs joint actions - ECCG meetings	3,088.10	
	E-customs joint actions - Trainings	835,523.09	
<b>Common costs Customs 2021 Subtotal:</b>		<b>838,611.19</b>	
Intra-muros services		11,573,356.73	
Transeuropean systems support and management		7,050,000.00	
Contingency budget		500,000.00	
GEFEG licences for B1&CS2		121,392.68	
<b>Supporting budget Subtotal:</b>		<b>19,244,749.41</b>	
<b>EUR GRAND TOTAL</b>		<b>117,110,611.19</b>	

Figure 9: Commission's costs in year 2021 (expressed in EUR)

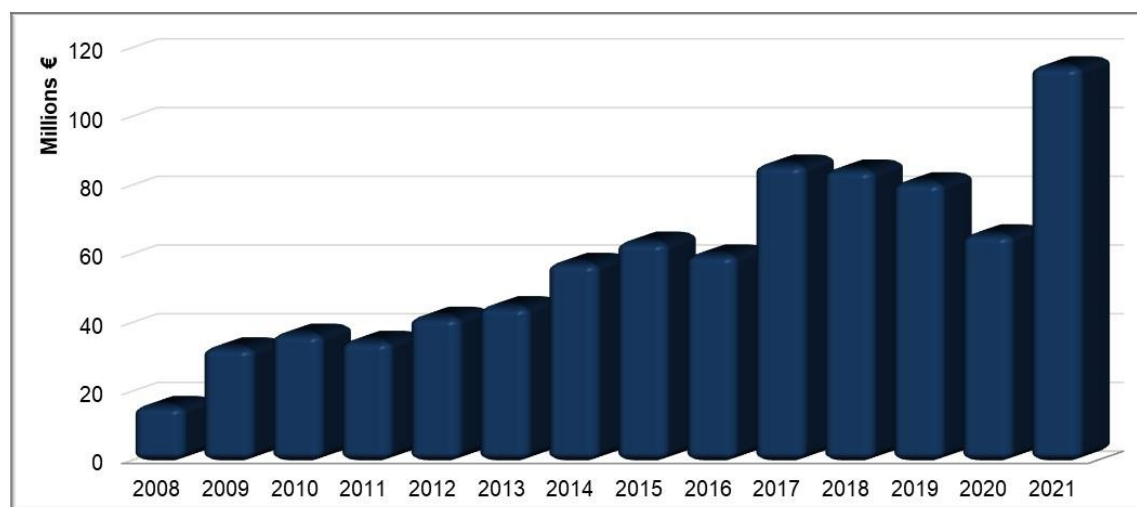
Other costs associated with IT training sessions under the Customs 2021 programme are also included in this category. A significant budget for ICS2 and for trans-European systems was committed during 2021. As detailed in **Figure 9**, the Commission’s 2021 costs for e-Customs have reached EUR 117,110,611.19.

As it can be observed in **Figure 10** below, this is principally due to the increase in the costs distributed to the category of studies and development (mainly owing to increase of the customs projects systems development costs and more specifically to ICS2 costs). A rise was also observed in the maintenance and operation of IT systems categories, which led to the enhancement of the systems’ operability and their improved performance.



**Figure 10: Main categories of the Commission costs in year 2020 and 2021**

**Figure 11** depicts the overall investment of the Commission in customs IT systems for the period 2008-2021. An incremental budget growth has been noticed throughout the years, especially in 2017, when several systems entered into operations. From 2017, there was a declining tendency until 2020. From 2021, with the new MFF, there was a greater opportunity for delivering systems and a significant surge was observed regarding the Commission IT costs. Specifically, in contrast with the overall costs allocated in 2020 (EUR 66,979,038.50), a substantial increase of 74.85% is observed in 2021.



**Figure 11: Commissions’ costs for customs IT systems, 2008-2021**

## 5.2 Costs incurred by the Member States in 2021

Total expenditures by the Member States on customs IT systems in 2021 were EUR **264,161,202.31**. **Figure 12** below illustrates Member States' investment per project according to the MASP-C Revision 2019, as reported in the national annual reports.

Following the structure and content-related transformations that took place during the MASP-C Revision 2019, Member States have reported on 31 projects.

According to **Figure 12**, the greatest share of the Member States' budget<sup>92</sup> in 2021 was consumed for the **UCC ICS2** (1.19) which constituted 22.80% of the total expenditure. This increase was due to the preparation of the Member States to develop and deploy the first phase of the import system (ICS2) by 2023 at the latest. The **e-Commerce & CP 42/63** (1.17) occupied the next largest expenditure, i.e., 16,95% of the overall expenses. Following in terms of considerable costs, are the maintenance<sup>93</sup> and updates of the operational IT systems (4.8) as well as the Adjustments of the existing import applications under the UCC (2.10), absorbing 12.95% and 9.95%, respectively.

For the rest of the UCC Projects, the **UCC AES** (1.6) and **UCC NCTS** (1.7) consumed from the overall expenditure 7.83% and 6.49% respectively, revealing the focus of the Member States towards the preparation of their National Transit and Export evolutive applications. The **non-MASP-C** projects accounted for 4,81% of the overall expenses, whereas the **SLA and ToC** absorbed 2,12% of the budget. The 'Other' projects utilised 5.23% of the budget, representing the effort of the Member States towards the development and maintenance of mainly the UCC AEO and impact of MRA (1.5), CCN2 (4.5), UCC EORI2 (1.15), UUM&DS (4.6), UCC INF SP (2.6), and COPIS (1.12), in decreasing percentage order.

In general, it is noticeable that the Member States minimised the allocation of their budget to upgrade their national systems to the new UCC requirements and focused more on the development of the new systems. This can be observed from the decrease in the maintenance costs as it has dropped by 3.43% of the overall budget in 2021 compared to 16,38% of the overall budget in 2020. The expenditure of the non-MASP-C Rev. 2019 projects (SLA and TOC costs included) holds an aggregate percentage of 6.92% of the total investment compared to 1.86% of total investment in 2020.

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<sup>92</sup> The data on budget amounts is imprecise due to the aggregated information received from some Member States.

<sup>93</sup> The reported cost on maintenance of the systems in operation since 2017 has been included under the Maintenance (4.8) project fiche.

## 2021 E-CUSTOMS ANNUAL PROGRESS REPORT

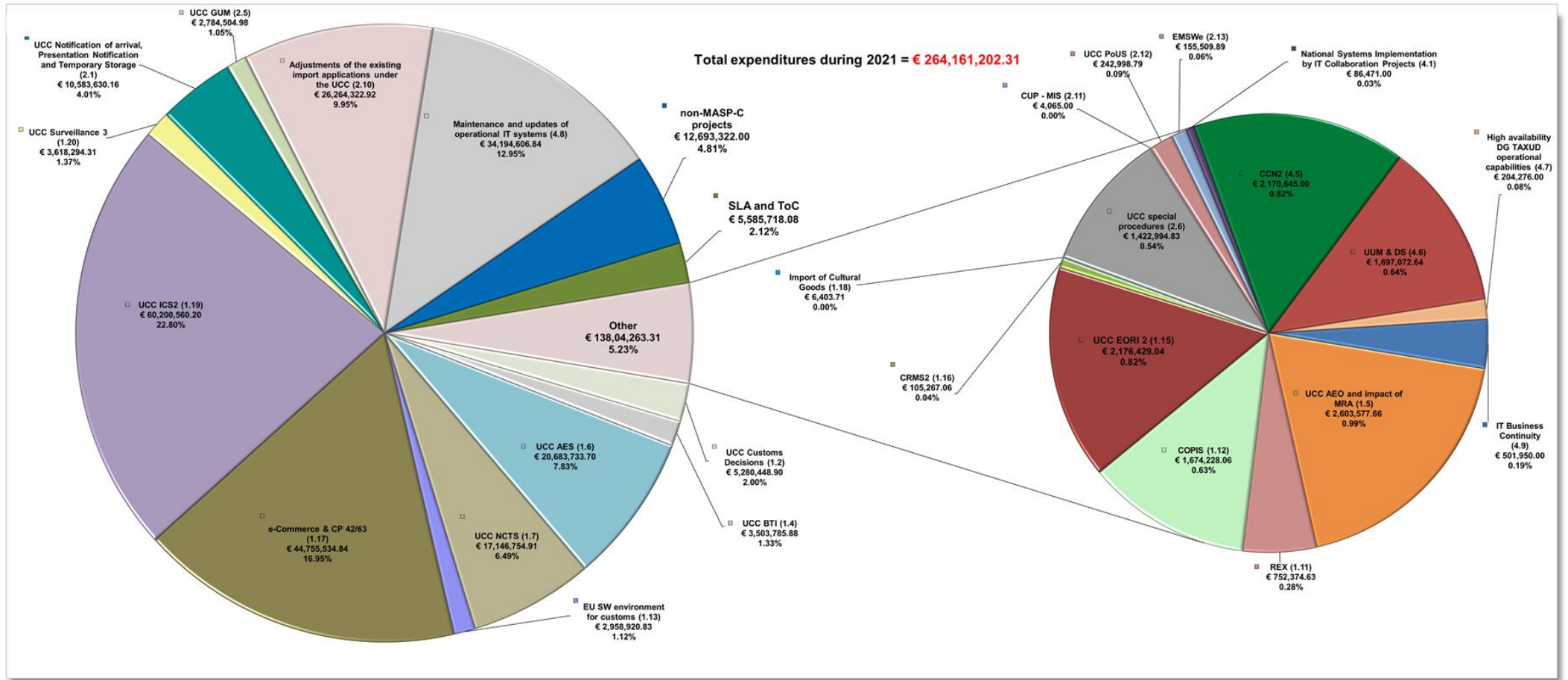
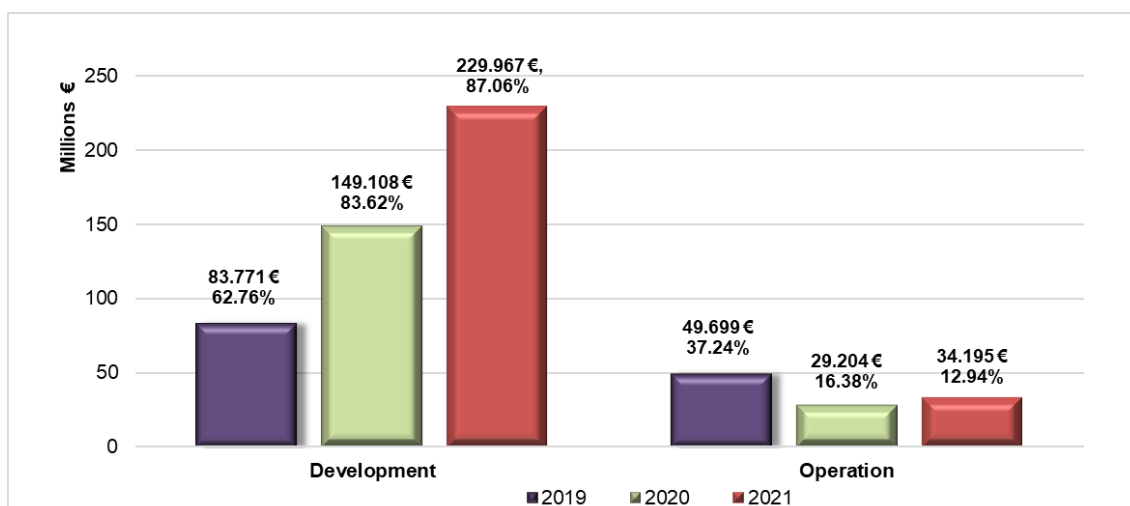


Figure 12: Member States' costs of customs IT systems in 2021

**Figure 13** shows the comparison between development of IT systems costs, and the operational costs, consuming 87.06% and 12,94% respectively, of the overall system expenditure reported in 2021. An increase of the percentage in the overall committed budget has been reported for the development of IT systems in 2021 compared to 2020 (87.06% versus 83.62%), which reconfirms the fact that Member States allocated a considerable part of their budget to the new systems development.

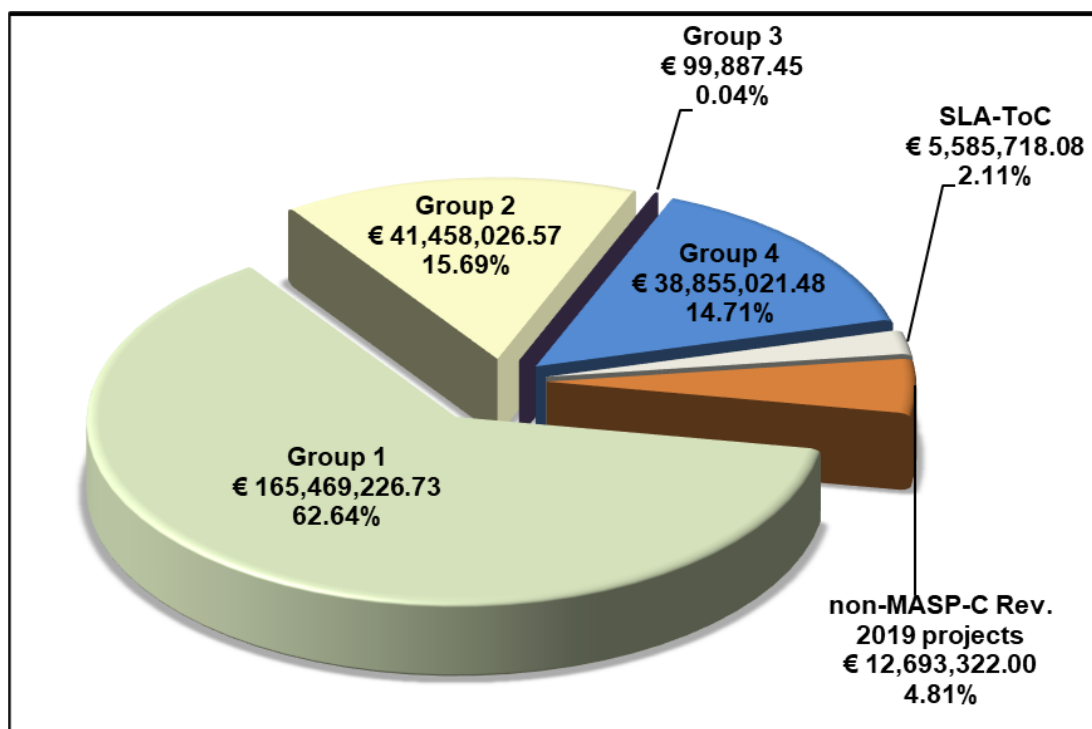


**Figure 13: Costs on IT systems in Operation and in Development as part of all systems in 2019-2021**

**Figure 14** depicts the accumulated cost of the MASP-C Rev. 2019 project groups, as well as non-MASP-C Rev. 2019 projects. Group 1 refers to the Customs European Information Systems (EIS), Group 2 relates to Customs European initiatives that require further analysis and agreement, Group 3 encompasses Customs International Information Systems, and lastly, Group 4 represents Customs cooperation initiatives and technological developments to facilitate Customs EIS, along with the maintenance of existing projects. The main budget consumption consisted of 62.64% absorbed by Group 1, followed by Group 2 with 15.69% and Group 4 with 14.71%.

In 2021, the focus of the Member States remained on the implementation and development of the Group 1 projects. As in 2020 and according to the UCC legislation, the Member States and the Commission had to deploy and put in operation a significant number of systems. Group 3 remained at the same level of the overall budget consumption for MASP-C groups in 2021 (0.04%) as in 2020 (0.01%) with a similar proportion of committed budget. In comparison with 2020, the Member States' distributed budget for non-MASP-C Rev. 2019 projects in 2021 was mainly consumed for the maintenance and upgrade of their national systems, marking a significant rise from 1.86% to 6.92% from the overall budget.





**Figure 14: Cost per MASP-C Revision 2019 Project Groups**

The following factors should be taken into consideration when analysing the cost figures reported by the Member States:

- The number of Member States that contributed budgetary information is not the same throughout the years. Since 2008, between 22 and 28 Member States have reported on their budget allocation, with the exception of 2011, when only 12 reports were received;
- Various development and implementation approaches adopted by the Member States resulted in diverse reporting for the project phases and/or costs associated to them (i.e., project progress, software/hardware costs). This expenditure is aggregated under the respective project as reported;
- Member States' national systems could have been developed on common platforms and thus the costs of numerous systems could then be reported under one reference baseline. Consequently, this affects the results and the accuracy of the data.

It is confirmed that the Member States reported less expenditures for the maintenance and the update of the operational IT systems in 2021. As depicted in **Figure 15**, the primary focus was directed to the development and implementation of the MASP-C projects, which accounted for 80.14% of the total expenditures on electronic systems, while maintenance costs consumed only 12.94% of the overall budget. Maintenance registered a decrease of 3.44% compared to 2020 (16.38% of the overall budget). In the same manner, Member States' cost for the non-MASP-C Rev. 2019 projects increased by 5.06% (1.86% of the overall budget in 2020) of the total expenditure. The 6.92% expenditure for non-MASP-C Rev. 2019 projects includes 2.11% costs for SLA and ToC.

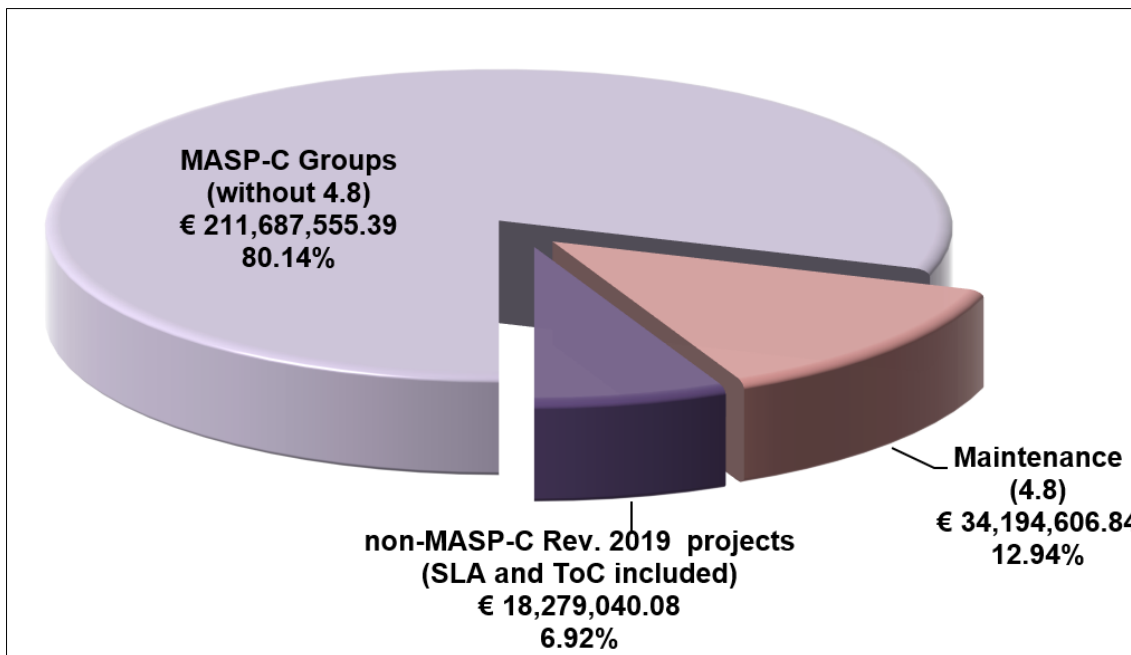


Figure 15: Distribution of Member States' expenditure

Figure 16 below presents the total investment of Member States in customs IT systems for the period 2008-2021<sup>94</sup>. The cited figures are not directly comparable due to the inconsistent number of Member States reporting over the years, which is respectively presented at the top of each bar for every year in which the data was collected. In addition, out of the total Member States that report each year, one or more do not submit costs reports. In 2021, one out of the 25 Member States did not report the costs.

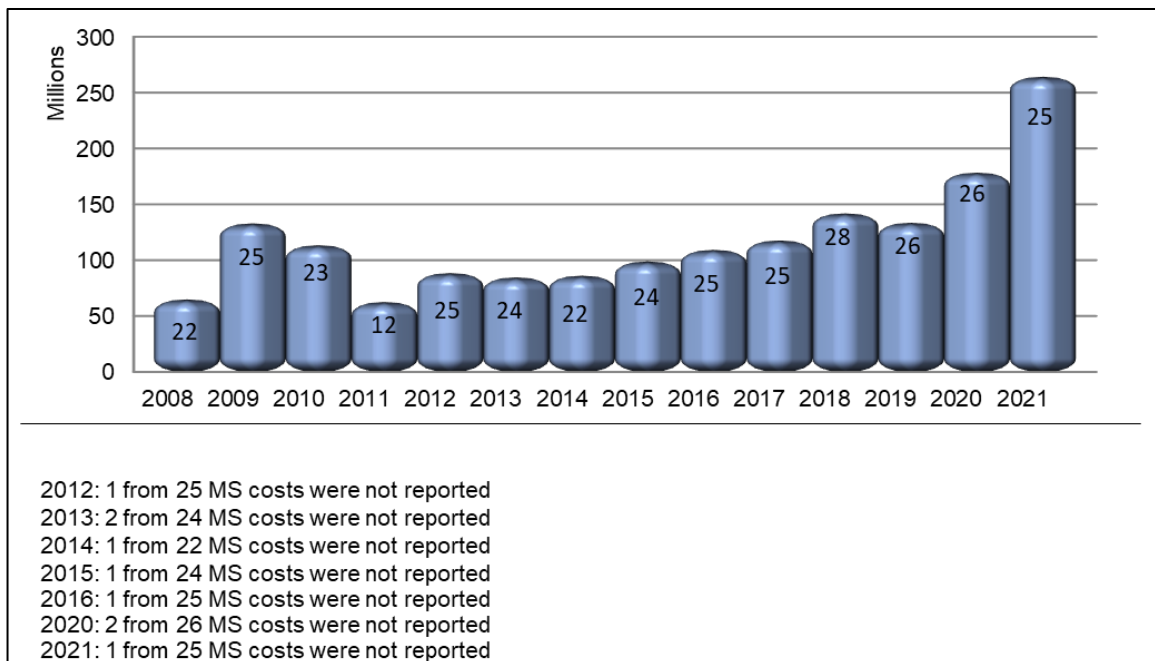
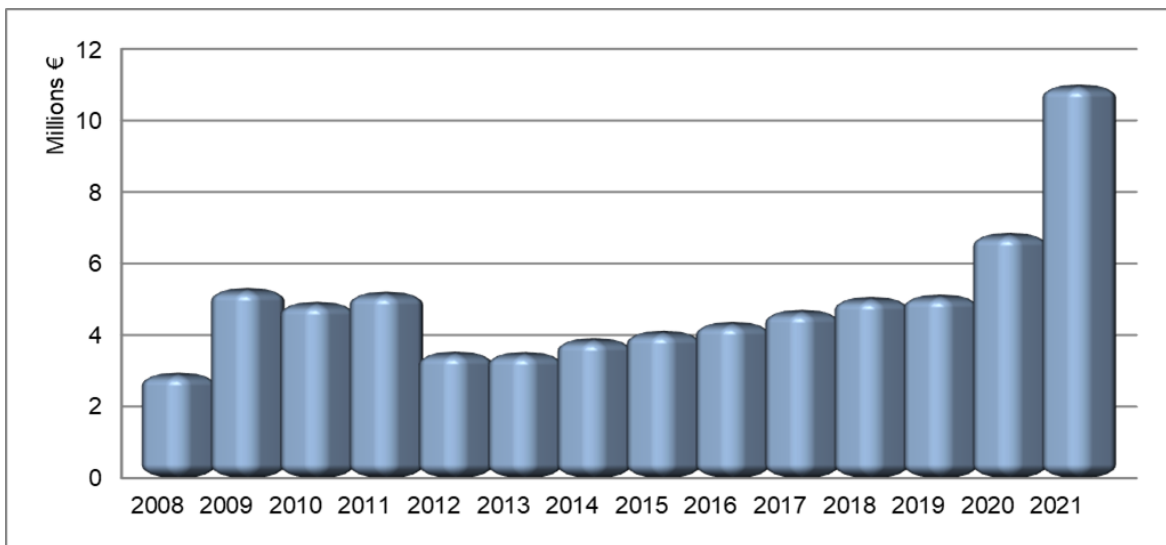


Figure 16: Member States' costs, 2008-2021

<sup>94</sup> As of 2013, the total number of the Member States is 28 and 27 as of 2021.

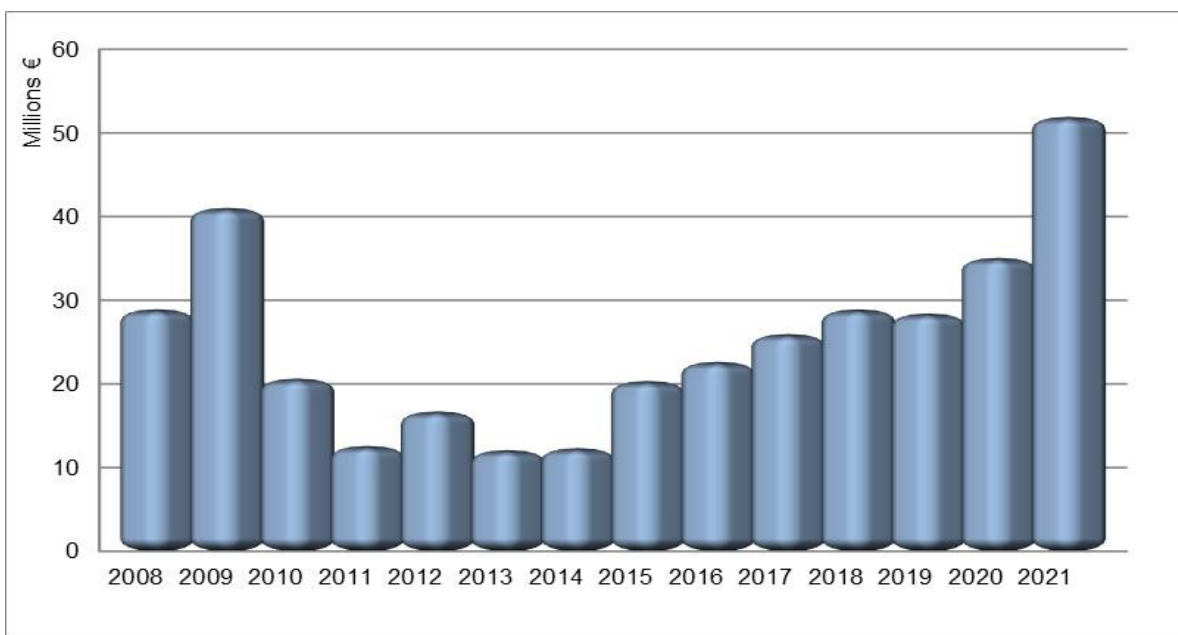
**Figure 17** outlines the average Member States' cost through the years 2008-2021. The total sum allocated by Member States for each year is divided by the number of the Member States that reported during this timeframe.



**Figure 17: Average Member States' costs, 2008-2021**

As shown in the figure above, the average Member States' dispensed cost has considerably increased by 48.14% in 2021 (average cost of EUR 11,006,716.76) compared to 2020 (average cost of EUR 7,429,690.58). As indicated in the graph, the total project expenditure dropped to its lowest levels (22.91%) in the period between 2012 and 2013. However, the average cost gradually increased during the past six years with a remarkable rise between 2019-2021.

This is also justified in the following **Figure 18**, which presents the total amounts utilised by seven Member States (LT, HU NL, PL, PT, FI, and SE) for the period 2008-2021.



**Figure 18: Total costs over the years 2008-2021 for 7<sup>95</sup> MS that reported in all years**

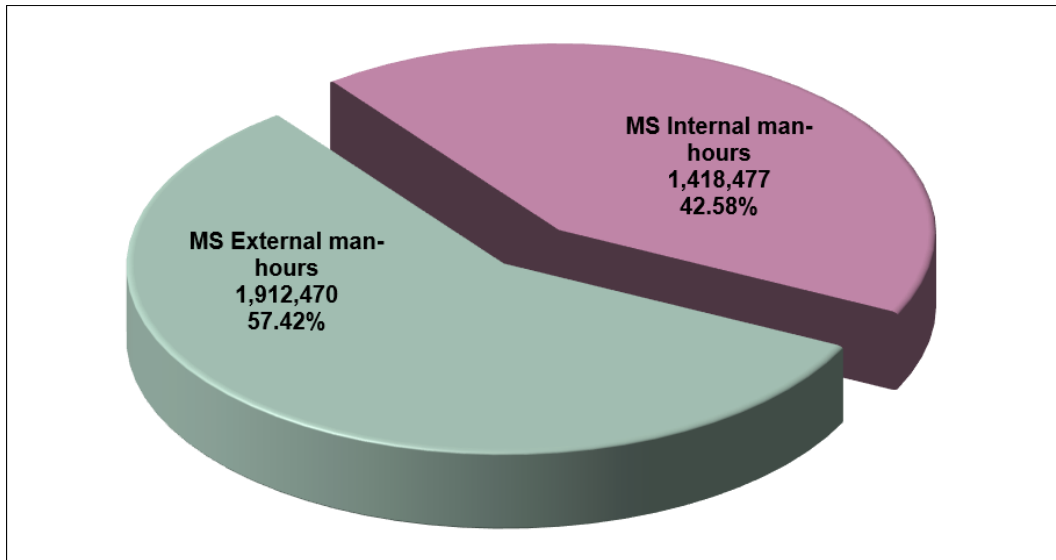
<sup>95</sup> The United Kingdom has been excluded from the graph due to its withdrawal from the European Union. For consistent comparison, the UK has been also removed from the previous years since 2008 as illustrated in the graph.

Moreover, Member States' consumption of man-hours is illustrated in the following **Figure 19** for each project of the MASP-C Revision 2019.





Based on **Figure 19**, the main proportion of the utilisation of man-hours in 2021 was the Maintenance and updates of operational IT systems (4.8), incorporating 20.54% of the total time spent. The UCC Projects UCC ICS2 (1.19), UCC AES (1.6), UCC NCTS (1.7) and Adjustments of the existing import applications under the UCC (2.10) had a great share of the man-hours during 2021 by consuming 15.87%, 8.29%, 7.45%, and 12.56%, respectively. The e-Commerce & CP42/63 (1.17) consumed a substantial share of the man-hours (13.25%) while the projects categorised under 'Other' projects consumed 5.76% of the overall man-hours during 2021. The man-hours for the non-MASP-C Rev. 2019 projects holds a percentage of 4.56% of the total man-hour budget.



**Figure 20: Member States' man-hours consumed in 2021**

**Figure 20** displays the man-hours that the Member States have allocated to all MASP-C projects in 2021. As depicted in the figure above, the internal man-hours (42.69%) of the projects' activities in 2021 were less than the external man-hours (57.31%). Compared with the internal and the external man-hours of the previous years (50.38% and 49.62% in 2020, 62.62% and 37.38% in 2019, respectively), the trend during 2019-2021 shows that Member States gradually assigned a greater part of the deployment and development of the systems externally in order to achieve the goals in MASP-C.

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## ANNEX 1 – IT SYSTEMS PROGRESS ACTIVITIES

### 1 MASP-C PROJECTS

The MASP-C is a living document evolving continually in response to the effective implementation of the Union Customs Code (UCC) and the e-Customs projects. This section summarises the efforts made by the Member States and the Commission in 2021 towards the implementation of MASP-C e-Customs projects and achievements thereunder.

#### 1.1 MASP-C Group 1 - Customs European Information Systems

##### 1.1.1 UCC Customs Decisions (1.2)

The UCC Customs Decisions System (CDS) allows the electronic processing and central storage of the applications and authorisations as well as publication of the list of holders on the internet. The central storage of the applications and authorisations allows the consultation and validation of Customs Decisions by the declaration systems and customs authorities in the Member States. The IT system facilitates the necessary consultations between Member States' customs authorities during the decision taking period and the management of the authorisations process. This system has been into operations since 2017.

Since the entry into operations in October 2017 and until mid-2021, approximately 39,600 applications were submitted, and 23,300 decisions were taken. In addition, more than 32,500 decisions were entered as pre-existing authorisations. The Business User Guide, which was updated in October 2020 and translated in all EU languages, was provided to the Member States for the linguistic validation of the translated versions in March 2021.

Since 2020, the discussions on the UCC Guarantee Management (GUM) project were incorporated in the UCC CDS group. The UCC CDS-GUM project group convened periodically throughout 2021 with the active contribution of customs experts from 20 Member States<sup>64</sup>. The goal was to discuss open business issues and potential improvements, as well as the amendment of the UCC Annex A in relation to the Deferred Payment (DPO) and Comprehensive Guarantee (CGU) authorisations, and the corresponding updates of the system. Further cooperation and consultation with the CEG-DIH took place on the change requests to Annexes A and B as an outcome of the CDS-GUM project group activities.

The Business Case on the "UCC CDS improvements" includes the integration of the UCC CDS within the EU Customs Trader Portal (EUCTP), the implementation of improvement initiatives coming from the project group, the implementation of the alignment of the system to the amendments of Annex A, and the connection with the GUM project. The aforesaid Business Case was accepted by the ECCG, Information Technology and Security Board (ITSB) and Information Technology and Cybersecurity Board (ITCB) as of July 2021. Additional developments in 2021 included the refinement of the Level 3 BPMs on GUM and adaptation of the Level 4 BPMs on CDS concerning GUM related business processes and data.

In 2021, each Member State continued having its own method of monitoring national guarantees, while having developed national systems to manage and oversee the "non-transit" guarantees. Some Member States, which already operated a Guarantee Management System, were adapting their national systems to the provisions of the UCC. On this basis, a need emerged to develop a central IT system that will assure the

effective and efficient management of the different guarantee types, while managing both the comprehensive guarantees that may be used in more than one Member State and the ones valid in one Member State. After considering several identified solutions, it was decided to proceed to a light implementation option and introduce two components. The central component (Component 1) and the national component (Component 2), whose communication is foreseen to be achieved through Customer Reference Services (CRS). While CDS already handles multi-Member States' CGU authorisations and applications, the central system approach was deemed more appropriate for this light implementation option. The CGU application and authorisation forms should be modified to cover the needs of GUM, while the required changes are derived from the Member States' proposals to amend the Annex A, submitted to the DIH Committee.

As UCC CDS is a hybrid system for both development<sup>96</sup> and operations<sup>97</sup>, the Member States can choose how to implement it in line with their preferences and national requirements. Therefore, most Member States (BG, DK, EE, IT, CY, LV, LT, LU, HU, MT, NL, PT, RO, SI, and SE) are using the centrally developed system, with ES and AT having developed their own national hybrid solution. The remaining Member States (BE, CZ, DE, IE, EL<sup>98</sup>, FR, HR, PL, SK, and FI) have adopted a different approach, using both central and national systems.

In 2021, the Member States informed about their status as 'In Progress' (BE, DK, DE, EL, FR, HR, IT, HU, MT, AT, PL, PT, SI, and FI) or 'Finished' (BG, CZ, EE, IE, ES, and SE). Concerning the current phase, the majority of the Member States reported being in operations (BE, BG, CZ, DK, DE, IE, EL, HR, IT, HU, AT, PT, SI, SK, and FI), in upgrade of the national system (EL), in deployment activities (MT and SE) or in national acceptance tests (FR and PL). EE and RO reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (CZ, DE, IT, and PL), maintenance (BE, CZ, DE, IE, HR, IT, HU, SI, SK, FI, and SE) and upgrades (CZ, DE, IE, ES, FR, HR, IT, HU, PL, SK, and SE). During the reporting year, some Member States communicated their preceding phase and indicated being in operation (DE and AT), designing their national system (PL), or being in upgrade of the national system (SI).

BG and DK are currently using the EU transnational systems and therefore, do not have a national CDS. CZ has updated their national Customs Decision (CD) application and reported the use of the CRS and CDMS web services in production for downloading authorisations. DE informed that the national ATLAS Release 9.1 entered in operations on 6 March 2021. EE performed testing activities for the national CDS system, developed a CRS system and attended the various meetings organised by the Commission. IE reported training activities and attendance at CDS Project Group meetings, as well as testing the new CDS releases to identify possible major enhancements for future upgrades. ES reported updates regarding improvement of the communication with the EU CDS. FR allowed to more national users access to the central system for issuing authorisations involving another Member States. HR informed that the project is in stable operation. HU reported testing new versions, handling issues, supporting economic operators and users, and participating in the relevant meetings.

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<sup>96</sup> Hybrid development refers to the development which gives MS the choice to either use the centrally developed and centrally operated system, or to develop and operate some of the components on their own national domain.

<sup>97</sup> Hybrid operation refers to the operation of a hybrid system. In these cases, central components coexist with national components operating in some or all MS.

<sup>98</sup> According to the [Interinstitutional Style Guide](#), EL is recommended as an ISO code for Greece and will be used throughout this document (instead of the ISO code GR). The former abbreviations (generally taken from the international code for automobiles) were used until the end of 2002.

IT experienced some problems related to the business issues and the misalignment between UCC CDS and the legal basis, which were solved with the deployment of UCC CDS v1.26 and v1.27 in operations. PL reported that in 2021 the national CDS system was built and it is preparing for deployment of the national system. EL informed that the interoperability functionality between national customs information system and the CDS has been implemented. AT progressed with early life support, bug fixing and implementation of change requests for CDS v1.24, analysis and implementation of changes in CDS v1.26, and operations of the national production system.

PL has developed the national CDS system in 2021 and is preparing for deployment. The CDS project is currently in procurement phase, and the contract will be signed by July 2022. PT informed entering in operations in 2021, while RO entered in the initiation phase, having finalised FSS and TSS in relation to CDS. SI's ongoing activities are focused on implementing national rules for utilising new versions of TP and CDMS (v1.26, v1.27 and v1.28). SK reported the use of the central CDMS system for multi-MS customs decision activities. LV, LT and NL have not reported activities on the project.

### **1.1.2 UCC Binding Tariff Information (UCC BTI) (1.4)**

UCC Binding Tariff Information is a decision issued by the customs administration that is binding on all Member States' customs administrations and on the holder of the decision. It makes use of a central system by which applications are submitted and UCC BTI decisions are issued. This system has been in operation since 2019.

During 2021, Phase 2 of the project, with both the EBTI Specific Trader Portal (EBTI-STP) and the EBTI Central System (EBTI-CS), were closely monitored and any identified issues were resolved with no delay. The EUCTP is used as a single-entry point for the traders.

In 2021, the Member States informed about their status as 'In Progress' (CZ, DK, DE, and FI), 'Finished' (BE, BG, EE, IE, FR, MT, PL, SI, and SE), or 'On Hold' (RO). Concerning the current phase, the majority of the Member States reported being in operations (BE, BG, DK, DE, IE, EL, HU, MT, PL, PT, SI, SK, FI, and SE), upgrade of the national system (CZ) or deployment activities (FR and SE). EE and RO reported status 'Other', with activities such as participating in the webinars organised by the Commission (EE) or the project being in the initiation phase (RO) with project activities planned to start in mid-2022 (RO). In addition, several Member States reported carrying out activities related to analysis and modelling (DE, ES, HR, and PL), maintenance (CZ, DE, HR, HU, PL, SK, FI, and SE) and upgrades (CZ, DE, PL, SK, FI, and SE). During the reporting year, CZ communicated being in deployment activities as their preceding phase.

BE, BG, DK, MT, and SK reported using the central system developed by the Commission, while BG and CZ receive and manage incidents from economic operators via their service desks using EU Specific Trader Portal for BTI (EBTI-STP). DK does not have a national BTI system and has identified system performance errors using EU transnational systems, for which development to meet legislation conformance is in progress. EE participated in monthly webinars. IE reviewed the arisen issues after testing, submitted the relevant change requests, and attended the monthly meetings organised by the Commission. ES performed several improvements in the national system after identifying some inconsistencies. HU reported planning new services at EU level. PL introduced necessary adjustments to the system at national level, thus improving electronic trader forms and adding parametrised analytical reports to the business intelligence module. SK reported using the central EBTI system and EUCTP

as of end of 2019 and performing maintenance and upgrade activities. EL, FR, IT, LV, LT, NL, and SI reported no major activities on the project

### 1.1.3 UCC AEO and impacts of MRA (1.5)

The UCC AEO system is a tool for the management of UCC AEO applications and authorisations and requires standard decisions taking processes to be applied to all customs decisions. The UCC AEO project covers four main components: Minor Enhancement, Major Enhancement, Direct Trader Access, and Mutual Recognition (MR) Enhancement.

Each of the components will be applied to the current UCC AEO system. The Minor Enhancement contains updates to the code lists managed in the Central Services – Reference Data 2 (CS/RD2) application and in the EOS-AEO applications' user interface. The Major Enhancement is needed for the alignment of the existing EOS-AEO system to the applicable UCC legislation. The Direct Trader Access allows data exchange between economic operators and customs authorities in a uniform and harmonised way and the Mutual Recognition Enhancement provides a standard interface for the UCC AEO data exchange with partner countries.

The first implementation of the UCC AEO system was related to Minor Enhancement and was completed in 2016, as planned. The second implementation was focused on the Major Enhancement and was finalised in 2018. Therefore, the current status of the project covers the two remaining components.

The activities for the EU UCC AEO Direct Trader Access continued in 2021 and were focused on monitoring and managing the eAEO-STP module, which has been in operation in two phases since 2019.

The UCC AEO Mutual Recognition Agreement (MRA) Enhancement component was already in production for China, Japan, Norway, Switzerland, and the United States of America. Business negotiations for an MRA with Canada have been set on hold since 2019, as there was no further reaction from the latter. Discussions between Hong Kong and the Commission for a possible MRA were also stopped and no legal agreement has been signed.

In 2021, AEO MRA negotiations with Türkiye were initiated and a related meeting between Türkiye and DG TAXUD's Directorate E was organised in March 2021. In April 2021, only one IT related call took place concerning the Interface Control Document (ICD) and the way the MRA exchange of data should be arranged. Nonetheless, the activities on the data exchange have not yet started. Similarly, the automated exchange of MRA data between UK and EU has been deployed in production since 13 December 2021.

In 2021, the Member States informed about their status as 'In Progress' (CZ, DK, DE, ES, HU, AT, PL, PT, FI, and SE) or 'Finished' (BE, BG, EE, IE, FR, MT, RO, and SI). Concerning the current phase, the majority of the Member States reported on various national activities related to being in operations (BE, BG, IE, ES, HU, MT, PT, SI, SK, and FI), upgrade of the national system (CZ, DK and DE) or deployment activities (FR). AT reported preparing the national Functional System Specifications (FSS) while PL carried out activities related to the national acceptance testing. The remaining Member States reported status 'Other', with activities such as participation in AEO webinars and eAEO/EOS translation (EE), as well as national language translation of the various eAEO and EOS labels and the eAEO-STP v1.4.0.0 manual (RO). Additionally, RO provided support to all the economic operators who encountered problems in using the eAEO-STP.



BG, CZ, DK, HR, CY, RO, and SK are currently using the central system developed by the Commission. BG uses AEO and the central Trade Portal eAEO-STP. CZ has gathered service cases including all identified issues to be addressed in future upgrades. DK is currently using the EU transnational systems and therefore does not have a national AEO system. DE carried out development and maintenance activities of AEO within the framework of the overall ATLAS-system. The national ATLAS Release 9.1 went in operation on 6 March 2021. The next changes will be in the next ATLAS Release 10.1, foreseen in March 2023. EE participated in AEO webinars organised by the Commission and prepared eAEO/EOS translation. IE analysed the documentation prepared by the Commission and provided proposals to the proper development from a business perspective. In addition, monitoring activity were reported to ensure correct use of the system. ES informed the use of a dedicated working group of experts to gather specifications aiming to develop a monitoring application. HR prepared and provided the translated labels for the system's UI. HU reported on activities related to testing the new system versions and the support of the national users and customs officials. AT reported working on national functional specifications for a national implementation of Self-Service Questionnaire and launched in production the central application (eAEO STP and EOS systems) in December 2021. PL prepared for deployment of the national AEO system and developed upgrades to address issues identified during national acceptance testing. PT reported that all operations as being external contracted services. RO reported supporting activities to economic operators on issues encountered while using the central eAEO-STP system. SK reported maintenance and upgrades activities during the current operation phase using AEO system and EUCTP. FI reported in operation phase using the eAEO portal. SE reported maintenance and upgrades activities as being in progress. EL, IT, LV, LT, and NL reported no activities on the project.

### **1.1.4 UCC Automated Export System (AES) (1.6)**

The UCC AES trans-European customs system aims at automating the completion of the export procedures (including re-export) and exit formalities covering common, national and external domains. Comprised of two components, the project entails implementing the UCC simplifications offered to trade to facilitate export of goods for the European companies. The first component relates to the 'trans-European AES', while the second component concerns the upgrade of the National Export Systems (NES).

The UCC AES-P1 was successfully deployed in March 2021 with DE being the first Member State to go live, opening the path to the next generation of interconnected trans-European Systems (TES) for the economic operators and the national customs authorities. On this basis, during 2021, the updated Functional System Specifications (FSS) have been initiated and a new package of updated BPMs was delivered for UCC AES-P1. Specifically, the updated Level 2-Level 3-Level 4 BPM/FSS package for UCC AES-P1 was approved by the ECCG in August 2021 and published in September 2021. Furthermore, the AES-P1 DDNXA 5.14.0 TSS have been approved by ECCG in May 2021, which include the Request for Change (RfC) List.33 and RfC-List.34 (emergency RfC-List) alignment to UCC Annex B latest updates.

The Commission also initiated several bilateral meetings with the Member States to enhance the monitoring of the project and assess IT continuous readiness for reducing delays in the development of the UCC AES. Within this context, the Commission accompanied each Member State individually to provide them with a seamless testing experience, speeding up their readiness and mitigating their technical risks. For the same purposes, several virtual meetings with the Member States took place at operational, middle, and senior management levels. Concomitantly, in the framework of the "National Administration Coordination Programme" the Commission continued to assist and

monitor the development and deployment of the national components for the UCC AES-P1 TES by the Member States. Having been already founded in 2019, the aforesaid programme has been proven instrumental to identify challenges in the deployment of the TES and maintain a high level of transparency on the progress of the Member States. On this basis, over the course of 2021, all national administrations confirmed or updated their National Project Plans (NPPs) and provided consolidated Risk Register reports to foster a collaborative culture between the Member States and the Commission, and ensure cost-effective allocation of resources during the development of the UCC AES TES, to meet the milestones of the UCC Work Programme. In 2021, the Commission also reported to the ECCG and CPG the ongoing progress of the Member States, providing the Key Performance Indicators (KPI) of the aggregated NPPs. A quarterly consolidated progress report of the transition of AES-P1 TES was issued by the Commission as from the first quarter of 2021.

Moreover, TAXUD's Information Exchange Converter Application (ieCA) system went in operation to facilitate the transition period by converting the exchanged messages in AES upon request from the legacy format to the UCC transitional format. In this context, a Real Time Exercise (RTE) was successfully performed from May to July 2021 for simulating the operational activities of the converter system. Additionally, a revision of the Security Plan applicable to AES-P1 started in 2021. To this end, a Security Measures Questionnaire and the Security Compliance Certificate were published in October 2021 to be completed by the National Project Managers (NPMs) and contribute to the evaluation of the overall implementation status of the Security Measures set in the Security Plan. Coordination meetings with the CEG-DIH, where the revision of the Business Continuity Procedure (BCP) for Export and Customs Control Equipment (CCE), and the preparation of the UCC AES Business Guidance were discussed, also took place in 2021. Parallel weekly meetings were held in view of the finalisation of the UCC AES Business Guidance, which was completed on 7 July 2021.

In 2021, the Member States informed about their status as 'In Progress' (BE, BG, CZ, DK, EE, IE, EL, ES, FR, HR, IT, LV, HU, MT, AT, PL, PT, RO, FI, and SE), 'Finished' (DE, LT and SI) or 'On hold' (SK). Concerning the current phase, several Member States reported being in design of the national system (BE, LV and HU), analysis of the national user requirements (BG, EL, SK, and SE), analysis of national functional specifications (LT), analysis of national technical specifications (PT), national acceptance testing (PL), deployment (IT), or operations (DE). RO is the only Member State who reported status 'Other' and is currently in the initiation phase. In addition, several Member States reported carrying out activities related to analysis and modelling (BE, BG, CZ, DK, DE, EE, IE, EL, FR, HR, AT, PL, SI, SK, FI, and SE), maintenance (DE and SI) and upgrades (CZ, DE, PL, and SI). During the reporting year, some Member States communicated their preceding phase and indicated being in operation (DE), in analysis of national technical specifications (DK), or national functional specifications (FI), designing their national system (ES and SI), or performing analysis of the national user requirements (FR).

BG participated in the review cycle for the UCC AES documentation. In addition, BG attended all webinars, workshops and training activities organised by the Commission. Lastly, BG completed the tender procedure and selected the IT provider for the UCC AES. CZ and RO focused on the finalisation of the national functional and technical specifications for their export system. DK established the system's infrastructure and initiated testing activities on the first releases. A sub-release of the national export system in DE covered the transformation of the existing rules and conditions using the ARIS-DMN notation. Moreover, DE focused their efforts on the completion of the software development regarding missing 'To-Be' processes and certain national

requirements, while continuing the national and international conformance testing activities for Mode 2. EE analysed and designed their national export system and connected to the CCN application.

EL performed analysis on the Level 4 BPMs, the common specifications, the national data requirements and listed the differences between the UCC AES and ECS. HR finalised the elaboration phase and initiated the construction of the project, deploying the main functionalities into a pre-production environment. LT prepared detailed functional specifications for the national export declarations management system, in accordance with the EU Customs Data Model (EUCDM). Besides attending all UCC AES meetings and analysing the relevant documentation prepared by the Commission, PL deployed the new National Export Control Application (NECA) which will be fully tested in 2021. SK created a detailed impact analysis of the system. FI engaged in diverse activities related to the different releases of their national import system.

### 1.1.5 UCC Transit System including NCTS (1.7)

The UCC NCTS Phase 5 project updated the NCTS Phase 4 system which automated the common and community transit procedure and controls the movements covered under the International Road Transports (TIR) procedure within the EU.

Activities on the UCC AES and UCC NCTS ran in parallel during 2021. As a result, NCTS-P5 went live in DE on 15 March 2021. In May 2021, the NCTS-P5 DDNTA 5.14.0 TSS have been approved by ECCG, which include the RfC-List.33 and the RfC-List.34 alignment to UCC Annex B latest updates. For both NCTS-P5 and AES-P1 projects, the main challenge was to ensure business continuity and smooth transition of the Member States and economic operators by December 2023, while applying significant changes in the applicable Data and Process models. On this basis, the national administrations approved a new set of specifications to cover the quality, technical support, business continuity, security and capacity of the AES-P1 and NCTS-P5 operations (Service Management, Service Level Agreement, Terms of Reference, Crisis management, Capacity Plan, Security Plan). Specifically, 2021 marked significant progress towards updating the FSS for NCTS-P5. Level 2-Level 3-Level 4 BPM/FSS for NCTS-P5 package was accepted in October 2021.

Additionally, a revision of the Transit Accompanying Document (TAD) and the Business Continuity Plan (BCP) in the context of the UCC NCTS-P5 deployment was discussed throughout 2021. To this end, in May 2021, the EU-Common Transit Convention (CTC) Working Group on Common Transit and the Simplification of Formalities in Trade in Goods was held to present the working documents on the TAD revision activities. Moreover, in October 2021, two TDA workshops were organised by the Commission with the participation of volunteer Member States and CTC countries to prepare and agree upon a new layout proposal for the TAD. The outcome of the workshops, as well as the Working Document for TAD were presented and discussed in several coordination meetings with the CEG-DIH and CCC-DIH.

In 2021, the Member States informed about their status as 'In Progress' (BE, BG, CZ, DK, EE, IE, EL, ES, HR, IT, LV, HU, MT, AT, PL, PT, RO, SI, FI, and SE), 'Finished' (DE and FR) or 'On hold' (SK). Concerning the current phase, several Member States reported being in design of the national system (BE, CZ, DK, IE, HR, LV, HU, and FI), analysis of the national user requirements (BG, EL, MT, SK, and SE), analysis of national functional specifications (AT), analysis of national technical specifications (ES, FR and PT), conformance testing (SI), operations (DE), upgrade of their national system (PL), or deployment (EE and IT). RO is the only Member State who reported status 'Other' and is currently in initiation phase.

In addition, several Member States reported carrying out activities related to analysis and modelling (BE, BG, CZ, DK, DE, IE, EL, ES, FR, HR, AT, PL, SI, SK, FI, and SE), maintenance (DE, PL and SI) and upgrades (CZ, DE, AT, PL, and SI). During the reporting year, some Member States communicated their preceding phase and indicated being in operation (DE), performing national acceptance testing (SI), or designing their national functional specifications (DK, ES and FI).

BG participated in the review cycle for the UCC NCTS documentation. In addition, BG attended all webinars, workshops and training activities organised by the Commission. Lastly, BG completed the tender procedure and selected the IT provider for the UCC NCTS. CZ focused on the finalisation of the national functional and technical specifications for their export system. DK finalised the procurement of a national Declaration Management System (DMS) to be used for both UCC AES and UCC NCTS Phase 5 and clarified all necessary details for the tender framework agreement. DE developed a new national transit component, while maintaining the existing system. Moreover, DE focused their efforts on the completion of the software development regarding missing 'To-Be' processes and certain national requirements, while continuing the national and international conformance testing activities for Mode 2. EE divided the project into seven phases, performed testing activities for the initial phase and started the analysis of the second phase. In addition, EE successfully connected to the CCN system.

FR completed the integration of UCC NCTS-P5 following two directions, namely the architecture design and the interfaces design for economic operators. HR finalised the elaboration phase and initiated the construction of the project, deploying the main functionalities into a pre-production environment. LT reported on activities related to redeveloping the National Transit Control system for complying with modern technologies and initiated the preparatory activities for production deployment. PL finalised the procurement of the supporting software and hardware for upgrading the system in accordance with UCC NCTS-P5. FI participated in the UCC NCTS project group.

### **1.1.6 UCC Registered Exporter System (REX) (1.11)**

The main purpose of the system is to replace the current paper-based certification process by an IT-supported self-certification process, including a central database that contains the registered exporters and provides the Member States with the opportunity to enhance their national systems for customs declarations with an automated verification of UCC REX numbers from the declarations against that central database.

UCC REX1 system entered in operations in 2017, while UCC REX2 was successfully deployed in production in 2018. UCC REX3 system is organised in two phases. Phase 1 aims at introducing the general requirements of the UCC REX Trader Portal, as well as enabling the registration of economic operators and the modification, consultation and printing of the UCC REX numbers. Additionally, Phase 2 aims at enabling the revocation and annulment of the UCC REX numbers while adding new features and functionalities, as requested by the Member States.

In 2021, REX3 Phase 1 entered in operation. Representatives from the Member States were trained to the new REX Trader Portal 1.0 functionality via four training sessions organised between the end of 2020 and the beginning of 2021, before the go-live date of Phase 1, on 25 January 2021. REX3 Phase 2 is expected to be deployed in 2022, following the reallocation of the financial resources to the Member States, after the adoption of the MFF for the period 2021-2027.

In 2021, the Member States informed about their status as 'In Progress' (BG, DK, FR, HR, LV, HU, and FI), 'Finished' (BE, CZ, EE, IE, IT, MT, AT, PL, PT, SI, and SE) or 'On hold' (RO). Concerning the current phase, several Member States reported being in operations (BE, CZ, DK, EE, IE, EL, HR, IT, LV, HU, MT, PL, PT, SI, SK, and FI), deployment (SE), upgrade (BG), national acceptance testing (FR), or analysis of the national functional specifications (AT). DE and RO reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (CZ, HU, AT, and PL), maintenance (BE, IT, HU, PL, SK, and SE) and upgrades (IT, SK, FI, and SE). During the reporting year, AT communicated being in operations as their preceding phase.

DE, MT and SK indicated that the central system is used by the national users. BG participated training sessions organised by the Commission and helped the economic operators in the application process for the REX Trader Portal. CZ similarly attended all training sessions regarding UCC REX and analysed the documentation for the UCC REX3 system. EE performed the necessary testing activities for the deployment of the system. ES launched REX Trader Portal Phase 2 and attended all training sessions organised by the Commission. HR reported that the application of REX Trader Portal was deployed. IT maintained the current operational system and prepared for the upcoming UCC REX3 system. HU successfully tested and deployed the nationally developed system and resolved all issues on their side. AT reported working on the business analysis and requirements definition for the integration of UCC REX in their national system. PL implemented the first tranche of the functional and technical changes, in view of the creation of an e-Client module functionality to handle eREX applications. PT informed that the new REX Trader Portal functionality was fully applied and explained to economic operators, while a notable increase in the number of new register exporters was observed, following the deployment of the new Back Office version of the REX system. RO had placed the national project 'On hold' and announced that the development of the national REX component is part of the National Import Declaration System. Besides using the central REX solution, FI performed testing activities and training sessions for the UCC REX3 system. LT and NL reported no project activities.

### **1.1.7 COPIS (1.12)**

Anti-Counterfeit and Anti-Piracy System (COPIS) is a central information exchange system which supports the enforcement of EU rules on intellectual property rights (IPR), where right holders can ask the intervention of customs to take measures against goods infringing certain IPR.

COPIS interface with Anti-Fraud Information System (AFIS) and European Anti-Fraud Office (OLAF). The system additionally interconnects with the European Union Intellectual Property Office (EUIPO) and the Intellectual Property Enforcement Portal (IPEP).

Under version 4.0.0 COPIS introduced the electronic Application for Action (eAFA) integrating with Intellectual Property Enforcement Portal (IPEP). COPIS eAFA aims to provide economic operators with the possibility to electronically submit and amend an application. During 2021, the development activities of COPIS eAFA have been continued, with the deployment and rollout to production of the COPIS v4.0.6.0 taking place in December 2021. At the same time, conformance testing activities were successfully executed. Finally, a new release, COPIS v4.1.0, is expected to be released in May 2022 and enter in production in June 2022.



In 2021, the Member States informed about their status as 'In Progress' (BG, CZ, DK, DE, IT, HU, PL, SI, and SE), 'Finished' (BE, ES, FR, MT, and AT) or 'On hold' (PT and SK). Concerning the current phase, several Member States reported being in operations (CZ, DK, DE, EL, HU, MT, PL, and SI), upgrade (EE and IT), or conformance testing (BG). The remaining Member States reported status 'Other' (BE, ES, FR, AT, PT, RO, and FI). In addition, several Member States reported carrying out activities related to analysis and modelling (BG, IT, AT, PL, and SE), maintenance (CZ, DK, DE, IT, AT, PL, and SE) and upgrades (DE, IT, AT, PL, and SE). During the reporting year, BG communicated their preceding phase and indicated designing the national system, while CZ informed about the performance of conformance tests (EL).

BG reported on activities related to development of a national application for infringements and risk information which will be integrated with central COPIS, as well as the establishment of a link between COPIS and the national register. CZ deployed a new release of the national system. DK provided economic operators with the option to use the IPEP Portal. ES and FI cooperated with EUIPO to ensure the availability of IPEP to economic operators. HR attended all the meetings of the Customs Experts Group on the IPR enforcement section. IT maintained the current operational system and prepared for the upcoming COPIS/FALSTAFF project. MT and RO indicated that the central system is used by the national users. PL performed a conformance testing campaign and modified the data model and messages for the CCN network, adding new functional rules in the national system. IE, LV, LT, and PT reported no activities on the project.

### **1.1.8 EU Single Window environment for customs (EU SWE-C) (1.13)**

EU SWE-C is defined as a facility that allows parties involved in trade and transport to lodge standardised information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements.

Given the complexity of the SW concept, the initiative contains three separate components: 'EU CSW-CVED', 'EU Customs SW-Certificates Exchange' and 'Potential legislative initiative on the EU SW environment for Customs'. The first component is implementing the automatic validation of the Common Veterinary Entry Document (CVED) for animals and animal products, as well as the Common Entry Document (CED). The second component builds on the outcomes of the EU CSW-CVED and foresees expansion of its scope with additional certificates, as well as enhanced functionalities. Finally, the third component is about the definition of a broader scope of the EU Single Window environment for Customs (beyond the certificates' exchange), preparation of the legal framework to cover this scope and the action plan for its implementation.

Currently, the 'EU CSW-CVED' component is operational in 9 Member States<sup>99</sup>, while it had several releases deployed in production during 2021.

The 'EU Customs SW-Certificates Exchange' (EU CSW-CERTEX) component has two main objectives. Firstly, it enhances the EU CSW-CVED functionalities, such as the quantity management and the possibility to generate and transmit certificates in PDF format. Additional functionalities will be introduced in subsequent stages. Secondly, it expands the scope of the certificates, permits and other documents, currently available for exchange via EU CSW-CERTEX. The following certificates and licences are covered: FLEGT, COI, CHED, ODS, F-GAS, Dual Use and Cultural Goods Import Licence and Importer Statement<sup>30</sup>.

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<sup>99</sup> BG, CZ, EE, IE, CY, LV, PL, PT, and SI.

In 2021, EU CSW-CERTEX FLEGT and COI were maintained in production. However, since 2020, the re-engineering of EU CSW-CERTEX has been investigated to provide the Member States with the access to all Partner Competent Authority (PCA) documents covered by the scope of the project via a single interface. This approach is expected to significantly facilitate the planning of the national integration in the Member States, as well as to reduce the efforts required for such an integration and maintenance. The first releases of the re-engineered EU CSW-CERTEX were deployed in conformance testing in 2020 and 2021. Specifically, during 2021, the second release of EU CSW-CERTEX, covering CHED-A, CHED-P and F-GAS, was finalised. The aforesaid release was installed in the conformance environment, allowing the Member States to initiate their testing activities as of July 2021. A third release, in which the Dual Use eLicensing system will be added in the scope of EU CSW-CERTEX, is under development by DG TRADE and is expected to enter the elaboration phase in the first quarter of 2022. To this end, an addendum to the Vision Document for the third release was produced in the second quarter of 2021.

The 'Potential legislative initiative on the EU SW environment for Customs' scheme, which is a third component, does not envisage the development of a new IT solution but rather deals with the interoperability of already existing solutions. The Commission continued the work towards the completion of the initiative. More information can be found under section [4.3](#).

In 2021, the Member States informed about their status as 'In Progress' (BE, BG, CZ, DE, EE, IE, EL, FR, MT, AT, PL, PT, FI, and SE), or 'On hold' (HU, RO and SK). Concerning the current phase, two Member States reported being in operations (BG and PT), in upgrade (CZ, IE and FR), in deployment (BE and PL), in conformance tests (EE), in design of national system (FI), in analysis of the national functional specifications (DE and AT), and in analysis of the national user requirements (ES, MT and SE). The remaining Member States reported status 'Other' (HU, RO and SI). In addition, several Member States reported carrying out activities related to analysis and modelling (BE, CZ, DE, EE, AT, PL, SI and SE), maintenance (BE, CZ and EE) and upgrades (BE, CZ, EE, IE, and PL). During 2021, some Member States communicated their preceding phase and indicated performing upgrade of the national system (CZ), determining the national user requirements (DE) and performing national acceptance testing (PL).

BG provided daily monitoring and supporting activities to economic operators, through the service desk platform and official national customs website. In parallel, BG reviewed all projects documents distributed by the Commission and maintained the national EU CSW-CVED component. CZ focused on developing a new functionality to be connected to CERTEX 2.0 and contains checks for all CHED, COI, FLEGT, ODS and FGAS certificates. The aforesaid functionality also covers quantity management for all domains. DE analysed the functional and technical specifications of the system. EE performed conformance testing activities for ODS and CHED-D certificates. In this context, the ODS certificate started to be used in the production environment since July 2021. ES attended the EU SWE-C project group and actively participated in the discussions for tackling all identified issues in the nationally developed systems. FR started technical analyses and developments in order to build a G2G connection with EU-CSW CERTEX, and attended meetings at EU level on the topic of Single Window for customs. HU participated in the relevant meetings, in view of a potential connection to EU-CSW CERTEX at national level. AT analysed the functional specifications and attended the various meetings organised by the Commission. PL held several national Single Window Project Group's meetings with the objective of preparing all national project documentation related to the national SW system. Similarly, PL organised communication activities and professional trainings for the end-users of the system. At the same time, PL finalised the conformance

testing activities for EU CSW-CERTEX Release 1 and initiated the integration between the latter and the national SW. FI focused on planning and designing the integration to EU-CSW CERTEX, and participated in all pertinent CBG meetings. HR, IT, PT and SK reported no activities on the project.

### **1.1.9 Classification Information System (CLASS) (1.14)**

CLASS provides a single platform where all classification information (regardless of its nature) is published in a manner that ensures transparency.

The system has been put in production since June 2019, with the identified issues being thoroughly analysed. During 2021, several updates were performed to improve the stability of the tool and the quality of the data provided, while incremental efforts have been made to resolve the technical issues in the various releases deployed within the year. The latest release CLASS v1.3.3.0 went live in July 2021.

The extension of the system under a second phase was considered necessary to support the integration of EBTI and the European Customs Inventory of Chemical Substances (ECICS) into the platform. To this end, over the course of 2021, the Commission initiated its work on the business requirements related to the elaboration of CLASS Phase 2, which is scheduled to be deployed in production by the end of 2023. Simultaneously, the Commission completed the impact analysis for implementing the second phase of CLASS, while providing solutions for the continuous improvement of the system.

In 2021, the Member States informed about their status as 'Finished' (BE, BG, EE, MT, and SI) or 'On hold' (PT and SK). Concerning the current phase, some Member States reported being in operations (BG, IE, EL and MT). In addition, some Member States reported status 'Other' (BE, EE, PT and SI). IE informed on activities related to reviewing all identified issues and submitting the related changes requests on the CLASS system. MT and RO indicated that their customs officials are using the central CLASS system. The majority of the Member States (CZ, DK, DE, ES, FR, HR, IT, LV, LT, HU, NL, AT, PL, RO, SK, FI, and SE) reported no activities on the project.

### **1.1.10 UCC Economic Operators Registration and Identification subsystem 2 (EORI2) (1.15)**

The objective of the UCC Economic Operators Registration and Identification (EORI) system is to establish a unique system of registration and identification of economic operators and other persons for the purposes of applying the customs legislation of the Union. The UCC EORI2 project aims to update the existing EORI system, and the EOS web services in alignment with the legal changes resulting from Annexes 12-01 to the UCC DA/IA. The system has been in operations since 2018. It is currently stable and no activities were performed in 2021.

In 2021, the Member States informed about their status as 'In Progress' (BG, DE, EL, FR, LV, and PT), 'Finished' (BE, EE, ES, HR, MT, AT, and PL) or 'On hold' (DK). Concerning the current phase, the great majority of the Member States reported being in operations (BE, BG, CZ, EL, ES, HR, LV, MT, PL, PT, RO, SI, and SK), or in analysis of the national technical specifications (FR and AT). In addition, several Member States reported carrying out activities related to analysis and modelling (DE and AT), maintenance (BE, DE, HR, PL, SI and SK) and upgrades (DE and SK). During the reporting year, DE and SI indicated being in operations as their preceding phase, while DE performed national acceptance testing.

BG, CZ, DE, EE, HR, and RO maintained and operated the national EORI systems. BG provided daily support for economic operators and customs officers through the service desk platform and the official national customs website. DK participated in workgroup meetings for economic operators handling both Authorised Economic Operators (AEO) and EORI. EE identified and corrected some bugs in their system. ES removed the remaining UK EORI numbers and checked the system for potential EORI inconsistencies. AT focused on the preparation of the national FSS to achieve self-service registration for the EORI number, as well as integration in a national system based on the EU TSS. During 2021, PL finalised the preparation and implementation of the changes in the national system for optimising the registration of the economic operator and the assignment of an EORI number. RO indicated that the EORI2 project was implemented, including the conformance tests. IE, IT, LT, HU, NL, FI and SE reported no activities on the project.

### 1.1.11 Customs Risk Management System2 (CRMS2) (1.16)

The Customs Risk Management System 2 (CRMS2) is used for the exchange of risk information, to support the implementation of priority control areas for crisis management purposes, and as a means of communication between risk experts. The CRMS2 system reshapes the existing CRMS system created in 2005 to increase the clarity of the different functions to be fulfilled.

CRMS2 Release 1 went live on 27 October 2021 to help the customs authorities quickly exchange information in real-time on dangerous goods and protect the health and safety of EU citizens. The software application included multiple capabilities, such as handling Requests for Information (RIF)<sup>100</sup> and establish digital cooperation between customs and Priority Control Area (PCA)<sup>101</sup>, Crisis Management (CM)<sup>102</sup>, and Risk Control (RC) and reports, surveys, and feedback functionalities as enhancements to CRMS.

In addition, users' training and system's configuration activities took place in November and December 2021, in view of the first transactions of the system, which are anticipated to be processed in January 2022. Until that time, all opened RIFs will be processed in the old CRMS system. Concurrently, work on minor releases to improve the system continued throughout 2021. The latest release, CRMS v2.10.1.0 went live on 22 July 2021.

In 2021, the Member States informed about their status as 'In Progress' (ES, AT, and SE), 'Finished' (BG, DE, EE, IE, and MT) or 'On hold' (FR, HR and PL). Concerning the current phase, several Member States reported being in operations (BG, DE, EE, IE, MT, AT, and SI), in upgrade (ES and SE), in conformance tests (SK) or in analysis of the national user requirements (FR). In addition, several Member States reported carrying out activities related to analysis and modelling (EE, IE and SI), maintenance (EE, AT, SI and SE) and upgrades (EE, ES and SE). During 2021, three Member States communicated their preceding phase and indicated performing upgrade to the national system (ES), being in conformance testing (SI) and national acceptance testing (EE)

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<sup>100</sup> The RIF domain's purpose is the exchange of information in the form of Risk Information Forms, feedback and messages between Member States and the Commission. In principle, a RIF can be created by any of the actors having the appropriate role.

<sup>101</sup> The ability of the Commission to define and subsequently initiate a campaign (termed a 'Priority Control Area', PCA) within a controlled environment amongst Member States over a given duration possibly against predetermined risks. At any point within a PCA's duration Member States' actors must know which of the identified predetermined risks (i.e., Common Risk Criteria) require further monitoring. A PCA can only be initiated by the Commission.

<sup>102</sup> Crisis Management is designated for the efficient reaction to fast moving crisis situations by using a set of functionalities offered to the involved parties.

BG appointed two national administrators in the Bulgarian customs administration, responsible for the user profiles management. In addition, BG initiated communication activities with the relevant units at national level to identify the activities required for accessing the new system, while introducing at the same time the registration process. During 2021, BG reported nearly 80 registered users of CRMS2, assigned by the national administrators with the relevant profiles and functionalities. MT reported using the central system. EE completed the business acceptance tests for CRMS2 and as from December 2021, all national administrators were given access to the production environment to configure national users and rights. HR informed that the national integration of CRMS2 had not started. AT participated in training activities and went live in December 2021. SI focused on testing activities, in view of identifying malfunctions of the system and communicating them to DG TAXUD for rectification.

The majority of the Member States (BE, CZ, DK, EE, IT, LV, LT, HU, NL, PL, RO, and FI) reported no activities on the project.

### 1.1.12 e-Commerce and CP 42/63 (1.17)

The objective of e-Commerce and Customs Procedure (CP) 42/63 is to automatically validate the individual Value Added Tax (VAT) identification numbers for the Import scheme declared in the customs declarations and for the CP42 and CP63 declared in the customs declarations against VAT Information Exchange System (VIES). As a result, the e-Commerce and CP 42/63 capture and offer all relevant data to tax authorities that are needed for validation purposes.

For achieving those objectives, the existing Surveillance Reception Application (SURV-RECAPP) system is used with the proper updates, for allowing the information required by the VAT legislation to be recorded from the customs import declarations in all Member States and subsequently be accessible in an automated manner to the relevant tax authorities. The new legislation<sup>103</sup> puts in place the Import scheme which extends the concept of the mini one-stop shop (MOSS) to small consignments of goods with an intrinsic value not exceeding EUR 150. This new scheme is called the import one-stop shop (IOSS).

The legal act of Council Decision (EU) 2020/1109<sup>104</sup> of 20 July 2020 amending Directives (EU) 2017/2455<sup>103</sup> and (EU) 2019/1995<sup>105</sup> as regards the dates of transposition and application in response to the COVID-19 pandemic, modified the applicability of e-Commerce to 1 July 2021. Following the revision of Annex B to the UCC DA and the UCC IA in March 2021, the amending regulations introduced new data elements to Super Reduced Data Set (SRDS). The addition of these data required a new review cycle of the Functional and Technical System Specifications for IOSS with the Member States. The Member States completed the review of the FSS and the TSS in June and July 2021, respectively, and the updated SRDS<sup>106</sup> was accepted. In addition, in April 2021,

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<sup>103</sup> Council Directive (EU) 2017/2455 of 5 December 2017 amending Directive 2006/112/EC and Directive 2009/132/EC as regards certain value added tax obligations for supplies of services and distance sales of goods, [OJ L 348, 29.12.2017, p. 7-22](#).

<sup>104</sup> Council Decision (EU) 2020/1109 of 20 July 2020 amending Directives (EU) 2017/2455 and (EU) 2019/1995 as regards the dates of transposition and application in response to the COVID-19 pandemic, [OJ L 244, 29.7.2020, p. 3-5](#).

<sup>105</sup> Council Directive (EU) 2019/1995 of 21 November 2019 amending Directive 2006/112/EC as regards provisions relating to distance sales of goods and certain domestic supplies of goods, [OJ L 310, 2.12.2019, p. 1-5](#).

<sup>106</sup> EQC192SURV-RECAPP FSS (VAT eCommerce update SRDS).



conformance testing activities with the Member States were initiated and the e-Commerce system entered in production on 1 July 2021 according to the plan.

In 2021, the Member States informed about their status as 'In Progress' (BE, DK, IE, EL, LV, LT, AT, and PT), 'Finished' (CZ, DE, EE, ES, FR, HR, HU, MT, PL, SI, and SE), or 'On hold' (BG and RO). Regarding the current phase, several Member States reported on various national activities related to being in operations (BE, BG, CZ, DK, DE, EE, EL, ES, FR, HR, LV, LT, MT, AT, PT, SI, and SK) or upgrade (IE and FI). RO reported other activities related to this project.

In addition, several Member States reported carrying out activities related to analysis and modelling (BE, DE, IE, and PL), maintenance (BE, BG, CZ, DK, EE, EL, FR, HR, HU, AT, PL, SI, SK, FI, and SE) and upgrades (BE, BG, CZ, DK, IE, EL, FR, HR, PL, SI, and SK). During 2021, some Member States communicated their preceding phase and indicated being in operations (DE), performing deployment activities (BE, DK, EL, and SI) or national acceptance testing activities (FR).

BG carried out the necessary testing activities of the new functionality of VAT e-Commerce package and completed the upgrade of the national import system. DK finalised the development activities for their Declaration Management System (DMS) with a new national import component for handling specific declarations and datasets and entered in operation on 1 July 2021, according to the MASP-C deadline. EE performed the necessary testing activities. FR upgraded the customs clearance system to apply the new VAT regulation. Moreover, FR built a new national Customs Clearance system to fulfil the new requirements concerning the low value consignment declarations.

LV continued developing new functionalities for the system until the entry into production in July 2021. Further to this, LV implemented the national Integrated Risk Information System (IRIS) to provide automatic risk analysis. LT put into effect a functionality for handling low value consignment declarations in the national Customs Declarations Processing System (iMDAS). Moreover, LT implemented integrates with other national information systems involved in the data exchange and connected the iMDAS with the central IOSS system. MT reported an extension of the current national import system with the e-Commerce function. PL analysed the project documentation and built a new national Customs Clearance system to fulfil the new requirements concerning the low value consignment declarations. SK upgraded the national Surveillance system, while IT and NL reported no activities on the project.

### **1.1.13 Import of Cultural Goods (1.18)**

The project aims to introduce implementing measures governing the import of cultural goods and new customs business and IT processes and procedures in this area. Based on the agreed approach, the project will be divided into three different main areas of activity: the legislative process, the establishment of a central electronic licensing system and the development of a system interface within the EU Single Window environment for customs (EU SWE-C).

The legislative process component includes the preparation and the progressive refinement of the draft implementing acts to the Regulation on the import of cultural goods<sup>107</sup>, stipulating the electronic licensing system related aspects. The central electronic licensing system will be introduced to ensure the uniform controls for the import of cultural goods upon their entry into the customs territory of the European Union.

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<sup>107</sup> Regulation (EU) 2019/880 of the European Parliament and of the Council of 17 April 2019 on the introduction and the import of cultural goods, [OJ L 151, 7.6.2019, P. 1-14](#).

The information exchange between the central electronic licensing system and the national customs/import systems will be facilitated through the EU CSW-CERTEX.

A dedicated project group has been established to act as a discussion platform where experts from national customs administrations and competent authorities will assist the Commission with the creation of the import licence template, and the development of the format for the importer statement. During 2021, the project group discussed the draft Implementing Act and the necessary update of the BPMs. On this basis, the Level 3 and Level 4 BPMs were approved, reflecting the technical and functional requirements of the system. Concurrently, the Vision Document v1.5. was approved by the ECCG in June 2021. At the same time, a new deliverable Business Acceptance Criteria (BAC) was produced to ensure that the system is being developed and delivered as specified in the Vision Document. In addition, on 24 June 2021, the Commission adopted the Implementing Regulation (EU) 2021/1079<sup>108</sup> laying down detailed rules for implementing certain provisions of Regulation (EU) 2019/880<sup>107</sup> on the introduction and the import of cultural goods, including those for the functioning of the system, data model and format for licences and statements.

The project is in an early phase and few Member States reported activities for 2021. The Member States informed about their status as 'In Progress' (BG, CZ and MT) or 'On hold' (EE, PT and SK). Concerning the current phase, some Member States reported on various national activities related to the development of national user requirements (CZ, EE and MT), or other activities related to the project (BG, PL and PT).

Customs Experts from BG actively participated in the project group organised by the Commission. CZ expected the final documentation to initiate the development activities, while DE started establishing the legal requirements at the national side.

### **1.1.14 UCC Import Control System2 (ICS2) (1.19)**

The UCC ICS2 Programme is set up for the development of the new version of the current Import Control System (ICS) system that is used for the lodgement and processing of the ENS. The programme consists of several projects and activities, including the Common Repository (CR), CRMS2 link, Trader Interface (National/Shared Trader Interfaces [STI]) and related Monitoring and Business Statistics, as well as National Risk Management systems, Risk Management support, e-screening, TES Helpdesk, National Declaration Processing Systems, and Arrival/Presentation Notification controls for national systems. The ICS2 system is also supported by the newly built DG TAXUD AS4 Access Point (TAPAS) exchanging ICS2 messages with economic operators, CCN2ng exchanging ICS2 messages with Member States, and UUM&DS managing the economic operators' digital certificates securing the data exchanges.

The programme implementation contains three releases. Release 1 covers the obligation of the relevant economic operators (postal operators and express carriers in air transport) to provide advance cargo information for postal consignments, enabling customs to address a wide range of unsafe traffic in the context of massive and growing flows of e-commerce. Similarly, Release 2 will incorporate the implementation of new ENS obligations and related business and risk management processes for all the goods

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<sup>108</sup> Commission Implementing Regulation (EU) 2021/1079 of 24 June 2021 laying down detailed rules for implementing certain provisions of Regulation (EU) 2019/880 of the European Parliament and of the Council on the introduction and the import of cultural goods, [OJ L 234, 2.7.2021, p. 67–89](#).

in air traffic, as well as Safety and Security Analytics (SSA) capabilities. Release 3 will further include the goods in maritime and inland waterways, road, and rail traffic.

ICS2 R1 went in operation on 15 March 2021 and by the end of the year ICS2 was used by 29 national customs administrations<sup>109</sup>. UK did not enter in operations due to the ongoing discussions on the implementation of the IE/NI Protocol. A total of 25 postal operators<sup>110</sup> established in the EU, as well as the postal operators of Switzerland and Norway were connected to ICS2 in addition to three express operators<sup>111</sup>. Since the date of entry into operations, nearly 3 billion different types of messages were exchanged by ICS2, without any major incident being reported and with daily traffic steadily increasing. Specifically, approximately 100 million messages per month were exchanged with national administrations over the CCN2ng platform, while 80 million messages per month were exchanged with economic operators over TAPAS.

A maintenance window was designated for scheduling all planned activities, to avoid extended downtime periods. At the same time, during 2021, further investments activities were carried out to improve the ICS2 technical and business monitoring and increase high availability by applying zero downtime design for many services, as well as tuning and scaling up ICS2, CCN2ng and TAPAS performance. Further improvements to achieve the Gold SLA level for ICS2 and supporting systems are planned in 2022.

Additionally, following the CPG approval in December 2021, ICS2 delivered the Safety and Security Analytics (SSA) pilot for the Data Scientists. The aforesaid pilot allowed the usage of state-of-the-art data analytics tools in the Data Lab to develop the analytical models that should be used in the production environment to identify suspicious packages. The challenging work to industrialise the SSA pilot as a production system and to deliver additional functionality was initiated in 2021. The first iterations delivering the pre-production system are expected in early 2022. These iterations will be used by Member States Data Scientist to develop the first models for the pre-production environment.

Throughout 2021, the NPP template was sent to the ICS2 NPMs and completed by the end of June 2021. Concomitantly, several documents necessary for the launch of ICS2 R1 implementation were finalised and published. Particular emphasis was placed on the finalisation of the Go-live procedure, Operational Guidance for Member States, and Operational Guidance for postal and economic operators. Additionally, from 15 March 2021, the Commission marked significant progress towards launching coordination activities that contributed to the implementation of ICS2 R1 through the facilitation of operational preparedness of Member States' customs authorities, national administrations, and economic operators.

On this basis, the Commission held regular ICS2 TES coordination meetings with the participation of all Member States customs national ICS2 project management representatives, individual economic operators, and international organisations. Correspondingly, a related forum was established to exchange queries regarding the ICS2 project development and to provide support via the organisation of dedicated webinars. Furthermore, regular online communication and social media campaigns, were launched by DG TAXUD, aiming to disseminate the various activities carried out in relation to the UCC ICS2 R1 programme implementation. The common components,

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<sup>109</sup> EU Member States, China, and Norway.

<sup>110</sup> Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, and Sweden.

<sup>111</sup> Fedex/TNT, UPS, and DHL.

such as the STI and CR, as well as the baseline for the Common Functional System Specifications (CFSS) and TSS for all three releases have been completed since 2018. In 2021, CFSS v1.25 was produced for the ICS2 R1, while a new version 2.0.0, merging Release 2 and Release 3 specifications, was delivered in August 2021. The UCC ICS2 Release 2 TSS were completed in October 2021.

At the same time, the first two software releases, R1.4.0.0 and R1.4.1.0, were deployed in 2021 to improve the ICS2 R1 business process and implementation by reducing the number of exchanged error messages. The second major software release (R1.5.0.0) was also finalised and the necessary testing activities were initiated in January 2021. The R1.5.0.0 scope was adapted to the CFSS baseline v1.25, and its objective was to provide the key functionalities for ICS2 R2 business processes both for economic operators and Member States. The third major software release (R1.6.0.0), which will aim at implementing all ICS2 R2 functionality required for production, is expected to be finalised in 2022 and will be utilised for the conformance testing activities starting in July 2022.

ICS2 R1 to R2 transition strategy was also finalised and published in 2021. The crisis management protocols and procedures 24/7/365 were agreed upon and distributed to all Member States. In addition, the ICS2 R1 evaluation approach and an initial review of the business statistics from the operations with Member States were delivered. Further activities included UCC ICS2 TES co-ordination plenary meetings involving Member States, the Security Risk Rules (SRR) Project Group, and the Commission. A parallel workshop was organised in January 2021 with the customs SRR Project Group, Aviation Security (AVSEC) authorities, and representatives of national administrations. Among the main objectives pursued by the aforesaid workshop was the identification of the role of customs and AVSEC authorities, integrating the requirements of the Customs legislation and the AVSEC legislation as revised for ICS2, as well as the development of a common information pack for training customs and AVSEC authorities.

In addition, the training strategy for ICS2 R2 was completed and published on CIRCABC in December 2021. Moreover, a communication campaign on the development of the ICS2 R2 and R3 strategy was ongoing during 2021, while a social media campaign was initiated, with the first posts being uploaded in December 2021. Two updates on the FSS (v1.30 and v2.0.0) were produced in 2021, with the latest merging the TSS for ICS2 R2 and R3. Additionally, in October 2021, an updated version of the TSS was delivered. A Risk Management Project for the establishment of common risk criteria and standards, including common operational guidance on security and safety risk analysis and controls, was also launched in October 2021. In November 2021, the ICS2 Security Plan was updated to include specific information related to the SSA. By the end of 2021, 28 national administrations<sup>112</sup> had provided their NPPs for ICS2 R2.

Concerning ICS2 R3, the FSS for R3 were completed and published in May 2021, while an updated version was launched in August 2021. Furthermore, DG TAXUD participated in two awareness webinars organised by FONASBA/ECASBA in February and December 2021.

During 2021, the majority of the Member States informed about their current status on UCC ICS2 R1 as 'In Progress' (BE, BG, DK, IE, EL, ES, FR, HR, LV, LT, AT, PL, PT, RO, SI, FI, and SE) or 'Finished' (CZ, DE, EE, HU, and MT). Concerning the current phase, several Member States reported on various national activities related to design of national system (ES, LV, PL, SI, and FI), creating the national technical specifications

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<sup>112</sup> BE, BG, CZ, DK, DE, EE, IE, EL, ES, FR, HR, IT, CY, LV, LT, HU, NL, AT, PL, PT, RO, SI, SK, FI, and SE, as well as United Kingdom, Switzerland and Norway.

(DK and FR) and national functional specifications (SE), or developing the national user requirements (LT). Furthermore, several Member States reported carrying out activities related to analysis and modelling (BE, CZ, DK, DE, IE, ES, FR, HR, RO, SI, SK, and SE), maintenance (BE, BG, CZ, DE, EE, IE, HR, HU, AT, PL, PT, RO, SI, SK, FI, and SE) and upgrades (BE, CZ, DK, DE, EE, IE, HR, HU, AT, PL, RO, SI, SK, FI, and SE). During the reporting year, some Member States communicated their preceding phase and indicated being in operations (EE, HR, LT and FI), performing deployment activities (BE, AT, PT, and SI), and national acceptance testing activities (BG), designing the national system (ES), performing conformance tests (HU), and creating the national functional specifications (FR) or developing the national technical specifications (DK).

BG reviewed the documentation distributed by the Commission, completed the transition phase for ICS R1, and participated in coordination meetings related to the project. DE reported that the preparation for UCC ICS2 is ongoing in view of their Release 10.1 of the national ATLAS system. EE performed the necessary conformance testing activities during 2021. LT updated the National Risk Evaluation and Control System (RIKS) for meeting the UCC ICS2 R1 requirements and performed conformance testing activities. Furthermore, LT developed interfaces with other national information systems which are involved in the data exchange. AT performed upgrades for usability improvements, while PL continued all analysis activities with their contractor. RO informed that according to the latest BCP submitted by the national administration, the presentation information functionality remains unavailable as the national postal operator system is not yet prepared for this operation. In addition, RO reported that certain functionalities, such as the user authentication and authorisation, audit and monitoring, and reference data require further IT development. FI achieved great progress towards project implementation during the reporting year and successfully concluded the national acceptance testing for the UCC ICS2 R1.

Regarding UCC ICS2 R2, IT informed about their current status as 'In Progress', while concerning the current phase, they reported status 'Other'. Furthermore, some Member States reported carrying out activities related to analysis and modelling (IT, AT and PL), maintenance (IT) and upgrades (IT).

BG informed that a tender procedure is ongoing for the IT provider concerning ICS2 R2. Preparatory work was initiated in DE during the second half of 2021 for the finalisation of the software. IT started preparations for the integration of their national import system and e-manifest system to the UCC ICS2 R2. LV defined the national user requirements and specifications, while SI informed that the development of the second release is ongoing. FI started preparing the FSS for ICS2 R2.

### **1.1.15 UCC Surveillance3 (1.20)**

The UCC Surveillance3 system collects and transmits customs declaration data to ensure the control and traceability of the import and export of specific goods throughout the customs clearance and warehousing process and is used by the Member States' customs administrations to improve customs risk analysis, the fight against fraud, market analysis, post-clearance controls and statistical analysis. This system has been in operation since 2018.

During 2021, multiple quality improvements in data warehouse and data mart have been executed, resulting in an increase in the system's performance. Further enhancements and initiatives have been discussed that will be added in an update in the system's specifications.

During 2021, the Member States informed about their current status as 'In Progress' (BG, DK, DE, IE, EL, FR, LV, HU, AT, PL, and FI), 'Finished' (CZ, EE, MT, PT, SI, and SE) or



'On hold' (RO and SK). Regarding the current phase, several Member States reported on various national activities related to being in operations (BG, CZ, DK, DE, EE, EL, LV, MT, and PT), design of national system (BE, HR, PL, SI, and FI), analysis on the national user requirements (AT and SK), creating the national technical specifications (FR), being in deployment (HU and SE), or upgrade (IE). RO reported other activities related to this project, focusing on the development of the functional and technical specifications of the system. In addition, several Member States carried out activities related to analysis and modelling (BG, CZ, DK, DE, IE, FR, AT, PL, SK, and FI), maintenance (BG, CZ, DK, DE, EL, FR, HR, FI, and SE) and upgrades (BG, CZ, DK, EL, FR, HR, PL, FI, and SE). During the reporting year, some Member States communicated their preceding phase and indicated performing upgrade to the national system (BG), being in operation (HR and FI), creating the national functional specifications (FR), performing deployment activities (DE), or being in conformance testing (DK).

BG defined the requirements for changing the national Surveillance system to allow data to be sent in accordance with the UCC requirements. CZ implemented some minor changes at the national level, particularly related to SRDS and H7 dataset. DK configured the surveillance application to cover other relevant MASP-C projects. EE participated in all webinars held by the Commission and provided access to the Surveillance3 IOSS monthly listing report. FR successfully deployed the nationally developed system and resolved all issues on their side. In addition, FR started updating the system with regards to the new Annex B data. PL analysed all the documentation prepared by the Commission. SK informed about the creation of a detailed impact analysis and the ongoing procurement procedure which impacts the initiation of the development phase. FI implemented the Surveillance within the national import project and started developing new versions according to the UCC Customs Work Programme. Finally, several Member States reported no IT activities at this stage (ES, IT, LT, MT, and NL).

## **1.2 MASP-C Group 2 - Customs European initiatives needing further study and agreement**

The second group contains projects for which further discussion will be required before they can be mapped on the IT plan. Group 2 can include Project Fiches on bilateral international initiatives (between the EU and third countries).

### **1.2.1 UCC Notification of Arrival, Presentation Notification and Temporary Storage (2.1)**

The development activities related to this project are a purely national responsibility. However, the processes and data requirements for the external domain are to be defined and agreed on the EU level. The goal is to enable the automation of processes at national level for the notifications of arrival of the means of transport and the presentation of goods and declarations for temporary storage as described in the UCC. This project aims to support harmonisation across Member States for data exchange between economic operators and customs and to ensure traceability of the goods entering the European Union. The system is foreseen to be operational by 30 December 2022 at the latest.

Following the finalisation and acceptance of the Level 2-Level 3 BPMs in 2016, a request had been launched by a collaboration project group, under the leadership of BE, to update the Level 2-Level 3 BPMs for Temporary Storage (TS) in view of new discussions

and findings. The aforesaid request was translated in five RfCs<sup>113</sup>, which were validated and approved.

Over the course of 2021, the change management implementation was successfully completed and the updated Level 2-Level 3 BPMs for TS were published, leading to the approval by the Member States and the economic operators in July 2021. This first approved RfC list is considering the alignment with the Level 4 BPMs, which have been created by the project group under the coordination initiative, as well as reviewed and agreed by all participating Member States.

Following the successful finalisation of the verification cycle, the updated Level 2-Level 3 BPMs for TS were published in the ARIS platform. Additionally, in October 2021, the updated BPMs were published on CIRCABC, along with a pertinent note<sup>114</sup>. As a result, the process of the change management implementation in Level 2-Level 3 BPMs, in the context of the UCC AN/PN/TS project, was successfully completed and closed.

During 2021, the Member States informed about their current status as 'in Progress' (BE, CZ, DK, DE, EE, ES, FR, HR, IT, LV, MT, PL, PT, FI, and SE), 'On hold' (BG, RO and SK) and 'Finished' (LT and AT). BG reported that the notification of arrival will be implemented as part of ICS2 Release 2. The New Temporary Storage functionality has been introduced in the production environment on 15 March 2021.

Concerning the current phase, the majority of the Member States reported on various national activities related to the development of national user requirements (EL, ES and MT), creation of national functional specifications (CZ and LT), national technical specifications (IT, SI, and SE), design of national system (BE, DK, HR, PL, and FI), being in operations (IE, LV and PT), system upgrade (DE and EE) and other activities (BG, AT and RO). DK reported on the implementation of a new declaration system. FI informed that phase 1 production started in March 2021, and the pertinent functionalities were implemented in the ICS2 project according to the UCC Work Programme. Moreover, the project continued with Temporary Storage Declaration (TSD) and preparation work for phase 2. FR reported that it is currently working on the national technical specifications. LT informed that detailed Functional System Specification for the national export declarations management system was prepared in accordance with the EUCDM. RO reported that the functional and technical specifications related to Notification of Arrival, Presentation Notification and Temporary Storage system development services have been developed. SI informed that activities are ongoing and that the national application for Temporary Storage will be harmonised with Annex B IA/DA (EUCDM 6.1 - G4).

Lastly, certain Member States reported carrying out activities related to analysis and modelling (BE, DK, DE, IE, EL, ES, FR, HR, IT, PT, SI, and FI), maintenance (BE, DK, DE, FR, PT, SI, FI, and SE) and upgrades (BE, DK, DE, IE, FR, PT, and FI). During the reporting year, some Member States communicated their preceding phase and indicated creating national functional specifications (DK and FR) and performing conformance tests (PT).

### **1.2.2 UCC Guarantee Management (GUM) (2.5)**

The objective of this project is to ensure that the data of guarantees used for import and export that affects more than one Member State is made electronically accessible to Member States where the customs declarations are lodged and accepted.

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<sup>113</sup> RfCs number 33125, 33126, 35362, 37214 and 37217.

<sup>114</sup> DG TAXUD, Ref. Ares (2021)6397381 – 19.10.2021.

The updated Business Case has been approved and accepted by the Information Technology Steering Committee (ITSC) in April 2021 with the preferred implementation option the Alternative C - Decentralised system architecture with light central IT support. The option was decided to be implemented through the UCC Customs Decisions System and it eliminates the requirement for the development of a national component. The central GUM component is expected to be operational in the second quarter of 2025. On the basis of the systems architectural change, the hybrid-Member States using UCC Customs Decisions system should be ready and test their systems before the central GUM component goes live in 2025. Member States with hybrid solutions are expected to start the operations in the first quarter of 2024. This creates a window of one year to develop their system after the component specifications of the GUM central system are made available.

On this basis, preparations for amendments to the Annex A were made during 2021. Specifically, the corrections and creation for new data elements related to Annex A have been thoroughly discussed at the CDS project groups, dedicated to GUM, which convened periodically throughout 2021 with the active contribution of customs experts from 20 Member States<sup>64</sup>. An initial draft of the Annex A data elements needed for GUM will be finalised by the first half of 2022. To this end, the GUM related proposals for the changes into the Annex A were discussed at the DIH Committee on 15 and 16 April 2021 and were introduced as an update to the Level 3 BPMs for GUM and CDS, and to the Level 4 for CDS. The updated BPMs were initially reviewed internally in April 2021, while an external review took place in May 2021. The final conclusions on the proposed implementation were made at a dedicated CDS-GUM meeting in June 2021. The finalised BPMs were formally approved by the ECCG in August 2021 by written procedure. Similarly, in December 2021, the GUM Vision document was also accepted by ECCG by written procedure.

During 2021, the Member States informed about their current status as 'In Progress' (EL, ES, FR, LT, HU, MT, AT, PL, PT, FI, and SE), 'On hold' (DE) or 'Finished' (BG, CZ, and EE). In addition, some Member States did not provide their current status (BE, DK, IE, HR, IT, NL, RO, SI, and SK). DE reported that the preparation for the trans-European GUM system (component 1) was put on hold due to the envisaged planning of the updated UCC Work Programme. Currently the national GUM system (component 1) is operated in the framework of the NCTS project. HR informed that the project has not started yet.

As regards to the current phase, some Member States reported on various national activities related to the development of national user requirements (EE, EL, HU, MT, and AT), being in operation (BG, CZ and PL), design of national system (FI), creation of national functional specifications (FR), being in deployment (LT), or other activities (DE, ES, PT, and SK). PL performed changes in the system based on the legal regulations. PT informed that its National GUM is under development. LT reported that the development and acceptance testing of the national Guarantee Management System (GVS) were finalised. Accordingly, the preparation for the deployment of GVS into production environment has been started. FR informed that extensive preparatory work of the DG-FIN3 "Guarantee Office" for the CDS/GUM was accomplished, while DIH/GUM meetings were held in February, March, and April 2021.

In parallel, the Member States conducted activities related to analysis and modelling (BE, DE, ES, IE, AT, PT, and SE), operations (BG and CZ). EE reported that the analysis for the user requirements has been finalised.

### 1.2.3 UCC Special Procedures (2.6)

The implementation of the UCC Special Procedures project is divided in two approaches. UCC Special Procedures Harmonisation are the national IT developments for the harmonisation of special procedures and alignment with the legal provisions defined in the UCC IA/DA. UCC Standardised Exchange of Information for Special Procedures (INF SP) are central services provided for the management of standardised information developed for inward and outward processing procedures.

The UCC INF SP system has been operational in all Member States as of 1 June 2020. At the same time, the INF Specific Trader Portal (STP) has been successfully integrated into the EU Customs Trader Portal (EUCTP) and been in production since 2020.

During the course of 2021, the INF project group continued its work and carried out extensive discussions to conclude business and important operational issues. On this basis, an INF business Change Advisory Board (CAB) meeting was held in June 2021 to clarify the RfCs for implementation into the IT system in the next update of the Level 4 BPMS. Further project group actions included the completion of the translation activities for the Business User Guide, and the resulting 24 language versions were published in March 2021.

In 2021, the majority of the Member States informed about their current status on the UCC SP Harmonisation as 'In progress' (BE, CZ, DK, EL, ES, FR, HR, HU, AT, PL, FI, and SE), 'On hold' (PT and SK) and 'Finished' (BG, DE, EE, IE, and MT). Several Member States did not provide their current status (IT, LV, LT, NL, RO, and SI). With reference to the current phase, the Member States reported on various national activities related to the development of the national user requirements (EL), national functional specifications (CZ, ES, FR, and HR), development of national technical specifications (SE), being in operations (BG, DE, IE, MT, AT, PL, and FI), design of national system (BE, DK and HU), or deployment and other activities (EE and PT).

AT reported on the operation phase with several upgrades and ongoing exchanges with the INF project group. DE informed that the INF system is used by customs officers and trade. DK reported that it is currently using the EU transnational systems and therefore does not have a national INF system. ES informed working in automatising the registration of the placement of goods under special procedures. FI reported that the INF testing and updates in the system were carried out according to the Commission updates.

PL reported that the implementation of the UCC Special Procedures Project in Poland is carried out in four IT system projects: UCC INF SP, Supplementation of AES, Supplementation of AIS, and the development and implementation of a new national System concerning management and settlement of the Special Procedures (RPS). The components of the National UCC SP system will be supplemented with additional required UCC SP functions under a new IT contract as the second phase of the project to implement the National UCC SP system (functional development of AES, AIS and RPS systems). RO informed that the project is in its initiation phase with the functional and technical specifications related to the special procedures development services already developed.

### 1.2.4 Adjustments of the existing import applications under the UCC (2.10)

The project relates to required updates and further development of the national import systems in the Member States, resulting from the implementation of the UCC. The

project covers the development of two systems: UCC National Import Systems upgrade and UCC Centralised Clearance for import (CCI Phase 1 and Phase 2).

During 2021, the UCC CCI IT project group on Phase 1 has continued its sessions and conducted further analysis from a business and IT point of view, as well as the update of the UCC CCI Phase 1 Technical Systems Specifications (TSS) package. Following the work on the development of the CCI Phase 1 system with the CCI forerunners and the Member States who started the development of their national CCI applications, the need for several changes in the approved TSS package was identified. To this end, the RfC-List.01 for the CCI Phase 1 TSS package was completed and sent to the Member States and economic operators for review in July 2021. The updated CCI Phase 1 TSS package, release 1.1.0, within the scope of the RfC-IAR #01 implementation, was finalised and formally approved by Member States and economic operators, and subsequently published on CIRCABC in September 2021.

Subsequent to further requests for improvements in the various documents of the CCI Phase 1 TSS package, the RfC-Lists.02-03-04 were prepared and approved by the Member States and the economic operators. On this basis, a second update of the UCC CCI Phase 1 TSS package (Release 1.2.0) was finalised, and formally approved and published on CIRCABC in December 2021.

Moreover, throughout 2021, the Commission held UCC CCI Phase 1 Forerunner weekly meetings with the participation of two Member States<sup>115</sup> for the early implementation of the national CCI Phase 1 applications, and the identification of potential IT issues, to ensure the smooth deployment of the CCI system, in view of the planned deployment date of 4 October 2022. In addition, several precursory deliverables were prepared with the collaboration of the project group members and the Commission, such as the Business Statistics (CuBuS) for CCI Phase 1 and the statistics types which were clarified with the relevant DG TAXUD Units. The UCC CCI Phase 1 Specifications for the Business Statistics package and its appendix were formally approved by the ECCG in June 2021. The UCC CCI Phase 1 Start-up Guide document was also prepared and approved by Member States in August 2021.

In November 2021, an exercise was launched for monitoring the Member States' national planning for the UCC CCI Phase 1 deployment and entering in operation, where the initial National Project Plans (NPPs) for CCI Phase 1 were collected and analysed. In this context, Member States were requested to report on their progress and communicate their NPPs for the development and testing activities of CCI Phase 1. Member States were also requested to provide input for their target date to start operations<sup>116</sup>. A technical meeting with the Member States was held in December 2021 to present and discuss the aforesaid NPPs. Further communication between the Member States and the Commission is expected in 2022 to follow up on the project's progress.

In reference to the second phase of the UCC CCI project, several technical documents were approved internally in DG TAXUD, in preparation for publication as part of a package for approval by Member States in 2022.

In 2021, the majority of the Member States informed about their current status as 'In Progress' (BE, BG, CZ, DK, DE, EL, FR, HR, HU, LV, MT, AT, PT, FI, and SE), 'On hold' (RO), or 'Finished' (EE, ES, IE, LT, and SI). In addition, some Member States did not report on their current status (BG, NL, IT, PL, and SK).

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<sup>115</sup> ES and FR.

<sup>116</sup> 22 Member States provided an initial version of their NPPs. Out of these, 19 Member States are planning to go live in the last quarter of 2023, while three Member States' target date starts earlier.



Concerning the current phase, the Member States reported on various national activities related to the development of national user requirements (EL and HU), being in operations (BG, DE, EE, IE, and SK), design of national system (BE, DK and FI), creation of national functional specifications (CZ, FR, LT, MT, AT, and PT), creation of national technical specifications (ES, HR, LT, MT, and PT), system upgrade (IT, AT, PL, and FI), in deployment (SE), or other activities related to this project (RO and SI).

BG reported that the national import system was updated. DE also informed that development and maintenance activities of the national import systems are carried out within the framework of the overall ATLAS-system. EE reported activities on the development and testing the new national import and UCC Special Procedures Harmonisation (National SP IMP) system. EL carried-out study of functional and technical specifications, Annex B, and EUCDM. It also reported the analysis of national requirements and interoperability with other systems. IT informed that in May 2021, the system was deployed in operations to economic operators, while FI informed that the national import system is running in production and new versions are under development according to Customs' programme plan. FR informed that an initial functional study was carried out, followed by a technical study. This work has led to the finalisation of the technical specifications and the initial launch of the functional specifications. LV informed that a new import system development has been started to implement updates according to the EUCDM latest version and CCI. RO reported that the functional and technical specifications related to the development services for the alignment of the national import application to the UCC data requirement have been completed. SI informed that the Slovenian automated import system (SIAIS2) was harmonised with Annex B IA/DA and would be put into operation by 2022.

### **1.2.5 Customs Union Performance – Management Information System (CUP-MIS) (2.11)**

CUP-MIS is a performance measurement system for the EU Customs Union. It supports the improvement of the functioning of the EU Customs Union by assessing the effectiveness, efficiency and uniformity of customs activities and operations.

The CUP-MIS system is planned to be in operation in the third quarter of 2023. However, during the year 2021, an early shadow run in conformance environment has been performed. Specifically, a web application to receive the data from the Member States was installed in the conformance test and production environment. The data warehouse, including historical CUP data, will be tested and deployed for operational purposes by March 2022. In addition, in the third quarter of 2021, the Vision Document approved in 2019 was updated.

During 2021, several Member States informed about their current status as 'In Progress' (BG, CZ, IE, ES, LV, FI, and SE), 'On hold' (MT, PT and SK) or 'Finished' (EE). Most of the Member States (BE, DK, DE, FR, HR, IT, LT, HU, NL, PL, PT, RO, and SI) reported no activities and no specific status for this project. BG reported that the activities within the CUP project group were carried out during the year. IE performed analysis and collected the necessary data for the CUP. LV worked on system testing and error identification. RO reported that the CUP-MIS system is functional and in use since July 2021.

### 1.2.6 UCC Proof of Union Status (PoUS) (2.12)

The UCC PoUS system is a new trans-European system designed to store and manage the electronic T2L/T2LF<sup>117</sup> documents and the electronic Customs Goods Manifest (CGM). This project was re-launched in 2019. The approach taken on system architecture involved a centralised system (under a hybrid approach). The Commission adopted a two-phased approach for the development of the UCC PoUS project. The first phase consists in implementing the electronic T2L(F) document with all the necessary functionalities, while the second phase involves the implementation of the electronic CGM, including the information exchange with the European Maritime Single Window environment.

The project group on UCC PoUS was established in September 2019 to assist the Commission with the preparation and the analysis of the two-phase approach of the project. In light of the work of the project group on UCC PoUS, a meeting with Member States and economic operators took place and several study visits were organised to examine the handling of the UCC PoUS system in different Member States. Alongside with both phases of the project, an analysis on the business processes and the related aspects were conducted. In 2021, an updated version of the Vision Document and the Architecture Overview for phase 1 was sent to the Member States for approval. In parallel, three separate external review packages containing technical documentation were launched and sent to the Member States for review. Part of the aforesaid documentation for phase 1 T2L/T2LF was approved in 2021. The rest of the documents, which will be subsequently used as the basis for the software's development, are expected to be approved by 2022, allowing Member States to start connecting to the central system web services developed by the Commission. On this basis, follow-up webinars were executed since December 2021. The objective of these webinars was to clarify to the Member States the requisite developments they needed to apply and how to properly read the existing documentation, in view of the development of one single document that would gather from all the existing documents the required information for the central system.

In relation to the preparation of the UCC PoUS phase two, in June 2021, the CGM Level 4 BPMs were accepted by the Member States by written procedure. As a result of the work on the technical implementation and the ongoing legal discussions, an RfC list started to be prepared to align the functional specifications of the T2L/T2LF.

In 2021, several Member states informed about their current status as 'In Progress' (BG, CZ, DK, IE, ES, FR, HR, HU, AT, PL, and FI) or 'On hold' (EE, MT, PT, RO, and SK). Concerning the current phase, most of the Member States reported on other national activities (BE, BG, IE, HR, MT, AT, PL, PT, RO, and FI), national user requirements (CZ, DE and EE), design of national system (ES), national technical specifications (FR and HU) and conformance tests (DK). Some Member States did not report on their current status (EL, IT, LV, LT, NL, SI, and SE). BG reported its participation in the review cycles of the documentation distributed by the Commission and its involvement in the webinar on 3 December 2021. FR informed that they attended the DG TAXUD's meeting and worked on the French implementation. In addition, FR is working on the implementation of their National Import Customs Application (NICA).

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<sup>117</sup> Means of proof of the Customs status of Union goods/ Means of proof of the Customs status of Union goods for goods transported to, from or between the non-fiscal areas (T2L/T2LF).

### 1.2.7 European Maritime Single Window environment (EMSWe) in relation to customs systems (2.13)

The European Maritime Single Window environment (EMSWe) aims to improve administrative procedures in maritime transport by introducing a single window for reporting formalities for ships to harmonise processes and data exchange with economic operators.

The MASP-C Revision 2019 introduced a new fiche (2.13) on the “European Maritime Single Window environment (EMSWe) in relation to customs systems” to develop a harmonised reporting interface module for the national single windows based on the provisions of Regulation (EU) 2019/1239<sup>118</sup>, which entered into force in August 2019. In close collaboration with DG MOVE, DG DIGIT and EMSA, DG TAXUD aims at developing an implementation plan to address all activities involving the application of the provisions laid down by the EMSWe Regulation. The processes and data requirements for EMSWe’s external domain will be defined at EU-level based on the Implementing and Delegated Acts that will be prepared in collaboration with DG MOVE. This initiative is examining the interconnections between future system development introduced by Regulation (EU) 2019/1239 and national customs systems. According to this Regulation, the latest date for the system to be operational is no later than 15/08/2025.

During 2021, weekly meetings with DG MOVE took place on the preparation of the documentations related to the EMSWe. In addition, Customs Business Group (CBG) meetings were organised jointly with DG MOVE. In particular, meetings with the EMSWe “Data thematic team” took place, focusing on the data requirements stemming from the EU and international legislation as well as on the national requirements. A deep analysis was conducted by DG TAXUD with the view to integrate customs and maritime processes and taking into consideration the alignment to the UCC DA/IA Annex B and the EUCDM. To this end, the software tool GEFEG FX for data modelling was used to facilitate the building of the EMSWe data set aligned with the EUCDM. Additionally, DG TAXUD participated in a number of meetings with the EMSWe “Interfaces thematic team”, where topics relating to the Message Implementation Guide (MIG), the common Graphical User Interface (GUI) functionalities and the Reporting Interface Module (RIM) were discussed.

Furthermore, in 2021, the EMSWe Multi-annual Implementation Plan (MIP)<sup>119</sup> was adopted by the Commission and published in the Official Journal of the EU on 27 July 2021, with the scope to facilitate the timely implementation of the EMSWe and provide quality control and procedures for deploying, maintaining and updating the harmonised interface module and related harmonised elements of EMSWe. The MIP aimed at providing an overview of the EMSWe’s implementation to Member States and other stakeholders.

In 2021, the Member States informed about their current status as ‘In Progress’ (BE, IE, HR, IT, LV, MT, FI, and SE), or ‘On hold’ (BG, EE, PT, RO, SI, and SK). Some Member states did not report on their current status (CZ, DK, DE, EL, ES, FR, LT, HU, NL, PL, RO, and SK). With reference to the current phase, the Member States reported on various national activities related to the development of national user requirements (EE, IE, IT, MT, FI, and SE), operations (LV) or other activities (BE, BG, CZ, HR, PT, and SI).

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<sup>118</sup> Regulation (EU) 2019/1239 of the European Parliament and of the Council of 20 June 2019 establishing a European Maritime Single Window environment and repealing Directive 2010/65/EU, [OJ L 198, 25/07/2019](#).

<sup>119</sup> Communication from the Commission Multi-annual implementation plan for the European Maritime Single Window environment 2021/C 299/03, OJ C 299, 27.7.2021, p. 3–10, [EUR-Lex - 52021XC0727\(01\) - EN - EUR-Lex \(europa.eu\)](#).

BG informed that the activities aimed to provide advice and expertise to the Commission on defining the data set and maintaining the list of reporting obligations under the provisions of Regulation (EU) 2019/1239 of 20 June 2019 and concluding a cooperation agreement between Bulgarian Customs Agency and Bulgarian Ports Infrastructure Cooperation to establish a NMSWe. LV worked on the system testing and error identification. DE informed that as it is necessary to establish the EMSWEE dataset, DE Customs contributed with the definition of Part C data elements used at national level. FI informed that the National maritime SW application will be developed by other authority than Customs. The application will also have interfaces to the FI Customs systems.

### **1.3 MASP-C Group 3 - Customs International Information Systems**

MASP-C Group 3 consists of projects managed by international organisations. The Member States and the Commission play an active role in their development.

#### **1.3.1 EU Implementation of UNECE eTIR System (3.1)**

The eTIR system aims to secure electronic data exchange between national customs systems related to the international transport of goods under cover of TIR Carnets. This project was launched by the contracting parties of the TIR Convention under the auspices of the United Nations Economic Commission for Europe (UNECE) to provide an exchange platform for all actors involved in the TIR system, including customs authorities, the guarantee chain and transport operators.

The implementation scope of the eTIR system in EU is twofold: adaptation of UCC NCTS to handle TIR operations as described in the eTIR Reference Model Document and adaptation of SPEED to enable the exchange of the data between UCC NCTS and eTIR system. The Commission will facilitate the compatibility and data exchange between UCC NCTS and eTIR and the connection to eTIR through SPEED or another system.

The ECCG was of the opinion that further information was needed on the eTIR-NCTS interconnection to decide on the proposed solution. To this end, the review of the Business Case was put on hold to initiate a Proof of Concept (PoC) which was finalised in July 2021. The PoC substantiated the possibility to interconnect the eTIR international system and NCTS. However, at the ECCG the eTIR implementation was deemed suitable at a later stage. Thus, following the acceptance of the Business Case in written procedure, the eTIR project will be moved under the NCTS fiche in the MASP-C.

During 2021, the Member States informed about their current status as 'In Progress' (BE, DE, HR, and SI) and 'On hold' (BG, CZ, EE, MT, PT, SK, and FI). Concerning the current phase, the majority of the Member States reported status "Other". No other activities were initiated by the Member States during the reporting year.

#### **1.3.2 eATA Carnet Project (3.2)**

The objective of this project is the development of a new electronic communication system to facilitate information sharing between a series of stakeholders (economic operators, chambers of commerce, customs administrations) involved in the temporary admission of goods procedure in various countries or customs territories. The aim of the project is to replace the current paper-based ATA Carnet System by a global eATA Carnet System.

The ATA Carnet is an international customs document that allows the temporary export and import of goods for up to one year without payment of customs duty and value-added

tax. It replaces national customs declarations and serves as “a passport for goods” to clear goods through customs, including professional equipment, commercial and testing samples and goods used at trade fairs, exhibitions, shows, or similar events.

The ATA Carnet System is administered by the International Chamber of Commerce World Chambers Federation (ICC/WCF) in line with the World Customs Organisation’s (WCO) ATA and Istanbul Conventions. Over the years, this system has spread to 78 countries and territories, including a growing number of emerging economies. Around 50% of the carnets issued annually concern goods’ movement across the EU.

Since the current system is almost entirely paper-based, the ICC WCF is currently implementing a system to replace paper-based ATA Carnet modalities using a digital solution called “Mercury II”. During 2021, the ICC demonstrated the system underdevelopment which is still in the pilot phase. To this end, several CBG and bilateral meetings were organised to present the main functionalities of the pilot phase, as well as coordinate the activities with the Forerunner Member States<sup>120</sup>, the National Guaranteeing Associations (NGAs) and the ICC. In addition, coordination meetings with other units and departments were ongoing throughout 2021.

Further to this, the eATA Security White Paper containing the eATA Carnet System security standards was presented in June 2021 and submitted for review in July 2021.

In 2021, the Member States informed about their current status as ‘In Progress’ (FR, AT and SE) and ‘On hold’ (BG, EE, MT, PT, SI, SK, and FI). Concerning the current phase, HR, AT and SE reported focusing on the development of the national user requirements, or in conformance testing (FR). Five Member States reported on other activities (BG, EE, MT, PT, RO, SI, and FI). In addition, two Member States reported carrying out activities related to analysis and modelling (AT and SE).

DE announced that they followed the project related activities, namely the pilot system from the ICC and the WCO on eATA. FR analysed several documents, such as the Security White Paper, and participated in many meetings hosted by the Commission. AT participated in all EU-workshops, while FI reported not having a project for a national eATA Carnet System. No additional activities were initiated from the Member States during the reporting year.

### 1.3.3 Smart and Secure Trade Lanes (SSTL) (3.3)

The SSTL is a pilot project between the EU (BE, DE, ES, FR, IT, NL, PL), UK, CN and HK customs authorities aiming to strengthen end-to-end supply chain security and provide trade facilitation to participating economic operators through maritime, air and rail trade lanes between the involved territories. This project consists of two main components: international exchanges between the EU, CN and HK customs authorities, and internal exchanges between the Member States and the Commission.

All activities on this project were put on hold since 2019 as a legal base and a possible scope expansion need to be defined.

In 2021, the Member States informed about their current status as ‘In Progress’ (ES and HU) and ‘On hold’ (EE, FR, MT, PT, SI, and SK). As regards the current phase, ES

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<sup>120</sup> In 2021, FR and IT joined the pilot phase. The kick-off meeting was held in IT on 21 September 2021, with the participation of the ICC, IT Customs, IT NGA, and DG TAXUD. The testing phase for the transition to the actual pilot implementation was initiated in November 2021.

Over the course of 2021, more countries proclaimed their participation in the project. In this respect, the ICC developed an issuing tool (‘ICC ATA Gateway’) to accelerate the digitalisation of the NGAs, especially those that do not have an ATA carnet issuing system in place.



focused on upgrading the national system and carried out activities related to analysis, modelling and upgrades. In addition, FR reported on the development of the national user requirements and six Member States reported on other activities (CZ, EE, HU, MT, PT and SI). ES organised meetings with trade lane personnel to promote their participation in this pilot project and performed operational activities related to Customs Enforcement Network Communication Platform (CENcomm). No further project activities were reported by the Member States during the reporting year.

#### **1.4 MASP-C Group 4 - Customs IT cooperation initiatives and technological developments to facilitate Customs EIS (including current CCN operations)**

MASP-C Group 4 consists of customs cooperation initiatives undertaken to strengthen the cooperation between Member States and to accelerate the technological development of the European Information Systems.

##### **1.4.1 National Systems Implementation by IT Collaboration Projects (4.1)**

Within the context of an IT Strategy for the implementation of the UCC and e-Customs initiatives, a new working method was developed at EU level already in 2018, which is depicted in the joint efforts of the Member States towards building common union components for customs national systems. The expert team on new approaches to develop and operate Customs IT systems (ETCIT) was launched in 2018 following the Tallinn Declaration on eGovernment<sup>121</sup> and concluded its activities in 2019. Based on the conclusions reached during the execution of the group's tasks, the activities and the strategic work continued within the context of the second expert team ETCIT II throughout 2021. Led by SE, the 16 participating Member States (BE, CZ, DE, EE, FR, IT, CY, LT, LU, HU, MT, NL, PT, RO, SK, and SE) cooperated towards the objectives agreed in the Council Conclusions on the way forward to developing Customs IT systems<sup>122</sup>, by carrying out a study, including the scope of a pilot project, stakeholder analysis, financing options and possible involvement of a permanent structure or shared supplier for IT. The main objective of ETCIT II was the identification of suitable options for new pilots and recommendations for the way forward towards the implementation of a long-term strategy on Customs IT.

During 2021, the Member States reaffirmed their interest to collaborate in areas beyond those defined in the MASP-C and highlighted the following pilot projects to serve as a basis for future discussions: Presentation Notification and Temporary Storage (PN/TS), Digital Guaranteed (DiG), e-Commerce, advanced analytics and application of artificial intelligence, Blockchain technology and digital transformation of customs administrations. The activities of the ETCIT II team were concluded at the end of 2021. However, the extension of the work under a third phase was considered necessary and useful to take the possibilities of IT collaboration further. To this end, ETCIT III is anticipated to begin its work in March 2022.

During 2021, most of the Member States (BE, BG, CZ, DK, DE, IE, EL, ES, FR, HR, IT, LT, LV, HU, NL, AT, PL, RO, SI, SK, and FI) reported no specific status and activities for this project. PT and SE informed about their current status as 'In Progress', MT as 'On hold' and EE as 'Finished'. EE and PT reported participating in the ETCIT working group activities. EE informed that it organised virtual seminars in the first and third quarter of

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<sup>121</sup> [Ministerial Declaration on eGovernment – the Tallinn Declaration.](#)

<sup>122</sup> [Council Conclusions on the way forward of developing customs IT systems.](#)

2021 to present and promote methods of possible collaboration. SE reported participating in ETCIT II and having a designated group working nationally with the analysis related to the outcome of this work.

#### **1.4.2 Common Communication Network2 (CCN2) (4.5)**

The CCN2 project is considered as the evolution of the current CCN architecture and services. The Common Communication Network and Common System Interface (CCN/CSI) operational infrastructure consists of a closed, secured network infrastructure that is provided by the Commission to facilitate the exchange of information between the national administrations of the customs and taxation areas. CCN2 applies a Service Oriented Architecture (SOA) architecture and provides a set of value-added services to support the evolution of new application development and deployment paradigms. Applications to be developed will use this new CCN2 infrastructure. CCN2 evolution is in line with the global EU architecture consolidation, encompassing the notions of the circles of trust and integrating with the shared services capabilities.

During the second quarter of 2021, the TSS for the CCN2ng Release 2 were finalised, as planned. The conformance testing activities were subsequently initiated, following the deployment and rollout in the conformance environment.

During 2021, the Member States informed about their current status as 'In Progress' (CZ, DK, DE, HU, AT, PL, PT, SI, FI, and SE) and 'Finished' (BG, IE, FR, HR, MT, and RO). In addition, some Member States did not report their current status (BE, EE, IE, EL, ES, IT, LT, LV, NL, and SK). Concerning the current phase, most of the Member States reported on various national activities related to being in operations (BE, BG, CZ, DK, IE, FR, LV, HU, MT, PL, PT, RO, SI, SK, and SE). Furthermore, several Member States reported carrying out activities related to analysis and modelling (BE, DE and, FI), maintenance (BG, CZ, HR, AT, PL, FI, and SK), and upgrades (BE, BG, HR, PL, FI, and SK). During the reporting year, some Member States communicated their preceding phase and indicated being in deployment (HU), upgrade (PL) or other activities (FI).

BG informed that the National CCN/CCN2 system components were maintained and operated. CZ informed that the CCN2ng is currently used in conformance and production for CDMS, TP, CRS, CS/RD2, EUCTP MS, INF SP and ICS2 applications. HR reported supporting the migration to CCN2ng Release 1.2.2 in Conformance and then in Production environment at the end of 2021. HR also informed that user management were performed in service operation period of CCN2 infrastructure (adding new users or permissions, blocking old or inactive users and system password changes were performed). HU reported that the deployment in production of the ICS2 communication took place in March 2021 on the CCN2 network, and operations are ongoing since then. FI reported other activities related to the CCN2, focusing on development work, maintenance, and participation in trainings.

#### **1.4.3 UCC Uniform User Management and Digital Signatures (UUM&DS) – Direct Trader Access to EIS (4.6)**

The UCC UUM&DS project aims to implement a system that allows economic operators to access new EU-wide services, in line with the security policies, legal provisions and operational responsibilities. Therefore, this system offers economic operators unified access to a unique interface to several central services implemented by the Commission. The economic operators are able to electronically submit declarations that will be forwarded to the competent national authority, for a number of supporting IT systems, such as UCC Customs Decisions, EOS-AEO, COPIS and UCC BTI. Furthermore, UCC

UUM&DS provides a mandate capability, allowing economic operators to be represented by known mandated individuals and support the use of electronic signatures.

During 2021, the work was focused on UCC UUM&DS Release 2.1, which will support additional functionalities for UCC REX, CUP-MIS and COPIS eAFA projects, namely User-to-System (U2S) and System-to-System (S2S) secure connectivity. Release 2.1 was deployed in the conformance environment in the first quarter of 2021. After successful validation of the new release, it was deployed in production in March 2021. The aforesaid release covered two main features, which were the implementation of the mixed certificates registration and the implementation of the central cross-border delegations. Both features will have minimal impact on the Member States Attribute Provider development for Release 2.0, which entered in operations in 2020. In addition, the elaboration phase of UCC UUM&DS Release 2.2 was initiated in 2021.

In 2021, the Member States informed about their status as 'In Progress' (BG, DK, DE, EE, HR, HU, MT, PT, SI, and FI), 'Finished' (CZ, EL, FR, IT, LT, and AT) or 'On hold' (RO). Concerning the current phase, the majority of the Member States reported being in operations (BG, CZ, DK, EL, FR, LT, PL, PT, SI, and SK), conformance testing (EE), upgrade (FI), design of the national system (MT) or national acceptance testing (HU). RO is the only Member State who reported status 'Other,' as they are type D and using the central solution. In addition, several Member States reported carrying out activities related to analysis and modelling (CZ, HR, IT, HU, AT, and PT), maintenance (BE, BG, CZ, EL, HR, IT, HU, PL, PT, SI, FI, and SK.) and upgrade (BE, BG, CZ, EL, HR, IT, PL, PT, SI, SK, and FI). During the reporting year, some Member States communicated their preceding phase and indicated being in upgrade (AT and PT) or conformance testing (EL and IT).

AT informed that the specifications for UUM&DS R2.1 (cross-border delegation) from the Commission were analysed and national functional specifications were created. As an activity and deliverable, BG reported the transitioning of the Economic Operators' (EO's) systems from VPN to System-to-System (S2S) through SSL communication to the EU Customs Information Systems and the BCA Information Systems. CZ informed that a roadmap has been prepared at national level and the migration to the UUM&DS Admin EXT/INT is only a temporary solution for the following three to five years. Meanwhile, CZ will develop connectivity to the National Identity Authority (NIA). DE reviewed and defined the national functional specifications in preparation for the national technical specifications. DK informed that the project is preparing cross-border delegation as part of release 2.1. EE reported that ITSM is working on the analysis and solutions for the specification of their national needs for cross-border delegation functionality. EL informed that during September 2021, version 2.0 was successfully deployed while further configuration took place for the maintenance of the certificates. FI informed that UUM&DS version 2.0 and 2.1 were implemented, tested, and installed into production.

FR informed that it is finalising CT mode 2 for R2.0 and is starting to analyse the R2.1 integration. IT reported that implementation and deployment of the Release 2.1 (X-Border delegation) have been executed. LT reported that changes in the national UUM&DS application (BAP) were introduced enabling a possibility for an employee-type user to access the administration part of UUM&DS, which allows the said users to register their existing certificates. PL informed that UUM&DS was adjusted to cooperate with other central services. PT performed an error screening in the economic operators' accesses via PT UUM&DS sub-domain in articulation and alignment with ITSM Support. RO's national customs administration is currently using the central solution as type D. SI performed production configuration and maintenance in conformance and production environment (new certificates installation). Furthermore, national adaptation of Identity

and Access Management (IAM) system was performed and additional configuration was put in place.

#### 1.4.4 High Availability DG TAXUD operational capabilities (4.7)

Under this project, the Commission intends to provide high availability infrastructure capabilities for the hosting of EU customs systems components and IT services. The Commission has developed High Availability (HA) and Disaster Recovery capabilities in the two DG TAXUD data centres hosted in Luxembourg. The main objective of establishing standardised HA capabilities is to assign appropriate HA characteristics to all hosted applications. To this end, three distinct HA service levels are defined: Bronze, Silver and Gold. Bronze service level is the default and it has been in place since 2015. Silver service level reflects the maximum current capability, while Gold service level, meaning 99,8% availability, is expected to be available by the third quarter of 2022, provided that the necessary funds are available on time.

In 2021, the European electronic systems achieved a high availability of 99.88%. In addition, the centralised customs applications had an average availability of 99.92%. Lastly, the availability of the systems in production (ITSM-operated systems, the CCN/CSI network, and the CCN production services), as well as the CCN gateway in 2021 were 99.99%.

During 2021, two Member States informed about their current status as 'In progress' (BG and MT) and one Member State as 'On hold' (PT). No specific information was reported by MT and PT. BG reported that an effective availability rate according to SLA for all customs trans-European systems was provided.

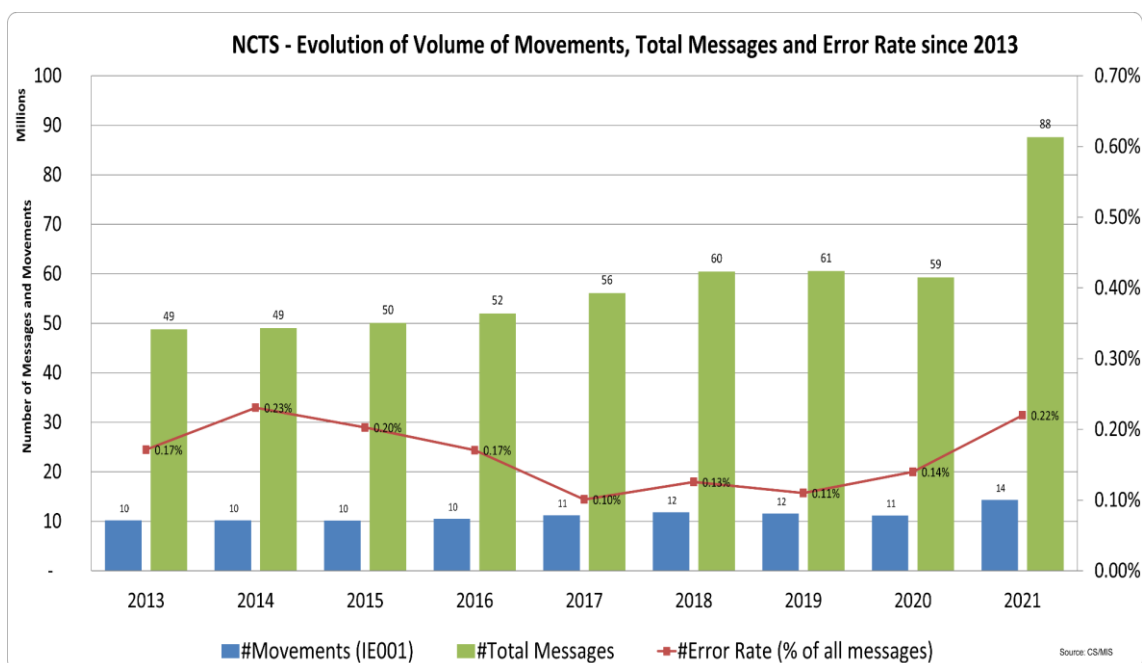
#### 1.4.5 Maintenance and Updates of Operational IT systems (4.8)

This section provides an overview of the trans-European systems' operations in 2021, including the error rate evaluation and system availability. The figures presented in this section depict the evolution of the message volume exchanged in the common domain within a certain timeframe.

This section places emphasis on NCTS, ICS and ECS operations and maintenance in the 2021 national progress report of these systems. The vast majority of the Member States reported on ongoing maintenance and enhancements of the operational systems. Among the maintenance activities carried out, the analysis of RfCs and the implementation of the Known Error Lists (KELs) were most common.

##### 1.4.5.1 *New Computerised Transit System (NCTS Phase 5)*

During the year 2021, UCC NCTS had an average availability of 99.45%. 14.3 million transit movements were released, indicating an increase of 28% compared to 2020. **Figure 21** depicts the evolution of movements since 2013, the average number of which reached 56,667 per business day. In addition, the total number of messages exchanged in the common domain considerably increased in 2021 (+ 47.8% in comparison to 2020), after a relative stability between 2018-2019 and a slight decrease in 2020. The quality of operations was not stable, with the average error rate in 2021 having a minor increase to 0.22%, due to some unscheduled unavailability events and temporary issues at the beginning of the year, whereas the quality of operations has increased, without experiencing any issues imposing a major business impact throughout the year.



**Figure 21: NCTS - Volume of movements, total messages and error rate per year since 2013**

#### 1.4.5.2 Export Control System (ECS Phase 2)

By the end of 2021, the ECS system had an average availability of 99.40%. The number of movements released for export (approximately 22.71 million electronic messages 'IE501') increased by 54.17% compared to 2020. In addition, the total number of exchanged messages increased by 60.04% in 2021 compared to 2020, reaching more than 68 million. The evolution of movements depicted in **Figure 22** illustrates that the number of ECS messages annually exchanged between the Member States in the common domain grew by 85% from 2013 to 2021. The error rate in 2021 has slightly increased from 0.14% to 0.24% and was mainly impacted by the number of uncorrelated IE906s<sup>123</sup> sent by NA-DK in loopback mode during October 2021. This issue impacted the error rate for October 2021, to reach 0.57%. Following up on open movements after Brexit, it was discovered that some movements were closed in NA-DK's National Export System, but not in the common domain. In this context, in October 2021, NA-DK took the necessary steps to register the movements correctly. Those uncorrelated messages were the result of this action. This issue has been resolved and all these movements were closed with Alternative Proofs of Exit (APoE).

<sup>123</sup> 16.000 uncorrelated IE906s.



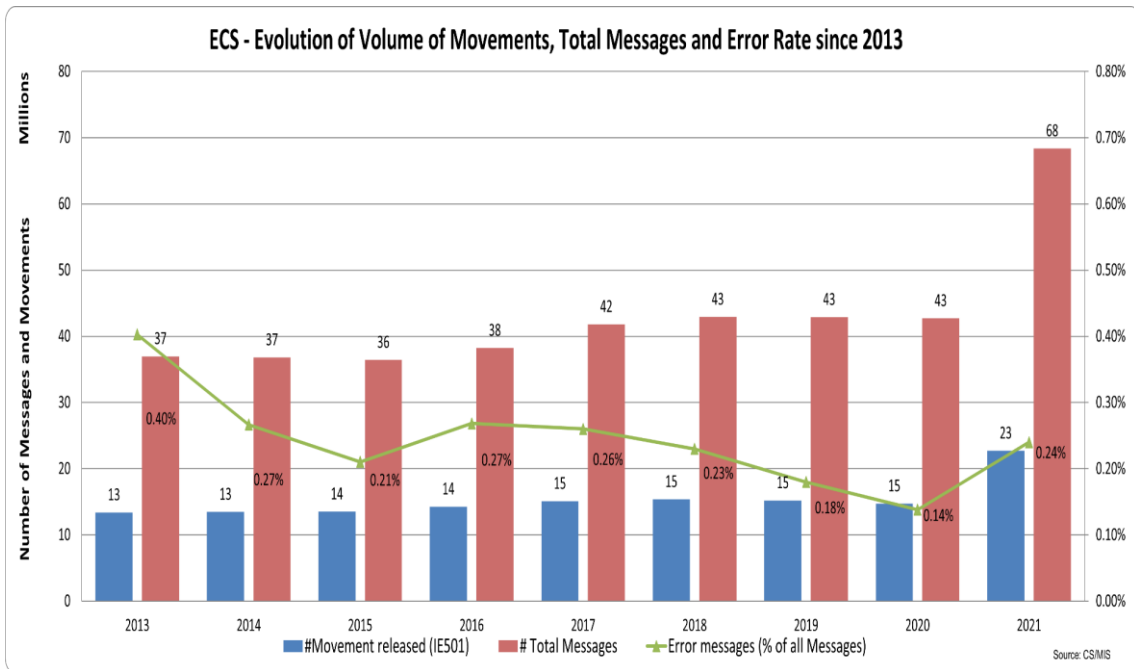


Figure 22: ECS – Evolution of movements, total messages and error rate per year since 2013

1.4.5.3 Import Control System (ICS Phase 1)

An excellent quality of ICS operations was observed during the reporting year 2021. The global availability rate of ICS was 99.50%. As depicted in **Figure 23**, approximately 81.3 million ENS were lodged in the EU in 2021, with an increase of 61.98% compared to 2020. In addition, about 67% of the total ENS movements were submitted for air transport. Lastly, the average error rate in 2021 experienced a minor decrease to 0.07%, showing that the quality of operations was stabilised and slightly increased.

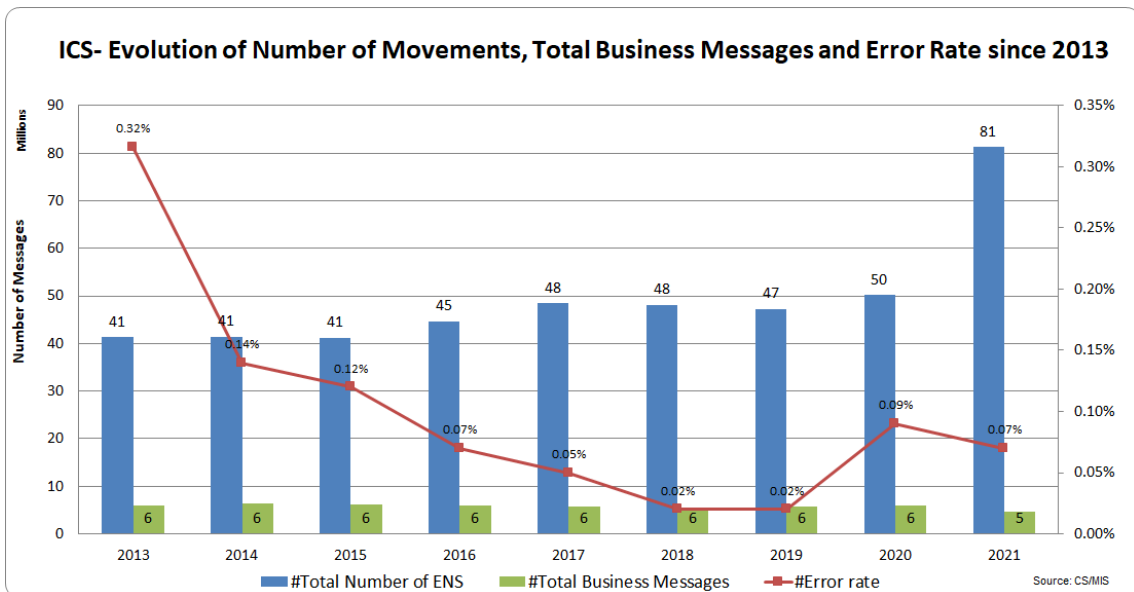


Figure 23: ICS – Evolution of number of movements, total business messages and error rate per year since 2013

#### **1.4.6 IT Business Continuity (4.9)**

IT business continuity focused on IT service continuity in support and alignment with the overarching business continuity. The objective was to ensure that DG TAXUD investments in preparedness in the preceding years have been effectively reflected in recoverability when required, in alignment with its business aims and priorities. In this respect, the IT Business Continuity Management System (IT BCMS) has been aligned with all other existing levels of business continuity management arrangements and has considered all the inter-dependencies within the Commission complex ecosystem to effectively meet its stakeholders' IT service continuity needs.

In 2020, DG TAXUD decided the continuation of IT Business Continuity Management System (IT BCMS) and initiated the Revamping Phase III project, which was finalised in March 2021. Specifically, throughout 2021, particular emphasis was placed on (a) the guarantee of the ongoing control, update and alignment of fundamental components, key parameters and documents of the BCMS as Impact Analysis, Risk Assessment, Continuity, Crisis and Disaster Recovery Plans, (b) the re-alignment of the IT Systems Availability Levels categorization to the new adopted Availability and Continuity Standards, (c) the enhancement of the monitoring and control of the BCMS Scenery through the deployment of new Key Performance Indicators, dashboard adoption and reporting, (d) the preparation of a base ground of information required to support future considerations on managing the Disaster Recovery (DR) Data Centres risk, (e) the awareness increase around the BCMS of the engaged personnel and teams of B Directory staff and (f) the execution of extended DR tests and exercises on all IT systems on an ongoing basis ensuring IT TAXUD's true capability to recover in cases of disruptive incidents. Furthermore, particular emphasis was placed on the alignment of the latest DR plans with the Configuration Items (CI) Inventory and Service Level Agreements (SLAs).

During 2021, two Member States informed about their current status as 'On hold' (BG and PT) and one Member State as 'In Progress' (MT). The Member States did not report any specific activities related to this project.

#### **1.5 Other National Projects and Activities**

Along with the UCC projects, the Member States' annual progress reports provided information about other national projects and activities related to the e-Customs domain. Most notably, EE performed analysis and upgrades to their national IT systems due to Brexit, as well as testing and implementation of changes related to the new UCC requirements. In addition, new TARIC measures and national changes were introduced in the national Tariff system. Finally, updates related to the new Cash Declaration System were also performed according to the Regulation (EU) 2018/1672 on controls on cash entering or leaving the EU, and the repealing Regulation (EC) 1889/2005. On this basis, EE developed new declaration forms and new interfaces for automated information exchange between the Custom Information System (CIS) by OLAF and the Estonian Financial Intelligence units.

IE reported that the UCC Change Management Unit (CMU) continued to participate in workshops related to the development of the AES, ICS2 and NCTS P5 TES.

NL stated that Brexit, e-Commerce IT activities and the COVID-19 crisis affected the progress of the UCC/MASP-C-developments integrated in the Electronic Prior Informed Consent (ePIC) application.

Lastly, SE reported on the national project programme for e-Customs, which will manage and coordinate the national projects that are launched to implement e-Customs including all the SE's ongoing national projects with an indirect relationship to the development of e-Customs and MASP-C. SE further reported being in progress on the Accounting and Risk Analyse System related to the project programme for e-Customs.

## **1.6 Supporting activities**

One of the objectives of the EU Customs Union in the area of e-Customs reform is the support for cooperation between the different customs administrations of the Member States at national level and the economic operators. This approach towards cooperation contributes to ensuring coherence of customs operations, by sharing best practices and increasing coordination between customs authorities and other relevant public authorities or economic operators. In addition, it has the potential to produce far-reaching benefits in terms of harmonising working methods for customs control and improving governance structures.

In 2021, the Member States and the Commission continued their activities related to the training for customs officials, consultation with economic operators, as well as the coordination of activities between e-Customs and other e-Government services.

### **1.6.1 Supporting tools used for collaboration and communication between EU and EU Member State administrations**

The Commission continued to take an active role in facilitating the supporting application tools to ensure the effective coordination of the e-Customs projects. PICS and the ARIS Publisher are the two primary supporting tools that have been developed to enhance information-sharing and optimise business processes, respectively. In addition, CIRCABC is one of the main applications utilised by the Member States and the Commission as a tool of communication for all customs applications and revision of documents.

PICS is a dedicated collaborative online platform administered by the Commission, which provides access to diverse information related to the implementation of the Customs 2021-2027 Programme activities. Similarly, in 2021, ARIS Publisher version 10 was actively maintained for enabling all change control management procedures, while ARIS Publisher version 9 remained accessible as an archive of publications. CIRCABC is a collaborative document management system, which offers a communication channel for exchanging information and sharing materials between the Commission, national administrations, and other stakeholders. In 2021, the transitional period initiated in 2020 to enhance the security of the PICS and CIRCABC tools continued by introducing a two-factor authentication to obtain access to certain Commission services. This transitional period is expected to be finalised by the first half of 2022, establishing the final interface for the two platforms.

In 2021, the use of Microsoft Teams and WebEx platforms continued acquiring significant growth to accommodate further modernisation in the collaboration between the Member States and the Commission. In consideration of the challenges posed by the continuation of the COVID-19 pandemic and the increasing need for online meetings, the Commission continued the endeavour of enhancing the cooperation with the Member States. The WebEx and Microsoft Teams platforms proved to be valuable tools throughout 2021 ensuring business continuity, as they were successfully used to host a substantial number of online meetings. Particularly, Microsoft Teams became the main platform of communication with the Member States, hosting several meetings and serving as a

forum for discussion, exchange of opinions and ideas, and sharing files within the activities of the various project groups.

### 1.6.2 Promotion and other activities

In 2021, the Commission worked extensively to provide visibility to the e-Customs project through different external communications actions. First, the ICS2 Integrated Communication campaign was launched by DG TAXUD, reaching 4.1 million impressions online. In addition, an e-commerce integrated worldwide communication campaign was also launched by DG TAXUD in the first quarter of 2021 and finished in July 2021. The campaign was managed mainly through DG TAXUD's social media presence, including DG TAXUD's Twitter account as well as the Commission's corporate LinkedIn account. The aforesaid campaign collected 7,500,000 million twitter impressions, 2.8 million YouTube views and 2 million impressions on LinkedIn.

In terms of promotion activities launched by the Member States, BG reported that information and guidelines for economic operators on REX have been published.

CZ reported that they have a special group for the implementation of AES system. This group is attended by business and IT experts, helpdesk, experts from customs offices and contractors. Discussions on the Single Window are led by CZ with their contractors to solve issues with their help desk. Additionally, CZ sent information to their customs officers on the Single Window. However, all communications were conducted through online meetings or by email due to the COVID-19 pandemic.

HR informed that promotion for the new UUM&DS 2.0 release was launched to relevant departments. HR also reported that meetings and awareness seminars were organised with representatives of IT application vendors and Trade for the UCC AES system.

IT organised events with economic operators to inform them about the expected changes to UCC ICS2. Regarding REX, IT informed that the Frequently Asked Questions (FAQ) section was updated, while a constant collaboration is carried out with the Legal and Procedural Department. Detailed instructions have been provided to the traders for using the REX TP and to the Customs Officers to process the requests for REX registration sent through the REX TP.

LT informed that specification of their national user management portal (BAP) for economic operators was published on the Lithuanian Customs website.

MT reported conducting promotion activities for the UCC CDS, UCC BTI, UCC AEO, UCC AES, UCC NCTS, REX, and COPIS through the Customs web portal, and implementation activities with working groups.

PL informed that the second pilot phase of the new National Single Window (NSW) platform was organised in July-August 2021 by the NSW PG with the Partner Competent Authority (PCA) as well as trade representatives, to promote the future NSW platform and discuss in detail the needs of PCAs in relation to their use of the NSW platform. Moreover, several bilateral meetings were organised by the Ministry of Finance with relevant PCAs (e.g., phytosanitary inspectorate, veterinary service). Promotion of e-Customs SW services took place during the 8th International Maritime Congress held in Szczecin (Poland) in September 2021. Regarding CEN2 and UUM&DS, PL reported that the implementation of the ICS2 System was associated with a large information campaign, targeted at customs users.

PT informed that national instructions were published and addressed to both economic operators and the main stakeholders through the administration's website, concerning the start in production of the REX Trader Portal.

RO reported that information on how to connect to eAEO has been published in the AEO section of the customs authority's website.

SI informed that due to the COVID-19 pandemic, the majority of activities were organised online, and the economic operators were informed about the progress and participated actively.

FI informed that the Finnish Maritime Traffic Control (FINTRAFFIC) is responsible for the promotion of events related to EMSWe.

With reference to COPIS, 10 Member States (BE, BG, CZ, EE, FR, IT, MT, AT, SI, and SK) informed that no promotion and implementation activities were carried out during 2021. Certain Member states reported implementation activities of the e-customs services. For instance, DK reported participating in promotion activities including workshops, seminars and working groups on the UCC CDS, UCC BTI, UCC AEO, REX, COPIS, e-Commerce, and UCC PoUS. DE reported that information on the implementation of UCC requirements is regularly published on the Customs Administration website ([www.zoll.de](http://www.zoll.de)).

### 1.6.3 Consultations with economic operators

The implementation of the e-Customs projects requires that the Member States' administrations and the Commission engage in a regular dialogue with the economic operators and their representative associations to ensure transparency in the implementation of national and European measures. Over the course of 2021, the Member States organised a series of seminars, workshops and meetings in close cooperation with economic operators, to introduce recent developments related to the technical, legal and business requirements in the area of e-Customs. During this process, careful consideration was given to the specific needs of economic operators to foster an environment conducive to collaboration.

The Member States' customs authorities and the Commission regularly informed the representatives of economic operators of the potential impact of the UCC-related changes on the national IT systems. Consultation activities also took place with the view to notify economic operators about the present and anticipated developments in the field of e-Customs but also to gather in-depth knowledge about different business processes from the trade sector's perspective. Furthermore, several Member States published information on their national websites as well as guidelines about diverse systems and national Helpdesks were utilised as a means to provide support to economic operators.

2021 marked significant progress towards launching consultation activities that contributed to simplifying procedures for economic operators. Common challenges related to the UCC CDS, AEO MRA, UCC AES, UCC NCTS, UCC REX, e-Commerce, UCC ICS2, CCN2, and UCC UUM&DS systems were proactively tackled by the majority of Member States through online meetings and publications, while a substantial amount of work was devoted to developing and refining user manual and training modules for these systems. Likewise, several Member States carried out informational activities on the procedures pertaining to the UCC AN/PN/TS, Adjustments of the Existing Import Applications under the UCC and Other activities.

Specifically, e-Commerce & CP 42/63 and UCC ICS2 are being developed in close cooperation with the national postal operator and express carriers. Following IT updates, BG gave an opportunity to the economic operators to make inquiries through the service desk platform, e-mail, and telephone, as well as through the organisation of meetings and seminars. CZ organised online meetings and seminars with the economic operators on UCC AES, UCC NCTS, e-Commerce & CP 42/63, and UCC ICS2. DK used the



existing forums to communicate changes/upgrades to the UCC CDS, UCC BTI system, UCC AEO MRA, UCC REX, COPIS, and UCC Special Procedures. Additionally, DK informed about the organisation of an information meeting with economic operators on UCC AES and UCC NCTS systems, as well as the planning for developing related national forums. DK also engaged economic operators in training activities on e-Commerce & CP 42/63, using the help of guides, to achieve the optimal usage of the system. Furthermore, it was reported an ongoing dialogue with customs administration and associated network of economic operators affected by the updates on UCC AN/PN/TS and UCC CCI.

DE reported the regular publication of information on their national webpage, regarding the implementation of the UCC requirements for UCC CDS, UCC EORI2, e-Commerce & CP 42/63, UCC AN/PN/TS, and UCC CCI. DE also held online meetings with economic operators and the Commission, while EE conducted webinars and training activities on UCC AES, UCC NCTS, UCC ICS2, and UCC AN/PN/TS. Further to this, EE provided advise for the economic operators on UCC REX, as well as operating instructions on the national webpage on e-Commerce & CP 42/63. EE also introduced to economic operators the new customs declaration processing system for import.

FR exchanged information with economic operators on a regular basis, to provide support for the processing of their application on UCC CDS. Moreover, FR held several meetings and seminars with economic operators and service providers, as well as working groups with customs experts on UCC NCTS P5, UCC Special Procedures, and UCC CCI. In addition, FR organised workshops to prepare the deployment of e-Commerce & CP 42/63 and resolve any outstanding issues.

HR organised online meetings and awareness seminars with representatives of the IT application vendors and economic operators on UCC AES and UCC NCTS. Similar meetings and workshops with the economic operators were also held on UCC ICS2 and UCC UUM&DS. IT established a permanent working group to share information with the economic operators on the UCC ICS2.

LV held meetings of the Customs Advisory Council with the participation of the economic operators' representatives on a regular basis. LT organised meetings and integration testing activities with the representatives of the national postal operators on e-Commerce & CP 42/63, UCC ICS2, and UCC AN/PN/TS. NL reported that the Customs Trade Consultation Group on IT met regularly to discuss UCC related matters.

AT conducted a survey with the national economic operators regarding their satisfaction on UCC CDS. In addition, AT created and published on the national customs website an application guide for UCC AEO MRA and UCC REX. At the same time, regular meetings with economic operators were held to discuss the modifications of the eAEO and central REX applications. Similarly, AT organised several meetings and forums with economic operators and software suppliers on UCC AES, UCC NCTS, and e-Commerce & CP 42/63, as well as workshops and working groups on UCC CCI. A national forum was also implemented for UCC ICS2, along with the organisation of weekly meetings with the national postal operators.

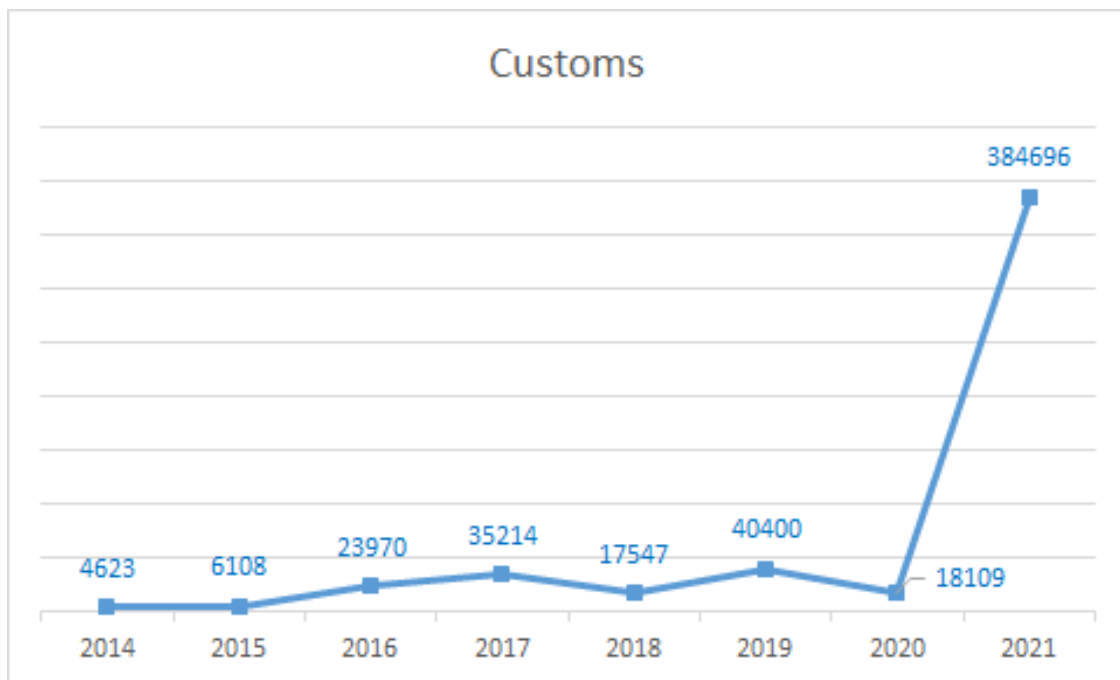
PL uploaded information on the organisation of a pilot project in the field of the EU SWE-C. Specifically, PL reported that the second phase of the aforesaid project was held by the national project group for the EU SWE-C from July to August 2021, with representatives from economic operators. The objective of this pilot project was to promote the future National Single Window (NSW) platform and identify the business needs. PL also reported on the use of the IT systems in the field of UCC INF SP for the economic operators on the National Portal of Customs and Tax Administration. Further information was provided for the CCN2 and UCC UUM&DS systems, for which

information sessions for the economic operators were organised on implementing the EU Customs Trader Portal (CTP) and the Specific Trader Portal (STP).

SI reported that the regular annual meeting with economic operators on the UCC AES system was organised. Lastly, FI held meetings with economic operators on UCC AES, UCC NCTS, UCC ICS2, UCC AN/PN/TS, UCC INF SP and Adjustments of the Existing Import Applications under the UCC. In parallel, FI organised meetings with the wood industry associations and the major wood importing companies on the processes of simplified import declarations.

**1.6.4 Training for Customs officials and other stakeholders<sup>124</sup>**

The dynamic environment of the e-Customs projects requires high-quality training and consultation on IT system procedures and customs legislation. In view of this, the Member States and the Commission have supported the development of training solutions and services for customs officials and economic operators to provide the necessary skills and knowledge towards implementing and maintaining e-Customs projects. As depicted in **Figure 24**, a total number of 384,696 customs officials were trained<sup>125</sup> with the EU eLearning portfolio in 2021. In addition, 285 eLearning courses were used from Member States and Customs 2021-2027 participating countries in several languages compared to 321 in 2020.



**Figure 24: Evolution of number of Customs trainees in national administrations**

The formation of online training tools and guidelines entails a continuous long-term learning plan for customs officials and other stakeholders. The main objective of these electronic learning materials is to help national customs administrations, as well as economic operators and citizens throughout the EU, to better understand and implement the EU customs legislation and its related procedures. This, in turn, is leading to more

<sup>124</sup> The information of the current section is based on the Commission’s training report accessible via Access to Documents procedure.

<sup>125</sup> The figures are approximate as not all Member States provided information regarding customs officials trained.

uniformity and efficiency of customs operations throughout the EU and further enhance consistent performance across the Member States.

Over the course of 2021, the Commission has produced a substantial number of eLearning courses financed by the Customs 2021-2027 Programme. More than 1.2 million professionals, including customs officers and representatives from the private sector, have downloaded 10,877 English and national language versions of the available courses on the EUROPA website until May 2021. Afterwards, the courses have been accessed through the newly launched Customs & Tax EU Learning portal<sup>126</sup>. The eLearning modules of UCC BTI, EU Customs Trader Portal for UCC BTI and UCC INF Special Procedures were efficiently and highly appreciated by customs officers and economic operators. Concomitantly, the Commission organised a new eLearning course with the economic operators to provide information regarding the use of the EU-wide Uniform User Management and Digital Signatures (UUM&DS) system. An additional eLearning course pertained to the prohibitions and restrictions of customs controls was also produced in 2021.

Moreover, activities for the update of the CDS e-Learning Customs module, developed to provide a UCC eLearning programme to professionals in the public and private sector, have been performed initiating from December 2021. Specifically, further actions related to the refresh of the Customs Decisions Management System (CDMS) and Trader Portal Play-Ground System (PGS) environments' translations were performed to enable availability of the latest labelling of CDS User Interface (UI) and main functionalities in the EU languages. Further awareness on those activities were also provided during the CDS IT meetings held along with the Member States' representatives. The significance of the training possibilities offered is highlighted by the fact that the national administrations have integrated the EU eLearning portfolio as part of their national training. DG TAXUD intends to continue focusing on the localisation of the training courses in the various official EU languages under the 'Centralised Localisation' scheme, thus responding to the increasing request by the national administrations.

The overall performance of the eLearning initiative was monitored through data collected at national level, as well as downloads from the EUROPA website and the data provided from May 2021 in the new Customs & Tax EU Learning portal. The quality of the eLearning courses was indicated by final users, who expressed an overall satisfaction with the customs eLearning services, with an average score of 74,7 out of 100 (according to the principles of Kirkpatrick<sup>77</sup>).

During 2021, the majority of the Member States organised several seminars, trainings, workshops and prepared manuals. More specifically, on the UCC CDS, EE reported organising training sessions for their customs officers. FR created UCC CDS related material for customs officers and economic operators and updated the UCC CDS dedicated page on intranet and the national webpage. In addition, FR initiated the preparatory work for the UCC GUM/CDS as well as for the improvement of the multilingual use of the portal. IT held training activities for customs officials, covering all aspects of the UCC CDS system, such as the submission of the application by the economic operator and the granting and the subsequent management of the authorisation by the customs office.

CZ participated in monthly webinars organised by the Commission on the UCC AEO MRA, while AT prepared the User Guide for the central eAEO and economic operators, as well as training materials and workshops for the customs officials.

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<sup>126</sup> [Customs & Tax EU Learning portal](#).

In reference to the UCC AES and UCC NCTS, seven Member States (EE, HR, LT, AT, PL, PT, and SI) informed that no trainings activities were carried out during 2021. DK informed that a questionnaire was created and presented to the potential users of both TES systems. AT participated in an EU workshop regarding the ieCA system for UCC NCTS.

In connection with the UCC REX system, BG informed that the REX registrations are provided only at the central level. EE participated in the REX STP training organised by the Commission. HR also participated in trainings organised by the Commission and performed education activities, such as regular seminars and workshops, for economic operators and other customs officials, while AT created an Application Guide for the customs officials.

Concerning COPIS, BG prepared trainings for the customs officials responsible for the project. CZ organised regular webinars and seminars on the implementation of COPISv4. IT informed that the ICT central directorate published operating instructions both for customs officials and external users with regards to the new software version of COPIS, while AT held workshops with the central customs department.

In terms of the EU SWE-C, CZ provided recommendations on the usage of customs declarations. PL launched the second phase of the pilot project on the new NSW platform by the SW national project group with the PCA, customs officials and the economic operators to promote the future of the aforesaid platform. In parallel, PL organised several trainings dedicated to the future users of the PKWD-Single Window system.

SI prepared training materials on the CRMS2 and organised a one-day workshop, dedicated to the personnel of the national financial administration, to present the correct method of using the main functionalities of the new IT system.

BG issued instructions to the Territorial Directorates processing the e-Commerce consignments. CZ established a national project group with business and IT experts, helpdesk, as well as experts from customs offices to implement the e-Commerce & CP 42/63 project. DK organised trainings for customs officials on H7 declarations. EE prepared training materials for system users and organised skill maintenance trainings for customs officials. EL published all related information of the e-Commerce & CP 42/63 for customs officers and economic operators on the Hellenic customs portal. LT informed that the e-Commerce & CP 42/63 functionality was presented several times.

Regarding UCC ICS2, BG completed training activities for both customs officers and customs administrators. CZ conducted training for the customs officers concerned, while FI organised trainings on several levels and for several groups of officials and Information and Communications Technology (ICT) personnel. EL published all related information of the UCC ICS2 for customs officers and economic operators on the Hellenic customs portal. AT informed that training videos were created and presented in workshops dedicated to customs officials.

Concerning UCC Surveillance3, DK provided to national customs authorities an initial introduction to the key resources of the system, while FI organised trainings on several levels and for several groups of officials and Information and Communications Technology (ICT) personnel to ensure a smooth deployment.

DK conducted seminars, workshops and on-boarding activities regarding the upcoming changes on the UCC AN/PN/TS system. LT provided information regarding the operation of the new Process Area functionality to customs officials.

LT reported that training materials and activities on UCC GUM were delivered to customs officials.

Relating to the UCC INF SP, DK reported that key customs officials were highly involved in the design and configuration of the system. DE organised multiple online training courses with the customs officers to provide an introduction to the procedure of the UCC INF system. EE provided national training materials and organised training session for the customs officials, while FR reported that national seminars were held. Similarly, FI conducted training sessions regarding the updated systems.

EE informed that test functionality information for the Adjustments of the existing import applications under the UCC projects were distributed via e-channels. EL informed that training has been planned to take place at later phases of the project, while FR reported that national seminars were held at the end of 2021.

In respect to CCN2, HR carried out courses for the customs officers related to the IT Infrastructure and provided information related to new CCN2 network. SI attended trainings and technical webinars organised by the Commission.

Concerning the UCC UUM&DS project, BG and IT organised trainings for the customs officers and the service desk, while EE translated the pertinent eLearning courses. HR held an online training for more than 70 customs officers, to inform about the new UUM&DS features in practical use. FI participated in several meetings where the content and configuration of the UCC UUM&DS system were discussed by experts. PT created training materials following the elaboration and approval of the top management of the "Ofício Circulado N.º 15842 2021-07-07" which instructs the national economic operators on the registration process and access via UCC UUM&DS. A training on roles and responsibilities of PT's UCC UUM&DS national project managers (NPM) also took place during 2021.

In addition, BG reported that regular seminars, workshops and skill maintenance trainings were held during 2021. EE provided information on the upgrades of the systems via e-channels. Lastly, LV reported that various training courses have been organised for customs officials regarding changes and improvements in the National Electronic Customs Data Processing System.

### **1.6.5 Coordination of e-Customs with other e-Government systems or activities**

In 2021, the coordination of e-Customs activities with other e-Government services was managed through cooperation with various ministries, ICT and legal departments, tax administrations and economic operators. The objective was to inform all relevant stakeholders on the necessary requirements for the implementation of the MASP-C and other e-Customs related projects.

Alongside the MASP-C coordination activities carried out by the Commission, presented at length in previous sections, some Member States highlighted the following key activity areas during 2021.

BG reported that the EORI webservices, which are used by the national import systems and the national components of UCC NCTS, ICS and UCC AES, are validated at national level. Coordination meetings were held with the national tax authorities regarding the national activities for the e-commerce project. For the UCC ICS2 project, BG has established coordination with the national import system, the national risk analysis system, and the national part of CCN.

CZ informed that coordination was made with their Customs office responsible for conformance testing and EORI national system. During 2021, CZ were in close contact with different key partners for the development of their Single Window solution. CZ also



reported cooperation with ITSM on EU level. Furthermore, CZ informed that the UUM&DS component has been withdrawn from the national decision system ASEO.

DK reported that national stakeholders as well as experts and external consultants were involved in the UCC AES and UCC NCTS projects, who supported the projects' activities to refine the technical solutions and processes. With regards to eCommerce project, there has been ongoing coordination with several authorities, including the Ministry of Taxation and the Ministry of Finance, the Agency for Digitalisation, Statistics Denmark, as well as with other projects such as the OSS VAT project "One Stop Moms 2", DK-CRS, and UCC ICS2. Several coordination activities were also performed within the context of the UCC AN/PN/TS project-

DK informed about the ongoing coordination with units and departments in the Ministry of Taxation, other MASP-C projects, national systems and other public authorities and ministries; for instance, coordination with regard to ICS2 R1 to support the requirements nationally, and coordination with Manifest on new integration, relocation of temporary storage functionality, and adaptations to internal and external users. Lastly, the Ministry of Finance carried out external review in terms of economy, scope, and priority.

DE informed that the UCC INF SP system is implemented in the EUCTP and that coordination with transport authorities is ongoing for the UCC PoUS project related to the project activities that are linked with the implementation of the EMSWe.

EE reported that the IT Centre of the Ministry of Finance (ITC) has been involved in the UCC AEO MRA project, while coordination with excise and VAT authorities has taken place with respect to the UCC AES project. In addition, the customs authorities have coordinated with the excise, VAT, and statistics authorities for the UCC INF SP project. For the e-Commerce project, EE customs administration has cooperated with the ITC and the system was also being coordinated with the national Surveillance system and the National Entry System.

With regard to the e-Commerce projects, FR reported that coordination with the legal departments (Clearance and Transit) and national systems was carried out for the databases of the economic operators, customs offices, and reference data.

MT informed that the customs authorities are coordinating and discussing aspects of the national single window and the e-Commerce project with the different stakeholders involved in the process.

AT reported that the central application is provided via a portal for economic operators, which is operated by the Federal Ministry for Digital and Economic Affairs. With regard to UCC AES and UCC NCTS projects, coordination with other units and departments is ongoing. AT reported coordination between the EU SWE-C and the national project for adjustment of import systems, while a self-service will be provided via a portal for economic operators for the EORI2 project, which is also operated by the Federal Ministry for Digital and Economic Affairs. AT is collaborating with DG TAXUD within the context of e-commerce and the import applications in relation to the provision of data via Surveillance. For UCC ICS2, there is interdepartmental analysis with National Risk Management, UUM&DS, and national service applications.

In the framework of UCC GUM, AT reported the coordination with the National Customs Decisions project.

PL reported coordination of the UCC CDS, UCC AEO MRA, and UCC EORI systems with the national reference data system (PDR PL/UE), NPM CCN2, and UUM&DS. UCC NCTS interoperates with several systems, including CS/RD, CS/MIS, Automatic Terminal Information Service (ATIS), SPEED, the national Integrated Risk Management

System (ZISAR), UCC EORI, EOS, UCC AEO, the national guarantee management system OSOZ2, UCC AES, AIS, ISZTAR Customs Tariff System, Safe TIR, as well as with TRACES for the verification of the CVED certificates and the Central Service Desk for the support of all Ministry of Finance IT systems. UCC NCTS also supplies data to the PL central data warehouse Ariadna2, which is used for control and statistical purposes. In addition, the system uses the nationally developed mechanisms for user management and authentication, access control, and digital signing of messages. In addition, PL informed that economic operators could submit messages via three different channels: the national SEAP portal ([www.puesc.gov.pl](http://www.puesc.gov.pl)), a WebService and email interfaces. In the reporting period, the NCTS2 was interfaced with AIS and UCC AES. Furthermore, three national IT projects (AES-upgrade, AISupgrade, RPS) were part of the IT Customs complex program called the Electronic Customs and Revenue Services "PUESC-2020" under the direction of the Ministry of Finance. The implementation of the UCC INF SP system took place in cooperation with DG TAXUD, while the UCC PoUS system in PL is part of the export system (ECS2) both from a technical and business perspective.

FI informed that the UUM&DS solution is integrated with UCC CDS, UCC BTI and eAEO and the cooperation with these projects has been essential.

## ANNEX 2 – PLANNING OVERVIEW OF MASP-C PROJECTS

### Explanatory Note on the Planning Overview of MASP-C Projects

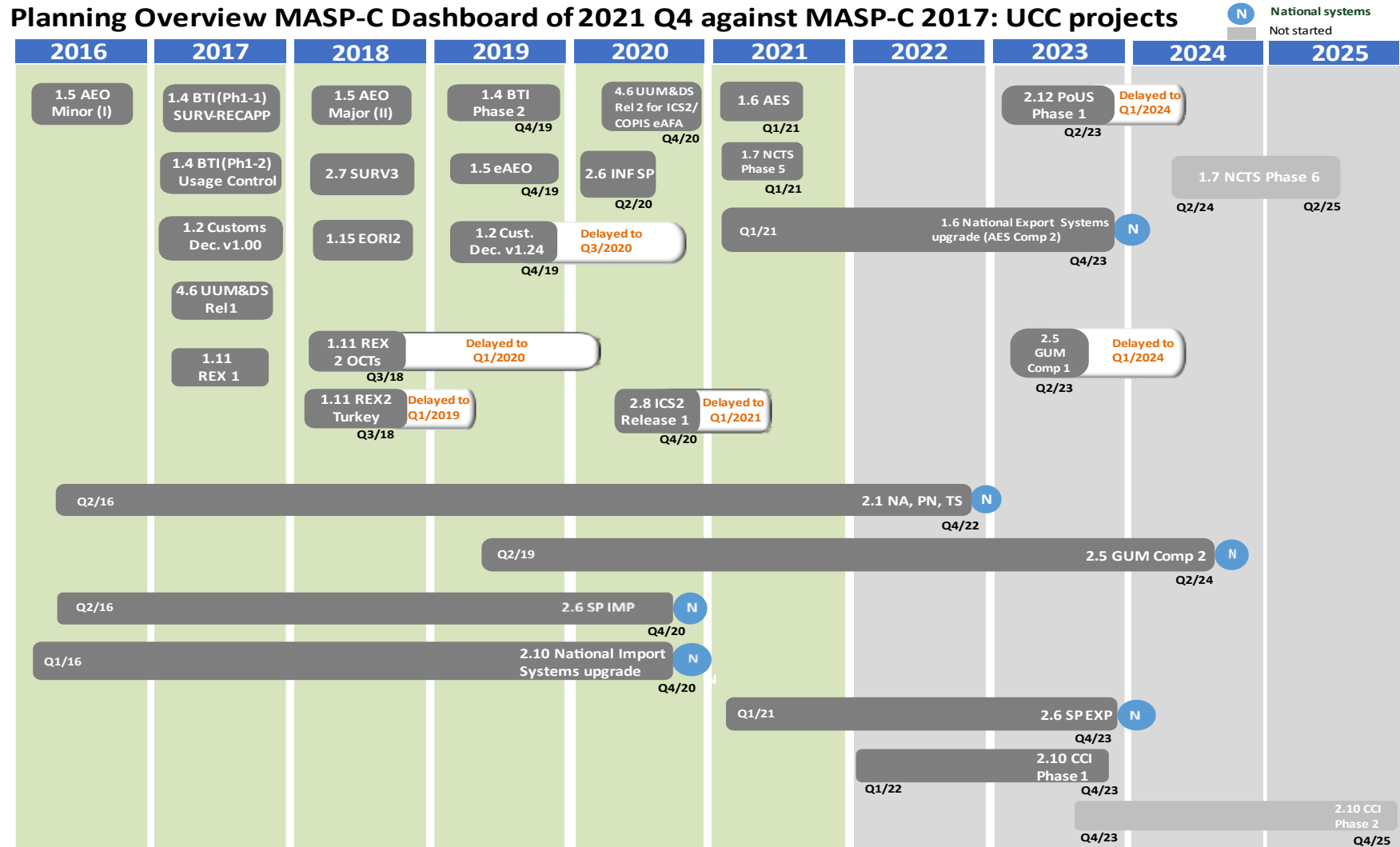
The planning overview of MASP-C Projects provides visual representations of the status of the Customs IT projects, taking into account the MASP-C Revision 2017 as a reporting baseline, while incorporating the milestones re-planned in line with the revised MASP-C Revision 2019. The project status is depicted in terms of the date of entry into operations for initiatives that have already been completed, or the anticipated date of entry into operations for forthcoming projects. Any deviations from the MASP-C Revision 2017 and the MASP-C Revision 2019 Consolidated Project Fiches baseline planning are indicated – either as delays or earlier deployments – in the white bars to the right and left of individual project titles. The actual or expected date of entry into operations is also shown in these bars, for comparison purposes with the corresponding MASP-C. For projects with a window for national deployment activities, the dark grey project title box corresponds to the end of the period for the Member States' operational deployment, while the white bar with blue text indicates the start of this period. The completed projects are depicted in the green project title boxes. Finally, these visualisations focus on the last milestone of each project for readability reasons. For full details on each MASP-C project milestones accompanied by a Gantt chart visualisation, please refer to the Annex 1 of the MASP-C package (produced in Microsoft Project Plan format) in the revision 2017 and the revision 2019.

Besides the information provided in this report, it is essential to consider the UCC Progress Reports which examines in more detail the state of play of the UCC projects and Member States' activities. The UCC Progress Reports<sup>127</sup> are published on the EUROPA website.

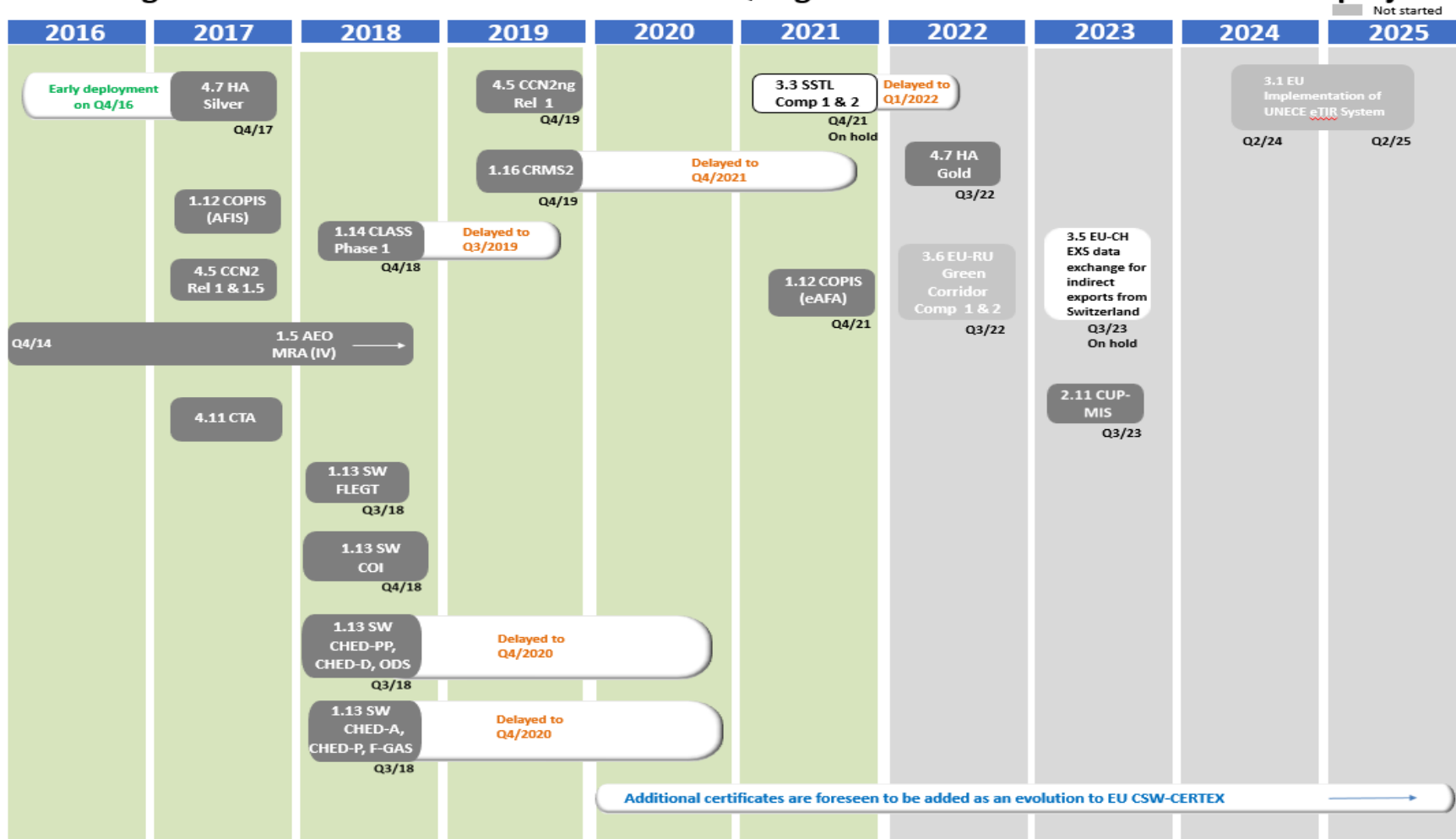
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<sup>127</sup> The latest version can be found at the [Report from the Commission to the European Parliament and the Council](#), pursuant to Article 278a of the Union Customs Code, on progress in developing the electronic systems provided for under the Code.

2021 E-CUSTOMS ANNUAL PROGRESS REPORT

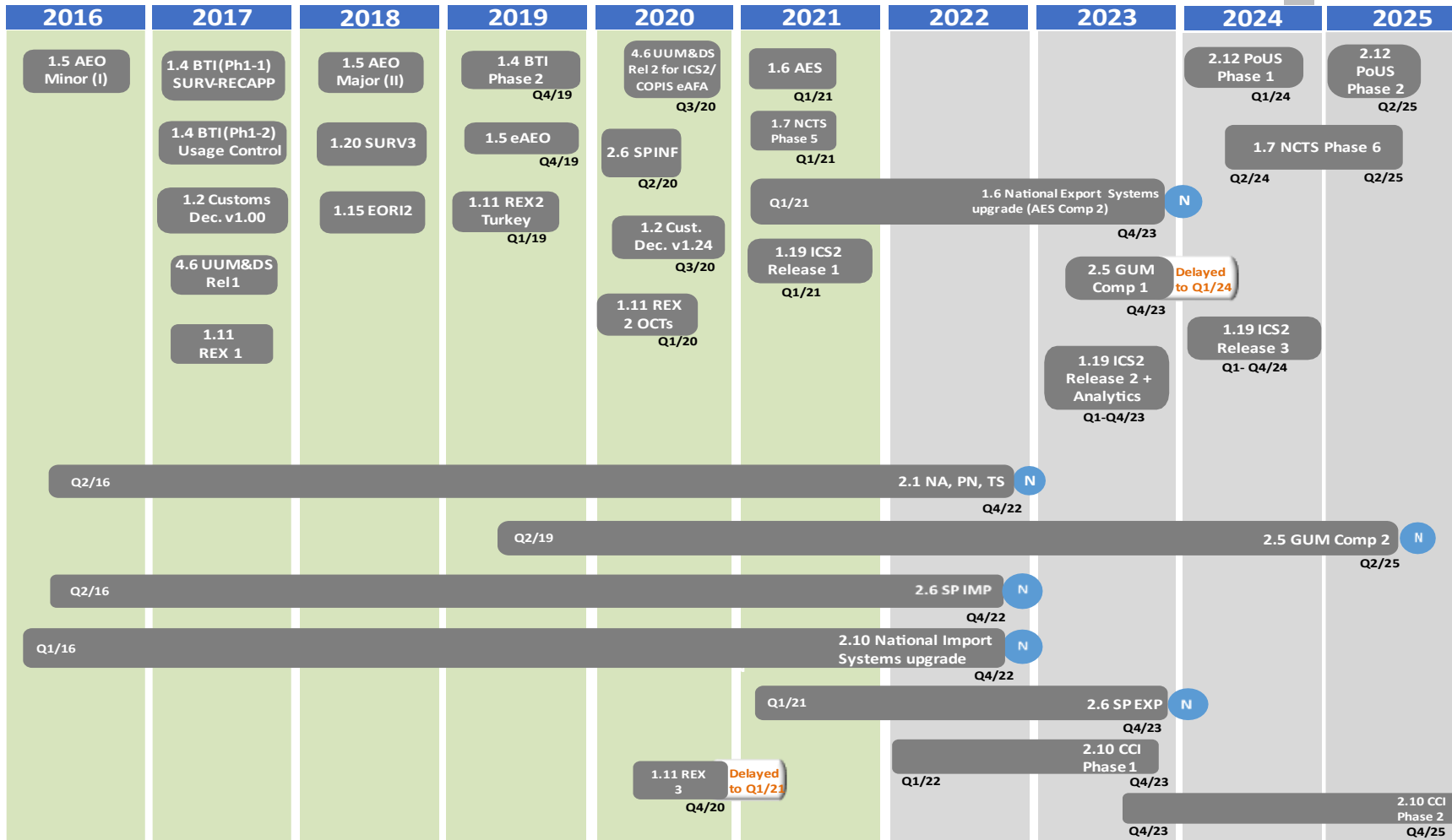


Planning Overview MASP-C Dashboard of 2021 Q4 against MASP-C 2017 : Other non-UCC projects

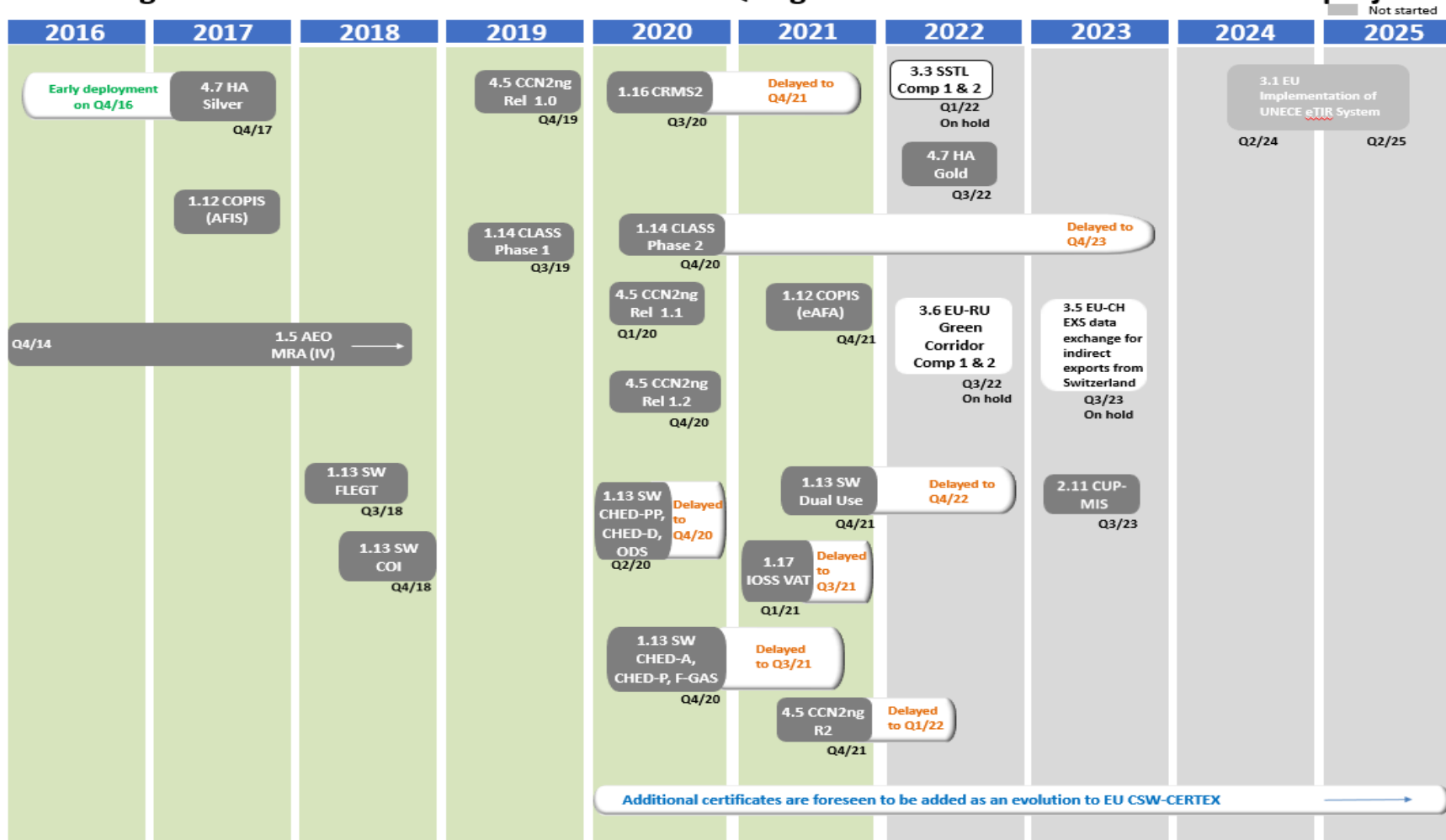




Planning Overview MASP-C Dashboard of 2021 Q4 against MASP-C 2019: UCC projects N National systems Not started



Planning Overview MASP-C Dashboard of 2021 Q4 against MASP-C 2019: Other non-UCC projects



### ANNEX 3 – ACRONYMS, ABBREVIATIONS & KEY TERMS

Acronym	Description
ACT	Application Configuration Tool
AEO	Authorised Economic Operator
AES	Automated Export System
AFA	Application for Action
AFIS	Anti-Fraud Information System
AI	Artificial Intelligence
AIS	Automated Import System
ALM	Application Lifecycle Management
AN	Notification of Arrival
ANPRS	Automatic Number Plate Recognition System
AO	Architecture Overview
APoE	Alternative Proofs of Exit
ARIS	Architecture of Integrated Information Systems (DG TAXUD has chosen ARIS produced by IDS-Scheer as a technical supporting tool for the business process modelling following the Commission overall policy of using ARIS software platform); New version ARIS10
ASEO	National Decision System of CZ
ATA	Admission Temporaire/Temporary Admission
ATIS	Automatic Terminal Information Service
ATLAS	Automated Customs Tariff and Local Processing Application System
AVSEC	AViation SECurity
B2C	Business-to-Consumer
B2G	Business-to-Government
BAC	Business Acceptance Criteria
BAP	LT national user management portal
BCMS	Business Continuity Management System
BCP	Business Continuity Plan
BCP	Business Continuity Procedure
BPM	Business Process Model
BTI	Binding Tariff Information
C/ieCA	Central Information Exchange Converter Application

Acronym	Description
CAB	Change Advisory Board
CAP	Common Agricultural Policy
CBG	Customs Business Group
CCC-DIH	Customs Code Committee on Data Integration and Harmonisation
CCC-GEN	Customs Code Committee – General Customs Legislation section
CCDT	Customs Country Desk Team
CCE	Centralised Clearance for Export
CCEI	Customs Control Equipment Instrument
CCI	Centralised Clearance for Import
CCN; CCN2	Common Communication Network; Common Communication Network 2
CD	Customs Decision
CDCO	Centrally Developed Centrally Operated system of PL
CDMS	Customs Decisions Management System
CDS	Customs Decisions System
CED	Common Entry Document
CEG-DIH	Customs Expert Group on Data Integration and Harmonisation
CENcomm	Customs Enforcement Network Communication Platform of ES
CERTEX	Certificates Exchange Project
CFSS	Common Functional System Specifications
CGM	Customs Goods Manifest
CGU	Comprehensive Guarantee Authorisation
CHED	Common Health Entry Document
CHED-A	Common Health Entry Document for Animals
CHED-D	Common Health Entry Document module for Products Not of Animal Origin
CHED-P	Common Health Entry Document for Animal Products
CHED-PP	Common Health Entry Document module for Plant Protection
CI	Configuration Item
CIO	Chief Information Officer
CIRCABC	Communication and Information Resource Centre for Administrations, Businesses and Citizens
CIS	Custom Information System by OLAF
CLASS	Classification Information System

Acronym	Description
CLEP	Common Learning Event Programme
CM	Crisis Management
CMS	Container status message
CMU	Change Management Unit by IE
COI	Certificate of Organic Inspection
COM	European Commission
COPIS	Anti-Counterfeiting and Anti-Piracy System
COPIS/FALSTAFF	The Italian national application used to file and manage eAFA
CoRA	Common Reference Architecture
COREPER	Committee of the Permanent Representatives of the Governments of the Member States to the European Union
COTS	Commercial Off-The-Shelf
CP	Customs Procedures
CPG	Customs Policy Group
CR	Common Repository
CRMS; CRMS2	Customs Risk Management System; Customs Risk Management System 2
CRS	Customer Reference Services
CS	Central System
CS/MIS	Central Services - Management Information System
CS/RD; CS/RD2	Central Services – Reference Data; Central Services – Reference Data 2
CSD	Central Service Desk
CSI	Common Systems Interface
CSW	Customs Single Window
CTC	Common Transit Convention
CuBus	Business Statistics
CUG	Customs Union Group
CUP-MIS	Customs Union Performance – Management information System
Customs 2020	EU cooperation programme providing the financing to EU IT systems for customs and national customs administrations with the possibility to create and exchange information and expertise.
CUWP	Customs Union Working Party
CVED	Common Veterinary Entry Document
DA	Delegated Act
DAC6	Dispositions d'Application du Code 6



Acronym	Description
DDCOM	Design Document for Common Operations and Methods
DDNCA	Design Document for National Customs Application
DevSecOps	Development, Security and Operations
DG	Directorate General
DGCF	Directors-General of Customs Forum
DG BUDG	Directorate-General for Budget
DG CNECT	Directorate-General for Communications Networks, Content and Technology
DG DIGIT	Directorate General for Informatics
DG MOVE	Directorate General for Mobility and Transport
DG SANTE	Directorate-General for Health and Food Safety
DG TAXUD	Directorate General for Taxation and Customs Union
DG TRADE	Directorate General for Trade
DiG	Digital Guaranteed
DIH	Data Integration and Harmonisation
DMS	Declaration Management System of DK
DPO	Deferred Payment Authorisation
DR	Disaster Recovery
DRR	Digital Reporting Requirements
e-PoC	Electronic Proofs of Origin Certificates
eAFA	Electronic Application for Action
EAM	Enterprise Architecture Model
eATA	Electronic Admission Temporaire/Temporary Admission
EBTI	European Binding Tariff Information
EBSI	European Blockchain Services Infrastructure
EC	European Commission
ECCG	Electronic Customs Coordination Group
ECICS	European Customs Inventory of Chemical Substances
ECS	Export Control System
EDB	Enforcement Database
EESC	European Economic and Social Committee
EIDR	Entry In the Declarant's Records
EIS	European Information Systems
eMan	Electronic cargo Manifests service
EMCS	Excise Movement and Control System

Acronym	Description
EMSA	European Maritime Safety Agency
EMSWe	European Maritime Single Window environment
ENS	Entry Summary Declaration
EORI; EORI2	Economic Operators Registration and Identification; Economic Operators Registration and Identification 2
EOS	Economic Operators System
EP	European Parliament
ePIC	Electronic Prior Informed Consent
ETCIT	Expert Teams on new approaches to develop and operate Customs IT systems
eTIR	Electronic TIR
EU	European Union
EUCDM	European Union Customs Data Model
EUCTP	European Union Customs Trader Portal
EUIPO	European Union Intellectual Property Office
EXS	Exit Summary Declaration
FAQ	Frequently Asked Questions
FGAS	Fluorinated Greenhouse Gases
FINTRAFFIC	Finnish Maritime Traffic Control
FLEGT	Forest Law Enforcement, Governance and Trade
FSS	Functional System Specifications
G2G	Government-to-Government
GDPR	General Data Protection Regulation
GFV	Group of the Future of VAT
GMS	Guarantee Management System of CZ
GRC	Governance Risk and Compliance
GUI	Graphical User Interface
GUM	Guarantee Management
GVS	National Guarantees Management System of LT
H/W	Hardware
HA	High Availability
HCI	Hyper-Converged Infrastructure
HLSG	High Level Steering Group
HMRC	UK Revenue and Customs Service
IA	Implementing Act

Acronym	Description
IaC	Infrastructure as Code
IAM	Identity and Access Management
ICC	International Chambers of Commerce
ICD	Interface Control Document
ICGS	Import of Cultural Goods Importer Statement
ICS; ICS2	Import Control System; Import Control System 2
ICT	Information and Communications Technology
IE	Information Exchange messages
IE/NI	Ireland/Northern Ireland
iMAPS	National Tax Calculation and Validation System of LT
IMCO	Internal Market and Consumer Protection Committee
iMDAS	National Customs Declarations Processing System of LT
IMP	Import
INF	Information Sheet
INF SP	Standardised Exchange of Information for Special Procedures
IOSS	Import One Stop Shop
IOSS-DR	IOSS VAT identifiers Distributed Registry
IPEP	Intellectual property enforcement portal
IPR	Intellectual Property Rights
IRIS	Integrated Risk Information System
IRTA	Implementing Regulation on Technical Arrangements
IT	Information Technology
ITC	IT Centre of the Ministry of Finance of EE
ITCB	Information Technology and Cybersecurity board
ITSB	Information Technology and Security board
ITSC	Information Technology Steering Committee
ITSM	IT Service Management
ITSRM	IT Security Risk Management
ITTI	Institute for Technology Transfer and Innovations
JAC	Joint Analytic Capabilities
JRC	Joint Research Centre
KEL	Known Error List
KPI	Key Performance Indicators
L1 BPM	Level 1 – Global BPM (overview of EU Customs Business Domain and Global Business Data).

Acronym	Description
L2 BPM	Level 2 – High Level BPM (interactions between the main Business Processes with each EU Customs Business Domain).
L3 BPM	Level 3 – Business Requirement BPM (Flow of the legal and business tasks within each main business process and the interactions between the involved stakeholders).
L4 BPM	Level 4 – Functional Requirement BPM (i.e. functional specification) (Flow of the envisaged system; information exchanges; data rules and conditions; requirements trees; test cases and scenarios).
LISO	Local Information Security Officer
LMS	Learning Management System
MASP	Multi-Annual Strategic Plan
MASP-C	Multi-Annual Strategic Plan for Customs
MASP-T	Multi-Annual Strategic Plan for Taxation
MAWP	Multi-Annual Work Programmes
MFF	Multi-Annual Financial Framework
MIG	Message Implementation Guide
MIP	Multi-annual Implementation Plan
MLS	National Customs Authorisations System of LT
MOSS	Mini one-stop shop
MoU	Memorandum of Understanding
MPR	Customs Client Register of LT
MR	Mutual Recognition
MRA	Mutual Recognition Agreement
MS	Member States
NCTS	New Computerised Transit System
NECA	National Export Control Application of PL
NES	National Entry System of RO
NES	National Export System
NETP	Not Established Taxable Persons
NGA	National Guaranteeing Associations
NGEU	NextGenerationEu
NIA	National Identity Authority
NICA	National Import Customs Application of FR
NILT	Northern Ireland Liaison Team
NOVIS	Reference Information Management System

Acronym	Description
NPM	National Project Manager
NPP	National Project Plan
NSD	National Service Desk
NSW	National Single Window
OCTs	Overseas Countries and Territories
ODS	Ozone Depleting Substances
OJ	Official Journal
OLAF	European Anti-Fraud Office
OLGA	National helpdesk of FR
PCA	Partner Competent Authority
PCA	Priority Control Area
PEM	Pan-Euro-Mediterranean
PGS	Play-Ground System
PICS	Programmes Information and Collaboration Space (online document sharing tool used to support the exchange of information between the Commission, customs administrations and the representatives of economic operators across the EU)
PIM	Privileged Identity Management
PKI	Public Key Infrastructure
PKWD	PL national system related to Single Window
PLACI	Pre-Loading Advance Cargo Information
PN	Presentation Notification
PoC	Proof of Concept
PoUS	Proof of Union Status
PUESC	National Trader Portal of PL
QUOTA	Electronic system for quota management / allocation
RC	Risk Control
REX; REX2; REX3	Registered Exporters System; Registered Exporters System 2; Registered Exporters System 3
RfC	Request for Change
RFCS	Russian Federal Customs Service
RIF	Request for Exchange of Information
RIKS	National Risk Evaluation and Control System of LT
RIM	Reporting Interface Module
RPS	PL's System concerning management and settlement of the Special Procedures



Acronym	Description
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan
RSB	Regulatory Scrutiny Board
RSP	Reusable Solutions Platform
RTE	Real Time Exercise
S/W	Software
S2S	System-to-System
SAD	Single Administrative Document
SD	Security Dashboard
SDLC	Software Development Life Cycle
SDR	Super Reduced Datasets
SEED	System for Exchange of Excise Data
SG	Secretariat General
SIAIS2	Slovenian Automated Import System
SLA	Service Level Agreement
SMS	Specimen Management System
SMT	Service Management Tool (Synergia)
SOA	Service Oriented Architecture
SOC	Security Operations Centre
SOFT-DEV	Software development
SP	Special Procedures
SPEED; SPEED2	Single Point for Entry or Exit of Data; Single Point for Entry or Exit of Data 2
SRDS	Super Reduced Data Set
SRR	Security Risk Rules
SSA	Safety and Security Analytics
SSL	Secure Sockets Layer
SSTL	Smart and Secure Trade Lanes
STI	Shared Trader Interface
STP	Specific Trader Portal
SURV-RECAPP	Surveillance Reception Application
Surveillance; Surveillance2; Surveillance3	A central database (managed by DG TAXUD) providing statistics for all products imported into the EU customs territory and for certain products exported from the EU customs territory
SW	Single Window

Acronym	Description
SW-C	Single Window Environment for Customs
T2L	Means of proof of the Customs status of Union goods
T2LF	Means of proof of the Customs status of Union goods for goods transported to, from or between the non-fiscal areas
TAD	Transit Accompanying Document
TARIC; TARIC3	Integrated Tariff of the European Communities; Integrated Tariff of the European Communities 3
TATAFng	Tariff Application Technical Architecture and Framework new generation
TB	Terabyte
TCA	Trade and Cooperation Agreement
TCG	Trade Contact Group
TCS	Trade Customs Solutions
TDA	Transitional Delegated Act
TEMPO	TAXUD Electronic Management of Projects Online
TES	Trans-European System
TIR	Transports Internationaux Routiers / International Road Transports
TNA	Transition Network Analysis
ToC	Terms of Collaboration
TOR	Traditional Own Resources
TRACES	Trade Control and Expert System
TS	Temporary Storage
TSD	Temporary Storage Declaration
TSI	Technical Support Instrument
TSL	Trusted Service List
TSS	Technical System Specifications
U2S	User-to-System
UCC	Union Customs Code
UCC WP	Union Customs Code Work Programme
UFST	Ministry of Taxation of DK
UI	User Interface
UNECE	United Nations Economic Commission for Europe
UPU	Universal Postal Union
UTU	National declaration system of FI
UUM&DS	Uniform User Management & Digital Signature

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Acronym	Description
VAT	Value Added Tax
VIES	VAT Information Exchange System
VLS	National Single-Window System of LT
WA	Withdrawal Agreement
WAF	Web Application Firewall
WCF	World Chambers Federation
WCO	World Customs Organisation
WG	Working Group
WPG	Wise Persons Group
ZISAR	Integrated Risk Management System of PL
Country codes	<a href="http://www.iso.org/iso/country_codes.htm">http://www.iso.org/iso/country_codes.htm</a> (ISO 3166) <sup>98</sup>

**Table 1: Abbreviations and acronyms**

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