



2022 E-CUSTOMS ANNUAL PROGRESS REPORT

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Directorate-General for Taxation and Customs Union
Directorate B — Digital delivery of Customs and Taxation Policies
Unit B1. — Processes & data, customer relationship and planning
e-mail: TAXUD-E-CUSTOMS@ec.europa.eu

*European Commission
B-1049 Brussels*

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1. OVERVIEW OF E-CUSTOMS PROGRESS PERFORMANCE¹

The development of e-Customs constitutes a dynamic process, challenged in recent decades either by fast-paced technological advancements or any unforeseen factors that could hinder the transition to a paperless environment for customs and trade. In collaboration with the Member States, the Commission is committed to providing adequate responses to mitigate interference with the progress of the UCC² implementation. To this end, the remodelling of customs is the inevitable path to fortify the external borders of the EU and secure the single market by harnessing the power of data analytics and innovative technologies and fostering cooperation with third countries.

Throughout 2022, several milestones were achieved in line with the e-Customs streamlining, mirrored in the accomplishment of various objectives in legislative, business, IT and operational activities.

Subsequent to the objectives of the Commission's ambitious programme 'Taking the Customs Union to the Next Level: a Plan for Action', an interim evaluation of the UCC implementation was published on 31 May 2022. The main conclusion was that, to a certain extent, the UCC implementation contributed to the first two objectives of the Customs Union: to protect the financial interests of the Union and the Member States and ensure the safety and security of the EU citizens. In contrast, no conclusion was reached concerning the third objective of facilitating legitimate trade since the primary legal provisions and the IT systems intended for that purpose were not yet applicable.

In 2022, the Commission pursued its goal of further securing the e-Customs framework by supplementing the existing legislation with new measures. On this basis, extensive discussions took place for the amendment of Annex A to the UCC DA and UCC IA, which concluded with the finalisation of the first drafts of the revised legal texts in mid-December 2022.

In pursuance of Article 278a of the UCC, the Commission submitted the fourth UCC Annual Progress Report to the Parliament and Council in December 2022. The report analysed the tangible progress made for all system types, while highlighting potential delays and mitigation measures. Specifically, the Commission proposed five implementing decisions to grant derogations to the Member States experiencing delays in the ongoing IT developments beyond the legal deadlines.

Remarkable progress was achieved in 2022 regarding the EU SWE-C Regulation, when thorough deliberations took place among the Parliament, Council and Commission in the

¹ From a timeline perspective, the information of the report reflects the author's perspective on 1 January 2023.

² The full terms for all abbreviations and acronyms can be consulted in [Table 1](#) of the current document.

form of tripartite meetings ('trialogues') to reach an agreement on the legal text. Following the unanimous approval of its final version by the IMCO³, the Parliament adopted the legislative text on 4 October 2022. Therefore, the Regulation (EU) 2022/2399 of the European Parliament and of the Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013 was published in the Official Journal on 9 December 2022. To further enable the automated verification of non-customs certificates, the EU CSW-CERTEX, which succeeded the EU CSW-CVED pilot project launched in 2015, introduced two new domains (CITES and DuES) to the existing eight from the previous year.

Parallel work was undertaken with regard to the EMSWe Regulation that would apply as of 15 August 2025. DG TAXUD focused on preparing the tertiary legislation by organising four CBG meetings, held jointly with the DG MOVE EMSWe subgroups and the EMSWe data and interface thematic teams. Both the DA and IA legal documents were finalised by the end of 2022.

The Commission continued the discussions with the UK via coordination meetings to ensure a follow-up on the ongoing activities concerning the application of the IE/NI Protocol and TCA. Following the UK's failure to properly implement the IE/NI Protocol, the Commission decided to take the infringement procedure launched on 15 March 2021 to its second stage by addressing a reasoned opinion to the UK on 15 June 2022, while instigating two additional infringement procedures concerning customs and SPS rules. On 22 July 2022, the Commission initiated four new infringement procedures due to the UK's failure to comply with the UCC requirements regarding the movement of goods from GB to NI to implement the rules on excise duties, including alcohol and alcoholic beverages, and VAT for e-commerce. Finally, notable progress was made regarding the testing activities of the new EU Access System launched in October 2022.

Following the Commission's 2019–2024 political guidelines, new initiatives (CBAM, BVI and BOI, Smart Border, Military Mobility, Deforestation Regulation, Forced Labour and Customs Reform) were introduced in the customs area in 2022, responding to different policy areas which impact customs formalities. The work on the CBAM legislation progressed steadily, resulting in a provisional political agreement on 13 December 2022. Two new projects on BVI and BOI were launched, requiring amendments to Annex A to the UCC DA and UCC IA, and the pertinent legal drafts were submitted for consultation in November and December 2022. The implementation of the Smart Border Project initiative would entail its integration with the existing TES systems. As regards the Military Mobility initiative aiming at enabling the movement of military equipment, assets and personnel, the project was at the assessment stage. Concerning the text of the new Regulation on deforestation, the Commission, Parliament and Council reached an agreement in December 2022. The draft proposal on the Forced Labour initiative was delivered to the Parliament and Council in 2022. In relation to the Customs Reform initiative, a draft proposal and impact assessment were submitted for review to the RSB.

The fruitful cooperation among the Member States, economic operators and Commission towards the digitalisation of all customs formalities continued throughout 2022. Project and/or expert groups met regularly to foster progress regarding the implementation of the e-Customs systems (UCC CDS, UCC CCI, UCC ICS2, UCC NCTS-P5, UCC NCTS-P6, UCC AES, UCC INF SP, Digitalisation of Cultural Goods). In particular, the B2G project group, which initiated its activities in 2021, pursued its investigations to develop the EU SWE-C B2G framework of the EU customs. In addition, the project group compared the proposal on deforestation-free products and the EU SWE-C B2G concept and underlined that their similarities and differences should be further analysed and addressed.

³ The full terms for all abbreviations and acronyms can be consulted in [Table 1](#) of the current document.

The Wise Persons Group (WPG) concluded the work on developing innovative ideas and concepts to cope with future challenges of the Customs Union. Therefore, the WPG published its landmark report on 31 March 2022, highlighting the need for fundamental and wide-ranging reforms, expressed in 10 recommendations. The ETCIT⁴ III expert team was launched in 2022 to explore the customs IT collaboration further, taking into consideration the WPG report.

In 2022, significant progress was achieved with regard to the MASP-C Revision 2019 projects, marking milestones in the implementation of the UCC systems. More concretely, UCC REX3 P2 and CCN2 R2 came into operation in 2022. Likewise, COPIS v4.1.2.0, CLASS v2.0.0.0, CRMS2 v1.2.0.0, UCC INF SP v1.3.3.0 and CUP-MIS v1.0.1.2 went live in 2022. Besides the progress, the Commission received a total of 116 derogation requests from several Member States concerning the following systems: UCC AN (21), UCC PN (20), UCC TS (21), UCC NIS (16), UCC ICS2 R2 (12), UCC AES (7), UCC NCTS-P5 (4), UCC CCI-P1 (11) and UCC ICS2 R3 (4). Regarding the delays announced in the implementation of UCC AN/PN/TS, UCC NIS and UCC ICS2 R2, discussions started on drafting five Commission Implementing Decisions that would be published in early 2023. In particular, as regards the anticipated UCC ICS2 R2 in 2023, the Commission evaluated these requests based on established common criteria. Subsequent to several bilateral meetings held by the Commission in December 2022, derogations were granted to the Member States for UCC ICS2 R2 and would apply from 1 March 2023 until 30 June 2023. In addition to the steady progress of UCC AES and UCC NCTS-P5 that entered in production in 2021, compatibility measures were introduced in the TSS for the Member States and economic operators to guarantee the continuity of operations for both UCC AES and UCC NCTS. Regarding UCC AES, the updated Business Guidance was approved in May 2022 and translated into French and German in December 2022. Furthermore, UCC AES was successfully deployed by ES in February 2022 and the export of messages between DE and ES started in April 2022. An overview of the advancement of the MASP-C Revision 2019 projects can be found in [Annex 2](#).

The evolution of the UCC IT implementation progress is depicted below in **Figure 1**. Subsequent to the MASP Revision 2016, the initial development of the UCC IT implementation was foreseen in 2020. Nonetheless, the challenging nature of this planning entailed reassessments during the MASP Revision 2017 and the MASP-C Revision 2019. Taking into consideration the new realistic approach of the UCC IT implementation of the systems, a notable progress of approximately 87% was achieved in 2022 by the Commission.

⁴ The full terms for all abbreviations and acronyms can be consulted in [Table 1](#) of the current document.

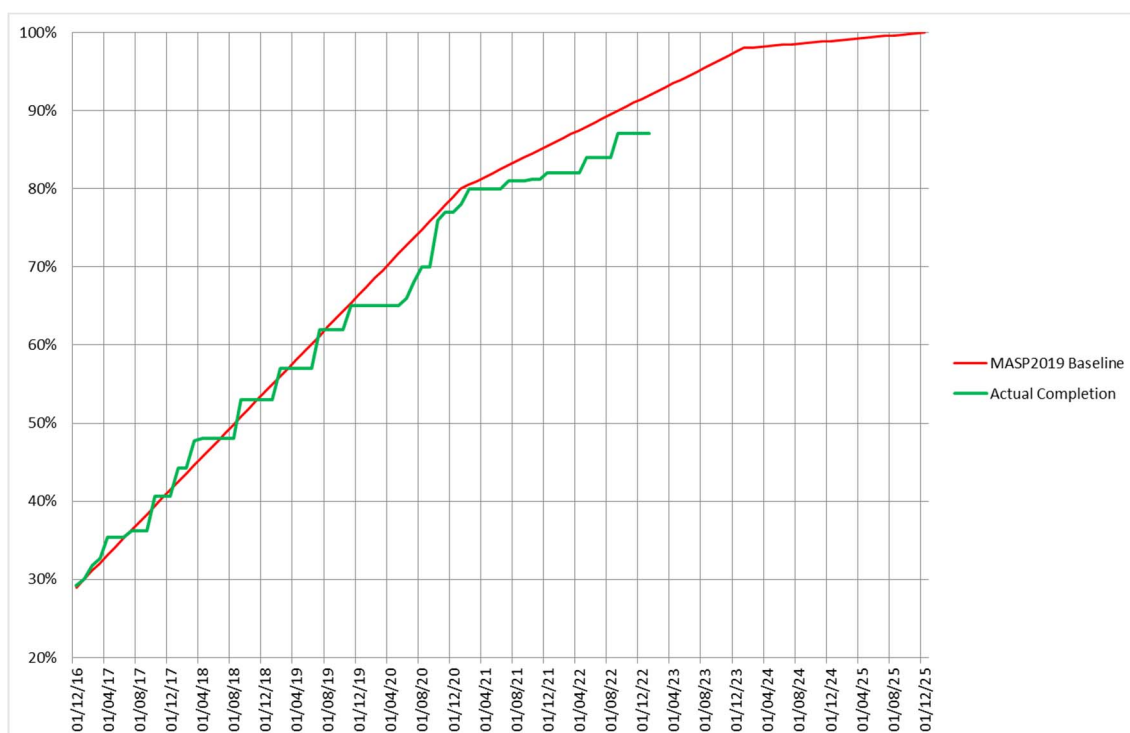


Figure 1: UCC IT Implementation progress

Throughout the reporting year, the Commission continued improving transparency and visibility regarding the UCC IT implementation progress by launching communication campaigns that reached 15 million impressions and 3.6 million online video views. In addition, the Commission further developed the IT modernisation programme by complementing the systems and infrastructure's updates, as defined in the IT strategy in the MASP-C⁵ Revision 2019, with the necessary reusable architecture components and with modern, agile and flexible software development approaches. Regarding the IT security environment, 8 out of 13 cybersecurity projects identified for areas such as infrastructure, business application products or services were launched and progressed in 2022.

In 2022, the Commission continued pursuing the improvement of the business continuity as a key objective. The monitoring of the core customs IT systems and infrastructure performance through the CCN experienced growth in 2022, marking an exchange of more than 11.6 billion messages and achieving a high availability of 99.80%. Additionally, with regard to the creation of the Data Lab, serving as a tool for exploiting data and assisting policy officers in their tasks, its first version entered in production in the first quarter of 2022.

Comprising of a wide scope of areas, some evident challenges include ensuring the enhancement of controls to confront fraud and security risks, greater monitoring of the EU customs legislation and benefit from innovation as well as fostering collaboration with international partners in the field of customs. The development of e-Customs 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.

To this end, the Member States and Commission dedicated a noteworthy budget to both human resources and investments. Similar to recent years, 92% of the 2022 total budget

⁵ The full terms for all abbreviations and acronyms can be consulted in [Table 1](#) of the current document.

allocated by the Member States and Commission was dedicated to the development of new IT systems and only 8% to maintenance activities, as depicted in **Figure 2** below.

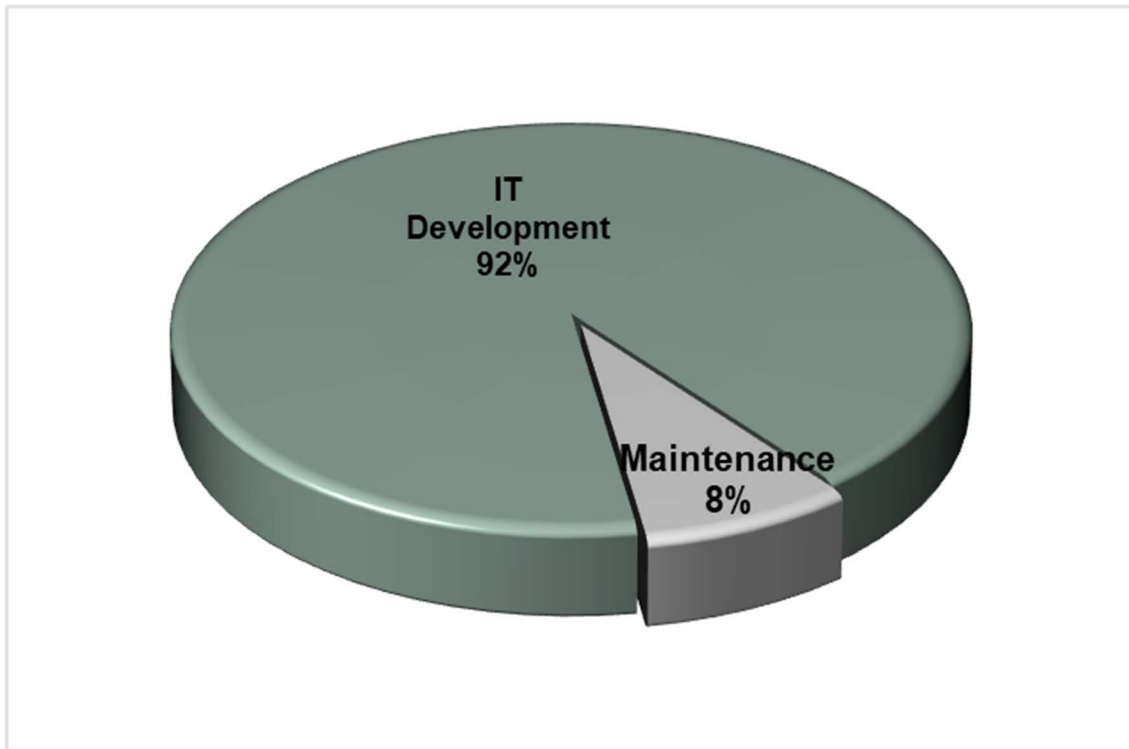


Figure 2: Commission and Member States' total expenditure on IT Development and Maintenance in 2022

Lastly, the amount allocated to the e-Customs activities by the Member States and Commission in 2022 was EUR 369,052,107.83 compared to EUR 381,271,813.50 in 2021, as illustrated in **Figure 3**.

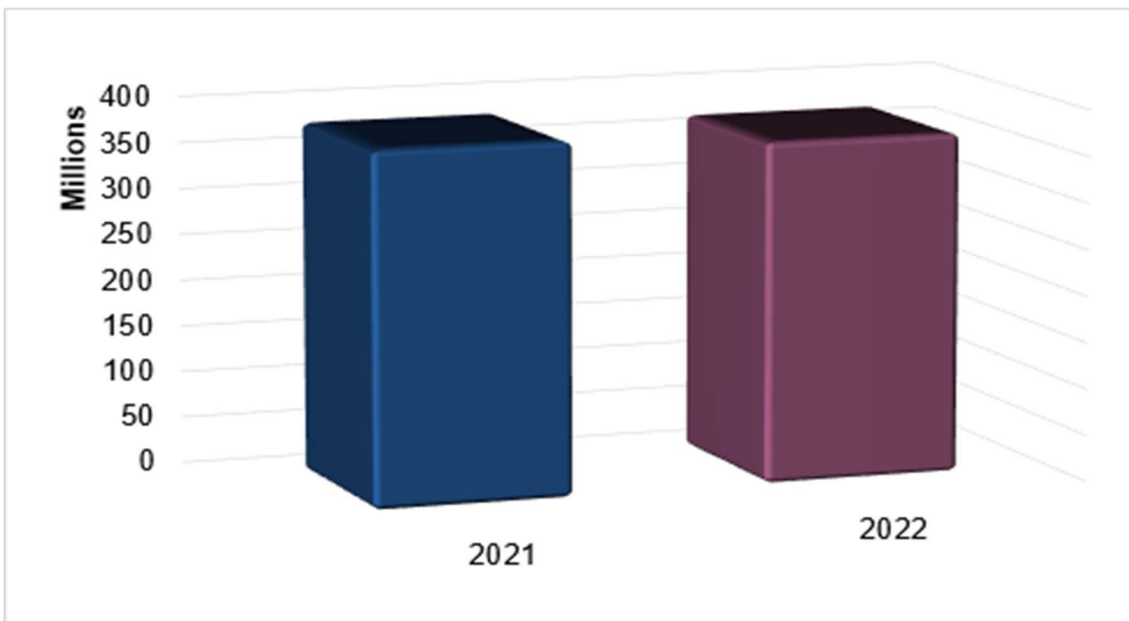


Figure 3: Commission and Member States' grand total on the e-Customs activities in 2021–2022

2. INTRODUCTION

The 2022 e-Customs Annual Progress Report is the fifteenth report prepared pursuant to Article 12 of the e-Customs Decision (Decision 70/2008/EC)⁶, under which the Member States are required to report on the progress made towards coordinating the implementation of the e-Customs initiative. The Commission⁷ prepares a comprehensive report covering the annual operational (from a technical viewpoint) and strategic financial objectives 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 reports⁸.

3. BACKGROUND

3.1 e-Customs Initiative

In 2003, the Commission issued an e-Customs Communication⁹ with 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 Resolution¹⁰ endorsed the objectives formulated in the e-Customs Communication, thus, establishing the framework for the e-Customs initiative. Decision 70/2008/EC⁶ 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 a coherent and 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 Commission by specifying the tasks of both stakeholders for the development and the synchronised implementation of the IT projects.

3.3 Governance of the e-Customs Implementation

Article 8(2) of the e-Customs Decision stipulates that the Member States and Commission should jointly prepare and regularly update a Multi-Annual Strategic Plan for Customs (MASP-C)¹¹ to ensure the effective management and coordination of all

⁶ 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. 21–26](#).

⁷ The European Commission is referred to as 'the Commission' throughout the document.

⁸ LU did not submit a national e-Customs progress report.

⁹ 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](#).

¹⁰ 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](#).

¹¹ 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 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 Revision 2017 v1.4 remains a fundamental reference point for the implementation planning of e-Customs projects.

activities and tasks related to ongoing and future e-Customs projects. As an overall project management and planning tool, the MASP-C provides 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 experts from the Member States' administrations. 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 Commission are equally responsible for facilitating the customs communication and information exchange systems by coordinating the electronic systems' setup, deployment and operation at the EU and national levels.

4. E-CUSTOMS KEY MILESTONES AND ACHIEVEMENTS IN 2022

4.1 Union Customs Code (UCC) and other legislative pillars

In 2022, the EU Customs Union remained a unique example, where all EU Member States collaborated in unity by applying a uniform legislative framework for handling the import, export and transit of goods. The Commission continued to address trade flows, new business models and the constantly evolving technological environment by optimising the customs legal framework and procedures. To this end, upgrading or developing electronic systems to change customs formalities was essential.

Subsequent to the impact of the substantial legal changes introduced by the Treaty of Lisbon¹², the UCC¹³ 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 implementing provisions, adopted as the Delegated Act (DA)¹⁴, Implementing Act (IA)¹⁵ and Transitional Delegated Act (TDA)¹⁶ to the UCC, are already in force since May 2016.

The complexity of the EU customs digitalisation required the amendment of Article 278 of the UCC. In particular, Regulation (EU) 2019/632¹⁷, adopted by the Commission in 2019, introduced a transitional period for the parallel operation of the existing electronic

¹² 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](#).

¹³ 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](#).

¹⁴ 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](#).

¹⁵ 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](#).

¹⁶ 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 operational and amending Delegated Regulation (EU) 2015/2446, [OJ L 69, 15.03.2016, p. 1–313](#).

¹⁷ 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](#).

and paper-based systems. Following the amendment and the new Article 278a of the UCC, the Commission published the 2022 UCC Annual Progress Report¹⁸ on the progress achieved in developing the electronic systems (provided for). Multiple meetings took place between the Member States' Chief Information Officers (CIOs) and Commission, where information was exchanged in full transparency. Several Member States reported delays in the ongoing IT developments. In addition, many customs authorities were prevented from completing the deployment of national entry and import systems by the end of December 2022 and Import Control System 2 (ICS2) R2¹⁹ by March 2023. The information shared by the Member States provided the Commission with real data to assess the situation and propose solutions in support of the former's efforts. This issue was raised during the Trade Contact Group (TCG) meeting, especially regarding the national entry and import systems. A helpdesk function in the Directorate-General for Taxation and Customs (DG TAXUD) was established for addressing questions on legal, procedural and technical issues. Furthermore, the Commission requested regular updates and conducted additional surveys for a realistic overview.

For this purpose, the Commission proposed a draft of five implementing decisions to grant derogations to several Member States, allowing them to temporarily use means other than electronic data-processing techniques, as defined in the UCC to exchange information concerning these systems. Other derogations requested by the Member States on the trans-European systems (TES), such as Centralised Clearance for Import (CCI), Automated Export System (AES) and New Computerised Transit System (NCTS) P5²⁰ would be assessed in 2023.

As indicated in the aforementioned report, the MASP-C dashboard continues to be used for tracking progress for the Commission to identify potential delays at an early stage. The MASP-C Revision 2019 and the UCC Work Programme (UCC WP) 2019²¹ remain the baseline for the dashboard milestones since 2019. Pursuant to Article 280 of the UCC, the UCC WP provides a high-level description of UCC projects and related electronic systems²², their legal basis as established by the UCC provisions, key milestones for the completion of stable Technical System Specifications (TSS) and anticipated start and end dates for system deployment. Updates on the UCC WP are required to keep pace with the latest developments of the UCC and ensure alignment with the anticipated MASP-C Revision 2023.

Subsequent to the UCC's entering into force, ongoing dialogues about pertinent legal issues among various stakeholders entailed further additions and amendments to the UCC legal package. In particular, efforts initiated in 2021 to amend Annex A to the UCC

¹⁸ REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL pursuant to Article 278(a) of the Union Customs Code, on progress in developing the electronic systems provided for under the Code, [COM \(2023\) 68 final](#).

¹⁹ In the current document, the various Releases of the systems will be abbreviated as 'R'.

²⁰ In the current document, the various Phases of the systems will be abbreviated as 'P'.

²¹ 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](#).

²² The UCC projects and related electronic systems included in the UCC WP can be divided into three categories: (a) eleven central TES 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 Surveillance³, UCC Proof of Union Status (PoUS), UCC Information Sheets (INF) for Special Procedures, UCC Centralised Clearance for Import (CCI) and UCC Guarantee Management (GUM), (b) three decentralised TES 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 (c) 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 (AN, PN and TS), UCC National Import Systems (NIS) and UCC Special Procedures (SP).

DA and UCC IA continued in 2022. Some anticipated changes in Annex A include a formatting alignment with Annex B data elements, establishing a modern structure allowing the seamless development of IT-level data modelling and creating integrated data sets. The work undertaken with regard to Annex A is closely related to the changes in Annex B. Further details on the amendments and the work on the revision of Annex B can be found in [section 4.2](#).

Throughout 2022, 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 ECCG to expand the scope of the Implementing Regulation (EU) 2021/414²³ on technical arrangements (IRTA) for developing, maintaining and employing electronic systems for the exchange and storage of information. Notably, the latest extension of the Regulation covered UCC Registered Exporter System (REX), UCC Proof of Union Status (PoUS), UCC Surveillance³ (SURV3), anti-Counterfeit and anti-Piracy Information System (COPIS) and an update to UCC ICS2 for the Safety and Security Analytics (SSA). Regarding the changes proposed in version 5 of IRTA, the Commission invited the Member States to submit their comments by October 2022 to finalise the document and start the interservice consultation by the end of 2022.

Following a request by the Parliament, the Commission published on 31 May 2022 an interim evaluation of the UCC²⁴, providing an assessment of the implementation of the UCC both at the EU and Member States' level. The Member States shared their views and experiences on the current application of the UCC for the period from 1 May 2016 to the end of December 2020 by replying to the EU questionnaire distributed at the end of 2021. As concluded in the interim evaluation, the UCC implementation has so far contributed to the general objectives of protecting the financial interests of the Union and the Member States, and the safety and security of the Union's citizens only to a certain extent. However, the evaluation cannot conclude on the third general objective²⁵ of the UCC, the facilitation of legitimate trade, because the main legal provisions and IT systems intended for that purpose are not yet applicable.

Highlights

- The fourth UCC Annual Progress Report was submitted to the Parliament and Council by the end of 2022.
- The Commission proposed five implementing decisions to grant derogations to the Member States reporting delays in the ongoing IT developments.
- The interservice consultation concerning the changes proposed in version 5 of IRTA started in December 2022.
- An interim evaluation of the UCC implementation was published on 31 May 2022.

²³ 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](#).

²⁴ COMMISSION STAFF WORKING DOCUMENT EXECUTIVE SUMMARY OF THE EVALUATION INTERIM EVALUATION of the implementation of the Union Customs Code, [SWD\(2022\) 159 final](#).

²⁵ The three general objectives of the Customs Union are: (a) to protect the financial interests of the Union and the Member States, (b) to ensure the safety and security of EU citizens, and (c) to maintain a proper balance between customs controls and facilitation of legitimate trade.

4.2 Revision of Annexes A and B to the UCC DA and UCC IA and Change Management

The UCC, together with the UCC DA and UCC 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'. With the objective of achieving compliance with the shared data requirements between the different electronic customs systems and accordingly updating the common data annexes, in 2019, the 'UCC DA/IA Data Annexes Revision for Harmonisation of Customs Data Requirement' project group was established. To this end, intensive work and analysis were carried out on Annex B²⁶ to the UCC DA amendment (Commission Delegated Regulation 2021/234)²⁷ and the UCC IA (Commission Implementing Regulation 2021/235)²⁸, which were published in the Official Journal²⁹ and entered into force in the first quarter of 2021.

The data harmonisation process required for the TES, national electronic systems and the systems used by the economic operators necessitates remarkable efforts. Thus, the Commission established a structured mechanism for 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 2021 publication 'Change Management Process for UCC Data Requirements' v3.20³⁰. The scope of the document focuses on Annexes B and D to the UCC DA as well as Annexes B and C to the UCC IA.

The next update of Annex B to the UCC DA and UCC IA through the change management process was launched on 4 June 2021 in the aforesaid project group and the Customs Expert Group, Data Integration and Harmonisation Section (CEG-DIH). A total of 481 change requests were proposed until mid-2022 from the Member States and Commission. The Member States and TCG continued communicating their comments in 2022 on the aforesaid change requests to the Commission for a thorough discussion, while drafting the legal provisions was ongoing.

Following the same principle for the change management of Annex B, thorough review and discussions on Annex A to the UCC DA and UCC IA were ongoing in 2020, 2021 and 2022 in the aforementioned project group and biweekly consultation hours, with the participation of the Member States and UCC Customs Decisions System (CDS) and UCC Authorised Economic Operators (AEO) experts from the Commission. The modifications applied to Annex A followed the structural principles of the new Annex B (e.g., data set approach and unique identifiers for all data elements), while utilising the experiences gained from the revision of the latter. The discussions on the proposals (242 in total) were concluded in November 2022. The first draft of the revised legal texts of Annex A to the UCC DA and UCC IA were finalised in mid-December 2022. A pre-

²⁶ The UCC DA amendment comprised the common data requirements, while the UCC IA amendment harmonised the respective formats and codes, for the exchange and storage of information between customs authorities as well as the latter and economic operators. Thus, ensuring 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. Both amendments also introduced transitional measures to facilitate the implementation of the new data elements.

²⁷ 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](#).

²⁸ 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](#).

²⁹ [Official Journal of the European Union](#), L 63, 23 February 2021.

³⁰ The publication is subject to the Commission's policy on the access to documents.

publication is planned via a new release of the European Union Customs Data Model (EUCDM) 7d in the first half of 2023, while the formal adoption of the updated Annex A is expected towards the end of the second quarter of 2023.

The outcome of the consultations with the Member States, economic operators and internally in the Commission on Annex A, Annex B and Annex 12-01 would be implemented in the amendments to the Commission Delegated Regulation 2015/2446 and Commission Implementing Regulation 2015/2447, both expected to be adopted by the Commission in the second quarter of 2023.

Highlights

- The change management for Annex B to the UCC DA and UCC IA was launched on 04 June 2021 and 481 change requests were proposed by mid-2022.
- The Member States and TCG continued to communicate their comments on Annex B, while the drafting of the legal provisions was ongoing.
- The first drafts of the revised legal texts for Annex A to the UCC DA and UCC IA were finalised in mid-December 2022.

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

The EU is the world's largest trading block, accounting for about 15% of the world's trade, worth nearly EUR 4 trillion. Efficient customs clearance and controls are essential to allow trade to flow smoothly, while also protecting EU citizens, businesses and the environment. At present, the formalities required at the EU external borders often entail the involvement of various 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. This directly impacts economic operators that must submit information to several authorities, each with its own portal and procedures, thus, creating a burdensome and time-consuming reality for the former, while also reducing the capacity of authorities to act jointly in preventing risks.

In recent years, 'single window' initiatives have gathered momentum to streamline the border clearance process within and across the EU. The 'single window' is a trade facilitation measure aiming to provide economic operators with the necessary means to meet the regulatory requirements for goods clearance by submitting data in a standardised manner to multiple recipients via a single-entry point, therefore, reducing duplication, time and costs. In 2008, the commitment of the Member States and Commission to promote an electronic customs environment in the EU⁶ involved the joint effort to establish a framework of single window services. The 2014 Venice Declaration³¹ proposed a progressive action plan to implement an EU Single Window Environment for Customs (SWE-C) and to develop its legal framework. This was reiterated in the 2016 Communication from the Commission on Developing the EU Customs Union and its Governance³², which announced the Commission's plans to explore a workable solution for developing and creating an EU SWE-C.

The necessity to set up a more robust framework for the Customs Union and to further facilitate the fulfilment of customs and EU non-customs formalities led to the legislative

³¹ The Venice Declaration is annexed to the December 2014 Council Conclusions ([ST-16507/14](#)).

³² Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, [COM \(2016\) 813](#).

proposal for a Regulation³³ establishing the EU SWE-C. This proposal addressed problems affecting the goods clearance process (particularly insufficient coordination and fragmented interoperability between customs and partner competent authorities (PCAs)) and pursued three objectives. The first concentrated on defining a governance framework for enhanced cooperation between customs and PCAs and developing interoperable solutions where beneficial and appropriate. The second objective referred to improving working practices between the regulatory authorities involved in international trade to enable more automated, electronic and integrated processes for dealing with goods clearance. The last one focused on determining a data harmonisation framework and enabling the reuse of data to fulfil different formalities required by customs and non-customs authorities for international trade.

In the legislative proposal, the development of the EU SWE-C relies on two pillars of digital administrative cooperation: (a) the government-to-government (G2G) digital cooperation between customs and PCAs through the central component EU CSW-Certificates Exchange Project (CERTEX), and (b) the business-to-government (B2G) digital cooperation. The first pillar aims at supporting the automated reception and verification by customs of the documents for goods clearance related to non-customs formalities. The second concentrates on streamlining reporting formalities imposed on trade for the import, export and transit of specific goods, subject to non-customs regulatory formalities.

The Regulation aims to improve cooperation and enable interoperability between the customs and non-customs domains in streamlining the electronic exchange of documents and information required for the goods clearance process. To this end, the EU CSW-CERTEX facilitates the interconnection of the customs systems of the Member States with EU non-customs systems managing specific non-customs formalities.

Initially, the EU SWE-C Regulation established the framework to enhance intergovernmental exchanges between customs and non-customs authorities at the EU borders, allowing for the automatic verification of non-customs formalities related to health and safety, the environment and product compliance by 2025. This verification ensures EU-wide quantity management and reduces fraud risks in importing and exporting sensitive goods, such as high-emission fluorinated greenhouse gases. A second phase, planned for 2031, would effectuate a B2G scheme to allow economic operators to provide data in one single portal in an individual Member State instead of submitting the data separately to both customs and EU non-customs systems.

Following a mandate given both to the Parliament by the Internal Market and Consumer Protection Committee (IMCO) and the Council by the Committee of the Permanent Representatives of the Governments of the Member States to the European Union (COREPER), negotiations were initiated regarding the Regulation between the Parliament, Council and Commission in 2022, in the form of tripartite meetings ('trialogues'). In the first half of 2022, several technical trialogues were held, concluding that the provisions related to the inclusion of the MASP-C in the proposal for a Regulation, the responsibilities of the national coordinators and the timeline for the implementation of the B2G regulatory formalities required a political compromise. In particular, during the political dialogue on 19 May 2022 with high representatives of the Commission, Parliament and Council, an agreement was reached on several points as part of the political compromise.

Specifically, the proposal's scope was broadened to include Union non-customs systems of voluntary use. The connection dates for the G2G for both mandatory and voluntary Union non-customs systems have been postponed to 2025. In addition, the timeframe for implementing the B2G scheme was agreed to nine years after the regulation enters

³³ 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](#).

into force. Furthermore, the Parliament's approach concerning the reporting and monitoring requirements associated with Part C of the Annex to the Regulation would be replaced by a yearly report that would constitute a horizon-scanning mechanism for all existing and upcoming Union non-customs formalities. In addition, all implementing acts would be adopted under the examination procedure according to Article 5 of Regulation (EU) No 182/2011³⁴. Regarding the provisions on the national coordinators, they have been retained with different wording, reflecting a policy choice substantially in line with the Commission's original proposal. Moreover, the Parliament agreed to maintain the e-Customs Decision⁶ and drop its proposal to include the MASP-C in the legal text. Finally, the Parliament agreed to drop its proposal to establish a working group (WG) for the National Single Windows (NSWs).

Subsequent to this agreement, an updated version of the legal text was concluded and submitted to the translation services on 20 June 2022. The Member States then reviewed the legal text, and the lawyer-linguists of the Parliament and Council undertook a final linguistic revision. The IMCO unanimously approved the result of the inter-institutional negotiations on EU SWE-C and the Parliament adopted the final version of the legislative text during its plenary session on 4 October 2022. The Regulation (EU) 2022/2399 of the European Parliament and of the Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013³⁵ was published in the Official Journal on 9 December 2022.

In line with the Commission's initial priorities following the Venice Declaration, a pilot project was introduced in 2015, the EU Customs Single Window-Common Veterinary Entry Document (EU CSW-CVED), jointly administered by DG TAXUD and Directorate-General for Health and Food Safety (DG SANTE). The objective of this project was to allow the automated verification of three non-customs health certificates. Its successor, the EU CSW-CERTEX, launched in 2017, expands the scope of regulatory requirements and introduces new functionalities, such as quantity management. In early 2022, nine Member States' customs administrations were using the EU CSW-CVED (BG, CZ, EE, IE, CY, LV, PL, PT, and SI), and by the end of 2022, three of them (CZ, EE, and IE) fully migrated, and one (PL) partially migrated to the EU CSW-CERTEX. Moreover, two more Member States (BE and IT) completed the conformance testing, while two additional domains³⁶ were introduced (CITES and DuES), thus, complementing the existing eight domains³⁷ from the previous year.

The Regulation further introduced additional facilitation measures to support the G2G and B2G cooperation, entailing the extension of the use of the Economic Operators Registration and Identification (EORI)³⁸ database to PCAs for validation purposes and the appointment of national coordinators in each Member State to coordinate all matters associated with the effective functioning of the EU SWE-C.

³⁴ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers, [OJ L 55, 28.2.2011, p. 13–18](#).

³⁵ Regulation (EU) 2022/2399 of the European Parliament and of the Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013, [OJ L 317, 09/12/2022, p. 1–23](#).

³⁶ Certificates for International trade of endangered species of wild fauna and flora (CITES), and Dual-use Export Controls (DuES).

³⁷ 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.

³⁸ EORI is a database managed by DG TAXUD that assigns to all economic operators engaging in customs operations a unique number (the EORI number) that is used as an identifier for all dealings with customs authorities in the EU.

A project group was set up in 2021 to elaborate on the B2G dimension of a harmonised national SWE-C. The members' contributions aimed at developing a concept for the EU SWE-C B2G consisting of an overview of functionalities, requirements and information, which the economic operators should submit via a national communication channel to the governments. The concept's objective was to provide comprehensive input to formulate the EU SWE-C B2G framework of the EU Customs.

This project group pursued its investigations and discussions during 2022, aiming at achieving the following goals: (a) continue supporting the legislative process, (b) provide input to a feasibility study related to the future design of the 'To-Be' processes, (c) perform data mapping exercise based on one non-customs domain, (d) examine alternatives for architecture, and (e) identify the obstacles and problems to be tackled in the 'To-Be' process design.

Highlights

- The IMCO unanimously approved the result of the inter-institutional negotiations on EU SWE-C and the Parliament adopted the final version of the legislative text during its plenary session on 4 October 2022.
- The Regulation (EU) 2022/2399 of the European Parliament and Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013 was published in the Official Journal on 9 December 2022.
- The project group dedicated to the B2G dimension pursued its investigations and discussions to support the legislative process.

4.4 European Maritime Single Window environment (EMSWe) in relation to customs systems

The European Maritime Single Window environment (EMSWe) Regulation³⁹ establishes a common, interoperable environment for reporting information from ships to shore during a port call, including some customs formalities. The Regulation would apply as of 15 August 2025.

EMSWe is a decentralised environment based on a Maritime National Single Windows (MNSW) network. Each MNSW provides a harmonised Reporting Interface Module (RIM) for System-to-System (S2S) communication and a Graphical User Interface (GUI) for User-to-System (U2S) communication. The Commission developed the RIM as a common component to be distributed to the Member States in order to be integrated into the MNSW and create a harmonised interface for maritime traders.

The customs formalities included in the EMSWe were the following:

- Notification of Arrival (AN);
- Presentation Notification (PN) of goods to customs;
- Temporary Storage (TS) declaration of goods;
- Customs status of goods (Customs Goods Manifest (CGM));
- Electronic Transport Documents (ETD) used for transit;
- Exit Notification;
- Exit Summary Declaration (EXS);
- Re-export Notification (REN).

³⁹ 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, p. 64](#).

The EMSWe Regulation empowered the Commission to define a harmonised data set covering all reporting obligations and develop as well as maintain common interfaces and services for the MNSWs.

In line with the delegated powers conferred, DG TAXUD and the Directorate-General for Mobility and Transport (DG MOVE) cooperated to supplement the Regulation by establishing the EMSWe data set aligned with EUCDM wherever possible. The EMSWe data set included more than 1,100 data elements required under the EU and national reporting obligations.

In addition to the aforementioned, the EMSWe Regulation granted the Commission implementing powers to lay down the specifications of the harmonised elements of MNSWs and of the common services of EMSWe. To this end, the Commission discussed during 2022 the first set of specifications and rules regarding the harmonised elements of MNSWs and the three common databases of EMSWe.

Several meetings were organised to finalise the DA and IA legal documents as well as define the functional and technical system specifications. In particular, DG TAXUD organised four Customs Business Group (CBG) meetings held jointly with the DG MOVE EMSWe subgroups and the EMSWe data and interface thematic teams.

The work on both legal documents was completed in the aforesaid expert groups and the Digital Transport and Trade Facilitation (DTTF) Committee by the end of 2022 and would be published in February 2023⁴⁰.

Highlights

- The EMSWe Regulation would apply as of 15 August 2025.
- The work on the DA and IA legal documents was completed.

4.5 UK Withdrawal from the EU – Post Activities

Under the procedure outlined in Article 50 of the Treaty of the European Union, the UK has withdrawn from the EU and has become a 'third country'⁴¹. The Withdrawal Agreement⁴² concluded between the EU and the UK is the official act that marked the UK exit and entered into force on 1 February 2020. The Agreement regulates various aspects pertaining to the UK withdrawal, including financial settlements, separation issues, citizens' rights, governance of the agreement and transitional arrangements. Notably, the Agreement established a transitional period (1 February–31 December 2020) as a negotiation window to determine new rules governing trade and cooperation between the EU and the UK, during which the UK continued to comply with the EU law. Article 185 of the Withdrawal Agreement established the application of the Protocol on Ireland/Northern Ireland (IE/NI Protocol) at the end of the transitional period.

⁴⁰ Commission Delegated Regulation (EU) 2023/205 of 7 November 2022 supplementing Regulation (EU) 2019/1239 of the European Parliament and of the Council as regards the establishment of the European Maritime Single Window environment data set and amending its Annex, [OJ L 33, 3.2.2023, p. 24–230](#).

Commission Implementing Regulation (EU) 2023/204 of 28 October 2022 laying down technical specifications, standards and procedures for the European Maritime Single Window environment pursuant to Regulation (EU) 2019/1239 of the European Parliament and of the Council, [OJ L 33, 3.2.2023, p. 1–23](#).

⁴¹ A 'third country' is a country that is not a member of the EU.

⁴² 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').

Furthermore, the EU-UK Trade and Cooperation Agreement (TCA)⁴³ entered into force on 1 May 2021 and defined the new relationship between the EU and the UK to preserve their longstanding friendship and cooperation.

The IE/Ni Protocol sets out the necessary arrangements to address the specific circumstances on the island of Ireland, notably to avoid a hard border and safeguard the 1998 Good Friday (Belfast) Agreement⁴⁴. Under the IE/Ni Protocol, NI stayed de facto in the EU single market for goods, which implies that no new checks are performed on goods crossing the border between NI and IE. In this respect, NI is connected to the TES IT systems for customs. Consequently, the UK, as a contracting party, should continue carrying out the necessary activities for implementing the related UCC IT projects. Moreover, in the context of the IE/Ni Protocol implementation, new geonomenclatures⁴⁵ have been applied for the customs declarations, i.e., 'XI' for NI and 'XU' for the UK, excluding NI⁴⁶. A new registration system has been active since 14 September 2021 to ensure that economic operators receive new validated authorisations with 'XI' EORI numbers. The IE/Ni Protocol also established the right for the EU to be present during any activities of the UK authorities related to the implementation and application of provisions of the Union law made applicable by the Protocol and for the EU representatives to receive all relevant information relating to such activities⁴⁷. The Northern Ireland Liaison Team (NILT) is the body that was instituted to support the UK authorities in jointly implementing the IE/Ni Protocol.

During 2022, coordination meetings continued to take place to discuss and follow up on the ongoing activities pertinent to the application of the IE/Ni Protocol and TCA, including the work of the NILT. A series of technical meetings on IT customs matters were also held in 2022 to discuss and investigate the NILT's real-time access to the UK IT systems, the invalidation of erroneous 'XI' EORI registrations, the closure of open export movements, surveillance data and the user list for the Union systems.

On 13 June 2022, the UK tabled the draft of the NI Protocol Bill⁴⁸ to the UK Parliament for the first reading. The Bill allows UK Ministers to render inapplicable significant parts of the IE/Ni Protocol, including parts regulating customs, Value Added Tax (VAT) and excise duties. On 15 June 2022, Commission Vice-President, Maroš Šefčovič, issued a statement as a reaction to the UK's NI Protocol Bill and the stalemate in the Protocol implementation. The statement announced that the infringement procedure against the UK launched on 15 March 2021 would be taken to its second stage by issuing a reasoned opinion⁴⁹. Moreover, it communicated the launch of two new infringement proceedings against the UK for (a) failing to carry out its obligations under the EU's Sanitary and

⁴³ 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](#).

⁴⁴ [The Belfast Agreement: An Agreement Reached at the Multi-Party Talks on Northern Ireland](#)

⁴⁵ The Geonomenclature, abbreviated as GEONOM, covers the 'Nomenclature of Countries and Territories for the External Trade Statistics of the Community and Statistics of Trade between Member States' and is the terminology used for compiling international trade statistics. In particular, GEONOM makes it possible to identify the actors involved in international trade: in other words, the reporting country and the partner country (source: [Eurostat – statistic explained](#)).

⁴⁶ [Guidance on the Use of GB and XI codes \(Annex B\)](#) – Geonomenclature codes for the implementation of the IE/Ni Protocol.

⁴⁷ Article 12(2) of the IE/Ni Protocol. [Decision No 6/2020](#) of the Joint Committee established by the Agreement on the Withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community provided the practical working arrangements related to the exercise of this right and defined the work of NILT.

⁴⁸ [The UK's Northern Ireland Protocol Bill](#)

⁴⁹ A reasoned opinion is a formal request to comply with EU law in the context of an infringement procedure. The reasoned opinion explains why the Commission considers that the country is breaching EU law. Moreover, it requests that the country inform the Commission of the measures taken, within a specified period, usually 2 months (source: [European Commission, infringement procedure](#)).

Phytosanitary (SPS) rules, and (b) failing to provide the EU with trade statistics data in respect of NI, as required under the Protocol. At the same time, the Commission published two position papers on customs and SPS rules with possible solutions to facilitate the movement of goods between Great Britain (GB) and NI⁵⁰. Four additional infringement procedures were launched on 22 July 2022 concerning failure to comply with the customs requirements on goods moving from GB to NI, failure to transpose rules on excise duties, including alcohol, and failure to implement rules on VAT for e-commerce. The UK was also urged to respond to the official letters requesting it to carry out the necessary actions to comply with the IE/NI Protocol. Upon UK's request, the Commission agreed to extend the final response date to 22 November 2022.

Following the Commission's action on the infringement procedure, the UK Revenue and Customs Service (HMRC) presented the updated version of the EU Access System in June 2022. The system was developed to allow the NILT to download data and transfer them to the DG TAXUD Data Lab, where relevant risk analysis can be performed; however, it did not provide direct and real-time access to the data available in the UK customs systems. In October 2022, a series of talks were initiated with the UK Secretary of State for Foreign, Commonwealth and Development Affairs to discuss possible solutions for implementing the IE/NI Protocol. The main focus areas were the NILT's access to the EU Access System, the UK's request to establish a Trusted Trader Scheme and unfettered access to goods. The provisional outcome of the meetings highlighted the UK's willingness to deliberate on the outstanding issues that hamper compliance with the IE/NI Protocol. In the same month, the testing of the new EU Access System started and progressed efficiently. After the testing period, the Commission issued a list of procedural recommendations for implementing the system. As of December 2022, the NILT continued to work with the UK authorities to implement the necessary improvements for the former to obtain constant access to the relevant UK's national IT systems and database.

Highlights

- Coordination meetings continued to take place to discuss and follow up on the ongoing activities pertinent to the application of the IE/NI Protocol and TCA.
- A series of technical meetings on IT customs matters was held.
- On 15 June 2022, the Commission revived the infringement procedure against the UK for failing to implement the IE/NI Protocol, including two new infringement procedures related to customs and SPS rules.
- On 22 July 2022, four additional infringement procedures were launched for failing to comply with the customs requirements on goods moving from GB to NI to transpose rules on excise duties, including alcohol, and to implement rules on VAT for e-commerce.
- Testing activities for the new EU Access System started in October 2022.

4.6 New Initiatives

In line with the Commission's 2019–2024 political guidelines⁵¹, new initiatives were gradually introduced in 2022 in the field of customs. These initiatives respond to recent

⁵⁰ [Press release of the European Commission](#), Brussels, 15 June 2022.

⁵¹ [Political guidelines for the next European Commission 2019–2024](#); Opening statement in the European Parliament plenary session 16 July 2019; Speech in the European Parliament plenary session 27 November 2019.

legislative proposals and guidelines in different policy areas, such as the EU Green Deal, decent work⁵², border management and cross-border military transport, which impact customs. Several of those new projects were launched after the revision in 2019 of the MASP-C and are planned to be included in the next revision of the MASP-C in 2023. A summary of the Carbon Border Adjustment Mechanism (CBAM), BVI, BOI, Smart Border, Military Mobility, Deforestation Regulation, Forced Labour initiative and Customs Reform are provided below.

➤ CBAM

CBAM⁵³ is an environmental policy instrument introduced in the 'Fit for 55'⁵⁴ package, addressing the risk of carbon leakage by focusing on importing goods from carbon-intensive sectors. CBAM's objectives are to align the carbon price between domestic products and imports and ensure that the EU's climate targets are not jeopardised by importing goods produced in countries with less ambitious environmental policies. CBAM will apply a carbon price to imported goods corresponding to the carbon price that would have been paid if the products were produced under EU's Emission Trading System (ETS)⁵⁵. A pilot phase of CBAM would be initiated in 2023 and then, the mechanism would be gradually phased-in from 2026 to 2035 to ensure the alignment of countries and businesses. Customs will play an essential role in the implementation of CBAM, as importers will need to register into a CBAM system, and the national authorities will authorise economic operators as well as review and verify relevant declarations.

After adopting the CBAM Regulation proposal⁵⁰ in 2021, the negotiations on the legislation progressed steadily in 2022. On 15 March 2022, the Council reached an agreement on its general approach to the proposed Regulation. On 22 June 2022, the Parliament adopted its position on the aforesaid Regulation. Subsequently, in July 2022, during the Czech Presidency of the Council, technical trialogue meetings between the co-legislators started taking place on a weekly basis, resulting in a provisional political agreement on 13 December 2022. Concerning the IT side of the CBAM implementation, the Commission held a series of coordination meetings to analyse how the CBAM Regulation would translate into an IT infrastructure and the synergies with other customs systems, such as Customs Decisions Management System (CDMS), National Import System (NIS) and UCC SURV3. In addition, the Project Charter for the transitional phase of the IT system was approved by the Member States and Commission.

➤ BVI and BOI

Two new projects on BVI and BOI were initiated to ensure legal certainty of customs valuation and uniform interpretation of the rules of non-preferential and preferential origin across the EU. Under the UCC, an economic operator can apply for a BOI to obtain legal certainty on the origin of goods. However, a similar decision related to binding information is lacking in the field of customs valuation. Nevertheless, the UCC determines that the Commission can establish the necessary provisions to introduce BVI

⁵² The International Labour Organization (ILO) defines decent work as productive work for women and men in conditions of freedom, equity, security and human dignity. Decent work (a) involves opportunities for work that is productive and delivers a fair income, (b) provides security in the workplace and social protection for workers and their families, (c) offers better prospects for personal development and encourages social integration, (d) gives people the freedom to express their concerns to organise and to participate in decisions that affect their lives, and (e) guarantees equal opportunities and equal treatment for all. See the ILO's [Toolkit for Mainstreaming Employment and Decent Work](#).

⁵³ Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a carbon border adjustment mechanism, [COM/2021/564 final](#).

⁵⁴ [Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions](#), 'Fit for 55': delivering the EU's Climate Target on the way to climate neutrality.

⁵⁵ [EU ETS](#) is a 'cap and trade' scheme where a limit (the cap) is placed on the right to emit specified pollutants over a geographic area and companies can trade emission rights within that area. It is the key tool for reducing greenhouse gas emissions, such as carbon dioxide (CO₂), from electricity generation and industry. EU ETS makes investing in environmentally friendly technology economically beneficial for industry and airlines.

in the legislation through the amendment of Annex A to the UCC DA and UCC IA. With these two initiatives, the Commission intends to align with the World Trade Organisation (WTO) and the World Customs Organisation (WCO), which recommend introducing BVI and BOI programmes as a facilitation for economic operators. The Commission prepared the Annex A to the UCC DA and UCC IA drafts that were submitted to the CEG for consultation with the TCG in November and December 2022. The vote and adoption of the DA and IA are expected in the second quarter of 2023. The development of the respective IT solution would start only after the adoption of the legislation.

➤ Smart Border

The Smart Border Project initiative aims at digitalising and automating customs processes and formalities related to the border-crossing of goods in the EU. The project initially originated in the context of an expert group's work involving Switzerland's bordering countries and focused on the digitalisation of the paper routing slip at adjacent clearance offices of Switzerland, DE, FR, IT, and AT. However, the EU proposed extending the concept to other EU Member States and their neighbouring countries, taking into account the Contracting Parties to the Convention on Common Transit (CTC). The Smart Border would accelerate the border crossing by refraining from stopping the vehicles when both concerned customs offices require no control. In 2022, the Smart Border Project was proposed for inclusion in the MASP-C Revision 2023 as a separate project, whereas the implementation foresees its integration with the existing TES.

➤ Military Mobility

Military Mobility is an EU initiative aiming at accelerating and facilitating the movement of military equipment, assets and personnel. The initiative comprises the improvement of the transport infrastructure, including its resilience and preparedness, enhancement of the cooperation with the North Atlantic Treaty Organisation (NATO), and digitalisation and streamlining of the national processes and procedures. In November 2022, the Commission and High Representative of the Union for Foreign Affairs and Security Policy issued a communication on an Action Plan on military mobility 2.0⁵⁶, building on the achievements of the first Action Plan launched in 2018⁵⁷ and covering the period 2022–2026. The objective of the 2022 Action Plan was to contribute to a well-connected, secure and efficient military mobility network, both in the context of the EU Common Security and Defence Policy and the framework of NATO.

The NATO form 302 is a document used for the cross-border movement of military goods and was established by the Agreement among the NATO parties in 1951. The UCC provides for the use of the NATO form 302 in Articles 226(3)(e) and 227(2)(e)⁵⁸ and in the Commission Implementing Regulation, Articles 221(5), 286 and 287⁵⁹. Similarly, the UCC provides for the use of EU form 302 as a Union transit declaration in Articles 226(3)(a) and 227(2)(a), and in the relative Commission Implementing Regulation, Articles 286(a) and 287(a)⁶⁰.

The project in the field of customs related to military mobility aims at the digitalisation of form 302, which is currently paper-based and could eventually lead to the development

⁵⁶ [Action plan on military mobility 2.0](#)

⁵⁷ [Joint Communication to the European Parliament and the Council on the Action Plan on Military Mobility](#)

⁵⁸ [Article 226\(3\)\(a\)\(e\)](#) and [Article 227\(2\)\(a\)\(e\)](#) of the [Regulation \(EU\) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code](#)

⁵⁹ [Article 221\(5\)](#) and [Article 287a](#) of the [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](#).

⁶⁰ [Articles 226\(3\)\(a\)](#) and [227\(2\)\(a\)](#) of the [Regulation \(EU\) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code](#); and [Articles 286a and 287a](#) of the [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](#).

of a Military Customs System (MCS). The project's objective is to reduce operational difficulties caused by a lack of clarity regarding the use of form 302 and ensure a smooth yet secure information exchange between military forces and customs authorities. The military mobility project is currently in an assessment phase.

➤ Deforestation Regulation

On 17 November 2021, the Commission proposed a Regulation⁶¹ to minimise the EU-driven deforestation and forest degradation. By promoting the consumption of 'deforestation-free' products and reducing the EU's impact on global deforestation and forest degradation, the new Regulation rules are expected to bring down greenhouse gas emissions and biodiversity loss. In June 2022, the Environmental Ministers of the EU Member States presented their position on the Commission's proposal at the Environmental Council's Meeting. The following month, the Parliament's Committee on Environment, Public Health and Food Safety (ENVI) voted by a large majority on amendments that would include more commodities within the Regulation's scope. Trialogue negotiations started in September 2022 following the Parliament's vote in Plenary Session and a preliminary agreement between the Council and the Parliament was reached in December 2022. Under the new Regulation, economic operators must submit a due diligence statement for a specific product through NSW and transmit it to the deforestation Register⁶². In this respect, the possible interconnection between the deforestation Register and EU CSW-CERTEX has been analysed and evaluated by the Commission during the course of 2022. The Commission also supported the legislative process for drafting the Regulation on deforestation, including assistance to the Council's Ad-hoc WG, and contributed to several interservice consultations on the impact of the new Regulation on EU SWE-C and EU CSW-CERTEX.

➤ Forced Labour

The Forced Labour initiative aims at preserving the EU market from products manufactured, extracted or harvested in the context of forced labour, both within the EU and in third countries. The draft proposal⁶³ was publicly shared for contribution on 23 May 2022 and was presented to the Parliament and Council on 14 September 2022. The proposed legislation would empower the national authorities to investigate products made using forced labour and withdraw them from the EU market. Moreover, customs authorities would be responsible for identifying and halting such products at the EU borders. During the reporting year, the Commission supported the co-legislation process on the Forced Labour Initiative and the analysis of the integration of the new formality within the scope of EU CSW-CERTEX following the adoption of the legislation.

➤ Customs Reform

Consequent to the publication on 31 March 2022 of the Wise Persons Group (WPG) report on Challenges Facing the Customs Union⁶⁴ and in collaboration with the French Presidency of the Council, the Customs Programme⁶⁵ organised a High-Level Seminar in Paris on 28 and 29 April 2022 to discuss the recommendations of the WPG and the

⁶¹ [Proposal for a regulation on deforestation-free products](#)

⁶² The Register is an Information System containing the due diligence statements, as provided in Article 31 and Article 4 (2) of the REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010.

⁶³ [COM\(2022\) 453 - Proposal for a regulation on prohibiting products made with forced labour on the Union market](#)

⁶⁴ [Putting more Union in the European Customs. Ten Proposals to make the EU Customs Union fit for a Geopolitical Europe](#) – Report by the Wise Persons Group on the Reform of the EU Customs Union, Brussels March 2022.

⁶⁵ In this report, 'Customs Programme' relates to the 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](#)) for the period 2021–2027. For brevity purposes the above-mentioned Regulation will be referred to as 'Customs Programme'.

possible follow-up actions. The main outcome of the High-Level Seminar was that the Customs Union is unfit for the challenges it is currently facing and that structural reform is needed to protect the EU core values and the single market. The discussion and conclusions of the seminar informed the ensuing Commission activities for the preparation of a Customs Reform proposal. During the course of 2022, a Task Force on the reform of the Customs Union was established to work on the ambitious proposal that is expected to be presented during the first quarter of 2023. The Task Force integrated the wider context of the Commission's political agenda for 2019–2024⁶⁶ and the 2020 Customs Action Plan⁶⁶, and the outcomes of the foresight study 'The Future of Customs in the EU 2040'⁶⁷ into their work. A series of activities were also carried out to assess the proposal's impact on the current UCC IT systems implementation, including the effects on related regulations on plant and animal health, food fraud, bamboo products and e-commerce. During the second half of 2022, the draft proposal and the impact assessment were submitted to the Regulatory Scrutiny Board (RSB) and the text is currently undergoing a review process. The work on the Customs Reform notably involved the economic operators that were invited to participate in a public consultation taking place during July and August 2022 and whose inputs were incorporated in the impact assessment.

Highlights

- New initiatives were introduced in the area of customs, which respond to different policy areas and have an impact on customs.
- The work on the CBAM legislation has proceeded steadily and a provisional political agreement was reached on 13 December 2022. In addition, the Project Charter for the transitional phase of the IT system was approved by the Member States and Commission.
- Amendments of Annex A to the UCC DA and UCC IA for introducing BVI and BOI programmes were submitted for consultation in November and December 2022.
- The Smart Border initiative was proposed to be included as a new project in the revision of the MASP-C in 2023.
- The Military Mobility project was at the assessment stage.
- An agreement on the text of the new Regulation on deforestation was reached between the Commission, the Parliament and Council in December 2022. The work for integrating the deforestation Register within EU CSW-CERTEX was ongoing.
- A draft proposal on the Forced Labour Initiative was submitted to the Parliament and Council on 14 September 2022. The possible interlinkage to EU CSW-CERTEX was under analysis.
- During the second half of 2022, the draft proposal and impact assessment on the Customs Reform was submitted to the RSB for review.

⁶⁶ 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](#).

⁶⁷ A. Ghiran, A. Hakami, L. Bontoux, F. Scapolo, [The Future of Customs in the EU 2040](#), A foresight project for EU policy, Joint Research Centre Publication, European Commission, 2020.

4.7 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 upgrade their electronic systems to meet the new legal requirements. On this basis, the trans-European Export Control System (ECS) P2 was succeeded by UCC AES. At the same time, two new components, NCTS-P5 and NCTS-P6, were developed for the upgrade of the trans-European New Computerised Transit System (NCTS-P4).

Specifically, the UCC AES project focuses on implementing the UCC requirements for the export and exit of goods, including export and re-export declarations, Exit Summary Declaration (EXS) and Centralised Clearance for Export (CCE), and an interface with Excise Movement Control System (EMCS) and NCTS. Comprised of two components, the project entails implementing the UCC simplifications offered to trade to facilitate the export of goods for European companies. The first component relates to the trans-European AES, while the second component concerns the National Export Systems (NES) upgrade.

Likewise, the scope of the new UCC NCTS project includes the extension of the current NCTS processes in alignment with the UCC legal provisions and UCC data requirements, and the upgrade and development of the interfaces with other systems, such as UCC AES, in addition to new safety and security requirements. More concretely, UCC NCTS-P5 includes steps to introduce new processes, such as the pre-lodgement of customs declarations, the registration of 'en-route' events, and information exchange alignment to the UCC data requirements. Although the system incorporates several components to be developed centrally, the main components are to be developed at the national level. In addition, UCC NCTS-P6 aims at aligning the NCTS to the new provisions set by the UCC regarding advanced cargo information for safety and security, while continuing the practice of combined declaration for the Member States opting to offer this facilitation to their economic operators. UCC NCTS-P6 requires the setup of an automated interface between UCC NCTS and UCC ICS2 to ensure that economic operators and Member States can simultaneously serve the transit procedure and the safety and security formalities with a combined declaration.

UCC NCTS-P5 and UCC AES went live in DE in March 2021, paving the way to the next generation of interconnected TES systems for the trade community and the national customs authorities. In February 2022, UCC AES was successfully deployed by ES and the exchange of export messages between DE and ES was initiated in April 2022. Throughout the reporting year, the UCC AES operations between the two Member States remained stable and all the identified issues were resolved on time. This proved the quality of the system's specifications and legal provisions, which was achieved with the close cooperation among the national customs administrations, economic operators and Commission pioneering a collaborative, iterative and agile working method. Similarly, the overall development of the UCC NCTS-P5 system progressed steadily during 2022. More specifically, a representative number of national administrations⁶⁸ either advanced or completed their conformance testing activities.

In the framework of the 'National Administration Coordination Programme,' the Commission continued in 2022 its monitoring activities of the national administrations and economic operators' project plans for the UCC AES and UCC NCTS-P5 systems. The objective of these activities was to ensure the alignment of the National Project Plans (NPPs) with the Commission's central planning against the UCC IT milestones. Similar activities also took place between a few Member States and the Commission to reduce

⁶⁸ In 2022, the following national administrations advanced their conformance testing activities (in Mode 1 and Mode 2) for UCC NCTS-P5: Bulgaria, Croatia, Denmark, Estonia, France, Poland, Spain, Switzerland, Türkiye, and Finland. In addition, Czechia, Italy, Luxembourg, Montenegro, and Slovenia successfully completed the related activities.

the number of the open export movements for indirect reports mainly destined to the UK. In the same way, the UK and Commission collaborated with the aim of managing the open export movements for the indirect NI exports and the implementation of the Goods Vehicle Movement Service (GVMS) platform in the UK. In addition, a Monitoring Mission was launched for the accession of Ukraine to the CTC⁶⁹, which was successfully achieved in October 2022, resulting in the deployment of UCC NCTS-P4. Concerning UCC NCTS-P5, Ukraine completed the procurement activity⁷⁰ during the reporting year and confirmed its plan for timely deployment in operation.

2022 further marked substantial progress towards developing a trade outreach strategy to promote a shift to the preparation of the trade community. On this basis, full transparency of the coordination programmes has been established to keep the economic operators informed on the national administrations' progress towards implementing the TES systems. Additionally, active forums for the trade community were organised in the national administrations, where the benefits of the new UCC TES systems for business were analysed using practical cases and examples.

Nonetheless, despite the substantial progress of the TES systems, possible delays were identified against the legal deadlines agreed upon in the context of the UCC and UCC WP, and the project milestones set out in the MASP-C Revision 2019⁷¹. In particular, several Member States announced UCC AES and UCC NCTS-P5 deployment to operations towards the end of the deployment window in the last quarter of 2023, while less than 20% of the national administrations announced running over the UCC WP deadline of 1 December 2023. The Commission has developed and shared with the Member States and economic operators as part of the TSS package specific compatibility rules and has put in operations the Central Information Exchange Converter Application (C/ieCA) enabling continuity of operations for the Member States having deployed their UCC AES and UCC NCTS-P5 systems and those running over the deadline of December 2023.

As regards UCC NCTS-P6, the elaboration phase was initiated in 2022, following the kick-off meeting of the UCC NCTS-P6 project group in January 2022. The aforesaid group convened periodically during 2022, with the active participation of 13 collaborating national administrations⁷². In addition, during the reporting year, the preparatory work for the new phase was mainly focused on finalising the UCC NCTS-P6 technical and functional specifications⁷³, which were developed in parallel using the agile method. Further activities included the establishment of a bridge between UCC NCTS-P6 and UCC ICS2 R3, which would enable the synchronisation of the entry and transit formalities at the border by allowing the CTC countries to use a combined transit declaration. On this basis, a Proof of Concept (PoC) was developed during the last quarter of 2022 for extracting the Entry Summary Declaration (ENS) for UCC ICS2 R3 from a combined transit declaration under UCC NCTS-P6. The full Transit ENS Data Processing Bridge (TED) would be deployed in 2024 in collaboration with the UCC ICS2 Common Repository (CR) team.

⁶⁹ The objective of the Commission is to involve the CTC acceding countries in the same window as the Member States for the deployment of the TES.

⁷⁰ [Public procurement \(europa.eu\)](https://public-procurement.europa.eu)

⁷¹ The legacy and new systems will be operational in parallel in the same environment during a transitional phase, for the period 2021–2023. The deadline for the deployment of the AES and NCTS-P5 systems is 01/12/2023.

⁷² Belgium, Croatia, Denmark, Finland, France, Germany, Italy, Ireland, Latvia, Poland, Serbia, Spain, and Switzerland.

⁷³ The functional and technical specifications for NCTS-P6 were formally accepted by the ECCG on 22 December 2022. Further information about UCC NCTS-P5 and UCC NCTS-P6 can be found in section [1.1.5 of Annex 1](#).

Highlights

- In February 2022, UCC AES was successfully deployed by ES and the exchange of export messages between DE and ES was initiated in April 2022.
- The overall development of the UCC AES and UCC NCTS-P5 systems progressed steadily.
- A Monitoring Mission for the accession of Ukraine to the CTC was successfully achieved in October 2022, resulting in the deployment of UCC NCTS-P4.
- Several Member States announced a shift of their UCC AES and UCC NCTS-P5 operations towards the end of the deployment window in the last quarter of 2023.
- The elaboration phase of UCC NCTS-P6 was initiated, following the kick-off meeting of the UCC NCTS-P6 project group in January 2022.

4.8 The UCC Import Control System 2 (ICS2)

The UCC 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 among national administrations, customs authorities and the Commission. This is to be achieved through better targeted risk-based controls of the EU customs authorities on improved ENS data quality, data filing, data availability and data sharing, and via real-time collaborative risk analysis and coordinated safety and security controls at the EU entry points.

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

The programme implementation consists of three releases. Being in operation since 15 March 2021, UCC ICS2 R1 introduced advanced 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. Notably, in UCC ICS2 R1, express carriers and designated postal operators established in the EU provide a subset of their ENS data before goods are loaded on aircrafts bound for the EU. This Pre-Loading Advanced Cargo Information (PLACI) is analysed by customs with the purpose of detecting immediate threats to Aviation Security (AVSEC)⁷⁴, thus, delivering a complementary intelligence-driven layer of consignment-level risk analysis in the context of the EU civil aviation security regime. Since the entry of UCC ICS2 R1 into operations, 29 national customs administrations⁷⁵ have been connected to the system. Furthermore, a total of

⁷⁴ [Aviation security \(europa.eu\)](https://europa.eu/aviation-security)

⁷⁵ EU Member States, Norway, and Switzerland. UK did not enter in operation due to the ongoing discussions on the implementation of the IE/NL Protocol and the issue of the 'XI' prefix for the EORI numbers, which is used for Northern Ireland and is still not declared by the trade community.

27 postal operators established in the EU as well as the postal operators of Switzerland and Norway have been connected to the system in addition to three express operators⁷⁶. Throughout 2022, the common components of UCC ICS2 R1 were running on a 24/7 basis without any major incident being reported. Nearly 20–25 million ENS were filed per month, while incremental efforts were made to improve the ENS data quality and completeness and implement the air cargo security referrals in full compliance with the new UCC requirements.

UCC ICS2 R2 covers the implementation of new ENS obligations and risk management processes for all the goods entering the EU by air traffic, while implementing an SSA capability in the system. In particular, as part of UCC ICS2 R2, the aforesaid capability will be integrated within the UCC ICS2 CR component. Furthermore, it will implement the analytics platform accessible by the Member States via the Common Communication Network 2 (CCN2). The platform will be integrated with a dedicated portal and a data factory for real-time analytics (enrichment of ENS data) connected to the CR. Moreover, UCC ICS2 R2 poses new challenges compared to UCC ICS2 R1, such as the addition of three new types of economic operators acting in the air transportation supply chains and 13 different types of ENS filings, improving the quality of the trade data of goods moving towards the EU. In addition, UCC ICS2 R2 includes new business models reflecting the business needs, rules and user interfaces (UIs), adding an increasing complexity of timers, data quality, data consistency rules and linkage for multiple filings, and arrival notifications.

In 2022, UCC ICS2 R2 was in the elaboration phase, during which a UCC ICS2 SSA expert team was established and initiated its work. Comprised of customs experts representing six Member States⁷⁷, the aforesaid team focused on assisting the Commission in bringing forward the SSA capability. Notably, the expert team succeeded in establishing and concluding the joint controllership arrangement with the EU, thus, providing a basis for processing the ENS data through the SSA analytics, planned to start in 2023. Additionally, extensive dialogue took place with the relevant trade associations and the Universal Postal Union (UPU) regarding the postal transit and transshipment and the challenges posed to data quality for goods in postal consignments. The Member States and economic operators also participated in a survey launched by the Commission to facilitate the preparation of the go-live documents, containing practical organisational arrangements for UCC ICS2 R2. In April 2022, a bilateral UCC ICS2 meeting between the UK and Commission took place, with the objective of providing an update on the development of UCC ICS2 R2 and addressing the UK's inquiries regarding the SSA and the risk rules.

Throughout the reporting year, the Commission further launched monitoring activities of the national administrations and economic operators' project plans to ensure their alignment with the Commission's central planning against the IT milestones. Although UCC ICS2 R2 is expected to be operational in all national administrations by 1 March 2023, several Member States submitted a written notification in 2022, asking for a derogation under Article 6(4) of the UCC, considering the possible delays against the legal deadline. These derogation requests were thoroughly assessed by the Commission in July 2022, based on a set of established common assessment criteria, such as the justifications provided and the specific situation of each requesting Member State, the safeguard of the business continuity of operations and the interdependencies between the different electronic customs systems. In this regard, during December 2022, the Commission organised bilateral technical meetings with several of the national customs

⁷⁶ DHL, Fedex/TNT and UPS.

⁷⁷ Belgium, France, Italy, Portugal, Poland, and the Netherlands.

administrations of the Member States⁷⁸ that had requested a derogation against the legal deadline of 1 March 2023. The objectives of these meetings were to inform about the requirements attached to the derogations, to closely follow up on the status of the national implementation and to identify solutions for the potential advancement of the operational date for the national administrations that indicated delays. In addition, the Commission worked closely with the Legal Service to prepare an Implementing Decision granting a derogation for UCC ICS2 R2 to several Member States⁷⁹, allowing them to use means for the exchange and storage of information other than electronic data-processing techniques in relation to goods transported by air. The derogation for UCC ICS2 R2 will apply from 1 March 2023 until 30 June 2023 to provide economic operators with adequate time to connect to the UCC ICS2 system.

Over the course of 2022, the Commission initiated the preparatory activities for UCC ICS2 R3, in alignment with the UCC NCTS-P6 project⁸⁰. Such activities included weekly meetings with the UCC NCTS-P6 team for the coordination between the two TES systems and the preparation of the transition strategy from UCC ICS2 R2 to R3. The objective of UCC ICS2 R3 is to build on UCC ICS2 R1 and R2 by enhancing the functional scope of the UCC ICS2 system through the support of other modes of transport and the implementation of the full UCC requirements for all 'entry of goods' use cases. In January 2022, the Community of European Railway and Infrastructure Companies (CER) submitted a request for introducing new multiple ENS filings for the rail transport mode. This request required the update of the functional and technical system specifications as well as the amendment of Annex B to the UCC DA and UCC IA. However, as the review cycle of Annex B was already finalised, the new functionality is planned to be deployed after 1 March 2024.

Highlights

- The common components of UCC ICS2 R1 were running on a 24/7 basis without any major incident being reported. Nearly 20–25 million ENS were filed per month.
- UCC ICS2 R2 was in the elaboration phase, during which a UCC ICS2 SSA expert team was established and initiated its work.
- Following the Member States' request for derogations for UCC ICS2 R2, the Commission organised a series of bilateral technical meetings in December 2022, which concluded by granting derogations to be applied from 1 March 2023 until 30 June 2023.
- The Commission initiated the preparatory activities for UCC ICS2 R3, in alignment with the UCC NCTS-P6 project.

⁷⁸ During the first half of December 2022, bilateral technical meetings took place between Austria, Denmark, Estonia, Greece, the Netherlands, Romania, and the Commission. Additional meetings with the remaining Member States that have requested derogations for UCC ICS2 R2 are planned to take place at the beginning of 2023.

⁷⁹ Derogations for ICS2 R2 were granted to Austria, Belgium, Croatia, Denmark, Estonia, France, Greece, Luxembourg, the Netherlands, Poland, Romania, and Sweden.

⁸⁰ In 2022, the end of the deployment window for UCC ICS2 R3 was rescheduled from 1 October 2024 to 1 March 2025 in order to be aligned with that of UCC NCTS-P6.

4.9 e-Customs Governance

The legal principles explaining the governance rationale for implementing the electronic customs systems are laid down in Articles 1 and 8(2) of the e-Customs Decision⁸¹ and Articles 16(1) of the UCC⁸². The articles provide that the Commission, in close cooperation with the Member States, should determine the strategies, resources and development phases and coordinate all the activities related to the development of the electronic customs systems, including legal, operational, training and IT development aspects. The governance framework also considers the 2012 Communication on the State of the Customs Union⁸³, which outlines a course of action to address challenges that the Customs Union is facing. Notably, the Communication acknowledges the complexity of implementing and operating the e-Customs systems in 27 EU national administrations in a harmonised manner, and sets up the direction for updating and improving the governance approach towards more efficient management of costs and efforts.

Furthermore, Article 11 of the Customs Programme Regulation⁸⁴ outlines the division of responsibilities between the Member States and Commission for developing and operating the European electronic systems. Namely, the Commission is bestowed with the coordination of the various activities related to e-Customs and the development, operations and maintenance of the common components of the electronic systems. Conversely, the Member States are responsible for carrying out all the necessary activities to develop and operate the national parts of the systems and regularly update the Commission on their advancement. In line with the Customs Programme, DG TAXUD is in charge of the general coordination of the e-Customs projects to ensure uniform implementation, operability, interconnectivity, constant improvement and cyber-resilience of the systems.

The governance scheme and functioning are outlined in the MASP-C, which breaks down the IT projects' implementation into manageable segments. The objectives of the governance framework are to closely follow up the planning and development of the projects resulting from the UCC and other legislations impacting customs, enhance coordination at policy, legislative, business operations and IT levels, improve efficiency, clearly delineate roles and tasks and bear accountability to the stakeholders involved.

The governance model is structured in three levels: policy, coordination and expert level. All levels interact with one another to achieve greater transparency and streamline coordination among stakeholders. The CPG is the steering body at the policy level, and it is composed of the Directors-General for customs of the Member States and candidate countries, and Commission. The CPG is responsible for providing policy advice to the Commission on customs matters, leading on operational policy implementation, providing strategic oversight and guidance to the work of the various committees and groups under the Customs Programme, providing a forum for strategic policy discussion and endorsing the MASP-C. The High-Level Project Group (HLPG) is mandated to follow up and facilitate the UCC implementation and e-Customs initiatives. Notably, the HLPG guarantees the coherence between the legislation, processes, Business Process Models (BPMs) and IT levels of the UCC implementation, agrees on the prioritisation of specific

⁸¹ [Article 1](#) and [8\(2\)](#) of the 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, 26.1.2008, p. 21–26](#).

⁸² [Article 16\(1\)](#) of the Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code, [OJ L 269 10.10.2013](#).

⁸³ Points 1.4.3 and 2.2 of the Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the State of the Customs Union, [COM/2012/0791 final](#).

⁸⁴ [Article 11](#) of the 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, 15.03.2021, p. 1–16](#).

projects, may endorse policies and instruments to increase coordination, and may issue related resolutions addressed to the other governance groups.

The coordination level of governance is embodied in the ECCG, which is chaired by the Commission and comprises representatives from all Member States and candidate countries. The ECCG mandate is to follow up closely and monitor the UCC WP implementation. It ensures that progress in the IT projects is made against the key milestones provided in the UCC WP and the MASP-C, regularly updating the latter and reporting to the delegates on development advancements. The ECCG plays an essential role in reaching an agreement between the Member States and Commission on the implementation of the e-Customs projects. More specifically, the ECCG ensures that the e-Customs implementation (a) is aligned with the related legislative framework, (b) guarantees consistency between the e-Customs projects and between the projects and the MASP-C, (c) prepares an IT environment that responds to the e-Customs requirements, and (d) improves the dialogue with the economic operators on customs issues. The ECCG may consult the CPG when a political agreement cannot be reached within its forum or when policy or strategy guidance is required.

The expertise level is composed of three groups, which carry out the business and IT activities necessary for the e-Customs projects implementation. These groups are the CBG, the IT Systems Development Group (ITSDG) and the IT Technology and Infrastructure Group (ITTIG). The CBG is made up of customs business experts from the Member States and Commission and is responsible for defining all customs business processes and their implementation. Notably, the CBG deals with the definition of Level (L) 3 and L4 of the BPM, business analysis and working papers for new and ongoing projects, legislation, processes and operational systems. It can be supported by project groups having a limited scope and duration. The ITSDG focuses on preparing the development of the systems (MASP-C Groups 1, 2 and 3), including IT deliverables and coordination. Finally, the ITTIG is tasked with the preparation of the technical projects and systems (MASP-C Group 4).

The Commission is legally obliged⁸⁵ to report annually to the Parliament and Council on progress related to the e-Customs projects at the EU and national levels. Additionally, the Commission regularly consults the representatives of economic operators through the TCG to hear their requirements, deliver updates on customs developments and capitalise on their expertise. The TCG is regularly invited to policy and coordination level meetings where opinions are exchanged on customs-related issues, such as policy developments and implementation of the e-Customs initiative.

In 2022, the post-COVID-19 rules and the new Commission policies towards a greening of their activities had an impact on the number of physical meetings. The e-Customs governance groups continued their regular meetings both online and, to a lesser extent, in physical presence. Under the framework of the Customs Programme, 324 meetings were held in 2022, out of which 222 took place online, 95 in physical presence and seven hybrid. The total number of meetings related to electronic customs was 161, with 3,284 participants, a decrease of 8% compared to 2021. More particularly, 110 meetings of 2,259 participants linked to the ECCG, CBG and project group meetings, whereas 48 meetings of 911 participants concerned IT systems training.

⁸⁵ [Article 278a](#) of the Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code.

Highlights

- 161 e-Customs-related meetings took place, with a total of 3,284 participants.
- The number of e-Customs-related meetings has diminished by 8% compared to 2021.

4.10 Customs IT Collaboration

The scale of the work required to develop new e-Customs systems and improve existing ones underlines the need both for the Member States and Commission to deliver the customs IT projects efficiently, ensuring that resources are allocated appropriately and that efforts are not duplicated. To this end, the Expert Team on new approaches to develop and operate Customs IT systems (ETCIT) was formed in 2018 as an initiative of EE and 12 other Member States, and it is supported by the Commission through the Customs Programme. The ETCIT's work aims to explore how customs IT systems could be developed and operated in the future by analysing the current legal and governance framework, devising new approaches and alternatives for the future development and operation of the customs IT systems, and proposing pilot projects.

In 2022, the ETCIT closed its second iteration and launched its third phase under the Customs Programme. The ETCIT III is composed of BE, CZ, DK, DE, EE, IE, FR, IT, CY, LT, LU, MT, NL, PT, and SE, with NL having a project management role and MT being the grant coordinator. Building on the achievements of the previous phases, the ETCIT III objectives were to continue the strategic work on identifying and managing future IT collaboration initiatives and taking further the potential of Member States' cooperation in the development of the e-Customs systems. Other objectives were to support ongoing pilot projects by using the already established methods of collaboration and explore ideas in the field of resource pooling. The expert team also focused on technical matters, which can influence the concept of pooling resources, i.e. new technologies, new architectures and modern equipment. Although the ETCIT is a collaboration platform destined for the Member States, the expert group also reaches out to the economic operators' representatives for feedback and information on aspects of interest to the latter.

The ETCIT work for 2022 was structured in five work packages carried out by more than 55 participants. The first work package focused on the setup of the CIO network, which aims to facilitate interaction and capabilities-sharing amongst the participants of the activities under the IT collaboration framework. By establishing the CIO network, the ETCIT intends to accelerate the delivery of concrete results and support a stable, extensive and strengthened network. Following the first CIO workshop, which took place in June 2022, the ETCIT focused on preparing the structural network where the CIOs of the Member States would meet regularly to exchange ideas on IT collaboration and common challenges in IT development and implementation. In this context, the option of a joint procurement with the Commission was explored. The CIO network is envisaged to take the form of a project group, which would be held jointly with the ETCIT within the Customs Programme.

The second work package centred on continuing the UCC Presentation Notification and Temporary Storage (PN/TS) pilot project. The main goal of the pilot project is to deliver a complete package of use cases to be handled within the PN/TS and Goods Accounting (GA) core components. During 2022, it focused on delivering the functional and non-functional specifications as well as technical information on how to implement the project. The third work package dealt with exploring new prospects in the area of customs IT collaboration and initiatives. The fourth work package continued the work on the Digital Guarantees (DiG) information exchange pilot project, which focused in 2022 on drafting

the Business Case, the TSS and functional requirements. Finally, the fifth work package was dedicated to following up on the analysis of the joint procurement, notably its legal aspects, and supporting other work packages in the area of legal, procurement and governance issues. In this regard, the ETCIT identified potential collaboration areas with the Customs Eastern and South-Eastern Land Border Expert Team (CELBET) during the CELBET workshop held in Warsaw in October 2022.

Finally, in the context of the work related to the development of SWE-C, the related project group explored the possible connection with the ETCIT to leverage the potential for collaboration that the platform of experts provides. More precisely, the ETCIT could be used as a venue to implement a pilot project on SWE-C B2G once the case study is completed. The ETCIT could explore the development of a common code for developing the NSWs, collaborate on developing the TSS and investigate a common way to collect and dispatch the common data set. To this end, the project group on SWE-C intends to exploit the CIO network established by the ETCIT to present the outcomes of the activities carried out thus far. Setting up a collaboration scheme on the development of the SWE-C through the ETCIT platform would benefit the Member States that are yet to develop an NSW and ensure a harmonised integration of the SWE-C B2G implementation.

Highlights

- The ETCIT closed its second iteration and launched its third phase under the Customs Programme.
- The first CIO workshop took place in June 2022, initiating the preparation of the structural network.
- The ETCIT progressed on the pilot project on UCC PN/TS to deliver a complete package of use cases to be handled within the PN/TS and GA core components.
- The DiG pilot project focused on drafting the Business Case, TSS and functional requirements.
- In October 2022, during the CELBET workshop, the ETCIT identified potential collaboration areas with the former, specifically in the areas of legislation, procurement and governance.
- A potential collaboration with the ETCIT platform for developing a pilot project on SWE-C was under exploration.

4.11 e-Customs Project Groups

The Customs Programme fosters knowledge sharing and collaboration between the Member States' experts and Commission, working in project groups⁸⁶ to analyse national customs practices and identify challenges in correctly implementing the EU customs legislation. In 2022, various project groups pursued their activities, whereas new ones were established to answer specific concerns and render recommendation reports on IT system implementation. The Commission chaired all the project group sessions.

⁸⁶ The UCC project groups are established at the expertise level based on the governance model outlined in MASP-C Revision 2019, Annex 3.

Subsequent to the UK's withdrawal from the EU, the CPG⁸⁷ provided an overview of the activities on three key points: (a) the implementation state of the EU-UK TCA, (b) the UK unilateral measures and border management, and (c) the NI state of play. The expert group held a meeting with the UK counterpart in October 2022, where the emphasis was put on the access of the NILT to the EU Access System, the UK's request for green and red lines, and the unfettered access issue. More specifically, the latter pertains to restrictions and prohibitions described in all the international agreements to which the EU and the UK are contracting parties. Furthermore, the CPG expert group addressed the Ukraine crisis and related sanction packages, highlighting the need to guide the Member States on various scenarios regarding the Ukraine crisis and trade facilitation. Moreover, the expert group discussed accelerating the Ukraine's accession to the CTC.

The UCC CDS project group, composed of customs experts representing 21 Member States⁸⁸, pursued its discussions in 2022, contributing to identifying, analysing and developing solutions to operational business issues. In particular, it held several bilateral meetings with the CEG-DIH project group, focusing on the amendment of Annex A to the UCC DA and UCC IA, which entailed changes in L3 and L4 BPMs to align them with the upcoming release of the system. Feedback sessions took place for the conformance testing for the release of UCC CDS v1.29, whereas demonstration sessions were held concerning the release of UCC CDS v1.30.

The UCC Guarantee Management (GUM) project group convened in 2022, bringing together customs experts of the participating Member States as well as Iceland, Lichtenstein, Norway, and Switzerland. The project group encouraged the Member States to request the Commission's support, where needed, in developing their national component (GUM 2). In addition, it coordinated discussions for the third iteration of the simplified Request for Change (RfC) List for UCC Customs Decisions BPM L3 and L4 to align with the timeline for the publication of the draft Annex A. In addition, the project group completed the legal review of the GUM Business User Guide and initiated similar discussions with the legal team for a review of the GUM Training & Communication Materials.

The UCC CCI IT project group pursued its discussions throughout 2022 with the collaboration of IT and business experts. The project group contributed to finalising the draft of the UCC CCI P1 Business Guidance document, sent for internal revision in December 2022. A CCI P2 workshop with all the Member States was held to inform them about the updates under the CCI P2 TSS. During the meeting, the Member States were invited to discuss the NIS' connection to the UCC CCI system internally and provide the outcome of these discussions in the following UCC CCI P2 workshop foreseen in February 2023. An additional goal of the project group was to align the UCC CCI P1 Functional System Specifications (FSS) with the TSS. At the same time, the Commission held weekly meetings with two forerunner Member States⁸⁹, contributing to the construction and development of the UCC CCI P1 at a national level. Finally, the Commission organised bilateral meetings with the Member States to inform them of the latest activities for UCC CCI P1 and receive a status update on their UCC CCI-related activities and plans, aiming to provide business support if the Members States raised business issues.

The project group on the Digitalisation of Cultural Goods convened in 2022 under the coordination of the business and policy units of DG TAXUD. Composed of

⁸⁷ Commission Decision of 7 June 2018 formalising the Commission Customs Policy expert group, C/2018/3530, [OJ C201.12.6.2018, p. 3–7](#).

⁸⁸ Belgium, Czechia, Denmark, Germany, Estonia, Ireland, Spain, France, Croatia, Italy, Latvia, Lithuania, Hungary, the Netherlands, Austria, Poland, Portugal, Romania, Slovakia, Finland, and Sweden.

⁸⁹ The forerunner Member States were Spain and France. Spain successfully passed the conformance testing activities in Mode 2 for the iteration of the UCC CCI P1 scope covering the conformance test cases and business scenarios for standard customs declaration in their role as Supervising Customs Office for Centralised Clearance for Import (SCI).

representatives from customs administrations and Ministries of Culture representing 14 Member States⁹⁰, the project group progressed in its initial two-fold objective. The first was to build an electronic licencing (e-licencing) system for the economic operators and the competent authorities in the Member States, which will be interconnected to the customs IT environment. The second was to set out the provisions for the Implementing Regulation supporting the system. Regarding the Import of Cultural Goods (ICG), several meetings were held to advance with the following points: (a) the configuration of the ICG system, (b) the input needed from the Member States, (c) the necessary changes to the BPMs, (d) the maintenance of the Business Acceptance Criteria (BAC), (e) the RfC creation as per the changes required (related to Import Licence for Cultural Goods (ICGL), Importer Statement for Cultural Goods (ICGS), General Description for the Import of Cultural Goods (ICGD)), and (f) the registration of modifications into the Rational Team Concert (RTC) tool. In addition, the project group cooperated with Artificial Intelligence (AI) experts from the International Criminal Police Organization (INTERPOL) and Fraunhofer Institute in order to envisage possible synergies in the ICG system evolution with the use of AI. Furthermore, the preparatory business activities for the integration with the EU CSW-CERTEX were launched. Concerning the Export of Cultural Goods (ECG), the project group organised meetings to discuss progress on a feasibility study for extending the ICG to the export domain and explore approaches for the system architecture. Finally, the project group analysed the EU survey on the 'ECG Integration: national systems capabilities', aiming at determining the needs of the integration and the specific particularities of the national systems for the Member States that already had a solution in place.

A project group dedicated to the B2G dimension was initiated in 2021 and continued its discussions and investigations in 2022. Composed of representatives from DG TAXUD, DG SANTE, customs authorities, PCAs in the Member States and TCG, it convened five times throughout the year. Observations and inputs were gathered from all parties involved in the EU SWE-C at the B2G level, and several conclusions were reached. In particular, regarding the optionality of data, the project group concluded that the non-compulsory data elements for non-customs formalities, but mandatory for customs should remain part of the Integrated Data Set (IDS). It was highlighted that in cases where the format is different, but the business content remains the same, a solution for rationalising the format should be found (i.e. transformation functionality). Moreover, the need for a deforestation legislation arose⁹¹, which could be a possible use case for a PoC to test the B2G functionality. In contrast, the similarities and differences between the proposal on deforestation-free products and the EU SWE-C B2G concept would need to be further investigated and addressed.

The project group concluded that the SWE-C, particularly the IDS, should aim to ease the process for the economic operators by giving as much flexibility as possible, while complying with the legislation. Nonetheless, for legal certainty, the legislation should clearly outline the different stages at which the IDS can be lodged concerning the formalities required at an airport entry point and under what specific conditions. Regarding the scenarios with or without pre-lodging, there is only one difference to be mentioned. In the case of the pre-lodgement of the IDS, all data are expected to be submitted simultaneously, whereas when there is no pre-lodgement, data could be submitted at two different points in time (data will be divided into Branch I and Branch

⁹⁰ Belgium, Bulgaria, Denmark, Germany, Greece, Spain, France, Italy, Latvia, Hungary, the Netherlands, Austria, Portugal, and Romania.

⁹¹ The proposal refers to the Commission's commitment to 'assess additional demand side regulatory and non-regulatory measures to ensure a level playing field and a common understanding of deforestation-free supply chains, in order to increase supply chain transparency and minimise the risk of deforestation and forest degradation associated with commodity imports in the EU', announced in the 2019 Commission Communication on Stepping up EU Action to Protect and Restore the World's Forests, [COM/2019/352 final](#).

Further details on the deforestation proposal can be found in [section 4.5](#).

II⁹²). The project group also expressed its opinion that the preferred alternative for the architecture would be to build the database in NSW and noted that there are no incompatibility issues with regard to the General Data Protection Regulation (GDPR) and the implementation of a data set. Finally, regarding the viability of deploying an NSW solution as proposed by the Commission in Alternatives C and B⁹³, the national customs authorities would need to conduct an internal assessment to determine if the proposal could be implemented.

The evolution of the existing UCC electronic systems and the deployment of new ones prompted several Pan-Euro-Mediterranean (PEM) partner countries to develop 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. Regarding the digitalisation of proofs of preferential origin certificates (e-PoC) in the PEM area⁹⁴, two WGs were created in 2021 to examine the legal and organisational framework (WG1) as well as the system and process design (WG2). In 2022, a joint meeting of both WGs took place to discuss the necessary legal foundation at the EU and international level for the development of the system. WG1 met periodically to further elaborate on the legal provisions regarding the compliance of the national systems with the EU e-PoC, highlighting the significant issue of including a 'general enabling clause' for e-PoC in international bilateral agreements. The project group discussed the draft legal provisions, including the EU recommendations on e-PoC, with the Member States' experts and the TCG's representatives. The WG2 held meetings to discuss the BPMs for three components: (a) Certificate Issuance, (b) Administrative Cooperation, and (c) S2S interface. The objectives of the project group were to validate the business needs of the Certificate Issuance Module and Administrative Cooperation Module and to identify new ones based on the low-fidelity prototype prepared by Balsamiq⁹⁵. In addition, the elaboration of an S2S interface for the electronic submission of certificates between PEM partners was undertaken during the WG2 meeting. Discussions with the WG2 representatives examined the possibility of an automated exchange of messages between the National Customs Systems and the central repository via EU CSW-CERTEX. In addition, the WG2 engaged in elaborating a feasibility study and a first draft of a Business Case by the end of 2022.

⁹² The IDS is split into two different branches, Branch I and Branch II, which can be submitted at different points in time for the completion of the Common Health Entry Document for consignments of food and feed of non-animal origin (CHED-D) formalities. Branch I is submitted first to receive the certificate and relates to the Partner Competent Authority (PCA) data elements, including the common data elements. Branch II relates to the data needed for the submission of the Import Customs Declaration.

⁹³ The Commission presented different alternatives for the Architecture of the 'To-Be' scenario with regard to the data stored: (a) Alternative A described a scenario where the non-customs data are stored in the different EU databases and where the EO would have to submit through the NSW the data to the different authorities. Therefore, these data would be stored in EU sectorial databases, (b) Alternative B proposed to store all data in the NSW from where the data would be sent directly through EU CSW-CERTEX to the partner competent authorities. Especially for this alternative, data protection was a relevant topic that was discussed between the customs and non-customs authorities, and (c) Alternative C was proposed as a solution where the information submitted by the EO is stored in the National Systems, such as National Customs System.

⁹⁴ The system of Pan-Euro-Mediterranean cumulation of origin allows for the application of diagonal cumulation between the EU, EFTA States, Türkiye, the countries that 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.

⁹⁵ Balsamiq is a company that created a rapid low-fidelity UI wireframing tool, reproducing the experience of sketching on a notepad or whiteboard, but using a computer.

The project group 'UCC Standardised Exchange of Information (INF) Special Procedures (SP) Business', consisting of delegates from 14 Member States⁹⁶, organised meetings in 2022. The project group focused on specific issues related to the use of the inland office roles, defined in Central Services/Reference Data 2 (CS/RD2) and applicable to export and transit systems. Legal, business and IT colleagues from the Member States and/or Commission, experts in UCC AES and UCC NCTS, participated in the meeting to share their opinions and reasoning regarding the inclusion of such an inland role. Furthermore, the Commission proposed a draft proposal for managing and handling the Integrated Tariff of the European Communities (TARIC) codes, in case of change or invalidity, and invited the Member States to submit their comments by 14 October 2022. The project group held an open discussion on the future of the UCC INF SP system, suggesting an overview of the development of an S2S connection using the Outward Processing Export/Import (OP EX/IM)⁹⁷ procedure, including the current process of the UCC INF SP system and the two automation steps (i.e. a 'pull' and a 'push' method). All project group members agreed that an improvement to establish connectivity between the UCC INF SP system and their declarative systems needed to be investigated. The outcome of this analysis will constitute part of the study in the Business Case for UCC INF SP P2, for which a mandate will need to be asked. Finally, the project group initiated the drafting of a new Business Case for P2.

The CEG-DIH project group continued supporting the evolution of the UCC legal package and met periodically throughout 2022. Delegates of the Member States and TCG committed to the revision of Annex A to the UCC DA and UCC IA. Coordination sessions took place with different experts on various future Annex A potential issues regarding: (a) the introduction of a new BVI decision and the determination of requirements for the BOI decision, (c) the UCC AEO-related changes, and (d) the UCC BTI-related changes. The drafting of the legal provisions of Annex A to the UCC DA was ongoing. In addition, the project group continued drafting the legal provisions of Annex B to the UCC DA and UCC IA. Following thorough discussions, the project group prepared a draft proposal to amend the Commission Delegated Regulation (EU) 2015/2446⁹⁸ to provide simplified customs formalities for trusted economic operators. The draft proposal introduces in Annex B a new column, H8, which contains the data for customs declaration for the free circulation of goods brought from the UK into NI that are not at risk of being transferred into the European Union. Furthermore, a working document was prepared to address the alignment among columns H6⁹⁹, H7⁹⁹ and I2⁹⁹ of Annex B to the UCC DA.

The WPG was invited by the EU Commissioner for Economy Paolo Gentiloni in September 2021 to provide innovative ideas and suggestions on tackling the challenges facing the Customs Union. Published in March 2022, the WPG's landmark report¹⁰⁰ concluded that an urgent structural change is needed to take the EU Customs Union to the next level and address modern challenges (i.e. new trade models and growing trade volumes, technological developments, the green transition, new geopolitical context and security risks). Although recognising important changes to the customs legislation and IT in recent years and commending the reform plans set out in the Customs Action Plan,

⁹⁶ Belgium, Czechia, Denmark, Germany, Greece, Spain, France, Croatia, Italia, the Netherlands, Poland, Portugal, Romania, and Finland.

⁹⁷ OP EX/IM is a customs procedure where the union goods are released under outward processing procedure to be processed in a third country outside the customs territory of the Union and then, brought back and released into free circulation with total or partial release from import duty.

⁹⁸ 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](#).

⁹⁹ [Annex B - Table Legend](#)

¹⁰⁰ [Report by the Wise Persons Group on the Reform of the EU Customs Union, 31.03.2022](#)

the WPG advocated for more fundamental and wide-ranging reforms, expressed in 10 recommendations to be implemented by 2030. These recommendations focused on five main areas, enhancing the Customs Union's modernity and resilience: (a) ensuring a protective 'one external border', (b) promoting the EU way of life, (c) guaranteeing proper collection of customs duties and taxes at the border, (d) greening of customs, and (e) adopting a new approach to responsibility and trust.

The UCC NCTS project group meetings organised in 2022 brought together customs experts of the participating national administrations. The main discussions concerned the UCC NCTS-P6 elaboration. In addition, the project group discussed the UCC NCTS-P6 transitional period principles, Common Domain protocol policy and processes to be managed during the transition. The project group activities also covered the validation of the few corrective changes for the Design Document for Common Operations and Methods (DDCOM) and Design Document for National Transit Application (DDNTA) baseline. Similarly, activities of the UCC AES project group continued during the reporting year. The aforesaid activities were mainly aimed at securing the operation and business continuity of the system. Within the project group, the Commission encouraged the Member States to request support, where needed, for the development of the national AES component. Moreover, in the project group, the Commission coordinated the discussions for the RfC List, new UCC AES Design Document for National Export Application (DDNXA) package and the UCC AES Business Guidance review.

Highlights

- The CPG expert group addressed the Ukraine crisis and related sanction packages.
- The UCC GUM project group completed the legal review of the UCC GUM Business User Guide.
- The UCC CC IT project group contributed to finalising the draft of the UCC CCI P1 Business Guidance document, sent for internal revision in December 2022.
- The UCC CCI IT project group held a UCC CCI P2 workshop with all the Member States to inform them about the updates under the UCC CCI P2 TSS.
- The project group on the Digitalisation of Cultural Goods cooperated with AI experts from the INTERPOL and Fraunhofer Institute to envisage possible synergies in the ICG system evolution with the use of AI.
- The B2G project group highlighted that the similarities and differences between the proposal on deforestation-free products and the EU SWE-C B2G concept would need to be further investigated and addressed.
- Both WGs on e-PoC in the PEM area jointly met to discuss the necessary legal foundation at the EU and international level for the development of the system.
- During the UCC INF SP project group meeting in September 2022, the Commission proposed a draft proposal for issues arising with the TARIC codes, inviting the Member States to submit their comments by 14 October 2022.
- The CEG-DIH project group prepared a draft proposal to amend the Commission Delegated Regulation (EU) 2015/2446 to provide simplified customs formalities for trusted economic operators.
- The WPG's landmark report was published in March 2022 and emphasised the need for urgent structural change in the EU Customs.

4.12 Supporting Instruments

Several instruments and tools are used to facilitate the work related to the elaboration of the e-Customs systems and to enhance their efficiency in a modern and automated way. The supporting instruments summarised below play a crucial role in attaining the Customs Union policy goal of reducing the administrative and financial burden to trade and fostering economic cooperation among the Member States and third countries.

➤ BPM policy

BPM¹⁰¹ is a business analysis tool that has been integrated into the e-Customs methodology since 2010. It responds to the need for ensuring a better understanding of the customs legislation and policies and their impact on the business architecture and processes of the e-Customs systems. BPM offers a visual representation of business processes and functional requirements that are built against the legislation, international

¹⁰¹ A BPM is a graphical representation of a business process or workflow and its related sub-processes. BPMs create thorough and quantitative flowcharts and diagrams containing essential insights into the functioning of a process. BPM is usually performed by business analysts and managers who are seeking to improve process efficiency and quality.

agreements or other relevant instruments. BPM serves numerous purposes, notably (a) rendering the business domains and processes visually understandable, (b) checking the business logic provided in the legal amendments against the existing or newly introduced customs legislation, and (c) assisting the overall project definition and IT scoping exercise by defining business scenarios, processes, and business and IT architecture.

The EU customs BPM methodology is structured in hierarchical levels, each providing a legal, business and IT perspective of the e-Customs systems and processes. L1 BPM & Data is an overview of all EU customs business domains and global business data. L2 Interaction BPM and Data and High-Level BPM and Data represent the interactions between EU customs business domains and between business processes within each business domain. L3 Business requirements BPM & Data shows the process flows and conceptual data elements. Finally, L4 BPM Functional Specifications & Data indicates the system's functionalities, including data rules, conditions, information exchanges and test scenarios.

BPMs are produced for each EU customs business domain and their level of accuracy depends on the extent of automation and harmonisation required. L1 BPM & Data and L2 Interaction BPM & Data are reviewed recurrently according to the BPM maintenance activities. In May 2022, the change management for L2, L3 and L4 BPMs for the UCC PoUS system was carried out, and the related requests for change were shared with the Member States and economic operators. Furthermore, the external review for the BPM of EU CSW-CERTEX R4 was conducted, the work on BPM for R5 has progressed, and relevant updates were delivered during the reporting year. Concurrently, updates were made on the BPM for the Import of Cultural Goods e-licencing, UCC NCTS and EMCS P4.1.

➤ Architecture of Integrated Information Systems (ARIS)

ARIS is a technical supporting tool for BPM, which was chosen by DG TAXUD in 2010 following the Commission's overall policy of using the ARIS software platform. ARIS facilitates the reusability and improvement of business processes and data. All EU customs BPMs are available to the Member States and economic operators via the ARIS Business Publisher. Throughout 2022, the ARIS platform and ARIS Publisher achieved a 99.9% availability rate in production and 99.2% in conformance testing without any significant downtime observed. 2,374 new models were created in DG TAXUD design and 893 models in DG TAXUD implementation for the customs IT systems under development, an increase of 87.44% compared to 2021. In addition, 1,381 models were created in DG TAXUD operation for the IT systems that are already operational.

Furthermore, 67 new publications were created for the Member States and DG TAXUD's business units. The total number of repository models accounted for 22,383 for DG TAXUD design, 1,047 for DG TAXUD implementation and 1,381 for DG TAXUD operation, an increase of 23.05% compared to the previous year. In addition, 14 'MSexportDB'¹⁰² services were provided for the delivery of BPM content to the national authorities of three Member States, and no changes in the list of national authorities that use this service were observed (BE, BG, CZ, DE, IE, FR, IT, LU, AT, PL, RO, SI, and SE among the EU Member States and Serbia and Türkiye among the partnering countries). Finally, 593 were ARIS users amongst DG TAXUD, other Commission's DGs, contractors, the Member States and economic operators, and 269 were the requests for users' profile creation or update.

➤ EUCDM¹⁰³

¹⁰² MSexportDB (Microsoft Export Database) is a service used to provide BPM content to national authorities.

¹⁰³ A new publication website for EUCDM is available at the following address: <https://eucdm.softdev.eu.com>.

EUCDM is a technical instrument that provides a harmonised data model aligned with the EU customs legislation and offers an authoritative source of information for the technical developments of the IT systems of national customs authorities. EUCDM is used for the TES systems, such as UCC NCTS, UCC AES and UCC ICS, and for the National Customs Clearance Systems in the EU. Therefore, EUCDM is the horizontal source of the legally defined data to be presented by economic operators when they lodge declarations or notifications. The TSS packages for each e-Customs system are prepared on the basis of the data requirements established by law and their related formats and codelists. The EUCDM legal requirements are outlined in the UCC DA¹⁰⁴, and their formats and codes are found in the UCC IA¹⁰⁵. EUCDM also contains the mapping of the EU customs data elements against the WCO Data Model, making evident the compatibility of the EU model with the international standards and allowing economic operators to understand clearly the relationship between customs needs and data.

During 2022, the EUCDM Guidance Document was amended due to the entry into force of the Commission Delegated Regulation (EU) 2021/234¹⁰⁶ and the Implementing Regulation (EU) 2021/235¹⁰⁷. EUCDM 6.2 was published in March 2022 and updated to the latest version of the WCO data model (v3.11.0¹⁰⁸). Subsequently, EUCDM 7d (R1) was published, containing improvements in the contents and functionalities, while extending EUCDM 6.2 with the draft version of the renewed Annex A to the UCC DA and UCC IA. Collected data regarding the use of EUCDM during 2022, illustrates that the average monthly visits to the site amounted to 3,395, whereas 935.75 were the average monthly visitors¹⁰⁹.

➤ Common Communication Network/Common System Interface (CCN/CSI)

CCN/CSI is the platform supporting the information exchange among the Member States for the legacy applications. It consists of a close and secured network infrastructure that is provided by the Commission to facilitate the exchange of information between the national administrations and the customs and taxation areas. CCN2 is the evolution of the CCN architecture and services and will run in parallel to CCN/CSI until the latter is dismissed. In 2022, the CCN services achieved a 99.98% availability rate. The Commission offered operational management, maintenance, support and services for 52 CCN sites in 37 countries, with 124 CCN Gateways deployed. The high availability rate supported a traffic volume of around 91.02 terabytes (TBs) of data from January 2022 to December 2022, compared to about 80.12 TBs during the equivalent period in 2021. Furthermore, the traffic volume amounted to around 11.4 billion messages exchanged during the reporting year, compared to 10 billion in 2021. The increase in traffic volume and exchanged messages compared to 2021 corresponds to 13.6% and 14% rates, respectively.

In parallel with the ongoing operation of CCN/CSI, the Commission continued working on future development and modernisation of the infrastructure. A related communication

¹⁰⁴ 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](#).

¹⁰⁵ 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](#).

¹⁰⁶ 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](#).

¹⁰⁷ 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](#).

¹⁰⁸ In the current document, the various versions of the systems will be abbreviated as 'v'.

¹⁰⁹ The figures refer to the period September–December 2022 as the site was not active for the full year.

campaign was also carried out with the production of two dedicated newsletters. In 2022, the CCN/CSI infrastructure was crucial to enabling Ukraine to start participating in cooperation activities with the EU customs authorities. More precisely, the candidate country's access to the CCN/CSI network allowed the former to operate within UCC NCTS-P4. Ukraine's IT connection through CCN/CSI also supported the work on Solidarity Lanes to and from Ukraine to streamline the trade between Ukraine and the EU Member States and other third countries being parties to the common transit convention.

- Communication and Information Resource Centre for Administrations, Businesses and Citizens (CIRCABC) and Programmes Information and Collaboration Space (PICS)

The vast scope of the Customs Programme and the large number of stakeholders involved requires the adoption of tools to ensure effective and time-efficient coordination of the e-Customs projects and collaboration among the Member States, Commission and other actors involved. CIRCABC and PICS are communication tools designed to share information with national administrations and other entities outside the Commission. CIRCABC is a web-based application, which allows geographically spread collaborative groups to share documents and information. The platform is accessible to associations of citizens, businesses and international, national or local administrations. PICS is an online platform designed for the collaborative work and sharing of information between administrations across the EU in the field of taxation and customs. An EU survey in 2022 highlighted that 68.03% of users are overall satisfied with the tool's effectiveness. The respondents also identified some suggestions for improvement, such as a more efficient search engine, simpler authentication process, more user-friendly presentation and organisation of content, and a more modern and intuitive interface. Following the survey, the Commission worked on the elaboration of a new version of PICS, which addresses the expressed suggestions.

- Customs Control Equipment Instrument (CCEI)

CCEI is a policy and financial instrument established with the Customs Programme and managed by the Commission. The instrument provides grants to the Member States in need to acquire, maintain and upgrade customs equipment for checking goods at the border, such as new scanners, automated number plate detection systems, sniffer dogs and mobile laboratories for sample analysis. Established by Article 3 of the Regulation (EU) 2021/1077¹¹⁰, CCEI aims to support the Customs Union and customs authorities to protect the financial and economic interests of the EU and its Member States, to protect the Union from illegal trade and to preserve security and safety. The Customs Eastern and CELBET and the Customs Laboratories Expert Team/Network are the groups of experts most relevant to CCEI.

In 2022, the instrument continued to be funded under the multiannual work programme for 2021 and 2022. The grant focused on actions aimed at identifying performance gaps in customs controls and subsequently ensuring that the border crossing points and customs laboratories do not lack essential equipment. The multiannual work programme 2021–2022 also supported the development of dedicated eLearning courses and a Common Learning Event Programme (CLEP) on the use of CCEI. With a total of 43 proposals from 24 Member States, the evaluation conducted during the second half of 2022 highlighted the decisive success of the initiative, which brings great benefit to the Customs Union. Furthermore, in the context of the war in Ukraine, Member States needing capacity building at their border crossing could benefit from the CCEI toolbox. Specifically, with the first call for proposal, 31 border crossing points in six Member States

¹¹⁰ 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](#).

(LV, LT, HU, PL, RO, and FI) bordering either Belarus, Russia or Ukraine were supported to improve their equipment in performing customs checks. Finally, the next CCEI work programme was prepared and adopted towards the end of the reporting year.

➤ Microsoft Teams and WebEx

Given the continuation of restrictions due to COVID-19 and the Commission's commitment to reducing the environmental impact of its activities, videoconferencing tools continued to be used significantly to organise the activities related to the implementation of the e-Customs systems. In 2022, Microsoft Teams was confirmed as the primary platform for the Member States and Commission to streamline collaborative work and sharing of information. On the other hand, WebEx served as a platform to organise online working and project group meetings. In 2022, an EU survey underlined that the reduced recurrence of physical meetings provided fewer networking opportunities for the e-Customs stakeholders. The respondents also highlighted the need for striking a balance between virtual and physical presence activities.

➤ Register of Commission Expert Groups

In an effort to further enhance communication and reaffirm the Commission's commitment to the principle of transparency, the Commission maintains a Register of Commission Expert Groups and other similar entities. The Register, which is accessible to the public, provides information about the expert groups assisting the Commission in the preparation of legislative proposals and policy initiatives, the preparation of delegated acts, the implementation of the EU legislation, programmes and policies and the early preparation of implementing acts before the submission to the committee. Besides the expert groups internal to the Commission, the Register also lists other consultative entities set up by the EU legislator. Each group's mission, tasks and members are reported in the Register as well as relevant documents discussed and produced.

➤ Training and Capacity Building

Training and capacity building are crucial in supporting the transition towards a fully digital EU Customs Union. In 2022, the Commission continued conducting training activities, such as developing, translating and promoting eLearning courses. During the reporting year, seven new courses in the area of e-Customs were developed in English and translated into 31 languages, while three courses were revised in all EU languages to reflect the updates of the related IT systems. These training modules targeted 8,595¹¹¹ officials and 60,755 professionals and were evaluated with a score of 75.3, according to the Kirkpatrick indicator¹¹². Moreover, activities were undertaken for the development of six eLearning modules in English related to UCC ICS2 R2, the release of the EU Customs Trader Portal (EUCTP) eLearning module in English and its localisation in all EU languages, the localisation in CZ, LT, HU, PT, SI, and SE of the UCC CCI eLearning module, and the localisation of the Customs Risk Management System 2 (CRMS2) eLearning module in all EU languages.

¹¹¹ The number for 2022 was lower than usual, considering that there was a change in the collection process of the data to provide more reliable information. Specifically, the data from the Member States were excluded.

¹¹² The Kirkpatrick Model is a globally recognised method of evaluating the results of training and learning programmes. It assesses both formal and informal training methods and rates them against four levels of criteria: reaction, learning, behaviour and results.



Figure 4: Professionals trained with EU eLearning portfolio

Furthermore, updates were performed for the eLearning courses on UCC EOS, UCC eAEO Trader Portal, and Sampling Manual for Customs and Taxation Authorities (SAMANCTA) in English and all EU languages. Considering the entire training portfolio supported by the Customs Programme, 496 learning modules were made available in the EU eLearning Platform throughout the reporting year. Additionally, the easing of the COVID-19 restrictions allowed the organisation of 17 CLEP trainings in physical presence with 216 participants. In 2022, a long-term evaluation was also conducted, following the end of the Action Plan 'Boosting taxation and customs performance in the EU through training and staff development' for 2017–2020. The review concluded that eLearning courses and localisation bring a high Union added value, together with the new taxation and customs EU Learning portal and the well-established collaboration platforms for training initiatives. Finally, DG TAXUD expanded its collaboration with other Commission services to develop eLearning modules that address the correlation of customs with other EU policies. In this regard, some of the new eLearning modules developed included a course on exchanging fluorinated greenhouse gases certificates in the context of EU CSW-CERTEX.

Highlights

- The ARIS platform and ARIS Publisher achieved a 99.9% availability rate in production and 99.2% in conformance testing without any major downtime observed.
- The total number of repository models in the ARIS platform was 24,811, an increase of 23.05% compared to the previous year.
- EUCDM 6.2 was published in March 2022, followed by EUCDM 7d (R1).
- The CCN services achieved a 99.98% availability rate. Around 11.4 billion messages were exchanged, corresponding to an increase of 14% compared to 2021.
- 24 Member States submitted 43 grant applications within the framework of CCEI.
- Seven new e-Customs-related courses in English were developed and translated into 31 languages, while three courses were revised in all EU languages to reflect the updates of the related IT systems.

4.13 IT Modernisation and Security

The IT modernisation programme continued to be a significant initiative for the Commission in 2022, aiming at improving the IT service provided to the Member States and internal stakeholders. This initiative complements the systems and infrastructures' updates, as defined in the MASP-C Revision 2019 IT strategy¹¹³, with the necessary reusable architecture components and with modern, agile and flexible software development approaches. Its main objective is to enable the Member States to reduce the time-to-operation regarding new and upgraded systems, increase flexibility when addressing new challenges and remain relevant from a technological standpoint in today's IT market.

The IT modernisation programme's organisation remained divided into four tracks¹¹⁴, each focusing on a different IT objective:

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

Regarding Track 1, the Commission progressed in collaborating with the Local Information Security Officer (LISO), aiming at elaborating a plan for comprehensive information system security and data protection, including the GDPR and Institutions' Data Protection Regulation (IDPR) compliance. The integration plan for the IT Security Risk Management (ITSRM) v2 methodology progressed and the first iteration of the information security dashboard was concluded. The Commission continued to focus on further improving the monitoring, reporting and auditability of IT-related expenditures, mentioning the alignment of consumption reporting.

In line with the objectives defined in Track 2, substantial advancements were made to the following points: (a) the enterprise architecture, where work was initiated on key architectural topics, (b) the consolidation of infrastructure (i.e. Wide Area Network (WAN) evolution, gateway centralisation), (c) the local Data Centre (DC) Consolidation P1, with a foreseen 'go' date in January 2023, and (d) the migration of the non-Gold services to containers.

In relation to the IT service continuity, as described in Track 3, significant accomplishments marked 2022. The planning with regard to the Gold Release of Vies on the Web (VoW) was updated. In addition, a pilot was completed for the centralised Disaster Recovery solution for CCN and CCN2 and a technical design was validated. New CCN gateways (i.e. Nutanix appliances¹¹⁵) were deployed in three Member States (CZ, IT, and RO), and the design of the CCN gateways' consolidation was completed.

As for Track 4, the agile guidelines for development were finalised, and the global adoption dashboard was ready to be finalised by the Configuration Item (CI) owners. The integration of the Application Lifecycle Management (ALM) with the EU Login was completed concerning the Acceptance Environment. Furthermore, the security

¹¹³ [IT strategy – MASP-C Annex 5 Revision 2019](#)

¹¹⁴ Track 1 touches upon general governance, programme and project management activities. Track 2 concerns the IT architecture and infrastructure, as set out in the MASP-C Revision 2019, fiche 4.7. Track 3 aims to address the objectives outlined in the MASP-C Revision 2019, fiche 4.9. Track 4 focuses on agile software development to reduce time-to-market, costs and risks of obsolescence. Additionally, it refers to DevSecOps as the key enabler to drastically reduce delays and shorten implementation and deployment services.

¹¹⁵ Nutanix appliances refer to software designed to integrate with hardware platform configurations produced or certified by Nutanix and OEM partners.

assessment on the connectivity from the Service for developers (SRV4DEV) to DG TAXUD DC was accomplished.

In 2022, the Commission pursued its efforts towards an enhanced IT security environment. To this end, 13 cybersecurity projects¹¹⁶ for areas such as infrastructure, business application products or services were identified, while eight¹¹⁷ were launched and progressed throughout the reporting year.

Highlights

- The first iteration of the information security dashboard was concluded.
- The planning with regard to the Gold Release of VoW was updated.
- The security assessment on the connectivity from the SRV4DEV to DG TAXUD DC was accomplished.
- Regarding IT security, 8 out of 13 cybersecurity projects were launched and progressed.

4.14 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.

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 CCN, which continued to experience growth during 2022. The CCN applications exchanged more than 11.6 billion messages during the year, with an increase of 13.40% compared to 2021, when 10.3 billion messages were exchanged. The increase in the quantity of messages exchanged has coincided with a volume growth of 14.22%, from 19.3 TBs in 2021 to 22 TBs in 2022. **Figure 5** below illustrates the evolution of the CCN message quantities and volume exchanged since 2008.

¹¹⁶ (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 the 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 a 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.

¹¹⁷ (1) Security Devices optimisation, (2) e-mail protection (servers and platforms), (3) Privileged Identity Management (PIM) across all platforms, (4) Security Awareness training, (5) Security Dashboard (SD) for a short-term period and Governance Risk and Compliance (GRC-ServiceNow) software for a long-term period, (6) Security Operations Centre (SOC), (7) Vulnerability Management System & Services, and (8) central Public Key Infrastructure (PKI) management for all platforms.

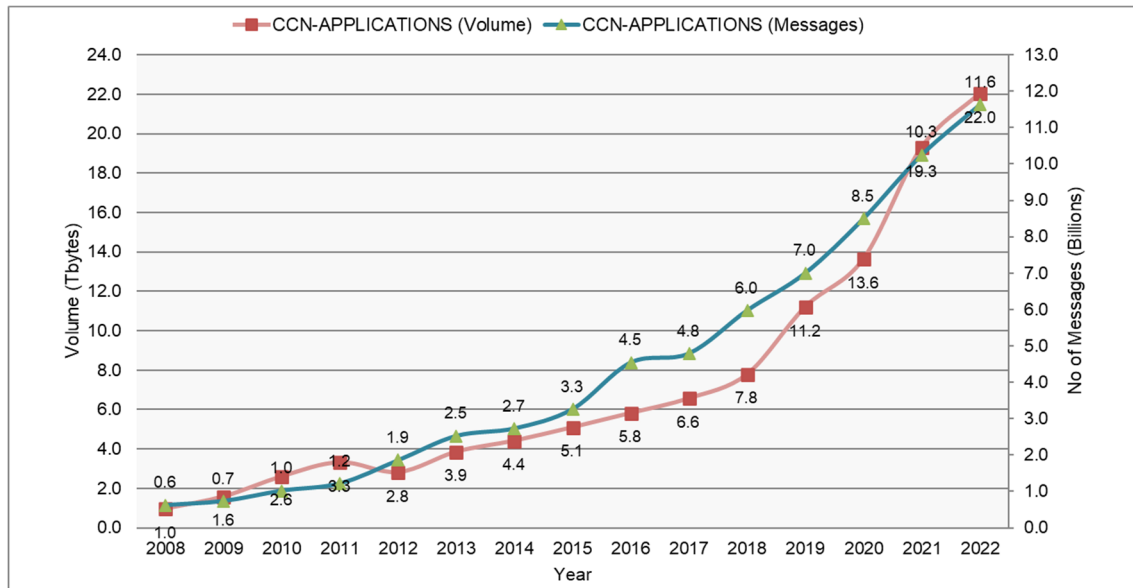


Figure 5: Evolution of CCN message quantities/volume

Figure 6 and **Figure 7** depict the progress of the exchanged message quantities since 2008 for the following projects: UCC European Binding Tariff Information (EBTI), UCC ECS, UCC Economic Operators System (EOS), UCC NCTS, UCC ICS, UCC Surveillance (SURV) and Specimen Management System (SMS) projects.

Specifically, as depicted in **Figure 6** below, in comparison to 2021, a decrease was observed for UCC ECS (16.67%) and UCC NCTS (8.95%) during 2022.

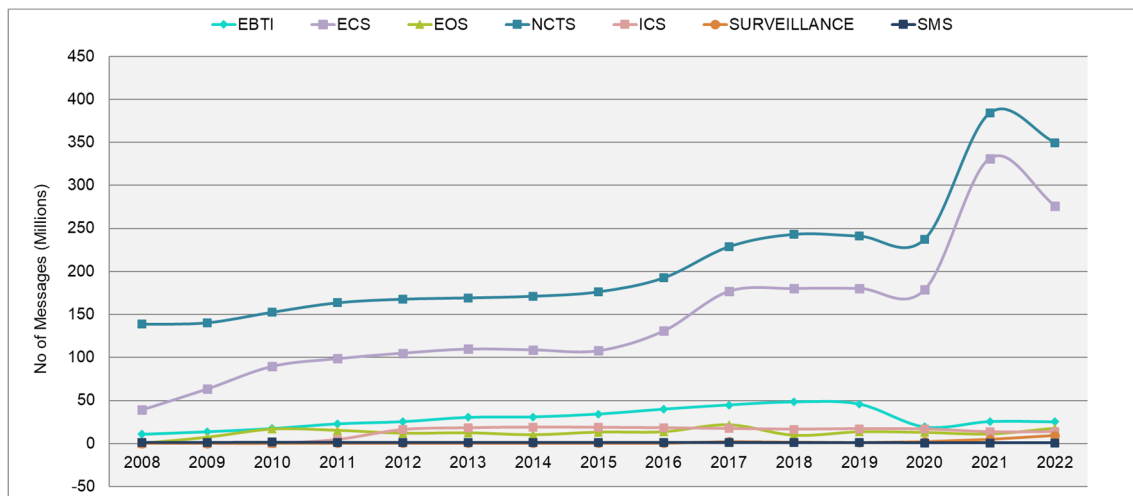


Figure 6: Evolution of exchanged messages for specific systems

In addition, an increase was observed for UCC SURV (91.48%), UCC EOS (62.85%), and UCC ICS (1.34%), whereas SMS (4.86%) and UCC EBTI (1.43%) experienced some decrease, as illustrated in **Figure 7**.

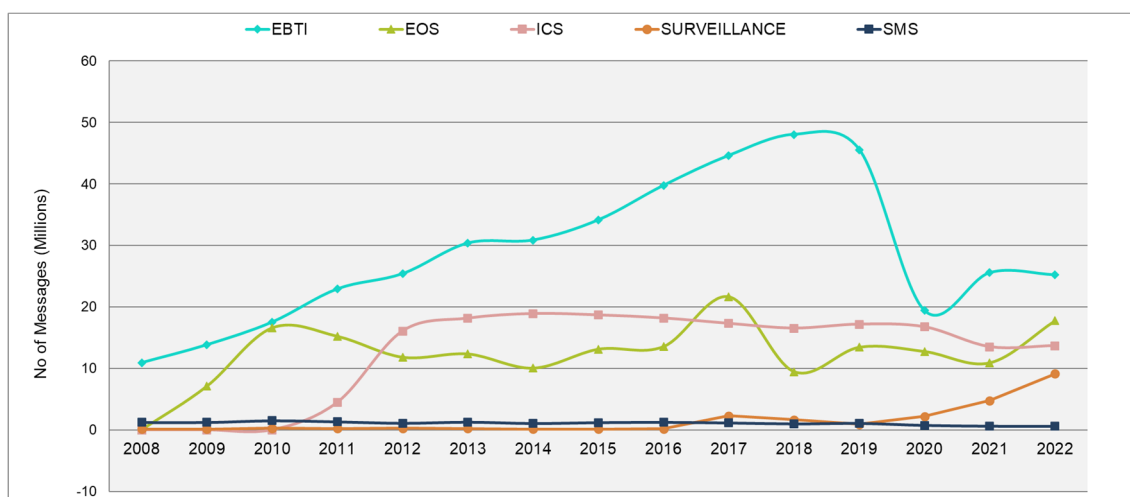


Figure 7: Evolution of exchanged messages for specific systems

Figure 8 outlines the evolution of the messages exchanged for UCC ICS2 TAPAS and UCC ICS2 CCN2 in 2021 and 2022. More specifically, a total of 1.4 billion and 1.8 billion messages were exchanged in 2022 for UCC ICS2 TAPAS and UCC ICS2 CCN2, respectively, marking a significant increase of 91% and 75% compared to 2021. Contrary to the constantly increasing number of messages during 2021, the number for both systems remained relatively stable during 2022.

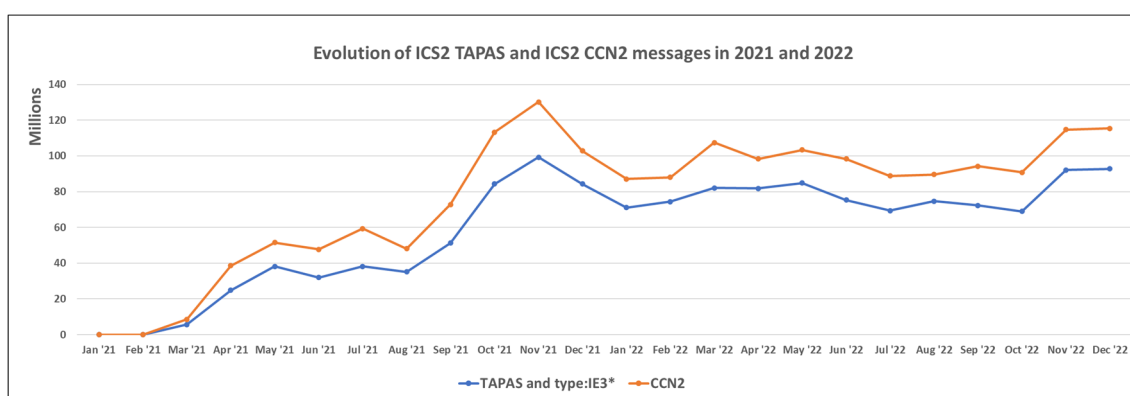


Figure 8: Evolution of exchanged messages for UCC ICS2 TAPAS and UCC ICS2 CCN2 in 2021 and 2022

Figure 9 presents the distribution of messages exchanged per system (UCC EBTI, UCC ECS, UCC EOS, UCC NCTS, UCC ICS, COPIS, UCC SURV and SMS) in 2022. The quantity of messages exchanged by the movement systems, such as UCC NCTS, UCC ECS, and UCC ICS represents 89.91% of the total number of messages exchanged by all systems, compared to 92.30% in 2021. As noted, there was a 2.58% decrease between 2021 and 2022 in the percentage of the messages exchanged, with a notable part used by the TES systems.

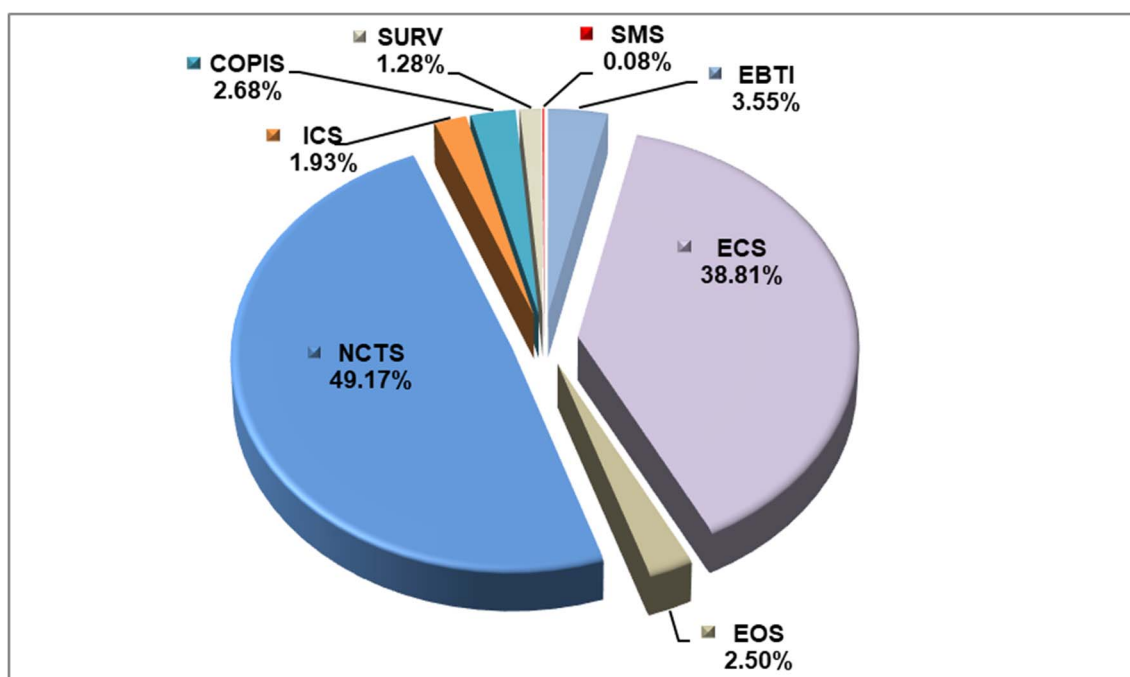


Figure 9: CCN messages distribution per system

Highlights

- The CCN applications exchanged more than 11.6 billion messages, with an increase of 13.40% compared to 2021.
- The increase in the quantity of messages exchanged has coincided with a volume growth of 14.22%, from 19.3 TBs in 2021 to 22 TBs in 2022.
- The number of messages exchanged for UCC ICS2 TAPAS and UCC ICS2 CCN2 remained relatively stable during 2022.
- The quantity of messages exchanged by the movement UCC systems represents 89.91% of the total number of messages exchanged by all systems, compared to 92.30% in 2021.

4.15 Service Level Agreement (SLA) and Terms of Collaboration (ToC)

The Service Level Agreement (SLA) and Terms of Collaboration (ToC) documents specify the rights and obligations of all stakeholders and their proper implementation constitutes a guarantee for the success of the customs TES systems. The Commission prepares the documents that the Member States subsequently adopt. All national administrations are responsible for ensuring consistency between their SLAs and the ToC. The SLA and ToC include the following documents:

- ToC for the customs TES;
- ToC for the Single Portal for Entry or Exit of Data (SPEED);
- Service Catalogue;
- SLA for the Service Desk;
- SLA Availability Management;
- Guidelines for the National Service Desks (NSDs);
- Security Plan;

- Capacity Plan;
- Availability Plan.

During the reporting year, the SLA and ToC including the Security Plan for UCC systems were updated and formally validated and approved by the Member States.

Out of the 26 reporting Member States, only nine (BG, EE, IE, AT, PL, SI, SK, FI, and SE) reported on the impact of the SLA and ToC on the delivery model. Eight among those Member States (BG, EE, IE, AT, PL, SI, SK, and SE) notified that the 2020 SLA required no further investments in their delivery model, contrary to one Member State (FI), which confirmed an impact.

EE communicated that compared to the 2017 SLA, the 2020 SLA brought no substantial costs to the delivery model. Furthermore, although no special supporting activities for the SLA actions were organised, all the necessary activities regarding development projects were carried out.

IE informed that the Change Management Unit (CMU) assisted the customs officials to the greatest extent possible for the implementation of Automated Import System (AIS). Moreover, the CMU engaged with all internal and external stakeholders to provide information and training concerning all aspects of UCC AES.

PL stated that the delivery of the SLA and ToC capabilities for UCC ICS2 R1 and R2 was included in a framework contract. In addition, PL specified that the trainings on UCC ICS2 R1 were completed, whereas those on UCC ICS2 R2 were not initiated yet. Regarding UCC NCTS-P5, PL noted that dedicated trainings on NCTS-P5 were organised for administrators, helpdesk staff and the UCC NCTS local trainers or consultants. The latter were subsequently required to transfer knowledge to officers working locally.

SI reported continuity of activities concerning the project's progress.

FI underlined that the ongoing e-Commerce projects impacted the infrastructure and IT systems requirements. The necessary analysis, the updates of the IT systems as well as the multiple installations and testing activities entailed additional costs.

Highlights

- The SLA and ToC including the Security Plan for UCC systems were updated and formally validated and approved by the Member States.
- Regarding the impact of the SLA and ToC on the delivery model, eight out of nine Member States reported none, while one Member State positively confirmed.

4.16 Innovative Technology Solutions

Throughout 2022, the Commission continued its consideration of additional innovative technology solutions applied to customs. Data is at the heart of the Commission's emphasis on shaping policies to support the design of modern and interoperable electronic systems. The Member States' customs administrations and Commission have always been at the forefront of data harmonisation and compliance with international standards.

Responding to the Commission's resolve to become a data-driven organisation, the 2019 DG TAXUD Data Strategy intends to maximise the value of data assets, while remaining

aligned with the overall European strategy for data¹¹⁸. Within this context, people, data values and tools have been identified as the key enabling factors of DG TAXUD's data strategy. 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. The creation of a Data Laboratory (named 'Data Lab') has been considered a possible effective tool for exploiting data. The Data Lab supports the implementation of adequate Data Governance and provides a platform that facilitates data usage through analytical tools, ultimately contributing towards the achievement of the objectives set by the Commission with regards to data-driven policy-making.

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. Creating a data platform where all this information is accessible in a secured and controlled manner is vital for any data-driven organisation and contributes substantially to maximising the value of the data. Moreover, the Data Lab provides a set of data analytical tools and offers on-premises computing resources in terms of storage, processing and memory. Data is uploaded and easily accessed, shared and processed, in full compliance with the personal data protection legislation and principles.

The first version of the Data Lab was deployed successfully in the first quarter of 2022. The main objective of establishing platforms for data analytics is to identify a data architecture that promotes good governance, re-usage of resources and error minimisation. Specifically, the current version of the Data Lab aims to consolidate data assets in a single data environment to facilitate performance and strategic analysis. With the Data Lab, the Commission intends to create a computing environment to aid policy officers in their task, with the view of supporting the Member States in data-intensive policy initiatives and contributing to the ambition of generating and disseminating relevant open data on taxation and customs for the EU citizens.

Highlights

- The first version of the Data Lab was deployed successfully in the first quarter of 2022.

4.17 The Recovery and Resilience Facility (RRF)

The Recovery and Resilience Facility (RRF) is the centrepiece of NextGenerationEU (NGEU), the temporary instrument designed to boost the 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: (a) to assist Member States mitigate the economic repercussions of the COVID-19 pandemic, and (b) to render 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) 2021/241¹¹⁹ of the European Parliament and 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

¹¹⁸ [European Data Governance Act](#)

¹¹⁹ 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](#).

Delegated Regulation (EU) 2021/2105¹²⁰ entered into force to supplement the aforesaid Regulation.

The Commission participated actively in the RRF exercise, and when required, the Customs Country Desk Team (CCDT) supported the implementation of Member States' Recovery and Resilience Plans (RRPs), participating at bilateral meetings with the relevant stakeholders and providing elements to relevant DGs to progress on the validation of the RRP's milestones, including customs aspects and consequent funding. Concomitantly, the Commission launched various discussions with the 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 subsequent payment request fully processed in 2022. The progress in the implementation of the plans can be followed live on a platform, the 'Recovery and Resilience Scoreboard'¹²¹, set up by the Commission in December 2021. The Scoreboard website contains dedicated sections on the achievement of milestones and targets, as well as RRF disbursements. Additional details have been published in October 2022 by means of the Bi-annual Reporting Factsheet¹²².

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 2022. The scope of this call was to provide Member States with technical support for the design or implementation of reform projects in 2023, including strategic and legal advice, studies, training and expert visits on the ground. As regards the main objectives of the Customs Action Plan, the Commission 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 NSWs 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's.

Throughout 2021 and 2022, the Commission also conducted the necessary activities for a 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 was published in July 2022¹²³.

Highlights

- The RRF has entered in the implementation phase, with the payment request fully processed.
- Details on the progress of the RRP's implementation were published in October 2022 by means of the Bi-annual Reporting Factsheet.
- To further support the Member States with the RRP's implementation, in June 2022, the Commission also launched a new call within the TSI cycle.
- A report on the RRF implementation was published in July 2022.

¹²⁰ 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](#).

¹²¹ [Recovery and Resilience Scoreboard \(europa.eu\)](#)

¹²² [Bi-annual reporting factsheet-October 2022 \(europa.eu\)](#)

¹²³ [Recovery and Resilience Facility Review Report | European Commission \(europa.eu\)](#)

5. COSTS

5.1 Costs incurred by DG TAXUD for IT systems development in 2022

Figure 10 outlines the Commission's costs committed under the 2022 budget for IT system development and maintenance as well as customs coordination. The Commission's 2022 costs for e-Customs amounted to EUR 125,941,320.66.

| System/Activity | | Commission Committed budget for 2022 (EUR) |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------|
| Studies and Development projects | UCC Customs Decisions System (CDS) | 3,728,116.67 |
| | UCC Authorised Economic Operators (AEO) and impacts of Mutual Recognition Agreement (MRA) | 200,000.00 |
| | UCC Automated Export System (AES) | 2,303,275.84 |
| | UCC New Computerised Transit System (NCTS-P5) | 2,557,525.17 |
| | UCC New Computerised Transit System (NCTS-P6) | 3,108,899.17 |
| | UCC Surveillance3 (SURV3) | 300,000.00 |
| | UCC Registered Exporters (REX) | 578,435.00 |
| | UCC Binding Tariff Information (BTI) | 200,000.00 |
| | UCC Guarantee Management (GUM) | 530,000.00 |
| | UCC Centralised Clearance for Import (CCI) | 2,223,043.75 |
| | UCC Proof of Union Status (PoUS) | 3,032,957.51 |
| | UCC Import Control System 2 (ICS2) | 7,460,628.89 |
| | UCC Standardised Exchange of Information Special Procedures (INF SP) | 200,000.00 |
| | UCC project | 26,422,881.99 |
| | Import of Cultural Goods (ICG) | 250,000.00 |
| | Export of Cultural Goods (ECG) | 150,000.00 |
| | EU Customs Single Window (CSW) - Business-to-Government (B2G) | 150,000.00 |
| | EU Customs Single Window (CSW) - Certificates Exchange Project (CERTEX) | 1,010,000.00 |
| | EU Customs Single Window (CSW) - Directorate-General for Health and Food Safety (DG SANTE) | 1,250,000.00 |
| | EU Single Window Environment for Customs (EU SWE-C) - other | 300,000.00 |
| | EU Single Window Environment for Customs (EU SWE-C) | 3,110,000.00 |
| | Central Services / Management Information System (CS/MIS2) | 2,309,977.42 |
| | Classification Information System (CLASS) | 150,000.00 |
| | Customs Union Performance (CUP-MIS) | 370,000.00 |
| | anti-Counterfeit and anti-Piracy Information System (COPIS eAFA) | 160,000.00 |
| | Customs Risk Management System (CRMS2) | 1,452,870.00 |
| | European Union Customs Trader Portal (EUCTP) | 370,000.00 |
| | Carbon Border Adjustment Mechanism (CBAM) | 450,000.00 |
| | electronic Proof-of-origin Certificates (e-PoC) | 250,000.00 |
| | Other Customs projects | 5,512,847.42 |
| | IT Architecture Customs | 300,000.00 |
| | Conformance Test Application (CTA) | 939,872.67 |
| | Information Exchange Converter Application (ieCA) | 1,564,058.34 |
| | ARIS (Modeler Publisher) | 310,000.00 |
| | EU Customs Data Model (EUCDM) | 520,000.00 |
| | Supporting Activities | 3,633,931.00 |
| Studies and Development Subtotal: | | 38,679,660.42 |
| Maintenance (corrective/evolutive) of Customs systems | | 8,196,300.00 |
| Maintenance (corrective/evolutive) of Customs systems Subtotal: | | 8,196,300.00 |
| Support of IT systems | | 24,330,356.51 |
| HW/SW maintenance | | 14,517,670.13 |
| DevSecOps Infra and services | | 500,000.00 |
| Operations of IT systems Subtotal: | | 39,348,026.64 |
| Development and maintenance of the platforms | | 8,900,000.00 |
| Enterprise Architecture | | 1,200,000.00 |
| Communication network CCN2 Subtotal: | | 10,100,000.00 |
| Quality Assurance including TEMPO | | 5,050,000.00 |
| Quality Assurance including TEMPO Subtotal: | | 5,050,000.00 |
| Common costs Customs 2022 | e-Customs joint actions - Meetings | 162,221.00 |
| | e-Customs joint actions - Training | 1,280,508.51 |
| | ICS2 communication campaign | 239,972.48 |
| Common costs Customs 2022 Subtotal: | | 1,682,701.99 |
| Consulting services | | 15,344,591.61 |
| Trans-European Systems (TES) support and management | | 6,840,040.00 |
| Contingency budget | | 700,000.00 |
| Supporting budget Subtotal: | | 22,884,631.61 |
| EUR GRAND TOTAL | | 125,941,320.66 |

Figure 10: Commission's costs in 2022 (expressed in EUR)

As illustrated in **Figure 11**, compared to 2021, there was an increase in the 'Studies and Development' category. The 'Maintenance of customs systems' and the 'Operations of IT systems' categories remained nearly at the same levels, while a decrease was observed in some of the other categories.

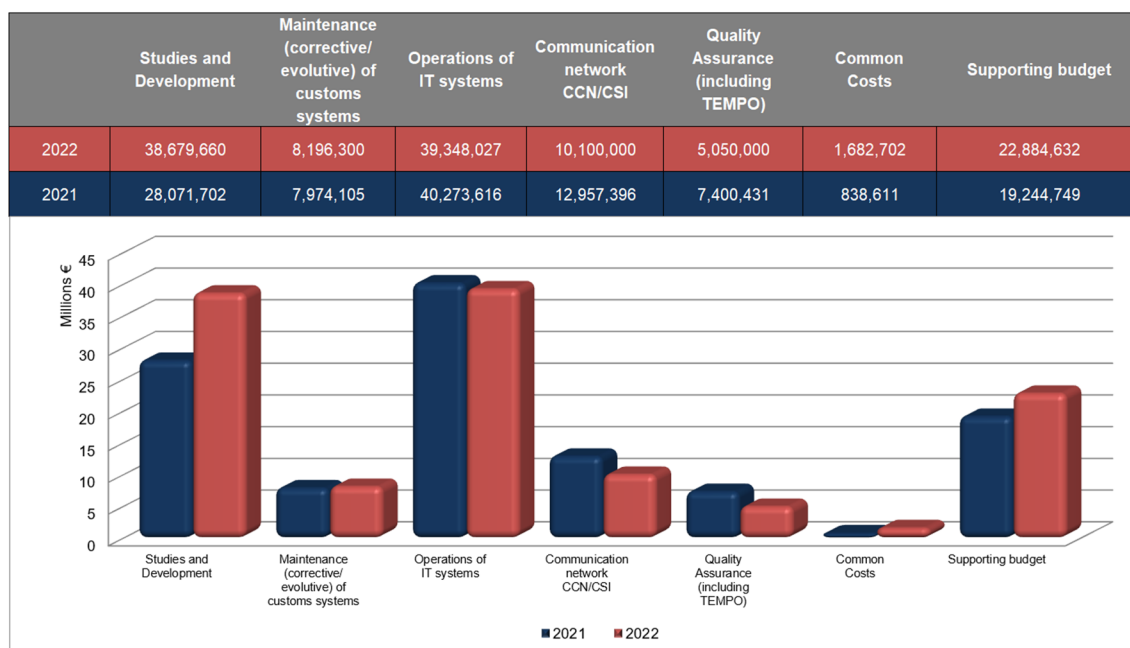


Figure 11: Main categories of the Commission's costs in 2021 and 2022

Figure 12 depicts the total cost of the Commission for customs IT systems from 2008 to 2022. A steady growth in the overall cost has been noticed throughout the years until 2017, when several systems entered into operations. Between 2017 and 2020, there was a declining tendency, while since 2021, the Multi-Annual Financial Framework (MFF) (2021-2027) has provided a new opportunity to continue the delivery of the IT systems (e.g. UCC ICS2). During the reporting year, a 7.54% increase of the overall cost has been observed in comparison to 2021 (EUR 117,110,611.19).

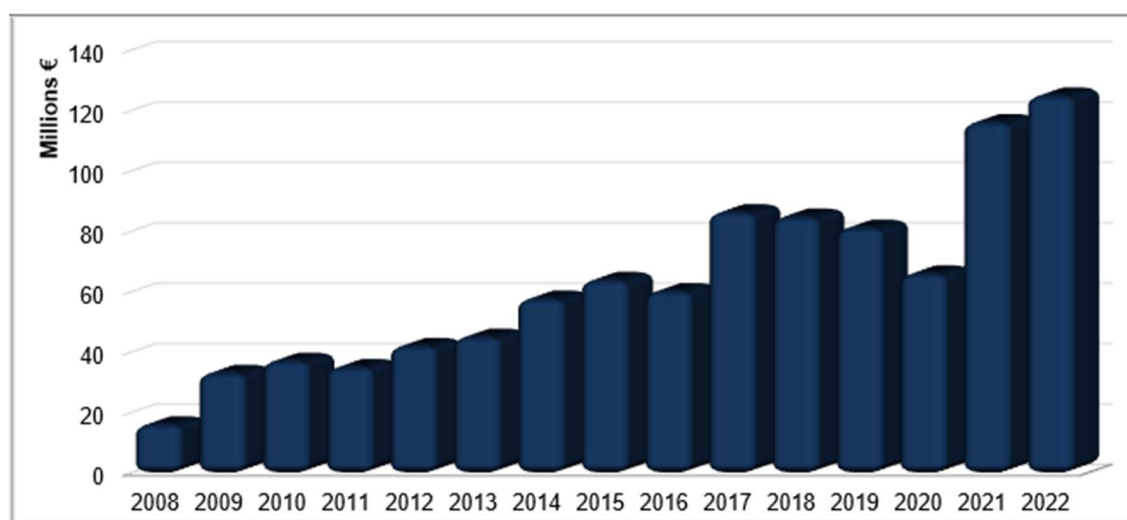


Figure 12: Commission's costs for customs IT systems, 2008–2022

5.2 Costs incurred by the Member States in 2022

The total costs by the Member States on customs IT systems in 2022 were EUR **251,941,496.64**, showing a slight decrease of 4.63% compared to 2021. **Figure 13** below illustrates the Member States' investment per project based on the MASP-C Revision 2019, as provided in the national annual reports. Following the MASP-C Revision 2019, the Member States have reported on 33 projects.

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 has not been 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;
- The various development and implementation approaches adopted by the Member States resulted in diverse reporting for the project phases and/or costs associated with them (i.e. project progress, software/hardware costs). The aforesaid expenditure is aggregated under the respective project as reported;
- The Member States' national systems may have been developed on common platforms and thus, the costs of numerous systems could then be reported under one reference baseline. Consequently, this has affected the results and the accuracy of the data.

According to **Figure 13**, the main allocation of the Member States' budget¹²⁴ in 2022 was used for UCC ICS2 (1.19) project, which constituted 22.14% of the total cost. The UCC AES (1.6) and UCC NCTS (1.7) projects comprised the next major costs, accounting respectively for 14.95% and 13.75% of the grand total, demonstrating the focus of the Member States towards the preparation of their National Transit and Export evolutive applications. The next considerable cost was related to the Adjustments of the existing import applications under the UCC (2.10) system at 12.91%. The next projects that the Member States focused on were Maintenance¹²⁵ and Updates of Operational IT Systems (4.8), e-Commerce and Customs Procedure (CP) 42/63 (1.17) and UCC AN/PN/TS (2.1) and represented, respectively, 6.01%, 5.2% and 4.35% of the total cost.

The non-MASP-C Revision 2019 projects accounted for 2.87% of the overall Member States costs. The projects categorised under 'Other' amounted to 5.18% of the total cost, representing the efforts of the Member States towards the development of mostly UCC AEO and the impacts of Mutual Recognition Agreement (MRA) (1.5), UCC GUM (2.5), UCC SP (2.6), UCC EORI 2 (1.15), CCN2 (4.5) and COPIS (1.12) systems, absorbing 0.92%, 0.73%, 0.52%, 0.49%, 0.43% and 0.40%, respectively.

¹²⁴ The budgetary data are imprecise due to the aggregated information received from some Member States.

¹²⁵ The reported cost on maintenance of the systems in operation since 2017 has been included under the Maintenance (4.8) project fiche.

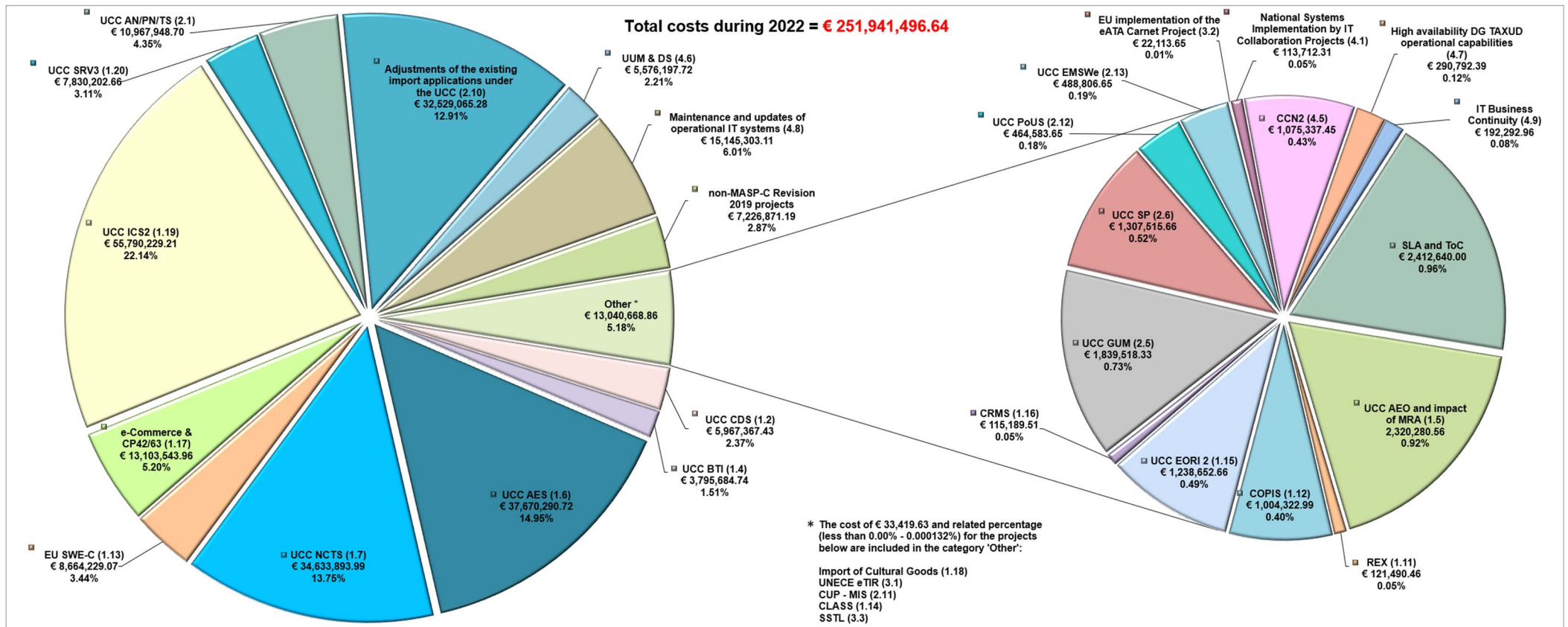


Figure 13: Member States' costs of customs IT systems in 2022

Figure 14 shows the comparison between the costs of the IT systems development and operation through the years 2019 to 2022. During that period, there was an increase in costs for the development and a decrease in the operations. Comparing the costs of IT systems in the last two years, the investment in development remained almost at the same levels. In 2022, the development reached 93.99% and the operations 6.01%, while the related percentages in 2021 were respectively 87.06% and 12.94%. The figures reconfirm the steady growth in the development.

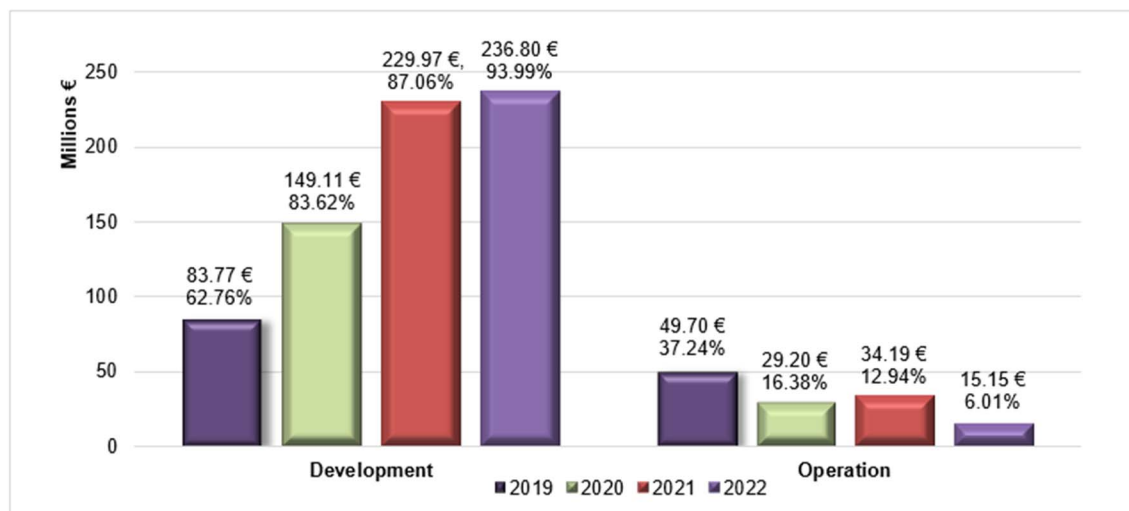


Figure 14: Costs of IT systems in Operation and in Development, as part of all systems in 2019–2022

Figure 15 displays the shares of the different MASP-C Revision 2019 project groups as well as non-MASP-C projects and SLA and ToC as part of all the Member States' costs. 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 the existing projects.

In 2022, the focus of the Member States remained on the implementation and development of the Group 1 projects. According to the UCC legislation, the Member States and Commission should deploy a significant number of system releases by the legal deadlines. The main budget consumption of 68.38% was absorbed by Group 1, followed by Group 2 with 18.89% and Group 4 with 8.89%. Group 3 remained at the same level of the overall Member States' budget consumption in 2022 (0.01%) compared to 2021 (0.04%).

The SLA and ToC consumed 0.96% of the budget, which represents only FI budgetary impact, as the other Member States (BG, EE, IE, AT, PL, SI, SK, and SE) did not submit the pertinent information.

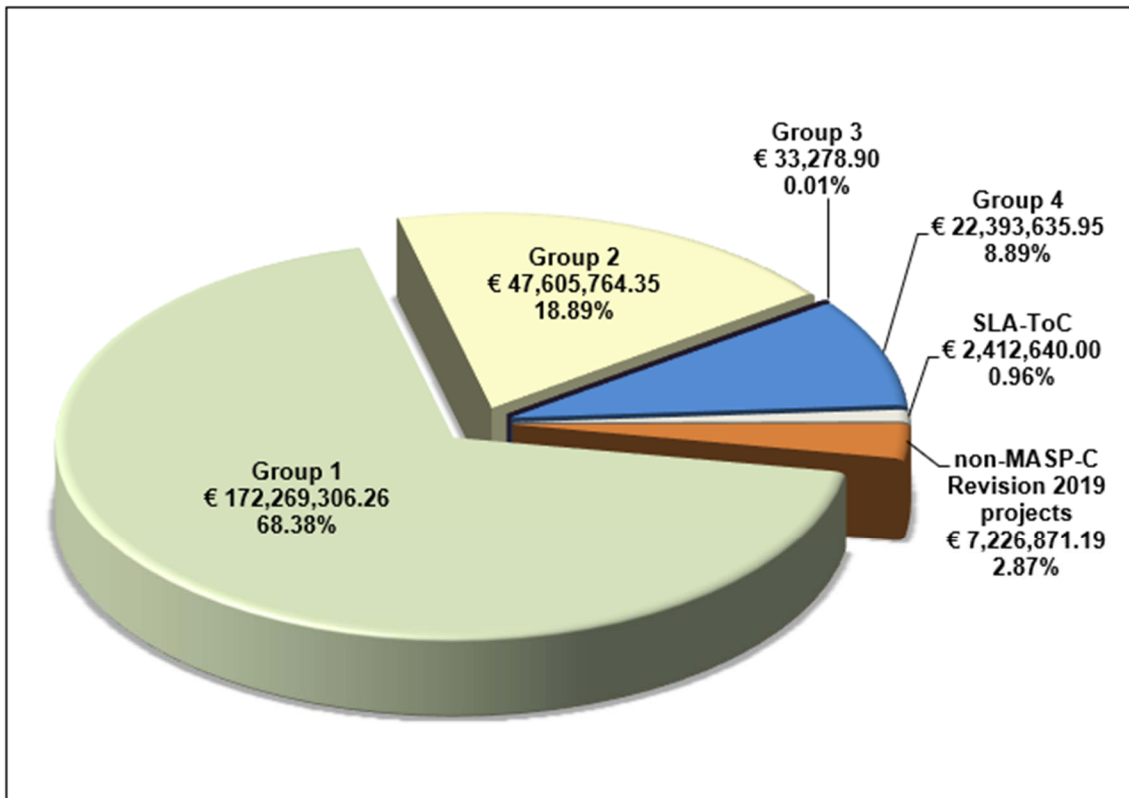


Figure 15: Cost per MASP-C and non-MASP-C Revision 2019 Project Groups and SLA and ToC

As depicted in **Figure 16**: Distribution of Member States' costs, the development and implementation of the MASP-C Revision 2019 projects were the primary focus of the Member States, accounting for 90.16% of their total costs on the electronic systems, representing an increase of 12.51% compared to 2021 (80.14% of the overall budget) to sustain the operation of the UCC projects. The maintenance costs accounted only for 6.01%, a declining tendency that was observed in the past years, and the non-MASP-C Revision 2019 projects absorbed 3.83%. The last two aforesaid categories registered decreases of 53.56% and 44.71%, respectively, in contrast with the 2021 costs.

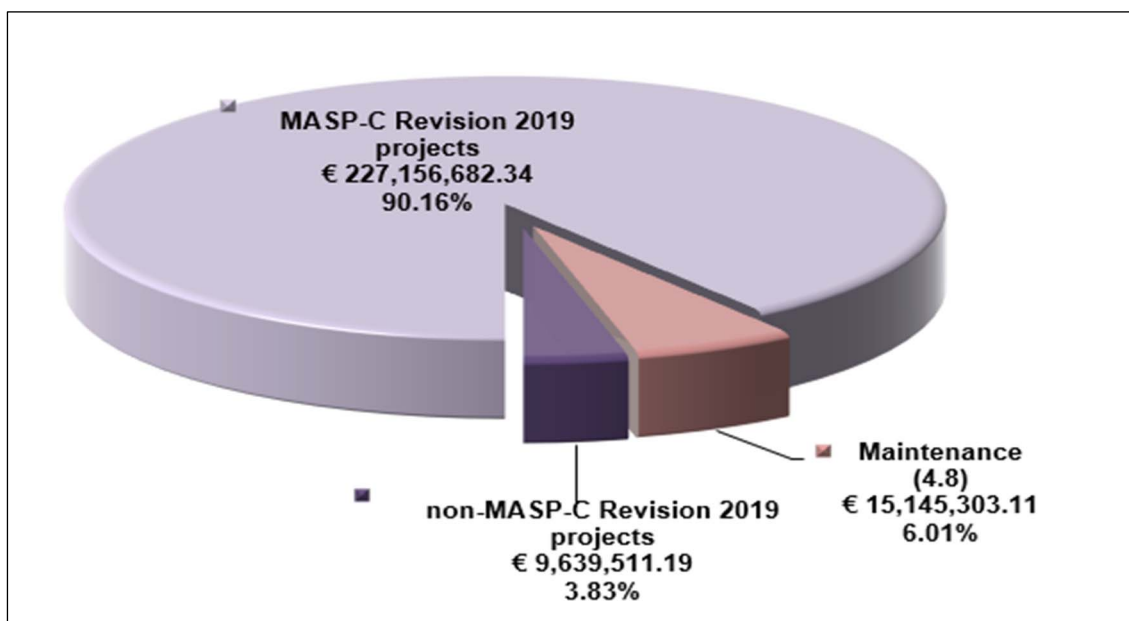


Figure 16: Distribution of Member States' costs

Figure 17 below represents the total cost of the Member States in the customs IT systems for the period 2008–2022¹²⁶. The cited figures are not directly comparable due to the inconsistent number of Member States reporting over the years, which is respectively presented with a red line for every year the data was collected. In addition, out of the total number of the Member States that report each year, one or more do not submit cost reports. In 2022, one Member State did not report costs.

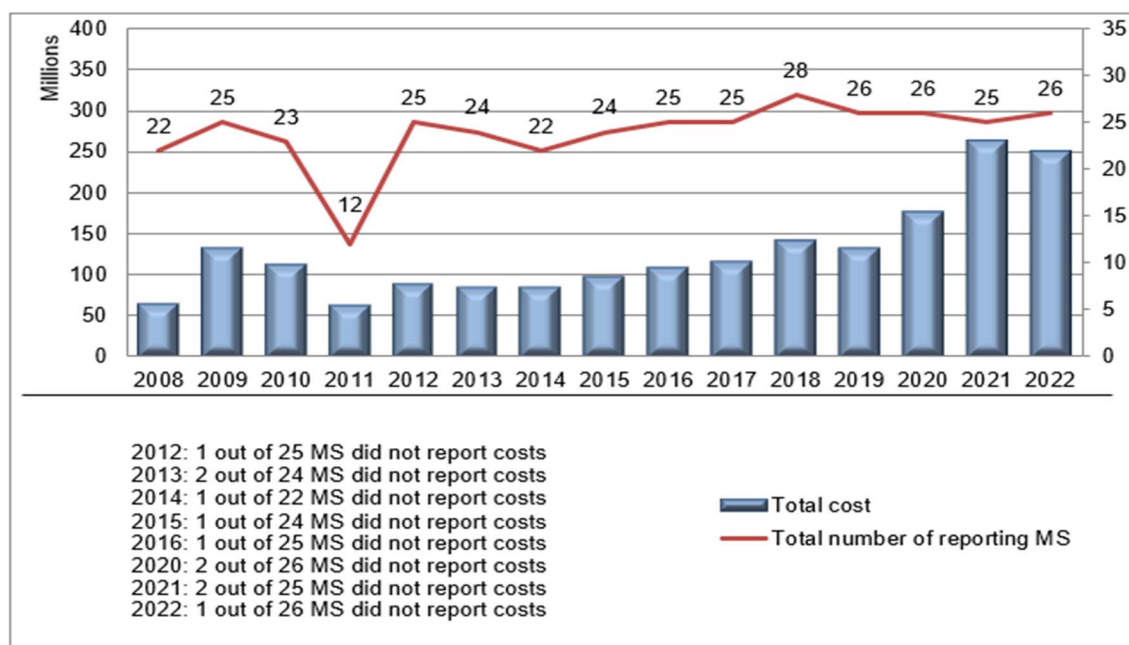


Figure 17: Member States' costs between 2008–2022

Figure 18 outlines the average Member States' cost through the years 2008–2022. The total sum they allocated for each year is divided by the number of Member States¹²⁷ that reported during this time frame. The average Member States' dispensed cost has slightly decreased by 4.63% in 2022 (average cost of EUR 10,077,659.87) compared to 2021 (average cost of EUR 11,006,716.76). However, the average cost gradually increased in the period 2012–2019, with a remarkable rise between 2019–2021.

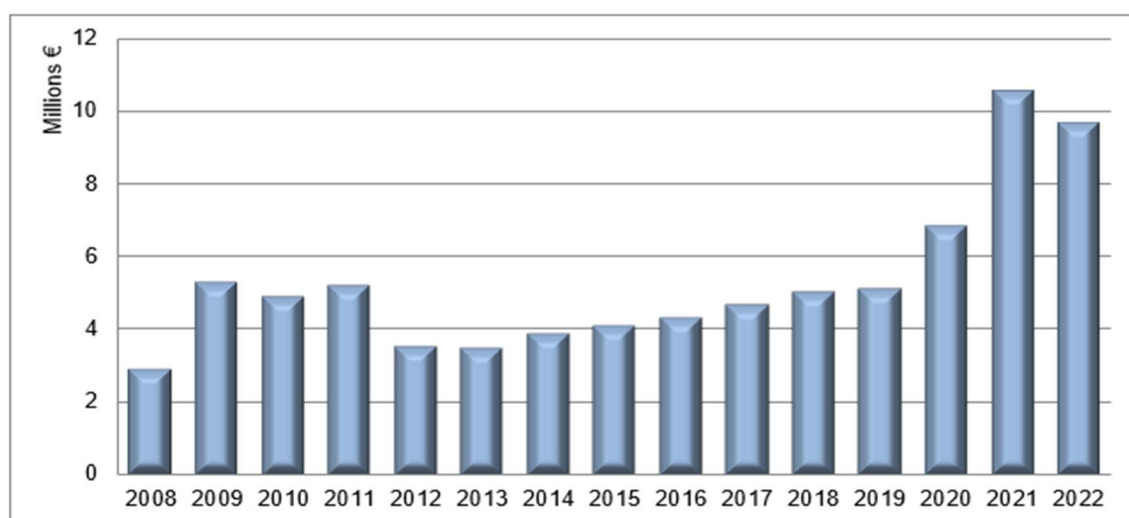


Figure 18: Average Member States' costs between 2008–2022

¹²⁶ As of 2013, the total number of the Member States was 28 and as of 2021 it is 27.

¹²⁷ For the number of Member States please refer to **Figure 17**.

As depicted in **Figure 19**, the cost for the seven Member States that reported in all years (LT, HU, NL, PL, PT, FI, and SE) has been rising steadily over the years. This reconfirms the increase in the Member States' budget in order to implement the growing number of projects and to comply with legislative acts.

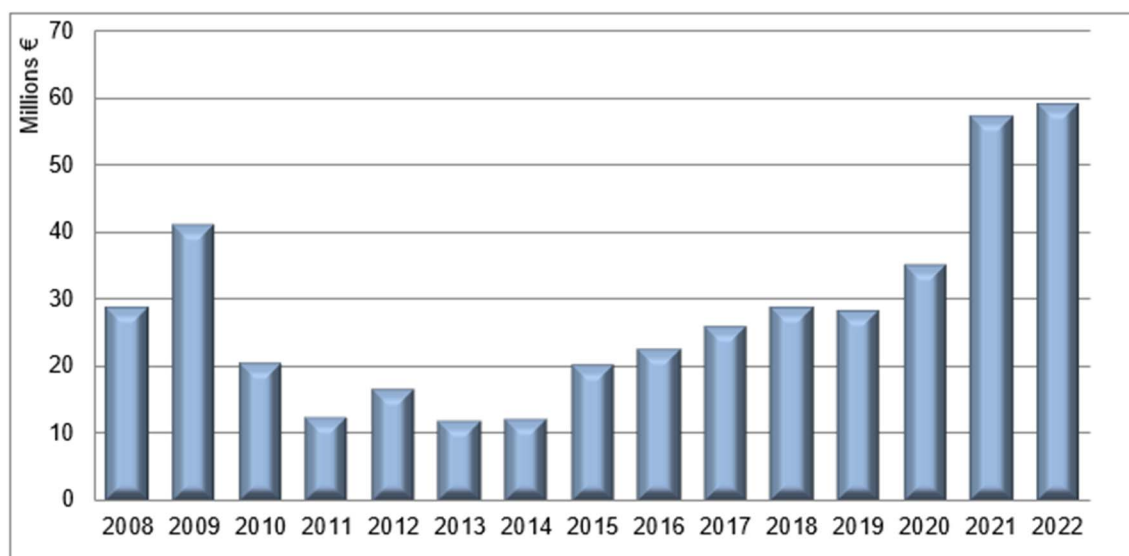


Figure 19: Total costs over the years 2008–2022 for seven Member States that reported in all years

The Member States' consumption of man-hours is illustrated in **Figure 20** for each project of the MASP-C Revision 2019. The majority of man-hours in 2022 was allocated to the UCC ICS2 (1.19) project, amounting to 17.99% of the total time spent. The UCC NCTS (1.7), Adjustments of the existing import applications under the UCC (2.10), UCC AES (1.6) and Maintenance and updates of operational IT systems (4.8) projects accounting, respectively, for 16.77%, 15.44%, 15.17% and 7.22% of the total man-hours.

Comparing the man-hours with the Member States' costs in **Figure 13**, it is evident that the project costs are aligned with the efforts reported by the Member States. As concerns the SLA and ToC, the impact on the Member States was insignificant.

The man-hours for the non-MASP-C Revision 2019 projects accounted for a percentage of 2.48%, while the projects categorised under 'Other' consumed 4.67%. The SLA and ToC absorbed 0.34% of the total man-hour budget. The latter represents only FI and SK efforts impact as the other Member States (BG, EE, IE, AT, PL, SI, and SE) did not report such information.



Figure 20: Member States' man-hours for customs IT systems in 2022

Figure 21 displays the man-hours that the Member States consumed in 2022 per category. The total Member States' internal and external man-hours were 43.96% and 56.04%, respectively. As depicted in the figure below, the internal man-hours (42.09%) of the MASP-C Revision 2019 projects activities in 2022 were less than the external man-hours (55.09%). A comparison with internal and external man-hours in 2021 (41.46% and 57.06% respectively) shows that the Member States retained most of the deployment and development activities for the systems externally, in order to achieve the goals of the MASP-C Revision 2019 projects.

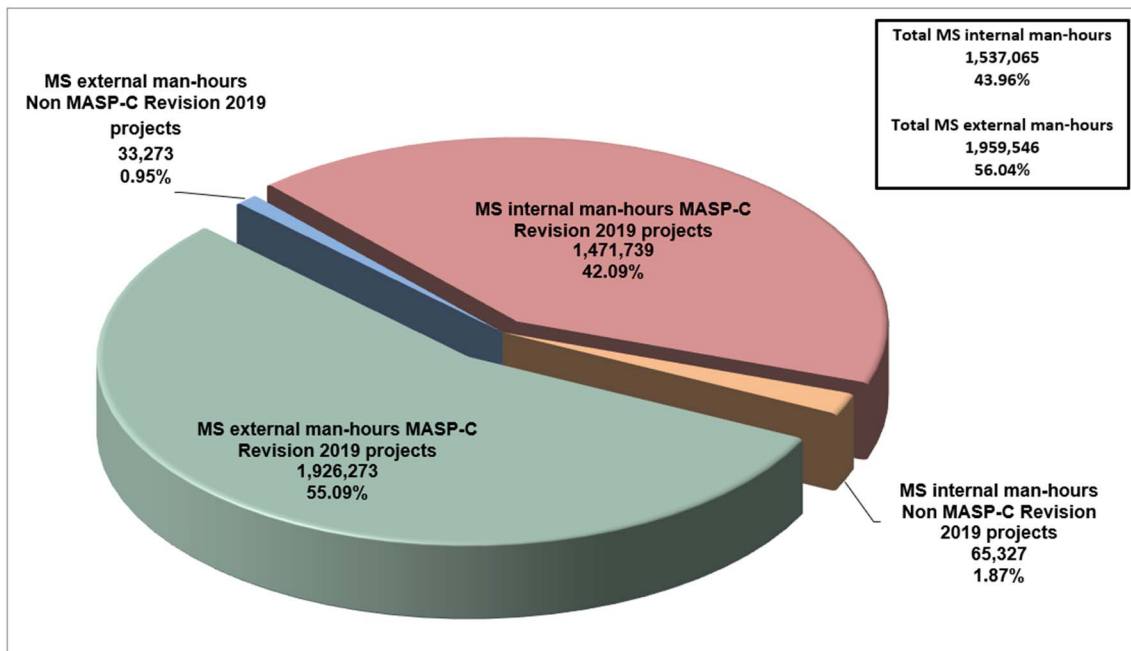


Figure 21: Member States' man-hours consumed in 2022 per category

ANNEX 1 – IT SYSTEMS PROGRESS ACTIVITIES

1 MASP-C PROJECTS

MASP-C is a living document evolving continually in response to the effective implementation of the UCC and the e-Customs projects. This section summarises the efforts made by the Member States and Commission in 2022 towards the implementation of the e-Customs projects foreseen in the MASP-C Revision 2019 and related achievements thereunder.

1.1 MASP-C Group 1 – Customs European Information Systems (EIS)

1.1.1 UCC Customs Decisions System (CDS) (1.2)

UCC 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 enables the consultation and validation of customs decisions by the Customs 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 in operation since 2017.

Since the entry into operations in October 2017 and until mid-2022, approximately 47,300 applications were submitted, and 27,900 decisions were taken. In addition, more than 43,700 decisions were entered as pre-existing authorisations.

2022 marked significant progress towards UCC CDS v1.29, which was deployed in September 2022 following an iterative approach, with three iterations prepared and presented to the Member States in dedicated project group meetings. Following the aforesaid deployment, activities related to the subsequent UCC CDS v1.30, which will be similarly developed in three iterations, were initiated and the second iteration was completed in November 2022. Concomitantly, pertinent training sessions and workshops were organised by the Commission for the national users. Additional developments in 2022 included the preparation of a UCC CDS Agile Pilot report to capture all lessons-learned from the deployment of the latest UCC CDS versions in an iterative method.

The UCC CDS project group convened periodically throughout 2022 with the active contribution of customs experts from 21 Member States¹²⁸. The objective was to analyse and solve operational business issues raised by the Member States and to proactively develop solutions for the continuous improvements of the UCC CDS system. The amendment of Annex A to the UCC DA and UCC IA in relation to the Deferred Payment (DPO) and Comprehensive Guarantee (CGU) authorisations was additionally discussed during the project group meetings, while further cooperation and consultation with the CEG-DIH took place on the change requests to Annexes A and B as an outcome of the UCC CDS project group activities. With regards to the UCC GUM project, additional insight was also provided during the reporting year, within the UCC CDS-GUM project group.

In 2022, 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 with a national GUM system already in operation were adapting their national systems to the provisions of the UCC. On this

¹²⁸ BE, CZ, DK, DE, EE, IE, ES, FR, HR, IT, LV, LT, HU, NL, AT, PL, PT, RO, SK, FI, and SE.

basis, a need emerged to develop a central IT system that will ensure the effective and efficient management of the different guarantee types, while managing both the CGUs that may be used in more than one Member State and the ones valid in a single Member State. After considering several identified solutions, it was decided to proceed with a light implementation option and introduce two components: the central component (Component 1) and the national component (Component 2), whose communication was foreseen to be achieved through Customer Reference Services (CRS). While UCC 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 UCC GUM, while the required changes originate from the Member States' proposals to amend Annex A and are submitted to the DIH Committee.

In 2022, the Member States informed about their status as 'In Progress' (BE, BG, DK, DE, EL, FR, HR, IT, LT, HU, MT, AT, PL, PT, SI, and FI), 'On hold' (RO) or 'Finished' (CZ, EE, IE, ES, CY, and SE). Concerning the current phase, the majority of the Member States reported being in operation (BE, BG, CZ, DK, DE, IE, ES, HR, IT, CY, LT, HU, PT, SI, SK, and SE), upgrade of the national system (EL, AT, and FI) or deployment activities (FR, MT, and PL). EE and RO reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (CZ, DE, HR, IT, MT, AT, and PL), maintenance (BE, CZ, DE, HR, IT, MT, AT, PL, SI, and SK) and upgrades (CZ, DE, ES, HR, IT, HU, MT, AT, PL, SI, and SK). During the reporting year, AT communicated performing an upgrade to the national system (AT) also as its preceding phase, while PL communicated being in national acceptance testing (PL) as its preceding phase.

BG established NSDs to monitor the CDS Specific Trader Portal (STP) and manage related incidents from the economic operators. CZ updated its national CDS application and reported the use of the CRS and CDMS web services in production for downloading authorisations. DK used the EU transnational systems and therefore, did not have a national CDS. DE informed that the development and maintenance activities for CDMS were carried out within the framework of the overall ATLAS system. The national ATLAS R9.1 has been in operation as of March 2021, while the next ATLAS R10.1 is expected in 2023. 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 the UCC CDS project group meetings as well as testing the new UCC CDS releases to identify issues that required attention.

EL informed that the interoperability functionality between the National Customs Information System and UCC CDS was implemented. ES reported the implementation of new functionalities to its national CDS system. FR ran several tests in the conformance environment, including data integration tests with the reception of error feedback from the Commission. Thus, FR integrated all data contained in its national CDS application and transferred all granted files for the Recovery Point (RP) formulas. HR informed that the project was in stable operation. IT participated in the UCC CDS project group and other IT meetings organised by the Commission and translated the labels for Testing Protocol (TP), CDMS and CS/RD2. LT updated its web services for receiving CDMS data, in accordance with CDMS v22.9. HU reported testing new versions, handling issues, supporting economic operators and users, and participating in the relevant meetings.

MT reported using the central system developed by the Commission. Nonetheless, a National Authorisation System was being developed in phases and is planned to be fully deployed by the end of 2023. AT progressed with bug fixing and implementation of change requests for CDS v1.28 and v1.29, analysis and implementation of changes in

CDS v1.30 and analysis of upgrades in its national system. PL informed that it tested the CDS processes and reported corrections and changes, in preparation for the deployment of their national CDS system. PT reported using the CDS system, which was operational, while RO remained in the initiation phase, having finalised the FSS and TSS in relation to its national CDS. SI's ongoing activities were focused on implementing national rules for utilising the new versions of TP and CDMS (v1.30 and v1.31). SK reported the use of the central CDMS system for multi-Member States-related activities. LV and NL did not report activities on the project.

1.1.2 UCC Binding Tariff Information (BTI) (1.4)

UCC BTI 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 for the submission of applications and issuance of BTI decisions. This system has been in operation since 2019.

During 2022, P2 of the project, along with EBTI-STP and EBTI-CS, was closely monitored and any identified issues were resolved with no delay. Particularly, a business monitoring report on UCC BTI P2 was prepared by the Commission and distributed to the Member States on a weekly basis. The aforesaid report contained Key Performance Indicators (KPI) based on the data collected and monitored from EBTI-STP and EBTI-CS. EUCTP is used since October 2019 as a single access point for the economic operators to the connected systems including EBTI, UCC AEO, UCC INF and UCC REX.

In 2022, the Member States informed about their status as 'In Progress' (BE, CZ, DK, DE, and FR), 'On hold' (PT) or 'Finished' (BG, EE, IE, CY, MT, PL, FI, and SE). Concerning the current phase, the majority of the Member States reported being in operation (BE, BG, CZ, DK, DE, IE, EL, CY, HU, MT, PL, PT, SI, SK, FI, and SE), upgrade of the national system (FR) or completion of activities (HR). EE and PT reported status 'Other'. In addition, some Member States reported carrying out activities related to analysis and modelling (DE), maintenance (DE, PL, and SK) and upgrades (SK).

BG reported using NSDs for receiving and managing incidents from the economic operators concerning the access and work with EBTI-STP. CZ also received and managed incidents from the economic operators via its service desk using EBTI-STP. DK did not have a national BTI system and used the EU transnational systems. EE participated in monthly UCC BTI webinars. IE reviewed the issues that arose after testing, submitted the relevant change requests and attended the monthly electronic BTI (eBTI) webinars organised by the Commission. ES conducted conformance testing activities and established continuous cooperation with all the parties involved in the maintenance of the UCC BTI system. FR informed that, following the delivery of a new version of the system, errors were identified during the granting access process. Thus, FR worked on an update to improve its national application. CY, MT, and RO reported using the central system developed by the Commission. PL added supplementary validation rules to the eBTI forms, deployed the national EBTI-STP, developed and used new reports to the business intelligence module and introduced new functionalities to its national system, thus, improving the operation of the system and the UI. SK reported using the central EBTI system and EUCTP. EL, IT, LV, LT, HU, NL, AT, PT, and SI reported no major activities on the project.

1.1.3 UCC Authorised Economic Operators (AEO) and impacts of Mutual Recognition Agreement (MRA) (1.5)

The UCC AEO system is a tool for the management of AEO applications and authorisations and requires standard decision-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. Minor Enhancement contains updates to the codelists managed in the CS/RD2 application and in the EOS-AEO applications' UI. Major Enhancement is needed for the alignment of the existing EOS-AEO system to the application of the UCC legislation. Direct Trader Access allows data exchange between economic operators and customs authorities in a uniform and harmonised manner, while MR 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 the 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 UCC AEO Direct Trader Access continued during 2022 and were focused on monitoring and managing the eAEO-STP module, which has been in operation since 2019.

The UCC AEO MRA component was already in production for China, Japan, Norway, Switzerland, Great Britain, and the United States of America. Business negotiations for an MRA with Hong Kong are on hold, while for the MRA with Canada the business and IT activities have restarted at the end of 2022.

An MRA IT module with Moldova was tested in January 2022 and entered in production during November 2022, following the signed agreement between Moldova and the Commission in October of the reporting year. Moreover, during 2022, the UCC AEO MRA negotiations with Türkiye continued concerning how the process of the MRA exchange of data should be arranged. On this basis, the legal comparison of their respective regimes have continued during 2022, while the signing of the agreement and IT activities are planned for the end of 2023.

In 2022, the Member States informed about their status as 'In Progress' (DK, DE, ES, HU, PL, PT, and FI) or 'Finished' (BG, EE, IE, CY, MT, RO, SI, and SE). Concerning the current phase, the majority of the Member States reported being in operation (BG, CZ, DK, IE, ES, CY, HU, MT, PT, SI, SK, FI, and SE) or upgrading the national system (DE). PL carried out activities related to the national acceptance testing. The remaining Member States reported status 'Other', with activities such as participation in UCC AEO webinars and eAEO/EOS translation (EE) as well as translation of the various eAEO and EOS labels and the eAEO-STP v1.4.0.0 manual into the national language (RO). RO provided support to all the economic operators who encountered problems in using eAEO-STP. In addition, CZ, DE, and IE reported carrying out activities associated with analysis and modelling, while CZ and DE also performed activities related to maintenance and upgrades. During the reporting year, some Member States communicated their preceding phase and indicated being in operation (DE and EE).

BG, CZ, and SK used UCC AEO and eAEO-STP. DK reported using the EU transnational systems and therefore, not having a national AEO system. DE carried out development and maintenance activities of UCC AEO within the framework of the overall ATLAS

system. The national ATLAS R9.1 has been in operation as of 2021, while the next ATLAS R10.1 is foreseen for March 2023. EE participated in UCC AEO webinars organised by the Commission and prepared eAEO/EOS translations. IE analysed the documentation prepared by the Commission and provided proposals for the proper development from a business perspective. In addition, monitoring activities were reported to ensure correct use of the system. Finally, IE offered support to the operational teams and organised pertinent IT training activities for the new staff. ES informed about its ongoing activities to develop a monitoring application.

HR attended regular meetings organised by the Commission on the UCC AEO network and prepared EOS translations. HU reported on activities related to testing the new system versions and the support of the national users and economic operators. PL prepared for the deployment of the national eAEO system and developed upgrades to address issues identified during the national acceptance testing. More concretely, PL developed and tested the national system, reported errors and submitted proposals for changes. RO used the central system developed by the Commission and reported supporting activities for the economic operators on issues encountered while using the central eAEO-STP system. BE, CZ, EL, FR, IT, LV, LT, NL, AT, SI, FI, and SE reported no activities on the project.

1.1.4 UCC Automated Export System (AES) (1.6)

UCC AES 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 the export of goods for the EU companies. The first component relates to the trans-European AES, while the second component concerns the upgrade of NES.

In February 2022, ES started the UCC AES operations. In April 2022, the exchange of export messages between DE and ES was initiated, using the CCN application and C/ieCA to ensure communications with the ECS systems and CS/MIS2 and monitor the operations. Moreover, the updated UCC AES Business Guidance was approved by the ECCG in May 2022 and translated into French and German in December 2022.

With the start of the exchanges between DE and ES, the Commission's C/ieCA system entered in operation to facilitate the transition period by converting the exchanged messages in UCC AES, upon request from the legacy format to the UCC transitional format. In this context, a Real-Time Exercise (RTE) P2 was successfully performed in February 2022 for simulating the operational activities of the convertor system. In addition, two new releases, ieCA R1.0.3.0 and R1.0.4.0 were deployed in May and October 2022, respectively.

Furthermore, the UCC AES DDNXXA 5.15.0 TSS, which includes the RfC-List.36 alignment to the latest updates of Annex B to the UCC DA and UCC IA, was approved by the ECCG in April 2022. On this basis, an update of the FSS was initiated and a new package of updated BPMs was delivered for UCC AES. Specifically, the updated L2-L3-L4 BPM/FSS package for UCC AES, which was approved by the ECCG in November 2022 and published in December of the same year, aimed at aligning the UCC AES FSS to the latest versions of the TSS. Moreover, the Central Services/Management Information System 2 (CS/MIS2) R2 entered in production in January 2022 and the transition from CS/MIS to CS/MIS2 was successfully initiated during the second quarter of the reporting year. In this respect, in March 2022, DE and ES performed conformance testing activities for CS/MIS2.

The Commission also continued organising several bilateral meetings with the Member States to support them in the implementation of UCC AES in order to monitor their

progress according to the NPPs and to encourage them to take all the necessary steps to comply with the legal deadline set by the UCC WP. Within this context, the Commission supported each Member State individually to provide a seamless testing experience, speeding up its readiness and mitigating its 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 UCC AES by the Members States.

Already founded in 2019, the aforesaid programme has proven to be instrumental in identifying challenges in the deployment of the TES systems and maintaining a high level of transparency on the progress of the Member States. On this basis, over the course of 2022, all national administrations confirmed or updated their NPPs to foster a collaborative culture between the Member States and Commission and ensure a cost-effective allocation of resources during the development of the UCC AES TES systems to meet the milestones of the UCC WP. In 2022, the Commission also reported to the ECCG and CPG the ongoing progress of the Member States, providing the KPI of the aggregated NPPs. A quarterly consolidated progress report on the transition of UCC AES was issued by the Commission as from the first quarter of 2022.

The Commission further provided consistent support to the trade community throughout 2022, considering that the foreseen national deployment deadlines of the UCC AES system were delayed leading to the submission of derogation requests by the Member States. The main objective of such assistance was to safeguard the operational continuity of UCC AES by providing visibility on the state of progress of the Member States and intensifying the common efforts between the national administrations and economic operators during the last year of the transition window. In particular, the Commission ensured that any updates on the NPPs were timely and adequately communicated to the trade community through dedicated active forums organised in the national administrations as well as frequent information sessions and seminars between the latter and the economic operators.

Finally, in view of the identified risks of delays on the side of the Member States and the economic operators, internal discussions took place between DG TAXUD and other relevant units and departments on the establishment of compatibility measures to ensure the continuity of operations. More concretely, the Commission examined different courses of actions to identify a solution for the communication between the legacy and new systems of the national administrations at the end of the TES' transitional period.

Thus, taking into consideration that Annex B to the UCC DA and UCC IA is the applicable legal basis for UCC AES and UCC NCTS-P5, in addition to the CTC in the case of UCC NCTS-P5, the first possible course of action to the rising problem that the Commission examined was to 'Do Nothing'. Namely, as of 1 December 2023, the national administrations having deployed new systems would use the new message format as defined in the applicable legal basis and implemented in the TSS of UCC AES and UCC NCTS-P5. The legacy systems would continue using the message format as defined in the legacy TSS. However, in this case, the communication between the legacy and new systems would not be feasible since the Common Domain Information Exchanges would be rejected due to certain incompatibilities in several data elements. As a result, this solution was not further considered by the Commission.

The second possible course of action that was analysed was the 'Flat Extension of the Transitional Period' for a given period, for example, until the end of 2024 to provide the national administrations using legacy systems with a sufficient timeframe to properly

develop and test their new systems. Even though this solution would immediately resolve all incompatibility issues, it would not enforce the lodging of the UCC compliant declarations by all new economic operators as of 1 December 2023, following the legal basis requirements. Additionally, this solution might discourage the national administrations and economic operators from accelerating their overall efforts for UCC AES and UCC NCTS-P5. Finally, such solution could solely postpone the current problem until the end of 2024, when it would be encountered again.

The third and recommended possible course of action that was examined was the 'Parallel Operation' of the new and legacy systems after the end of the TES transitional period and the proposal of specific technical compatibility measures to be followed by all stakeholders to circumvent any incompatibility issues. This solution would minimise the impact on the national administrations that would be ready to deploy the new systems by the legal deadline, while also allowing the national administrations using legacy systems to develop the new ones, without having to republish the economic operators' specifications¹²⁹.

In 2022, 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, PT, RO, SI, FI, and SE), 'On hold' (SK) or 'Finished' (DE, CY, LT, and PL). Concerning the current phase, several Member States reported being in operation (DE, IE, ES, and CY), upgrade of the national system (MT), deployment (IT), conformance testing activities (DK, HR, PL, and SI), national acceptance testing (EE), design of the national system (BE, BG, CZ, FR, LV, LT, HU, and FI), creation of the national technical specifications (AT) and national functional specifications (EL) or analysis of the national user requirements (SK). PT, RO, and SE reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (BE, BG, CZ, DK, DE, IE, EL, ES, FR, HR, IT, HU, MT, AT, PL, SK, FI, and SE), maintenance (DE, IE, IT, CY, and MT) and upgrades (CZ, DE, ES, HR, IT, MT, and PL). During the reporting year, some Member States communicated their preceding phase and indicated being in conformance testing activities (ES), designing the national system (HR), performing national acceptance testing (DK and PL) or carrying out analysis of the national user requirements (BG and EL). FR, AT, SI, and FI communicated being in the same phase as their preceding phase.

BG finalised the elaboration phase in July 2022 and initiated the development of the project. In addition, BG attended all webinars, workshops and training activities organised by the Commission and published the national technical specifications for the economic operators, providing the latter with the necessary support concerning the UCC AES project. Lastly, BG performed CCN Connectivity setup and testing activities as well as updates in relation to CS/RD2. CZ initiated the conformance testing activities for Mode 1 in July 2022. In October 2022, CZ provided an update to its NPP, informing that the development of UCC AES would be completed later than expected.

Preparations for the development of the new National Export Control Application (NECA) were ongoing in EE. IE provided policy advice and support to the UCC AES system development in relation to the Simplified Procedures. EL issued a call for tender on 13 October 2022, published the necessary UCC AES-related informational material for the economic operators and carried out an analysis of the functions related to the export customs procedures based on EL's national legislation. FR reported delays against the legal deadline of 1 December 2023, due to the redesign of the national AES system. HR

¹²⁹ Considering that the TSS and FSS are binding only for the messages and processes between the national administrations, each national administration undertakes the production and publication of distinct specifications for its economic operators. The latter use these specifications to develop and deploy their own systems that will be then used to communicate with the UCC AES and UCC NCTS systems of each national administration.

held regular workshops for the analysis of the UCC AES business processes and started conformance testing activities in Mode 1 as well as pre-conformance tests in Mode 2. HR also analysed and deployed the changes from the RfC-List.36 and updated the national technical specifications for the economic operators and the National Rules and Conditions documentation. LV informed that the development of UCC AES would be carried out in stages. The first five stages were completed, while work was ongoing on the specifications, design and development of the sixth, seventh and eighth stages of the system. LT prepared the draft interface specifications (iMDAS client portal) for the economic operators, in accordance with EUCDM.

AT compiled all national requirements and specifications and made preparations for the 'Fit-Gap' analysis¹³⁰. AT further informed that the initial version of UCC AES is expected to be released in the third quarter of 2023. Besides attending all UCC AES meetings and analysing the relevant documentation prepared by the Commission, PL performed testing activities on the new NECA. RO focused on the finalisation of the national functional and technical specifications for its export system. SI performed conformance tests in Mode 2. SK created a detailed impact analysis of the system. FI and SE reported being in the development phase of UCC AES. In particular, FI progressed with bug fixing and stabilisation of the implemented features, which led to the initiation of conformance testing activities in Mode 1 as of 23 November 2022. However, due to recruitment difficulties encountered by the supplier, the creation of new features progressed slowly. Therefore, FI requested a derogation until the second quarter of 2024.

1.1.5 UCC Transit System including New Computerised Transit System (NCTS) (1.7)

The UCC NCTS-P5 project updated the UCC NCTS-P4 system, which automated the common and community transit procedure and controlled the movements covered under the International Road Transports (TIR) procedure within the EU.

Activities on UCC AES and UCC NCTS ran in parallel during 2022. As a result, in April 2022, the UCC NCTS-P5 DDNTA 5.15.0 TSS was approved by the ECCG, including the RfC-List.36 alignment to the latest updates of Annex B to the UCC DA and UCC IA. At the same time, the DDCOM 20.4.0 was also approved by the ECCG. In addition, the UCC NCTS-P6 DDNTA 6.2.0 TSS and DDCOM 21.2.0 were approved by the ECCG by written procedure.

During 2022, constant collaboration with the UCC ICS2 team was also ensured through weekly internal meetings. Building a bridge between UCC NCTS and UCC ICS2 would enable the synchronisation of the entry and transit formalities at the border by allowing the CTC countries to use a combined transit declaration and therefore, avoiding different declarations for the same consignment. Additional benefits for the aforesaid countries would contain the use of central validation services for optimising the data quality, validation of the EORI information and MR for SSA. In this regard, extensive work was carried out together with the UCC ICS2 CR team on the preparation of the transit ENS TED. Although this work is expected to be concluded in 2023, a PoC to extract the ENS declaration for UCC ICS2 R3 from a combined transit declaration under UCC NCTS-P6 became available during the last quarter of 2022.

2022 further marked significant progress towards updating the FSS for UCC NCTS-P5 and UCC NCTS-P6 in parallel with the TSS development. The updated L3-L4 BPM/FSS

¹³⁰ [Fit-Gap Analysis](#)

for the UCC NCTS-P5 and UCC NCTS-P6 packages were approved in writing in December 2022.

Furthermore, over the course of 2022, the discussions on the revision of the Transit Accompanying Document (TAD) and Business Continuity Plan (BCP) in the context of the UCC NCTS-P5 deployment continued within the EU-CTC WG. Moreover, in April 2022, the eTIR Business Case was formally adopted by the ECCG. The aforesaid development led to the revision of the MASP-C Revision 2019 fiche for transit and the integration of eTIR project under the UCC NCTS scope, allowing the future interconnection between the two systems.

Similar to the UCC AES project, the Commission also performed several coordination activities throughout the reporting year, organising bilateral meetings with the Member States and CTC countries, and monitoring the deployment of the national components for the UCC NCTS system.

In 2022, the Member States informed about their status as 'In Progress' (BE, BG, CZ, DK, EE, IE, EL, ES, FR, HR, IT, CY, LV, AT, PL, PT, RO, FI, and SE), 'On hold' (LT and SK) or 'Finished' (DE, HU, MT, and SI). Concerning the current phase, the Member States reported being in operation (DE and SI), deployment (IT), conformance testing activities (CZ, DK, EE, HR, and PL), design of the national system (BE, BG, IE, FR, CY, LV, MT, and FI), creation of the national technical specifications (ES, HU, and AT) and national functional specifications (EL) or analysis of the national user requirements (LT and SK). PT, RO, and SE reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (BE, BG, CZ, DK, DE, IE, EL, ES, HR, IT, CY, MT, AT, PL, SK, and FI), maintenance (DE, IT, CY, MT, and PL) and upgrades (CZ, DE, ES, HR, IT, MT, and PL). During the reporting year, some Member States communicated their preceding phase and indicated being in conformance testing activities (SI), performing national acceptance testing (DK), designing the national system (HR), creating the national functional specifications (CY) or analysing the national user requirements (BG and EL). AT, PL, and FI communicated being in the same phase as their preceding phase.

BG, HR, LV, AT, and SK performed in parallel the same activities carried out for UCC AES. CZ reported that conformance testing activities in Mode 1 took place between January and June 2022, while the conformance tests for UCC NCTS-P5 in Mode 2 started in October 2022 and were finalised in December of the same year. CZ further informed that a test environment for the economic operators became available as of 1 March 2022. EE focused on the analysis of the UCC NCTS project through regular internal meetings, performed several conformance testing activities, started the pre-conformance tests in Mode 2 and published the UCC NCTS-P5 TSS for the economic operators on its national website.

EL issued a call for tender on 13 October 2022 and published all the necessary informational material on UCC NCTS-P5 for the economic operators. HR finalised the construction phase and initiated the transition from UCC NCTS-P4 to UCC NCTS-P5, deploying the main functionalities into a pre-production environment. EE successfully connected to the CCN system. LT reported activities related to the public procurement procedures for the redevelopment of the National Transit Control System, for its compatibility with UCC NCTS-P5. MT reported that a call for tender for the procurement of UCC NCTS-P5 was published.

PL conducted analysis and development activities for UCC NCTS-P5, including the development of the necessary interfaces with the interoperable systems. Moreover, PL executed conformance testing activities in Mode 2 and reported that UCC NCTS-P5 is planned to enter in production in June 2023. FI reported that the UCC NCTS project was

under development, while its scope has been under investigation considering that some features might be excluded to adhere to the deployment schedule for UCC NCTS-P5. FI finalised the conformance testing activities in Mode 1 on 25 November 2022, approximately two months later than the original plan, due to issues in the 'To-Be' system. Thereupon, conformance tests in Mode 2 started and are expected to be completed by 20 June 2023. SE was in the development and conformance testing phase.

1.1.6 UCC Registered Exporter System (REX) (1.11)

The main purpose of the UCC REX 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. The project provides the Member States with the opportunity to enhance their national systems for customs declarations with an automated verification of REX numbers from the declarations against that central database.

The UCC REX1 system entered in operation in 2017, while UCC REX2 was successfully deployed in 2018. The UCC REX3 system is organised in two phases. P1, which went live in 2021, aimed at introducing the general requirements of the UCC REX Trader Portal as well as enabling the registration of the economic operators and the modification, consultation and printing of the UCC REX numbers. Additionally, P2 aimed at enabling the revocation and annulment of the REX numbers, while adding new features and functionalities, as requested by the Member States.

In 2022, UCC REX3 P2 entered in operation. In particular, the new UCC REX Trader Portal 2.0 was deployed on 5 May 2022, and online trainings to representatives from the Member States were conducted between April and May 2022. In addition, the UCC REX3-STP Single Page Application (SPA) was released in March 2022. Lastly, a new release, UCC REX v3.4 containing a UI for the REX partner countries was successfully delivered in October 2022 and is expected to enter in production in 2023. Specifically, the aforesaid UI became accessible to Andorra and San Marino, introducing both as REX countries.

In 2022, the Member States informed about their status as 'In Progress' (BG, DK, HR, LV, HU, and RO) or 'Finished' (BE, CZ, EE, IE, FR, IT, CY, MT, PL, PT, SI, and SE). Concerning the current phase, several Member States reported being in operation (BE, CZ, DK, EE, IE, EL, FR, HR, IT, CY, LV, HU, MT, PL, PT, SI, SK, and SE), upgrading the national system (BG), designing the national system (ES) or analysing the national user requirements (RO). DE was the only Member State that reported status 'Other', indicating that the central UCC REX system is used by the national users as of 2017. In addition, some Member States reported carrying out activities related to analysis and modelling (PL), maintenance (BE, IT, PL, and SK) and upgrades (IT and SK).

BG participated in training sessions organised by the Commission and helped the economic operators in the application process for the UCC REX Trader Portal. CZ similarly attended all training sessions on UCC REX and analysed the documentation for the UCC REX3 system. DK reported using the EU transnational systems and therefore, not having a national REX system. In DE, CY, and SK, since 2017, the central REX system has been used by the national users and the UCC REX Trader Portal by external users. EE performed the necessary tests for the deployment of the system and participated in online webinars and training activities on UCC REX P2. HR reported that the UCC REX Trader Portal P2 was deployed, which included revocation for both request and annulment. IT informed that a mixed approach was used in the reporting year. Namely, both paper-based and electronic REX registration requests were submitted to ensure that the economic operators would gradually adapt to the new electronic

procedure. Nevertheless, the latter were invited to opt in favour of the electronic procedure in anticipation of UCC REX P2. HU successfully deployed and tested new versions of the national REX system and resolved all issues on its side. PL implemented several changes to its national system, in view of the creation of an e-Client module functionality to handle eREX applications. RO informed that REX3 was in its initiation phase, while the national functional and technical specifications related to the system development services were being developed. IE, EL, ES, ES, FR, LV, LT, NL, AT, PT, FI, and SE reported no project activities.

1.1.7 Anti-Counterfeit and Anti-Piracy System (COPIS) (1.12)

COPIS is a central information exchange system that 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 interfaces with the European Anti-Fraud Office (OLAF) and Anti-Fraud Information System (AFIS). The system additionally interconnects with the European Union Intellectual Property Office (EUIPO) and the Intellectual Property Enforcement Portal (IPEP).

COPIS v4.0.0 introduced the electronic Application for Action (eAFA) integrating with IPEP. COPIS eAFA aims to provide economic operators with the possibility to electronically submit and amend an application. During 2022, the development activities of COPIS eAFA continued, with the deployment and rollout to production of COPIS v4.0.5.0 and v4.0.6.0 taking place in February and March 2022, respectively. The latest release COPIS v4.1.2.0 entered in production in July 2022.

In 2022, the Member States informed about their status as 'In Progress' (BG, DK, DE, HU, SI, and FI), 'On hold' (PT and SK) or 'Finished' (BE, EE, ES, FR, CY, MT, AT, PL, and SE). Concerning the current phase, the Member States reported being in operation (BG, CZ, DK, DE, EL, CY, HU, MT, AT, PL, SI, FI, and SE) or upgrading the national system (EE and IT). The remaining Member States reported status 'Other' (BE, ES, FR, and PT). In addition, some Member States reported carrying out activities related to analysis and modelling (IT, AT, and FI), maintenance (BG, CZ, DK, DE, IT, and AT) and upgrades (BG, CZ, DE, IT, and AT). During the reporting year, BG communicated its preceding phase and indicated being in conformance testing activities.

BG reported that following the deployment of the national application for infringements and risk information, the operations started immediately. Furthermore, upgrades were performed in conformity with COPIS and any new pertinent requirements, while a link was established between COPIS and the national register. CZ deployed a new release of the national system. DK provided economic operators with the option to use IPEP. EE participated in two webinars related to the COPIS project. ES cooperated with EUIPO to ensure the availability of IPEP to the economic operators and the hybrid architecture agreed upon for the eAFA management through EUIPO became operational. HR attended all the meetings of the CEG on the IPR enforcement section. IT reported performing all the necessary activities for the alignment of the national COPIS/FALSTAFF system with the new COPIS R4.1 and R4.2, based on the documentation provided by the Commission. MT used the central system developed by the Commission. FI reported that the usage of eSignature was put on hold. IE, EL, FR, CY, LV, LT, HU, NL, PL, PT, RO, SK, and SE 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: (a) EU CSW-CVED, (b) EU CSW-CERTEX, and (c) Potential legislative initiative on the EU SWE-C. The first component is implementing the automatic validation of the CVED for animals and animal products as well as the Common Entry Document (CED). The second component builds on the outcomes of EU CSW-CVED and foresees expansion of its scope with additional certificates as well as enhanced functionalities. Finally, the third component concerns the definition of a broader scope of EU SWE-C (beyond the certificates' exchange), the preparation of the pertinent legal framework and the action plan for its implementation.

EU CSW-CVED is planned to be decommissioned in 2023. As of that time, EU CSW-CERTEX will be the only IT tool for customs to report the quality management to the Information Management System for Official Controls (IMSOC). Currently, the EU CSW-CVED component is operational in one Member State¹³¹.

The 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 and permits other documents, currently available for exchange via EU CSW-CERTEX. The following certificates and licences are covered: FLEGT, COI, CHED, ODS, F-GAS, DuES, CITES and ICGS.

Since 2020, the re-engineering of EU CSW-CERTEX has been investigated to provide the Member States with access to all 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. On this basis, EU CSW-CERTEX R2, covering CHED-A, CHED-P and F-GAS, was finalised in 2021, allowing Member States to initiate their testing activities as of July of the same year and throughout 2022. EU CSW-CERTEX R3 entered in conformance testing as of May 2022, including the DuES e-licencing system. In addition, an addendum to the Vision Document for EU CSW-CERTEX R4 adding the EU CITES domain and extending EU CSW-CERTEX with new functionalities¹³² was produced in the first quarter of 2022. The aforesaid release was delivered in October 2022 and entered in conformance environment in December of the same year.

The 'Potential legislative initiative on the EU SWE-C' scheme, which is the third component, does not envisage the development of a new IT solution, but rather deals with the interoperability of already existing solutions. In 2022, the Commission continued the work towards the completion of the initiative. More information can be found under [section 4.3](#).

In 2022, the Member States informed about their status as 'In Progress' (BE, BG, DK, EE, IE, EL, FR, CY, AT, PL, PT, RO, SI, FI, and SE), 'On hold' (HU and SK) or 'Finished' (CZ, DE, and MT). Concerning the current phase, the Member States reported being in

¹³¹ LV is the only Member State that still utilises EU CSW-CVED.

¹³² Two new features have been added in EU CSW-CERTEX R4: the Request for list and Push notification.

operation (BG, PL, and PT), upgrade of the national system (CZ and IE), deployment (BE), conformance testing activities (EE and SI), national acceptance testing (FR), design of the national system (DE, ES, RO, FI, and SE), creation of the national technical specifications (CY, HU, and MT) or analysis of the national functional specifications (EL and AT). DK reported status 'Other'. In addition, several Member States reported carrying out activities related to analysis and modelling (BE, CZ, DK, DE, EE, IE, EL, FR, CY, MT, AT, PL, SI, and FI), maintenance (BE, CZ, FR, and PL) and upgrades (BE, CZ, EE, IE, and PL). During 2022, two Member States communicated their preceding phase and indicated being in deployment activities (PL) or performing national acceptance testing (DE).

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 project's documents distributed by the Commission and maintained the national EU CSW-CVED component. Lastly, BG performed an analysis of the requirements and changes needed to migrate to the new version of EU CSW-CERTEX and finalised the national technical specifications for the upgrade of the national system, including the documents for a call for tender. CZ focused on developing a new functionality to be connected to EU CSW-CERTEX R2. In DK, all governmental projects should qualify and be validated through an obligatory governmental project model, which consists of several phases. One of these phases is the 'idea/pre-analysis' phase, in which DK entered in 2022. More specifically, throughout the reporting year, DK focused on the primary investigation of the national user requirements, national functional and technical specifications and high-level architecture of the new national system. DK further informed that the next phase of the EU CSW-CERTEX project, namely, a thorough analysis on the national system's specifications and requirements, is planned to take place at the beginning of 2023. EE reported that the ODS, CHED-D, CHED-P and CHED-PP certificates were launched.

EL selected its contractor and in July 2022, signed the related contract for the EU CSW-CERTEX project, which was agreed to be deployed within an eighteen-month period. EL also participated in several meetings with relevant agencies to discuss and determine the interoperability between the involved information systems. Since the adoption of the Regulation (EU) 2022/2399 of the European Parliament and Council establishing the European Union Single Window Environment for Customs in November 2022, ES had started preparations for the connection to EU CSW-CERTEX and work on the development of the B2G domain at the national level. FR implemented the COI certificate and designed the upgrades for the national interconnections with the national UCC Customs Clearance System. HU participated in a relevant meeting organised by the Commission and started planning the necessary national developments for handling the CHED certificates through EU CSW-CERTEX, based on the legal obligations. AT prepared the national tender procedure and attended the various meetings organised by the Commission.

PL held several NSW project group's meetings with the objective of preparing all national project documentation related to the NSW 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 R1 and in September 2022, the integration between the latter and NSW went live. FI focused on planning and designing the integration to EU-CSW CERTEX, finalising the national specifications for NIS. In addition, FI participated in all pertinent CBG meetings. HR, IT, LV, LT, NL, PT, SK, and SE 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. The extension of the system under a second phase, delivered in two iterations, was considered necessary to support the integration of EBTI and the European Customs Inventory of Chemical Substances (ECICS) into the platform.

During 2022, the Commission continued its work on the development of CLASS P2, which is scheduled to be deployed by the end of 2023. Hence, in July 2022, CLASS v2.0.0.0 (Iteration 1), allowing the integration with the ECICS2 data, entered in production. Additionally, throughout the reporting year, the Commission completed the impact analysis for the development of CLASS v2.1.0.0 (Iteration 2) for the integration of the EBTI data.

In 2022, the Member States informed about their status as 'In Progress' (DK), 'On hold' (PT and SK) or 'Finished' (BE, BG, EE, IE, CY, MT, SI, and SE). Concerning the current phase, several Member States reported being in operation (BG, DK, IE, EL, CY, MT, FI, and SE). 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 RfCs for the CLASS system. MT and RO indicated that their customs officials are using the central CLASS system. The majority of the Member States (CZ, ES, FR, HR, IT, LV, LT, HU, NL, AT, PL, RO, and SK) 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 EORI project is to establish a unique system of registration and identification of the economic operators and other persons for the purposes of applying the customs legislation of the Union. The project aims to update the existing EORI system and the UCC EOS web services in alignment with the legal changes resulting from Annex 12-01 to the UCC DA and UCC IA. The system has been in operation since 2018. It is currently stable and no activities were performed in 2022.

In 2022, the Member States informed about their status as 'In Progress' (DK, DE, EL, LV, HU, and PT) or 'Finished' (BE, BG, EE, ES, FR, HR, CY, MT, PL, and SE). Concerning the current phase, the great majority of the Member States reported being in operation (BE, BG, CZ, DK, DE, EL, ES, HR, CY, LV, HU, MT, PL, PT, RO, SI, and SK). EE and FR reported status 'Other'. In addition, some Member States reported carrying out activities related to analysis and modelling (DE), maintenance (DE, HR, PL, SI, and SK) and upgrades (DE and SK).

BG, CZ, DE, EE, HR, RO, and SK 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. EE tested the interoperability between EORI and other systems and corrected the economic operators' data. ES developed the eAEO community portal functionalities. RO indicated that the EORI2 project was implemented, including the conformance tests. IE, IT, LT, NL, AT, FI, and SE reported no activities on the project.

1.1.11 Customs Risk Management System 2 (CRMS2) (1.16)

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. It is meant to provide support for EU wide collaboration among customs offices in the fight against financial and safety and security threats for the EU and its citizens, and therefore, complements the national customs activities and systems. The CRMS2 system reshapes the existing CRMS system created in 2005 to increase the clarity of the different functions to be developed.

CRMS2 connects the customs community from the EU's 27 Member States, including all international ports, airports, major land border posts and all national risk analysis centres.

CRMS2 R1.0.0.0 has been in production since October 2021, aiming to help the customs authorities quickly exchange information in real time on dangerous goods and protect the health and safety of the EU citizens. The software application includes multiple capabilities, such as handling Requests for Information (RIF)¹³³ and establishing digital cooperation between customs and Priority Control Area¹³⁴, Crisis Management¹³⁵ and Risk Control. It also provides reports, surveys and feedback functionalities as enhancements to CRMS. The first transactions of the system were processed in January 2022.

On 27 June 2022, CRMS2 v1.1.1.0 and v1.1.1.1 went live, while an updated v1.2.0.0 entered in production on 25 November of the same year. Concurrently, minor releases to improve the system continued throughout 2022.

CRMS2 R1.3.0.0 will implement necessary changes and updates identified since the time the system went live in 2021. It offers new characteristics, opportunities and several significant simplifications that bring tangible benefits to the customs business. R1.3.0.0 will be delivered in 2023.

In addition, in 2022, preparatory activities on CRMS2 R2 were initiated. On this basis, the Commission started the elaboration of the Vision Document for R2, and in November 2022, the CRMS2 R2 Project Charter was approved. The software application will include new capabilities, such as Risk Management Data Consolidation Module (RMDC), Advanced Statistical Reporting, UCC ICS2 Integration, Data Migration from CRMS and extending the use of CRMS2 to third countries.

In 2022, the Member States informed about their status as 'In Progress' (BG, DK, EE, ES, HU, and AT), 'On hold' (HR and PT) or 'Finished' (DE, IE, CY, MT, FI, and SE). Concerning the current phase, the Member States reported being in operation (BG, DK, EE, IE, CY, MT, AT, SI, FI, and SE), upgrade of the national system (ES), deployment (DE and HU) or conformance testing activities (SK). HR and PT reported status 'Other'. In addition, some Member States reported carrying out activities related to analysis and modelling (EE and IE), maintenance (AT) and upgrades (EE and ES). During the

¹³³ The purpose of the RIF domain is the exchange of information in the form of Risk Information Forms, feedback and messages between Member States to establish digital cooperation between customs, Priority Control Area and the Commission. In principle, a RIF can be created by any of the actors having the appropriate role.

¹³⁴ Priority Control Area is the ability of the Commission to define and subsequently initiate a campaign within a controlled environment amongst Member States over a given duration possibly against predetermined risks. At any point within a Priority Control Area's duration, Member States' actors must know which of the identified predetermined risks (i.e. Common Risk Criteria) require further monitoring. A Priority Control Area can only be initiated by the Commission.

¹³⁵ Crisis Management is designated for the efficient reaction to fast-moving crisis situations by using a set of functionalities offered to the involved parties.

reporting year, ES communicated performing an upgrade to the national system also as its preceding phase.

BG reported nearly 96 registered users of CRMS2, assigned by the national administrators with the relevant profiles and functionalities. DK informed that the CRMS2 platform was being monitored on a 24/7 basis throughout 2022. DK also reported its participation in the CRMS2 workshops organised by the Commission. Similarly, DE attended and contributed to the CRMS2 working groups convened by the Commission. EE identified and corrected some bugs in its national system. HR informed that the national integration of CRMS2 had not started, while MT and RO reported using the central system. AT and SI participated in CRMS2 training activities. SI further focused on monitoring the new functionalities and upgrades of the national system. BG, CZ, EL, FR, IT, LV, LT, NL, PL, and RO reported no activities on the project.

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

The objective of e-Commerce and CP 42/63 is to automatically validate the individual 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, e-Commerce and CP 42/63 capture and offer all relevant data to tax authorities that are needed for validation purposes.

To achieve 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 legislation¹³⁶ 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 'IOSS'.

The e-Commerce and CP 42/63 system has been in operation since July 2021 and is currently stable.

In 2022, the Member States informed about their status as 'In Progress' (BE, EE, EL, LV, LT, and PT) or 'Finished' (BG, CZ, DK, DE, IE, ES, HR, CY, MT, PL, RO, SI, and FI). Regarding the current phase, several Member States reported being in operation (BE, BG, CZ, DK, DE, IE, EL, ES, HR, CY, LV, LT, HU, MT, PL, PT, SI, and SE) or upgrade of the national system (EE and FI). RO reported carrying out other activities related to this project. In addition, several Member States reported carrying out activities related to analysis and modelling (BE, DK, DE, EE, and PL), maintenance (BE, BG, CZ, DK, EE, IE, EL, HR, CY, LV, PL, SK, and FI) and upgrades (BE, BG, CZ, DK, EE, EL, HR, PL, SK, and FI). During the reporting year, DK communicated being in deployment activities as its preceding phase.

CZ and DK developed upgrades to the e-Commerce and CP 42/63 system. EE corrected errors in the system. LT reported that queues were prepared for sending the Super Reduced Data Set (SRDS) of the import declaration (H7)⁹⁹ and postal declaration (HC) to the SURV-RECAPP system. With the initiation of the conformance testing, H7 data was sent on a regular basis, while the Lithuanian Post was not ready to provide the H6⁹⁹ data to the Lithuanian customs, and therefore, no such data (UCC Postal Surveillance Declaration Record (SDR)) was sent to SURV-RECAPP. MT reported an extension of

¹³⁶ 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](#).

the current NIS with the e-Commerce and CP 42/63 functionality. SK informed that the national SURV system was upgraded. FR, IT, NL, AT, and SE reported no activities on the project.

1.1.13 Import of Cultural Goods (ICG) (1.18)

This project aims to introduce implementing measures governing the ICG and new customs business and IT processes and procedures in this area. Based on the agreed approach, the ICG project will be divided into three different main areas of activity: (a) the legislative process, (b) the establishment of a central e-licencing system, and (c) the development of a system interface within EU SWE-C.

The legislative process component includes the preparation and progressive refinement of the draft implementing act to the Regulation on the ICG¹³⁷, stipulating the e-licencing system-related aspects. The central e-licencing system will be introduced to ensure the uniform controls for the import of cultural goods upon their entry into the customs territory of the EU.

A dedicated project group has been established to act as a discussion platform where experts from national customs administrations and competent authorities assist the Commission with the creation of the import licence template and the development of the format for the importer statement. During 2022, the project group discussed the preparation of the technical activities for the ICG system and the extension of the latter to the export domain¹³⁸.

The project was in an early phase and few Member States reported activities for 2022. The Member States informed about their status as 'In Progress' (BG, DK, MT, and PL) or 'On hold' (EE, PT, SI, and SK). Concerning the current phase, some Member States reported analysing the national user requirements (EE and MT) or carrying out other activities related to the project (BG, DK, PL, and PT).

Customs experts from BG participated in the project group organised by the Commission. DK entered in the 'idea/pre-analysis' phase for the ICG project. Namely, DK focused on the primary investigation of the national user requirements, national functional and technical specifications and high-level architecture of the new national system. DK also reported that the ICG project would be integrated with its Declaration Management System (DMS) and EU CSW-CERTEX. EE informed that its activities were at the initial stages. In particular, EE initiated discussions with the permit issuer, namely, the Heritage Protection Board. Both Customs and Heritage Board participated in the ICG project group. MT reported that a call for tender was published for the implementation of an NSW that would incorporate the ICG processes.

1.1.14 UCC Import Control System 2 (ICS2) (1.19)

The UCC ICS2 programme is set up for the development of the new version of the current ICS system that is used for the lodgement and processing of the ENS. The programme consists of several projects and activities, including CR, CRMS2 link, Trader Interface (national interface/STI) and related Monitoring and Business Statistics. It also involves the National Risk Management Systems, Risk Management support, e-screening, TES Helpdesk, National Declaration Processing Systems and AN/PN controls for national

¹³⁷ 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](#).

¹³⁸ More information about the project group on the Digitalisation of Cultural Goods can be found in [section 4.10](#).

systems. The UCC ICS2 system is supported by DG TAXUD's newly built Access Point for AS4 System (TAPAS) for exchanging UCC ICS2 messages with economic operators, CCN2ng for exchanging UCC ICS2 messages with Member States, and UCC Uniform User Management & Digital Signature (UUM&DS) for managing the economic operators' digital certificates and securing the data exchanges.

The programme implementation contains three releases. UCC ICS2 R1 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. UCC ICS2 R2 incorporates the implementation of new ENS obligations and related business and risk management processes for all the goods in the air traffic as well as SSA capabilities. UCC ICS2 R3 further includes the goods in maritime and inland waterways, road and rail traffic.

UCC ICS2 R1 has been in operation since 15 March 2021. During 2022, its common components were running on a 24/7 basis, without any major incident being reported. A maintenance window was designated for scheduling all planned activities to avoid extended downtime periods. At the same time, further activities were carried out to improve the UCC 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.

Concerning UCC ICS2 R2, several preparatory activities took place during the reporting year. More concretely, a number of business documents were produced and published. Particular emphasis was placed on the finalisation of the Pre-Arrival Referral Guidance, Operational Guidance for Member States and Operational Guidance for postal and express consignments. The Go-Live procedure, Operational Guidance for air cargo and the update of the UCC ICS2 R1 to UCC ICS2 R2 transition strategy were also under preparation. Moreover, the BCP was updated for the Member States in April 2022 and for the economic operators in June 2022, with the objective to cover the UCC ICS2 R2 operations. The end-to-end testing organisation document was also published in April 2022 for both the Member States and economic operators, introducing as further steps the elaboration of pertinent test scenarios. These scenarios aimed at encouraging the Member States to carry out end-to-end testing activities with the economic operators, providing the opportunity to test real message exchanges with the national and economic operators' systems and the central components.

The common components, such as 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 2022, the CFSS v2.0.1 was produced for UCC ICS2 R2, while three updates of the TSS were delivered in February, March and September. The objective of the first update was to align the TSS with the latest version of the CFSS. The second update contained the specifications applicable for UCC ICS2 R3, in addition to the specifications related to the UCC ICS2 R1 and R2 business processes. The third update aimed at implementing the latest Known Error List (KEL) and integrating the last changes that were raised by the business experts for the UCC ICS2 R2 and R3 processes as well as additional business processes necessary for the integration of the CR and SSA. At the same time, the third major software release, R1.6.0.0 was delivered in 2022, which implemented all the functionalities required for the production of the UCC ICS2 R2 system, apart from the integration with UCC ICS2 SSA. This software version was utilised by the national administrations for their conformance testing activities, which

started as of 1 July 2022¹³⁹. The launch of the conformance testing activities for the economic operators was delayed until 1 September 2022 due to identified issues in the UCC ICS2 software. The UCC ICS2 R2 SSA delivery was also ongoing through several iterations. The Iteration 2.3, which will provide the final version for the go-live, is planned to be finalised in early 2023.

Additionally, the Commission marked significant progress towards launching coordination activities that contributed to the implementation of UCC ICS2 R2 through the facilitation of the operational preparedness of the Member States' customs authorities, national administrations and economic operators. On this basis, several bilateral technical meetings were organised with the Member States that had requested a derogation against the legal milestone of 1 March 2023. Correspondingly, regular online communication and social media campaigns were launched, aiming to disseminate the various activities carried out with reference to the UCC ICS2 R2 programme implementation.

With regard to UCC ICS2 R3, the elaboration phase was finalised in June 2022 and the development activities were initiated in September of the same year. The relevant CFSS were updated in March 2022 and the Common Technical System Specifications (CTSS) in March and September 2022. Additionally, in 2022, the UCC ICS2 R2 to R3 migration strategy was published, while the Guidance document for the maritime transport mode was under elaboration. The development of Iteration 1 for the UCC ICS2 R3 CR and STI v2.1.0.0 started during the reporting year, and is expected to be completed in 2023, followed by the delivery of Iteration 2. Concomitantly, the development of the UCC ICS2 R3 Monitoring and Shared Trader Portal applications, along with the elaboration of the SSA P3, also started in 2022.

Furthermore, the analyses of changes required for the integration of UCC ICS2 R3 with UCC NCTS-P6 were finalised in 2022. On this basis, the final date for deploying the UCC ICS2 R3 system was rescheduled from the last quarter of 2024 to the first quarter of 2025, with the purpose of being aligned with the end of the UCC NCTS-P6 deployment window. This change will provide Member States and economic operators with a legal and IT basis to ensure an effortless transition from the ENS requirements covered by UCC ICS2 and UCC NCTS-P5, into the new ENS requirements under UCC ICS2 and UCC NCTS-P6.

Moreover, preparations for the training strategy for UCC ICS2 R3 were ongoing during 2022. The Commission also organised a bilateral meeting with the Federation of National Associations of Ship Brokers and Agents (FONASBA)/European Community Association of Ship Brokers and Agents (ECASBA) in June 2022 to discuss their collaboration on UCC ICS2 R3. In July of the same year, a workshop was conducted by CLECAT to provide high level information on UCC ICS2 R3, while further information on the aforesaid release was exchanged during bilateral meetings with customs administrations of third countries.

During 2022, the Member States informed about their current status as 'In Progress' (BE, BG, DK, EE, IE, EL, ES, FR, HR, CY, LV, HU, MT, AT, PL, PT, SI, and SE) or 'Finished' (CZ, DE, IT, LT, and FI). Concerning the current phase, the Member States reported being in operation (BG, DE, IE, EL, AT, PT, SI, and SK), upgrade of the national system (BE), deployment activities (EE and HU), conformance testing activities (CZ, FR, HR, CY, and MT), national acceptance testing (LT and PL) or design of the national system (DK, ES, LV, and FI). IT and SE reported status 'Other'. Furthermore, several Member States reported carrying out activities related to analysis and modelling (BE, BG, CZ,

¹³⁹ From the non-EU national administrations, Switzerland was the first to perform conformance tests in September 2022.

DK, DE, EE, IE, ES, FR, HR, IT, MT, AT, SI, SK, and FI), maintenance (BE, BG, CZ, DE, EE, IE, EL, FR, HU, MT, AT, SI, SK, and FI) and upgrades (BE, BG, CZ, DK, DE, EE, EL, FR, IT, HU, MT, AT, SI, SK, and FI). During the reporting year, some Member States communicated their preceding phase and indicated being in operation (BE), designing the national system (PL), developing the national technical specifications (DK, EL, and FR) or creating the national functional specifications (FI). ES communicated being in the same phase as its preceding phase.

BG participated in coordination meetings, webinars and workshop activities related to the project. Furthermore, BG successfully executed conformance testing activities for UCC ICS2 R2 in Mode 1 and Mode 2. BG also started the design of the national ICS2 R3 system and informed that a tender process was ongoing for the IT provider concerning both UCC ICS2 R2 and UCC ICS2 R3. CZ developed the national component of ICS2 R2. DK informed that although the UCC ICS2 R2 planning and development was progressing, a derogation request until 31 October 2023 was submitted to the Commission in September 2022. In addition, DK reviewed and analysed the UCC ICS2 R3 TSS provided by the Commission and participated in the expert group on UCC ICS2 R3 Operational Guidance for maritime and inland waterways. DE reported that the preparation for UCC ICS2 R2 was ongoing in view of R10.1 of the national ATLAS system. The development activities for UCC ICS2 R2 were finalised at the end of 2022.

EE attended regular analysis meetings with the developer. IE reported that the CMU was involved in several discussions and workshops with reference to the implementation of the project. IT informed that the development phase of UCC ICS2 R2 was finalised and the national system was upgraded to align with the requirements of the aforesaid release. LT developed the National Information System for the Presentation of Goods for Customs Control (PPMKS), which was integrated with the updated National Risk Evaluation and Control System (RIKS) for data exchange with UCC ICS2 R2. Analysis and development activities on UCC ICS2 R2 were ongoing in AT throughout the reporting year. PL reported that most of the UCC ICS2 R2 functionalities were delivered. RO informed that the documentation for both UCC ICS2 R2 and UCC ICS2 R3 was under the approval procedure by the Ministry of Finance. FI reported that the implementation of UCC ICS2 R2 was finalised at the end of 2022. SE reported that UCC ICS2 R2 was under development.

1.1.15 UCC Surveillance3 (SURV3) (1.20)

The UCC SURV3 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. It 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 2022, 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 and will be added in an update in the system's specifications.

During 2022, the Member States informed about their current status as 'In Progress' (DK, DE, IE, EL, FR, IT, LV, AT, PT, RO, SI, and FI), 'On hold' (SK) or 'Finished' (BG, CZ, EE, HR, CY, HU, MT, PL, and SE). Regarding the current phase, the Member States reported being in operation (BG, CZ, DK, DE, EE, EL, CY, LV, MT, PT, SI, FI, and SE), upgrade of the national system (HR), deployment activities (IE and HU), conformance testing activities (IT and RO), design of the national system (PL), creation of the national

technical specifications (FR) or analysis of the national user requirements (AT and SK). In addition, several Member States carried out activities related to analysis and modelling (CZ, DK, DE, FR, AT, PL, and SK), maintenance (BG, CZ, DK, DE, EL, HR, HU, PL, and FI) and upgrades (CZ, DK, IE, EL, HR, and PL).

BG informed that regular monitoring and data analysis activities were carried out. CZ implemented some minor changes at the national level, particularly related to SRDS and the H7 data set. EE participated in all webinars held by the Commission and developed queues for the new SDR formats (nUCC and UCCp) for deployment in 2023. IE regularly analysed the national documentation to keep them updated based on the latest developments of UCC SURV3, while FR analysed the system's specifications for the interconnection with NIS and UCC AES. PL analysed all the documentation prepared by the Commission. RO reported that the national SURV system was developed for the H1⁹⁹ and H6⁹⁹ packages. In addition, the conformance tests regarding the exchange of SURV messages between the national SURV and SURV-RECAP systems for the aforementioned packages were completed. The first exchange of messages would take place after the deployment of NIS. RO further informed that for the B1⁹⁹ types of customs declarations, the development of the national SURV system was in the analysis phase. SK informed about the creation of a detailed impact analysis and the ongoing development phase. Considering that FI had finalised the implementation of SURV within the NIS project and had started the development of new versions according to the UCC Customs WP since 2021, only minor regression testing activities were reported in 2022. Finally, some Member States reported no IT activities at this stage (BE, ES, LT, and NL).

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

The MASP-C Group 2 contains projects for which further discussion will be required before they can be mapped in 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 (AN/PN/TS) (2.1)

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

However, the interconnection between this project and other systems, such as UCC NIS and UCC ICS2, highlighted the complexity of its development. Subsequent to the risks identified in the 2021 Annual Progress Report concerning the national entry projects, the Commission addressed implementation delays at an early stage through regular progress reporting and organising bilateral meetings with Member States at the CIO level. More specifically, following the derogations requested by the Member States, the Commission initiated discussions on the draft Commission Implementing Decisions, highlighting that the proposals referred to the delays in the development of the national IT systems. The Member States were invited to submit their comments by October 2022 in order for the text to be finalised and the interservice consultation to be launched.

During 2022, the Member States informed about their current status as 'In Progress' (BE, BG, CZ, DK, DE, EE, EL, ES, FR, CY, LV, HU, MT, PT, SI, FI, and SE), 'On hold' (RO and SK) or 'Finished' (IE, HR, IT, LT, and AT). Concerning the current phase, the Member States reported being in operation (IE, LV, and FI), system upgrade (DE, EE, and PT), deployment activities (IT), national acceptance testing (HR, LT, and AT), design of the national system (BE, CZ, DK, FR, CY, and HU), creation of the national technical specifications (EL and SE) and national functional specifications (SI), analysis of the national user requirements (ES and MT) or carrying out other activities (BG and RO). In addition, several Member States reported carrying out activities related to analysis and modelling (BE, CZ, DK, DE, EE, EL, ES, FR, HR, MT, PT, SI, and FI), maintenance (BE, DK, DE, EE, IE, FR, PT, and FI) and upgrades (BE, DK, DE, PT, AT, and FI). During the reporting year, some Member States communicated their preceding phase and indicated performing conformance testing activities (IT), designing the national system (HR and AT), creating national functional specifications (DK) or analysing the national user requirements (EL).

BG reported that UCC AN would be implemented as part of UCC ICS2 R2, while UCC PN/TS would be implemented as part of NIS. In June 2022, DK applied for a derogation on UCC AN/PN/TS until 31 December 2024 and in September 2022, it applied for a derogation on UCC AN/PN/TS for air until 31 October 2023. EL informed that a call for tender was issued on 13 October 2022. FR informed about its work on the integration of the application code delivered in batches by BE. On this basis, FR reported that monthly exchange meetings with BE were convened and work was ongoing on the last iteration to integrate the Belgian solution into the French Information System. HR reported that the UCC TS application was delivered in conformance test environment. HR further informed that UCC AN/PN was developed within the framework of UCC ICS2. In addition, HR submitted a request for derogation against the UCC AN/PN/TS operational deadline.

FI informed that an updated version of UCC TS according to the latest changes of EUCDM entered in production on 15 February 2022. Additional changes for processing the location of goods entered in production in FI on 10 August 2022. LT reported that the functionality for handling arrival and presentation notifications within PPMKS was developed. MT issued a call for tender for the implementation of UCC AN/PN/TS, which is expected to be awarded by the end of April 2023. PT focused on designing the national system for UCC AN/PN/TS P2. RO reported that the functional and technical specifications related to the UCC AN/PN/TS development services were established and the project entered in the procurement phase. SI informed that activities were ongoing and the declaration for UCC TS would be aligned with data set G4⁹⁹ of Annex B to the UCC DA and UCC IA. Lastly, UCC TS entered in production in FI on 5 November 2022. NL, PL, and SK did not report activities on the project.

1.2.2 UCC Guarantee Management (GUM) (2.5)

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

The system is comprised of two components: a central component (component 1), which will be implemented through UCC CDS and a decentralised component (component 2), which refers to the national GUM systems that will be developed by the Member States. The two components will be interconnected via CRS. The central GUM component is expected to be operational in the first quarter of 2024, while the national GUM components would be deployed until June 2025. On this basis, the hybrid-Member States using UCC CDS should be ready to test their systems before the central GUM

component goes live in the first quarter of 2024. This allows a window of more than one year to develop the national components of the UCC GUM system after the deployment of the central component in 2024.

During 2022, preparations for amendments of Annex A to the UCC DA and UCC IA continued, and an initial draft of the Annex A data elements needed for UCC GUM was finalised in the first half of the same year. Specifically, the UCC GUM-related proposals for the changes of Annex A to the UCC DA and UCC IA were discussed during the 2022 meetings of the DIH Committee, where the UCC GUM project team participated. In parallel, over the course of 2022, the aforesaid team carried out a thorough analysis of the planned changes to Annex A for the implementation both in the UCC CDS and UCC GUM systems in comparison with the updated TSS, highlighted the discrepancies that were discovered and made recommendations for their correction and/or modification. The corrections and creation of new data elements related to Annex A were also discussed in several UCC CDS project groups and during a CPG meeting in March 2022.

Moreover, the Application and Service specifications for CDMS and TP were completed during the second quarter of 2022, while the CRS technical specifications document was delivered in the third quarter of the same year. The UCC GUM TSS were formally approved by the ECCG in September 2022 by written procedure. In addition, by the last quarter of 2022, the Commission had carried out a comprehensive review of the UCC GUM Business User Guide, providing recommendations for further improvements.

Furthermore, during 2022, bilateral meetings with several Member States were organised to discuss potential issues and explore the possibilities for future modifications to the system architecture of the UCC GUM components. In this respect, the Commission also completed several assessments of the status of the Member States' readiness concerning the development of the UCC GUM system. Finally, in 2022, the Commission coordinated the compilation and finalisation of a comprehensive list containing the Member States' appointed National Project Managers (NPMs) for the UCC GUM project.

During 2022, the Member States informed about their current status as 'In Progress' (BE, DK, EE, IE, FR, CY, LT, HU, MT, AT, PL, PT, and FI), 'On hold' (DE and SK) or 'Finished' (BG, CZ, and SE). Concerning the current phase, the Member States reported being in operation (BG, CZ, PL, and SE), deployment (LT), design of the national system (FI), creation of national functional specifications (EE), analysis of the national user requirements (BE, IE, EL, FR, HU, MT, and AT) or carrying out other activities (DK, DE, CY, and PT). In addition, some Member States conducted activities related to analysis and modelling (BE, DK, IE, FR, MT, AT, and FI). During the reporting year, FI communicated being in the same phase as its preceding phase.

BG informed about the preparation of a 'Terms of Reference' document in the last quarter of 2022, which foresaw an upgrade of the national GUM system. DK reported that the project was under analysis and no issues were encountered in relation to the planned operational deadline of 2024. EE reported that weekly analysis meetings with the developer were organised. IE attended all UCC GUM and UCC CDS meetings convened by the Commission. FR made significant progress towards achieving its goals, successfully completing several major steps and initiatives despite the encountered challenges. HR analysed the UCC GUM Business Case and UCC GUM Vision Document. LT reported that additional integration testing of the national Guarantee Management System (GVS) with other Customs Information Systems was performed, while any errors or inconsistencies found during this activity were corrected. Additionally, preparation activities for the deployment of GVS into production were performed. MT informed on its plan to use the central system developed by the Commission and the analysis of changes to the National Accounting System. PL performed changes in the

national system based on the legal regulations. PT informed that its national GUM system was under development, while RO reported that the update of the national GUM was part of the NIS project. Finally, some Member States reported no IT activities at this stage (ES, IT, LV, NL, SI, and SK).

1.2.3 UCC Special Procedures (SP) (2.6)

The implementation of the UCC SP project follows two approaches. UCC SP Harmonisation are the national IT developments for the harmonisation of special procedures and alignment with the legal provisions defined in the UCC DA and UCC IA. 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, UCC INF-STP has been successfully integrated into EUCTP and in production since 2020. EUCTP is the single portal at the Union level to provide economic operators with unique access to a number of centralised TES systems apart from UCC INF (i.e. UCC EBTI, UCC REX and UCC AEO).

Since the entry into operations in June 2020 and until mid-2022, approximately 40,200 UCC INF requests were sent by economic operators via UCC INF-STP, out of which more than 36,000 were validated by the customs officers in UCC INF SP.

In March 2022, UCC INF-STP v1.3.0.0 and v1.3.1.0 were deployed, while UCC INF-STP v1.4.0.0 was delivered in October 2022 and successfully tested in December of the same year. In addition, UCC INF SP v1.3.3.0 entered in production in May 2022.

Moreover, over the course of 2022, the UCC INF project group continued its work and carried out extensive discussions to conclude on business and important operational issues. In February 2022, the Commission attended a meeting with representatives of the European Association of Sugar Traders (ASSUC), with the aim of providing answers and clarifications to crucial inquiries and issues identified by the economic operators. Internal discussions also took place on the technical solution to be implemented for the invalidation of the TARIC codes, considering that the real-time validation in the TARIC system for opening each INF would lead to a major decrease in the performance of the system. Additional deliberations between DG TAXUD and Directorate-General for Informatics (DG DIGIT) concentrated on reaching a common agreement on the delegation per STP, instead of a global EUCTP approach with a duplication of profiles. For this purpose, a change of the EUCTP architecture and communication protocol would be required for the division of EUCTP into separate sub-logical modules. Finally, over the course of 2022, the Commission further participated in CEG-DIH and ITSDG meetings to address the notion that several Member States were no longer using the UCC INF system and discuss the outcomes of the UCC INF project group meetings.

In 2022, several Member States informed about their current status as 'In Progress' (BE, BG, CZ, DK, EE, ES, FR, CY, HU, AT, PL, and FI), 'On hold' (PT and SK) or 'Finished' (DE, IE, HR, MT, and SE). Concerning the current phase, the Member States reported being in operation (BG, DK, DE, IE, HR, HU, MT, AT, PL, FI, and SE), national acceptance testing (EE), design of the national system (BE and FR), creation of the national technical specifications (CY) and national functional specifications (ES), analysis of the national user requirements (CZ and EL) or conducting other activities (PT). In addition, some Member States conducted activities related to analysis and modelling (BE, ES, CY, and PL), maintenance (BE, DE, IE, HR, AT, PL, and FI) and upgrades (HR, AT, and PL). During the reporting year, CY communicated developing the national functional specifications as its preceding phase.

BG and HR informed that the National SP Import (IMP) was part of NIS. The National SP Export (EXP) of both BG and EE was part of UCC AES. DK reported using the EU transnational systems and therefore, not having a national INF SP system. EE informed that the National SP IMP was in operation. EL also reported that the project would be following the upgrade of NIS. FR informed that the different functionalities of the national system would be delivered in several iterations, while the National SP IMP project was supported by NIS. IT informed that all the activities related to UCC SP were carried out within the 'Adjustments of the existing import applications under the UCC' project. MT reported that despite using the central system developed by the Commission, national authorisations for SP would eventually be processed via the national application e-Authorisations, while the multi-Member States' authorisations would still be processed via the central system. AT reported on the operation phase with several upgrades and ongoing exchanges with the UCC INF project group.

PL reported that the implementation of the UCC SP project was carried out in four IT system projects: (a) UCC INF SP, (b) Supplementation of UCC AES, (c) AIS, and (d) the development and implementation of a new national system concerning the management and settlement of SP (RPS). The components of the national UCC SP system would be supplemented with additional required functions under a new IT contract, as the second phase of the project to implement the national UCC SP system (functional development of UCC AES, AIS and RPS systems). PL further informed that following the implementation of the RPS system in 2021, additional functionalities were implemented in 2022. Furthermore, analytical work was carried out to adapt the RPS, AIS and UCC AES systems to a new matrix referred to in Annex B to the UCC DA and UCC IA. RO informed that the project was in its procurement phase with the functional and technical specifications related to the SP development services already being established. SI informed that the national SP were part of the Slovenian Automated Import System (SIAIS2), which became operational on 1 January 2022. FI reported that the INF SP testing and updates in the system were carried out according to the Commission updates. Finally, LV, LT, NL, and SK reported no IT activities at this stage.

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

This project pertains to the required updates and further development of NIS in the Member States, resulting from the implementation of the UCC. The project covers the development of two systems: UCC NIS upgrade and UCC CCI (P1 and P2).

During 2022, the UCC CCI IT project group on P1 held bilateral meetings with 23 Member States. Several among them underlined the challenges and the risks they faced regarding the legal deadline of December 2023 for entering in operation. The Commission committed to monitoring the progress of the Member States' activities and providing assistance where needed. Moreover, the Commission requested from all Member States to provide their latest NPPs by mid-May 2022.

In reference to UCC CCI P1, the final package on the conformance testing (specifications and scenarios) was delivered. The consultation procedure between the forerunner Member States¹⁴⁰ was completed and they started conformance testing activities, thus, marking a major achievement and a milestone in the UCC CCI project.

Concerning UCC CCI P2, the UCC CCI P2 TSS package for R1.0.0 was published for external review on 10 February 2022 and the deadline for comments was foreseen on 24 March 2022. The Member States and economic operators successfully finalised the

¹⁴⁰ ES and FR.

UCC CCI P2 TSS package verification, which was formally approved by written procedure on 17 June 2022. Lastly, the UCC CCI P2 Specifications for Business Statistics package and its appendix were internally reviewed and accepted.

In 2022, the majority of the Member States informed about their current status as 'In Progress' (BE, BG, CZ, DK, DE, EE, EL, ES, FR, CY, LV, LT, HU, MT, AT, PT, RO, FI, and SE) or 'Finished' (IE, HR, IT, and SI). Concerning the current phase, the Member States reported being in operation (BG, DE, IE, HR, SK, FI, and SE), upgrade of the national system (SI), deployment activities (HU), national acceptance testing (MT), design of the national system (BE, CZ, DK, EE, ES, FR, and LV), creation of the national technical specifications (CY and AT) and national functional specifications (EL and LT) or other activities related to this project (IT, PT, and RO). In addition, several Member States conducted activities related to analysis and modelling (BE, BG, DK, DE, EL, IT, CY, HU, MT, AT, SI, and FI), maintenance (BE, BG, DE, IE, HR, IT, SI, SK, and FI) and upgrades (BE, BG, DE, HR, MT, AT, SI, SK, and FI). During the reporting year, CY and AT communicated their preceding phase and indicated developing the national functional specifications.

BG reported that at the end of 2022, preparations for the next upgrade of NIS, which is planned for 2023, were initiated and some of the national requirements were specified in a dedicated meeting. CZ informed that the upgrade of NIS was postponed until 1 December 2024. In June 2022, DK applied for a derogation on UCC CCI P1 and NIS until 31 December 2024. DE reported that the development and maintenance activities of NIS were carried out within the framework of the overall ATLAS system. Moreover, DE reported the alignment of NIS to the UCC DA requirements by the end of the reporting year. EE informed that the development of the UCC CCI project, which started as of August 2022, would be performed in iterations, while the initial part of the national testing took place. EL reported that a call for tender was initiated on 13 October 2022 and a derogation request was submitted. FR informed about the NIS development. IT informed that the national system was upgraded in order to implement all the Hx messages according to EUCDM 5.2 and EUCDM 6.0 for H7. IT also carried out conformance testing activities with the economic operators to detect and correct any identified errors. In addition, IT finalised the analysis, development and deployment of the Simplified Procedures, while ensuring the interoperability of the new system with the other IT National Customs Systems. Lastly, IT started the analysis for the migration to EUCDM 6.2.

LV informed that a new NIS development has been started to implement updates according to the latest version of EUCDM and UCC CCI. LT reported that a draft for the iMDAS Client Specifications was prepared in accordance with EUCDM and shared with other units to be aligned with the preparation activities for the updated National Tax Calculation and Validation System (MAPS). MT informed that AIS was being developed internally by MT's Information Technology Agency. AT reported that the national tender procedure for the core systems was issued and the national project organisation was aligned. SI informed that SIAIS2 was harmonised with Annex B to the UCC DA and UCC IA and was put into operation on 1 January 2022. Subsequently, SIAIS2 was upgraded based on the users and customs officers' suggestions and thus, the minor system errors identified were eliminated. SK informed about its ongoing work to harmonise the system with the revised Annex B to the UCC DA and UCC IA. FI reported that new versions of NIS were under development. FI further informed that due to emerging issues concerning the recruitment of new personnel in the supplier domain, a derogation request was submitted for UCC CCI. However, later during the reporting year, this derogation was withdrawn to be re-examined. SE informed that some parts of the project were in

operation, while others were still under development. NL and PL did not report IT activities at this stage.

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.

Nonetheless, in February 2022, the development of the CUP-MIS data warehouse was completed, while the conformance testing activity for the data warehouse reports continued. In April 2022, CUP-MIS v1.0.1.2 was deployed. Lastly, in December 2022, the development of the item/declaration conversion regarding the data warehouse was finalised.

During 2022, some Member States informed about their current status as 'In Progress' (BG, DK, CY, and LV), 'On hold' (MT, PT, and SK) or 'Finished' (EE, IE, ES, and SE). Concerning the current phase, most of the Member States (BE, CZ, DE, EL, FR, HR, IT, LT, HU, NL, AT, PL, RO, SI, SK, and FI) reported no activities and no specific status for this project. DK, EE, IE, LV, and SE communicated being in operation, while CY reported analysing the national user requirements. BG, ES, MT, and PT reported status 'Other'. IE also informed about carrying out maintenance activities.

BG reported that activities within the CUP-MIS project group were conducted during the year. DK informed about the quarterly and yearly submission of CUP-MIS indicators into the system and its participation in a workshop organised by the Commission on the use of the CUP-MIS system. IE performed analysis and collected the necessary data for CUP-MIS. LV worked on system testing and error identification. RO reported using the CUP-MIS IT tool developed by the Commission.

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

The UCC PoUS system is a new TES system designed to store and manage the electronic T2L/T2LF¹⁴¹ documents and CGM. This project was re-launched in 2019. The approach taken on the system architecture involved a centralised system (under a hybrid approach). The central component of UCC PoUS includes a Back-Office (BO) module where proofs are processed by the customs office and an STP for the submission of proofs by economic operators. The national administrations of the Member States would choose either to use the central system or to develop a national system, which would interface with the central one. The Commission adopted a two-phased approach to developing the UCC PoUS project. The first phase consists of 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 EMSWe.

In 2022, the project group on UCC PoUS advanced considerably in the elaboration and development of the two-phased approach of the system. Within the framework of the project group, regular webinars with the Member States were organised to discuss the development of the central system and the advancement of the national components.

¹⁴¹ 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).

The development of the first part of the UCC PoUS BO module for P1 was completed and installed in a conformance testing environment in January 2022 and included 70% of the functionalities. The remaining 30%, along with STP and the S2S interconnection, were nearly finalised by December 2022 and are expected to be delivered in early January 2023. During the course of the above-mentioned webinars, the Member States reviewed and commented on the BO and STP that were provisionally installed in a sandbox environment to test their functionalities, allowing for early identification of needed improvements. Data concerning the Member States T2L(F) volumes and capacity planning were also collected via a survey.

Alongside the IT development, the L2-L3-L4 BPMs were updated and implemented according to the 59 RfCs registered and analysed in 2021. The related external review was launched in May 2022 and formally accepted by the ECCG in September of the same year. The changes in Annex B to the UCC DA related to UCC PoUS (E1 column T2L/F) that were proposed and discussed in the previous year were implemented in 2022; however, the relevant updates to the system will be performed in 2023.

Concerning the preparation of the UCC PoUS P2, the analysis activities for elaborating the CGM service specifications started in May 2022. The CGM use case specifications for the BO and STP were finalised and published for review by the Member States. As a result of the work on the technical implementation and legal discussions, a change management activity was undertaken to align the FSS. In 2022, a misalignment between the deployment dates of UCC PoUS P2 and EMSWe was observed. Considering that UCC PoUS is expected to receive a considerable volume of CGM through the EMSWe system, the final deployment date has been postponed from June to August 2025 to adapt to the EMSWe planning and avoid unnecessary burdens for the economic operators.

In relation to the development choice, 25 Member States decided to use the central system, while two Member States (ES and PL) opted for developing a national PoUS system. Considering the challenges faced by the Member States for the implementation of the e-Customs systems, a six-month extension was granted to the Member States that will use the central system, bringing the deadline to June 2023.

In 2022, several Member states informed about their current status as 'In Progress' (BE, BG, CZ, DK, EE, IE, ES, FR, IT, CY, HU, MT, PL, SI, FI, and SE), 'On hold' (PT, RO, and SK) or 'Finished' (AT). Concerning the current phase, the Member States reported being in conformance testing activities (DK), national acceptance testing (MT), design of national system (CZ, HU, and PL), creation of the national technical specifications (FR, IT, and AT) and national functional specifications (EE), analysis of the national user requirements (DE, EL, and FI) or other national activities (BE, BG, IE, CY, PT, RO, SI, and SE). In addition, some Member States conducted activities related to analysis and modelling (BE, CZ, DK, EE, IE, ES, FR, IT, AT, PL, and SI) and upgrades (ES). During the reporting year, two Member States communicated their preceding phase and indicated being in conformance testing activities (ES) and developing the national user requirements (FR).

BG and EE reported their participation in UCC PoUS webinars organised by the Commission. FR focused on the implementation of the risk analysis. HR analysed the development of the services that need to be implemented by a national PoUS Risk Analysis System to have an S2S communication with the PoUS BO application for the risk analysis interactions. IT reported activities for UCC PoUS P1. PL carried out an analysis on the UCC PoUS documentation prepared by the Commission and developed the National System Requirements Specifications. RO did not foresee to develop a national PoUS system due to the reduced number of documents issued in the country.

Therefore, RO would use the central system developed by the Commission. SE would also use the UCC PoUS system. Lastly, some Member States reported no IT activities at this stage (LV, LT, NL, and SK).

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

EMSWe aims to improve maritime transport administrative procedures by introducing an SW for reporting formalities for ships to harmonise processes and data exchange with the economic operators. Following the EMSWe Regulation (EU) 2019/1239¹⁴², the system is foreseen to be operational by 15 August 2025.

Throughout 2022, several joint meetings took place between DG TAXUD and DG MOVE to progress on the implementation of the EMSWe Regulation and the related customs aspects. With regard to the drafting of the EMSWe DA, the software tool GEFEG.FX¹⁴³ was used to prepare and maintain EUCDM, therefore, facilitating the building of the EMSWe data set aligned with EUCDM. The consolidated v0.11 of the EMSWe data set included part A and part B data elements stemming from the EU and international legislations. In contrast, part C represented data elements stemming from the national legislations. Therefore, a harmonised data set was mapped with Annex B to the UCC DA and UCC IA. Particularly for part C, the Member States' additional contributions and clarifications were discussed among the Member States' experts during the CBG meetings and bilateral meetings. The DA¹⁴⁴ containing the EMSWe data set was approved in the fourth quarter of 2022, whereas the IA¹⁴⁵ was submitted for opinion at the DTF Committee and was adopted in the third quarter of 2022.

Furthermore, DG TAXUD and DG MOVE collaborated internally with: (a) the PoUS team on CGM, (b) the AES team on the three exit formalities, namely the EXS, the re-export notification and the exit notification (foreseen under the EMSWe Regulation), and (c) the ICS2 team as regards UCC AN. Lastly, DG MOVE continued its work on the EMSWe Message Implementation Guide (MIG), which would contain messages to be exchanged in the S2S communication between declarants and the Maritime Single Window (MSW).

In 2022, the Member States informed about their current status as 'In Progress' (BE, BG, DK, IE, HR, CY, MT, FI, and SE) or 'On hold' (EE, PT, and SI). Concerning the current phase, some Member States reported designing the national system (FI and SE), analysing the national user requirements (BG, IE, and MT) or carrying out other activities (BE, DK, EE, HR, CY, PT, and SI). In addition, some Member States conducted activities related to analysis and modelling (BE, BG, IE, MT, and FI).

BG informed that the development of the MNSW application would be undertaken by the Bulgarian Ports Infrastructure Company (BPI Co.) according to the Bulgarian Law on Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria. BG also informed that the Bulgarian Customs Agency and BPI Co. had a cooperation agreement to establish an MNSW environment. The customs authority coordinated all customs-related matters with BPI Co. and provided some technical specifications for the integration between the National Customs System and MNSW. However, as BG

¹⁴² 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](#).

¹⁴³ [GEFEG.FX](#) is an eBusiness Interface Design supporting the definition, modelling, validation, harmonisation and organisation of interfaces with extensive functions.

¹⁴⁴ In this case, the DA is part of the tertiary legislation in relation to the [EMSWe Regulation](#).

¹⁴⁵ In this case, the IA is part of the tertiary legislation in relation to the [EMSWe Regulation](#).

reported, this integration had no impact on the business processes in the National Customs System. For the integration of the latter with the MNSW environment, BG carried out an analysis on the national user requirements and design of the necessary changes. Lastly, the S2S communication, common user registry and access control system were tested. DK informed that it was yet to be clarified whether the Danish Customs Agency would be the national administrator or project owner of this project. However, since the project had integrations to the National Customs System domain, the interaction and interfacing with the current and future setup in the customs system domain was being assessed to secure that the latter could support the strategy and goal for EMSWe, as laid out by the Commission. To this end, DK reported being in an ongoing dialogue with the Danish competent authorities.

DE informed that as it was necessary to establish the EMSWe data set, DE customs contributed with the definition of part C data elements used at the national level. EE and SI attended the related webinars organised by DG MOVE and informed that the development of the national system has not yet started. MT would use the central system developed by the Commission. FI informed that the MNSW application would be developed by an authority other than customs. The application would also have interfaces to FI's Customs Declaration System. Lastly, several Member States reported no IT activities at this stage (CZ, EL, ES, FR, IT, LV, LT, HU, NL, AT, PL, RO, and SK).

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 Commission play an active role in their development.

1.3.1 EU Implementation of United Nations Economic Commission for Europe (UNECE) electronic International Road Transports (eTIR) System (3.1)

The eTIR system aims to secure electronic data exchange between National Customs Systems related to the international transport of goods covered by TIR Carnets (TIR Convention¹⁴⁶). This project was launched by the contracting parties of the TIR Convention under the auspices of the UNECE to provide an exchange platform for all actors involved in the TIR system, including customs authorities, the guarantee chain and transport operators.

Subsequent to the approved solution in the Business Case, the eTIR project will be moved under UCC NCTS and a new phase for UCC NCTS-P7 will be created, which will include the NCTS-eTIR international system interconnection. The planning and expected IT architecture, including the development and operation method, will be defined.

During 2022, the Member States informed about their current status as 'In Progress' (BE, DE, HR, CY, and FI) or 'On hold' (BG, CZ, EE, MT, PT, and SK). 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 electronic Temporary Admission (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 (e.g. economic

¹⁴⁶ The [TIR Convention](#) refers to the Customs Convention on the International Transport of Goods under cover of TIR Carnets and was drafted in 1975.

operators, chambers of commerce and customs administrations) involved in the temporary admission of goods procedure in various countries or customs territories. The project aims to replace the current paper-based ATA Carnet with a global eATA Carnet system.

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 the 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, ICC WCF is currently implementing a system to replace paper-based ATA Carnet modalities using a digital solution called 'Mercury II'. During 2022, the eATA Carnet project was at its development stage, which included the involvement of EU Member States and third countries in several pilot projects. The business-related activities included support and service optimisation, customs implementation and training of the National Guaranteeing Association (NGA). Since October 2022, a light issuance platform, the ATA Gateway system, was made available for those NGSs and issuing associations not intending to integrate their systems into the eATA Carnet system. In November 2022, the ICC WCF published the global transition plan, containing a proposal for the Member States' transition.

The Commission's activities for the implementation of the eATA Carnet system included the organisation of dedicated meetings within the CBG framework with the invitation of third countries and the ICC WCF, promoting the Member States' participation in the pilot phase, sharing the results of the pilot projects to support other contracting parties and promoting the adoption of the eATA Carnet system. To this end, a dedicated survey was published in 2022 to obtain information on the Member States and third countries' planning, project managers' details, current ATA Carnet volumetric and offices involved in the ATA transactions. Another essential activity was the evaluation of the ICC WCF eATA Carnet system's security standards, carried out in cooperation with the Member States. In February 2022, a review cycle on the above-mentioned evaluation was launched, and following the Member States' feedback, a final version was approved in July of the same year.

In 2022, the Member States informed about their current status as 'In Progress' (DK, EE, CY, AT, FI, and SE), 'On hold' (MT, PT, SI, and SK) or 'Finished' (BG). Concerning the current phase, EL and HU reported being in conformance testing activities, while HR, AT, FI, and SE reported focusing on the analysis of the national user requirements. Seven Member States reported on other activities (BG, DK, EE, MT, PT, RO, and SI). In addition, three Member States reported carrying out activities related to analysis and modelling (DK, HU, and AT).

DK reported its participation in two CBG meetings dedicated to the eATA Carnet system. Furthermore, DK informed that at the end of 2022, a national project group on the eATA Carnet system was established, whereby a preliminary analysis of the project was performed. DE announced that they followed the project-related activities, namely the pilot system from the ICC WCF and the WCO on eATA. EL informed about its collaboration with the National Chamber of Commerce. AT participated in all the EU

workshops, while FI attended all related meetings organised by the Commission. No additional activities were initiated from the Member States during the reporting year.

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

SSTL is a pilot project between the EU (BE, DE, ES, FR, IT, NL, PL), UK, China, and Hong Kong 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, China, and Hong Kong customs authorities and internal exchanges between the Member States and 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 2022, the Member States informed about their current status as 'In Progress' (ES and HU) and 'On hold' (DK, EE, FR, MT, PT, and SK). As regards the current phase, ES focused on upgrading the national system, while FR reported the analysis of the national user requirements. Six Member States reported other activities (CZ, DK, EE, HU, MT, and PT). ES performed operational activities related to the 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 the Member States and to accelerate the technological development of EIS.

1.4.1 National Systems Implementation by IT Collaboration Projects (4.1)

Within the context of an IT Strategy for implementing the UCC and e-Customs initiatives, a new working method was developed at the EU level already in 2018, which is depicted in the joint efforts of the Member States towards building common EU components for National Customs Systems. ETCIT was launched in 2018 following the Tallinn Declaration on eGovernment¹⁴⁷ and concluded two iterations since its inception. 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 ETCIT III throughout 2022. Led by NL, the 15 participating Member States (BE, CZ, DK, DE, EE, IE, FR, IT, CY, LT, LU, MT, NL, PT, and SE) cooperated towards the objectives agreed in the Council Conclusions on the way forward to developing customs IT systems¹⁴⁸, by studying new approaches, analysing the legal and governance framework, providing possible options for launching pilot projects and exploring new or alternative possibilities for financing the future development and operation of customs IT systems. The main purposes of ETCIT III were to share knowledge and initiatives among the Member States, build on the achievements of the previous two phases to advance the possibilities of IT collaboration

¹⁴⁷ [Ministerial Declaration on eGovernment – the Tallinn Declaration](#)

¹⁴⁸ [Council Conclusions on the way forward of developing customs IT systems](#)

further, support pilot projects and identify future IT collaboration activities and exploit the established ETCIT methods of cooperation.

The ETCIT III activities started in April 2022 and are expected to conclude in October 2023. The Member States reaffirmed their interest in collaborating in areas beyond those defined in the MASP-C Revision 2019 and continued working on the pilot projects launched in the previous ETCIT iterations, such as UCC PN/TS and DiG. In addition, ETCIT III launched a new initiative called 'CIO Network', aiming to set up and maintain a network of key stakeholders in the customs IT field. The newly created CIO Network was established under the Customs Programme 2021–2027.

Other pilot projects focused on collaboration around the national systems in the areas of import, export and transit, legal and procedural constraints in addition to practical collaboration perspectives. More precisely, the Member States participating in the UCC PN/TS pilot project (BE, FR, MT, and SE) advanced in defining the business context, use cases and message specifications, validating the non-functional requirements and testing the application. The following components were developed: presentation notification, temporary storage, goods accounting and re-export notification. Concerning the DiG pilot project, the ETCIT III activities in 2022 focused on drafting the Business Case, the TSS and functional requirements.

During 2022, most of the Member States (BE, BG, CZ, DE, EE, IE, EL, ES, FR, HR, IT, CY, LV, LT, HU, NL, AT, PL, RO, SI, SK, and FI) reported no specific status and activities for this project. Some Member States informed about their current status as 'In Progress' (DK, MT, and SE) or 'On hold' (PT). DK, PT, and FI reported participating in the ETCIT working group activities.

1.4.2 Common Communication Network 2 (CCN2) (4.5)

The CCN2 project is the evolution of the current CCN architecture and services. The CCN/CSI operational infrastructure consists of a closed, secured network infrastructure provided by the Commission to facilitate the exchange of information between the national administrations of the taxation and customs areas. CCN2 applies a Service Oriented Architecture (SOA) approach 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 the shared services capabilities.

In 2022, a more agile release management approach was followed, consisting of a shorter release lifecycle to achieve a better and faster alignment with the business needs. CCN2 R2 came into operation in March 2022, whereas the testing for CCN2ng R2.1, which was rescoped and dedicated to Oracle Identity and Access Management (IAM) upgrades, was ongoing during June 2022, and the production phase started in November of the same year. CCN2ng R2.2 was in the construction phase during the first quarter of the reporting year, the testing and deployment phase began during the second quarter and the entry into operations was in November 2022. This release was reassessed and addressed the necessary improvements needed to comply with the Gold availability level. Furthermore, the elaboration of the system specifications for CCN2ng R3 started during the fourth quarter of 2022. During the reporting year, a bridge between CCN2 and SPEED2, which allows the national administrations of the Member States to connect to EU CSW-CERTEX through CCN2, was also developed and entered in production in May 2022. The CCN/CCN2 evolution project was 'On hold' and under impact analysis following the recommendations contained in the 'Report by the Wise

Persons Group on the Reform of the EU Customs Union'. In the meantime, evolutions are considered by platform and based on the needs of the Member States.

During 2022, the Member States informed about their current status as 'In Progress' (BG, CZ, DK, DE, FR, HU, AT, PL, PT, SI, and FI) or 'Finished' (EE, IE, HR, MT, and SE). Concerning the current phase, the Member States reported being in operation (BE, BG, CZ, DK, EE, IE, HR, LV, HU, MT, AT, PL, PT, SI, SK, and SE) or designing the national system (FR). DE and FI reported status 'Other'. Furthermore, some Member States reported carrying out activities related to analysis and modelling (BE, DE, FR, HU, MT, and FI), maintenance (BG, CZ, HR, MT, AT, PL, SK, and FI), and upgrades (BE, BG, HR, MT, PL, SK, and FI). During the reporting year, PL communicated its preceding phase and indicated being in upgrade of the national system. FI reported being in the same phase as its preceding phase.

BG informed that the national CCN and CCN2 system components were maintained and operated. CZ reported that CCN2ng was used in conformance and production environments for the CDMS, TP, CRS, CS/RD2, EUCTP, INF SP and ICS2 applications. DE focused on establishing an S2S connection as well as user management, maintenance and support when using central web applications, such as UCC INF SP or CDMS. HR reported supporting the migration to CCN2ng R2.2 at the end of 2022. HR also informed that user management activities were performed in the service operation period of the CCN2 infrastructure (e.g. adding new users or permissions, blocking old or inactive users and changing system passwords). In addition, the IOSS and 'Dispositions d'Application du Code' 7 (DAC7) systems, which entered in production during the reporting year, were connected to the CCN2 network. HR further reported that in October and November 2022, a VPN backup solution was performed for the CCN and CCN2 networks, in collaboration with the Commission.

HU reported that the modelling and development of the CCN2 network for the UCC ICS2 R2 communication started in October 2022. HU also participated in the CCN workshops organised by the Commission and followed the new planning and documentation updates for CCN2. PL's activities focused on the CCN2 user management, tests and configuration tasks for the local network. PL reported that the main encountered issues related to the considerable number of users in the UCC INF SP system, while additional problems emerged from the last update of the CCN2 network to v2.2.0. More concretely, the connection of the latter to Oracle's Identity and IAM encountered multiple issues. Nevertheless, all problems caused by the unavailability of the IAM tool were resolved in November 2022. Additionally, PL informed that the main activities of the CCN2 national project team included the participation in the CCN meetings organised by the Commission and ITTIG, the execution of CCN2 training activities and the CCN2 monitoring for partner countries. FI reported other activities related to CCN2, with a focus 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 with a unified access to a single interface for 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 CDS, UCC 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.

The activities during 2022 focused on UCC UUM&DS R2.2, which is critical for the two-factor authentication process and supports the migration to OpenID Connect, Kafka and type D migration to the EU Login. The conformance testing was carried out in January 2022, and R2.2 was deployed in production in March 2022. The development of UCC UUM&DS R2.3 was completed in January 2022 and came into operations in August 2022. It covered the migration of the Member States' nodes to the electronic Identification, Authentication and trust Services (eIDAS) v2.5 components, thus, increasing the security level of the authentication communication flow. The development phase of UCC UUM&DS R2.4 proceeded alongside the work on the aforementioned releases and was deployed in production in November 2022. In the UCC UUM&DS R2.4, the previous UUM&DS Member States' nodes were replaced by the native standalone eIDAS nodes with exclusive local hosting. Additional features included simplifications in the certificate registration. The first half of 2022 was also dedicated to developing UCC UUM&DS R2.5 and the Site Acceptance Testing (SAT) was performed in December 2022. This release introduced the extended cross border delegation allowing employees who represent their companies to create and use the delegation in a more flexible manner. In addition, the building of UCC UUM&DS R2.6, R2.7 and R4.0 was initiated in the last quarter of 2022, and the SAT for UCC UUM&DS R3.0 was executed in the same period.

In 2022, the Member States informed about their status as 'In Progress' (BG, DK, DE, EL, HR, IT, HU, MT, PL, PT, SI, and FI) or 'Finished' (CZ, EE, FR, LT, and SE). Concerning the current phase, the Member States reported being in operation (BG, CZ, DK, EL, FR, HR, IT, LT, PT, SI, SK, and SE), upgrade of the national system (PL), deployment activities (EE and FI), conformance testing activities (DE and HU) or design of the national system (MT). In addition, several Member States reported carrying out activities related to analysis and modelling (BG, DE, HU, MT, PL, and PT), maintenance (BE, BG, EL, HR, IT, HU, MT, PL, PT, SI, SK, and FI) and upgrades (BE, BG, EL, HR, IT, MT, PL, PT, SI, SK, and FI). During the reporting year, three Member States communicated their preceding phase and indicated being in operation (PL), upgrade of the national system (PT) or national acceptance testing (DE).

BG reported the analysis and modelling of the Oracle's Business Critical Assistance (BCA) IAM upgrade for the UCC UUM&DS R2.3 and R2.4 capabilities. BCA IAM was successfully upgraded to the last version of NetIQ Access Manager and NetIQ Identity Manager capabilities and entered in conformance testing environment. CZ reported a delay in its migration to UCC UUM&DS Admin External (EXT)/Internal (INT), which was planned for 2023. DK provided comments on the documentation of UCC UUM&DS R2.4 and R2.5 and started the preparation activities for the alignment of UCC UUM&DS with the national IAM. EE deployed UCC UUM&DS R2.3 and analysed the national technical specifications for UCC UUM&DS 2.4 and the national requirements for R2.5. FR reported finalising the conformance testing activities in Mode 2 for UCC UUM&DS R2.0 and starting to analyse the UCC UUM&DS R2.1 integration. HR focused on the implementation and whitelisting of algorithms as a prerequisite for developing UCC UUM&DS R2.3 and R2.4. In addition, HR participated in UCC UUM&DS meetings, workgroups and webinars organised by the Commission.

LT reported that subsequent to the upgrade of the national UUM&DS Common User Management Portal (BAP), the following changes were introduced: (a) an extension to the automated registration process for a legal entity was implemented, (b) the BAP security level was increased, (c) the creation of a certificate of short-term validity was carried out, and (d) the integration with the State Information Resource Interoperability

Platform (VIISP) was extended, covering the use of the e.Resident¹⁴⁹ code for logging into the system. HU provided support to the economic operators in the use of the system. PL upgraded UCC UUM&DS R2.3, which necessitated changing the national system's configuration of the current hashing algorithm. PT performed an error screening in the economic operators' access via the national UUM&DS sub-domain. SI performed maintenance in conformance and production environments (e.g. new certificate installation) and started the analysis of UCC UUM&DS R2.4. FI informed that although UCC UUM&DS R2.1 was tested and operational in the conformance environment, it could not enter in production due to security issues in the connection to the UCC UUM&DS PDP. Furthermore, FI upgraded the national solution also to accept non-Finnish EORI numbers. The UCC ICS2 automated testing encountered some issues, given that the UCC UUM&DS national testing environment did not allow access to the economic operators. A few incidents in the production environment prevented the economic operators from accessing EUCTP. Lastly, several Member States reported no IT activities at this stage (BE, IE, ES, CY, LV, NL, AT, RO, and SE).

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. The Bronze service level is the default availability offering of 99.4% and has been ensured since 2015. The Silver service level reflects the maximum capability of 99.6% that was in place up to the third quarter of 2022. The Gold service level, meaning 99.8% availability, was enabled in November 2022 after the successful finalisation of an IT business continuity disaster recovery exercise, which proved the high resilience of the electronic systems.

In 2022, the EU electronic systems achieved a high availability of 99.80%, a value above the aggregated target set at 99.65%. In addition, the centralised customs applications had an average availability of 99.04%. The availability of the systems in production (ITSM-operated systems, the CCN/CSI network and the CCN production services) was 99.98%. More specifically, the availability of the CCN/CCN2 was 99.49% (99.98% for CCN and 99% for CCN2), a value slightly lower than the target set at 99.8%, which was the result of several planned unavailability for installing patching or fixing problems and some unplanned unavailability due to network issues.

During 2022, two Member States informed about their current status as 'In progress' (BG and MT) and one Member State as 'On hold' (PT). Concerning the current phase, BG reported being in operation, while MT and PT reported status 'Other'. BG informed that an effective availability rate according to SLA for all TES systems was provided.

1.4.5 Maintenance and Updates of Operational IT Systems (4.8)

This section provides an overview of the TES' operations in 2022, including the error rate evaluation and system availability. The figures presented in this section depict the

¹⁴⁹ e.Resident is a status and an identification granted by the Migration Department under the Ministry of the Interior of the Republic of LT to the foreigner who seeks to use administrative, public or commercial electronic (remote) services provided in the Republic of LT.

evolution of the message volume exchanged in the common domain within a specific timeframe.

This section places emphasis on the UCC NCTS, UCC ICS and UCC ECS operations and maintenance in the 2022 national progress report of these systems. The vast majority of the Member States reported ongoing maintenance and enhancements of the operational systems. Among the maintenance activities carried out, the analysis of RfCs and the implementation of the KELs were the most common.

1.4.5.1 UCC New Computerised Transit System (NCTS-P4)

In 2022, UCC NCTS had an average availability of 99.64%. 14.9 million transit movements were released, indicating an increase of 5% compared to 2021. **Figure 22** depicts the evolution of movements since 2014, the average number of which reached 59,222 per business day. In addition, the total number of messages exchanged in the common domain was approximately 83.2 million, a 4.95% decrease compared to 2021, after relative stability between 2017–2020 and a significant increase in 2021. The quality of operations was stable throughout the year, despite some increase in the error rate, which was caused by some temporary issues experienced by FR with no business impact on the national administrations. The average yearly error rate was 0.25%, representing a minor increase compared to the 2021 value (0.22%), and this was due to some scheduled and unscheduled unavailability events and temporary issues throughout the year.

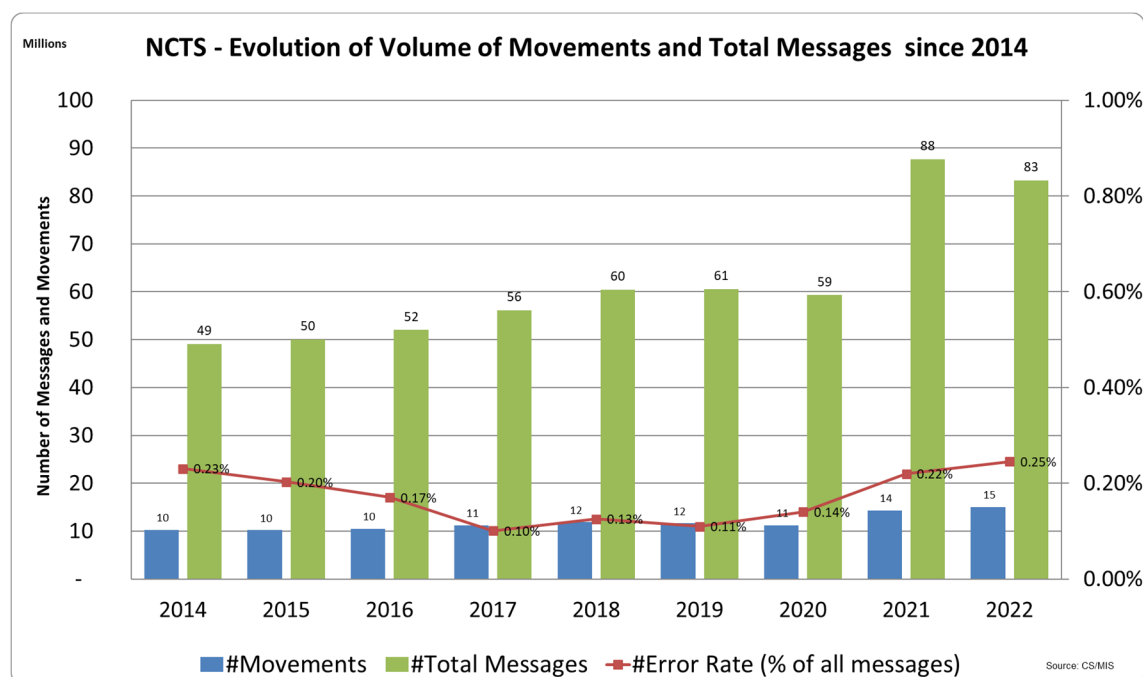


Figure 22: UCC NCTS – Volume of movements, total messages and error rate per year since 2014

1.4.5.2 UCC Export Control System (ECS P2)

By the end of 2022, the UCC ECS system had an average availability of 99.78%. The quality of operations was satisfactory, with approximately 105.1 billion movements initiated, representing a slight decrease of 4.37% compared to the previous year. The same decline (4.37%) was also encountered in the total number of indirect export

movements released, which amounted to approximately 21.6 billion¹⁵⁰. The total number of messages exchanged on the common domain decreased by 9% compared to the previous year, reaching over 62 million. The evolution of movements depicted in **Figure 23** illustrates that the number of the UCC ECS messages exchanged annually between the Member States in the common domain grew by 69% from 2014 to 2022. The error rate in 2022 has slightly decreased from 0.24% to 0.21% and was mainly due to temporary issues. Namely, in May 2022, the error rate reached 0.27% as a consequence of a high number of messages sent by FR with an incorrect code value and also because of rejections sent by DE and FR to follow up on old movements. The highest error rate was experienced in December 2022 (0.29%) due to a high number of messages with an incorrect code value sent by the national administrations to FR and a high number of messages exchanged between IT and LT containing an element not supported.

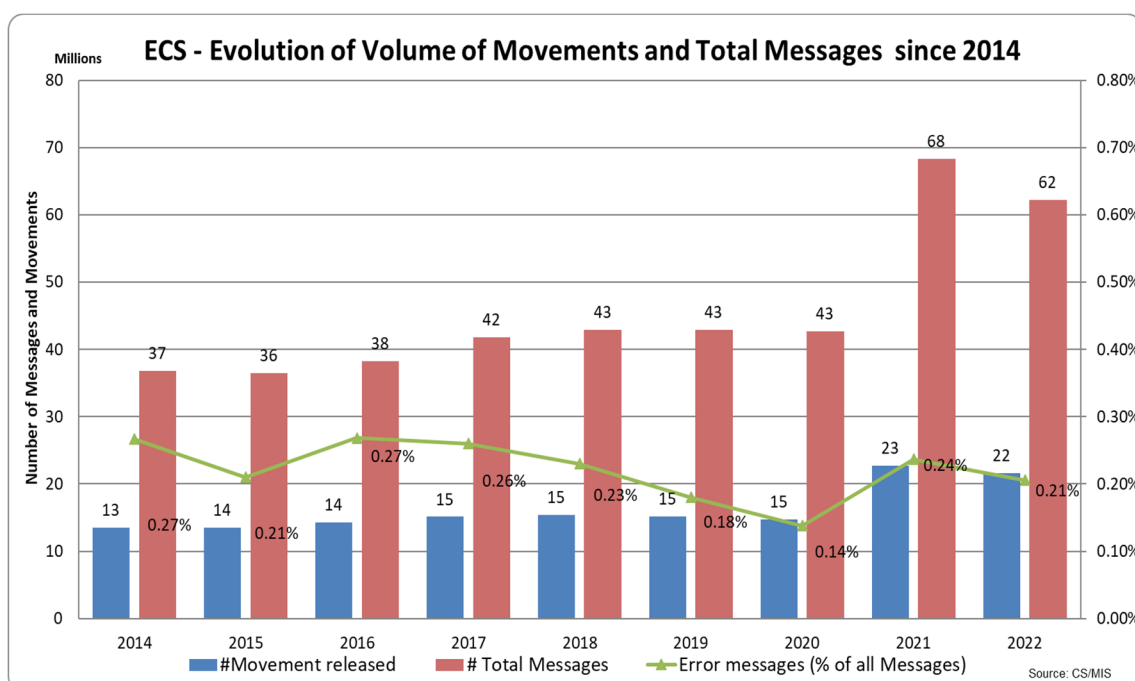


Figure 23: UCC ECS – Evolution of movements, total messages and error rate per year since 2014

1.4.5.3 UCC Import Control System (ICS P1)

An excellent quality of UCC ICS operations was observed in 2022. The global availability rate of UCC ICS was 99.61%. As depicted in **Figure 24**, approximately 81.4 million ENS were lodged in the EU in 2022, with a slight increase of 0.16% compared to 2021. 80% of the total ENS were submitted for air transport and about 68% were lodged in BE, DE, EL, and ES collectively. The average error rate in 2022 was 0.01%, showing a decrease compared to the 2021 value (0.07%) and confirming the stability and quality of operations.

¹⁵⁰ ECS Common Domain messages duplicated by DG TAXUD to OLAF were excluded from the calculations.

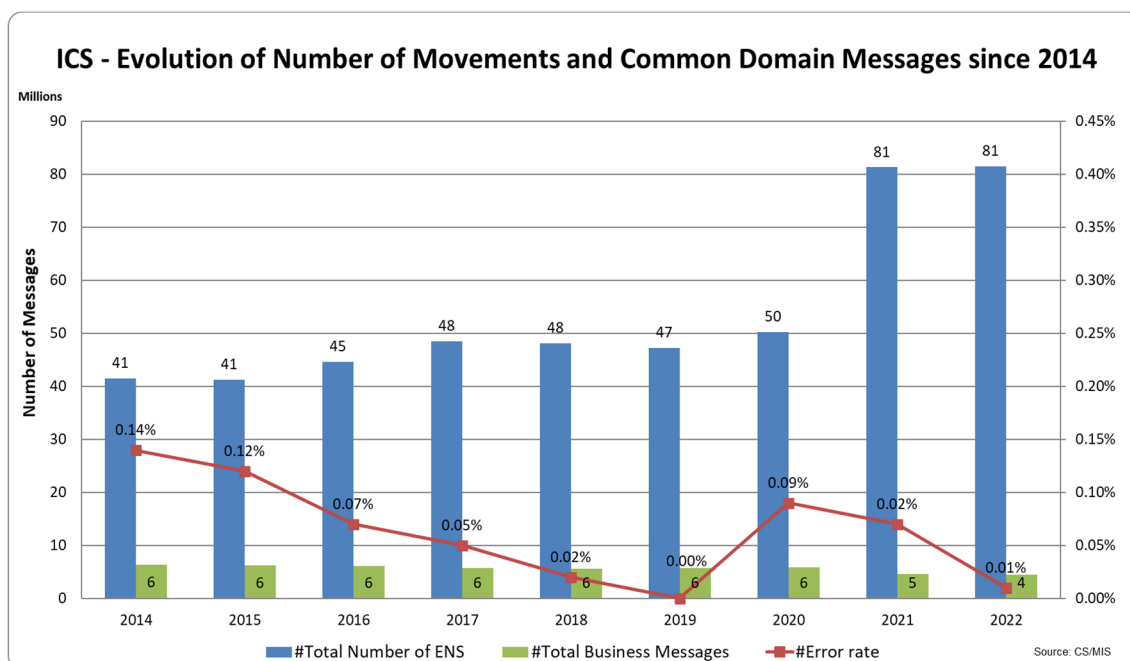


Figure 24: UCC ICS – Evolution of number of movements, total business messages and error rate per year since 2014

1.4.6 IT Business Continuity (4.9)

IT business continuity focuses on IT service continuity management, which aims at reducing the risk and containing the impact of IT disaster events that could negatively affect the IT services. Within the framework of the DG TAXUD's business continuity plan, the IT BCMS was revamped in 2020 and is currently in its third phase. The objective is to ensure that the Commission's investments in preparedness during the previous years are effectively translated into recoverability when required, in alignment with its business aims and priorities. In this respect, the IT BCMS is aligned with all other existing levels of business continuity management arrangements and considers all the interdependencies within the Commission's complex ecosystem to meet its stakeholders' IT service continuity needs efficiently.

The IT BCMS is based on three pillars: (a) procedures and activation criteria in case of IT crisis, (b) development of technology that supports the IT system continuity, and (c) personnel preparedness. The above-mentioned three pillars are grounded on the initial analysis of the IT systems criticalities and the subsequent definition of standardised continuity and availability levels. More specifically, the criticality level of each IT system was initially analysed as defined by the business needs. The IT systems were assigned a 'critical', 'essential' or 'unclassified' criticality level on these bases. Consequently, each system was given a standardised availability level (Gold, Silver, Bronze and Best Effort) based on their criticality. Relevant technology investments were made to ensure the defined availability levels.

In 2022, the IT BCMS project focused on achieving the 'Gold' availability level, which entailed the following arrangements: (a) the development of an IT infrastructure that supports the 'Gold' availability level, (b) adjustment of IT applications and platforms to include 'built-in' features to support the availability levels required, (c) the achievement of a solid response structure via 24x7 mechanisms, (d) monitoring, managing and controlling the IT systems through SLA with third parties operating the IT systems according to the 24x7 mechanism, (e) the development of disaster and recovery plans

for all the IT systems, and (f) the creation of an IT service continuity dashboard to monitor progress in IT continuity and availability arrangements. Furthermore, particular emphasis was placed on personnel preparedness by (a) ensuring that all the involved IT staff is trained every year, (b) setting up an IT duty officer roster, (c) defining a communication plan with contact points of the IT staff and third parties, (d) regularly updating the IT crisis management structure with a clear definition of roles and responsibilities, (e) creating a document repository, and (f) verifying the preparedness and response capability of the IT systems through tests and exercises.

In this regard, the annual disaster and recovery exercise was conducted in November 2022 and involved all the DG TAXUD data centres. The activity consisted in moving all virtual machines, platforms and IT systems from the primary to the alternate data centre and then switching back to the primary. During the exercise, 657 virtual machines, seven platforms and 139 IT systems were moved, including 90 Oracle databases. The switchover included network, firewalls and storage for a total of 1,4 petabytes. The overall process lasted 6 hours for the switchover and 6 hours for the switchback. During the exercise, the IT systems remained available for operations, which proved the resiliency of the Commission IT ecosystem.

During 2022, MT informed about its current status as 'In progress' and PT as 'On hold'. Other 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 reported on three national projects. As regards the national Control Task Management System (TOTS2), EE informed about its division into three phases. The first phase was finalised during the reporting year, while the second and third phases are expected to be completed in 2023. In particular, in 2022, EE performed conformance testing activities for the initial phase of the TOTS2 project, organised pertinent analytical meetings with the developer and analysed or tested connections to other customs applications. Additionally, concerning the national Tariff system, EE reported that TARIC measures and modifications were introduced. EE further participated in TARIC meetings organised by the Commission. Finally, in relation to the Cash Control System, EE informed that an upgrade was performed during the reporting year.

LV maintained and improved the national Electronic Customs Data Processing System modules, containing UCC ICS, UCC ECS, Trade Customs Solutions (TCS), electronic cargo Manifest/Trading Services (eMan/TS) and UCC EORI.

NL informed about the ongoing studies of its Financial and Control Directorate on the possibilities to align the financial and/or project administration with the customs requirements. NL further reported that due to the different departmental priorities, some MASP-C projects (e.g. UCC ICS2 and UCC AN/PN/TS) would be jointly delivered by one national project, while others (e.g. UCC CDS) would be divided into more than one national project. In addition, some projects would also support the national requirements.

AT informed that other activities included the planning, implementation and deployment of the modernised risk management processes for UCC ICS2 R2.

PL informed about the creation of RfCs for the Customs and Excise Message Broker system and the Integrated Tariff Information System (ISZTAR4). More specifically, two RfCs were created for the Customs and Excise Message Broker system. The first one suggested support for additional CCN2 functionalities to ensure communication with UCC CCI. The second one concerned the development of a message translator for the

external domain and a message broker for both the external and common domains for UCC AES and UCC NCTS, in alignment with DDNXA 5.14.0 and DDNXA 5.15.0. In addition, four RfCs were created for ISZTAR4. Namely, one RfC was for developing a JavaScript Object Notation (JSON) Application Programming Interface (API) to enable external users to retrieve nomenclature codelists, code descriptions of tariff and non-tariff measures, and quota details. The second RfC was for removing vulnerabilities found during the security audit, while another RfC was for implementing additional data elements available for users, including adding new API services. The fourth RfC was for implementing changes in the Tariff Calculator according to the NIS requirements.

SE reported being in progress and creating the national technical specifications for the Accounting System as well as entering in operation of the Risk Analysis System.

1.6 Supporting activities

One of the objectives of the EU Customs Union in the area of e-Customs is the support for cooperation between the different customs administrations of the Member States at the 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 2022, the Member States and Commission continued their activities related to trainings 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 actively promote the use of supporting application tools to ensure the effective coordination of the e-Customs projects and the communication between the EU and the Member States. CIRCABC, PICS and ARIS Publisher are the primary supporting tools developed to enhance information-sharing and optimise the business processes.

CIRCABC is a web-based application employed by the Member States, the Commission and other stakeholders as a private workspace for sharing information and resources and revising documents. CIRCABC is a multilingual and multi-format platform offering a high level of security owing to the two-factor authentication access through the EU Login, the Commission's unique authentication service. Other features of CIRCABC include translation management, multilingual search, scheduling of events and meetings, discussion forums and accessibility for users with disabilities. The platform is actively maintained and regular updates are introduced to enhance its features and functionalities. In this respect, CIRCABC version 4.2.2.2 was published in December 2022.

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. Following a user survey that indicated the need for a more intuitive and accessible interface, a new version of PICS was elaborated in 2022.

In 2022, the number of groups on the online collaborative platforms was 247, out of which 208 related to 'customs domain' groups and 39 to 'other'. A clean-up exercise was

performed during the reporting year, not significantly impacting the number of active groups, which slightly increased from the previous year. The number of active users on the online collaboration platforms was 780, out of which 675 related to groups devoted to customs while 105 groups were classified as 'other'. The active users included customs and Commission officials, international organisations representatives, external contractors and economic operators. The number of interactions counted as items created in PICS was 6,555.

ARIS Publisher is a software tool enabling reusability and continuous improvement of the business processes and data. The Member States and economic operators have access to the EU customs BPMs via the platform, which was introduced in 2010 to support the review of the BPM diagrams. In 2022, a transition from ARIS Publisher to ARIS Connect was arranged as the previous platform has been phased out by the software vendor. Moreover, some minor editing and changes in the use of ARIS Publisher were implemented, such as the adoption of the Corporate Architecture (CORA) methodology, as well as the creation of a new Wiki.

In 2022, videoconferencing platforms continued to be exploited significantly to organise meetings related to the implementation of the e-Customs systems. Microsoft Teams and WebEx software were critical tools to enhance the collaboration among the Member States, Commission and economic operators, while addressing the need to reduce the environmental impact of their activities. In 2022, the Interactio application was also successfully used to facilitate remote and hybrid multilingual meetings, thus, enhancing further the Commission's inclusive, accessible and democratic operating methods.

1.6.2 Promotion and other activities

An integral part of optimising customs procedures is the promotion of the e-Customs projects through various activities. In 2022, the Commission pursued its communication campaign concerning the UCC ICS2 implementation. The aforesaid campaign, which included the development of factsheets, a video, publication of social media posts on Twitter and LinkedIn accounts, direct communication to the stakeholders and a press release, was planned to be delivered in two phases. The first phase started in 2021 and aimed at preparing the national administrations and economic operators for the conformance testing activities as well as raising the awareness of potential stakeholders, particularly the economic operators from third countries. The objective of the second phase, which was launched in September 2022 and is expected to be concluded in 2023, was the preparation of the national administrations and economic operators for entering in operation. The campaign entailed social media publications, presentations during trade events, and distribution of information to stakeholder organisations and trade media in all Member States as well as priority markets in third countries. The 2022 campaign resulted in 168 trade, business and general media articles. The aforesaid campaign reached 247 stakeholder organisations and collected 15 million impressions and 3.6 million online video views.

Specifically, the budget was used for the following communication activities: (a) the production of three information factsheets and one animated video in 10 languages, (b) paid advertising on social media (Twitter and LinkedIn), (c) social media communication, including production of visuals and messages, (d) press and stakeholder outreach, and (e) speaking engagements at trade events.

Additionally, the first phase of the communication campaign on the development of UCC ICS2 R3 was finalised during 2022, which aimed at raising the awareness of the directly and indirectly affected stakeholders through informative materials and encouraging the directly impacted stakeholders to prepare for the conformance testing activities for UCC

ICS2 R3. The aforesaid communication campaign will be organised in three phases and the last two are planned to take place in 2023 and 2024. In October 2022, a Commission note was sent to the economic operators to request the latter's feedback on the UCC ICS2 R3 communication activity plans.

As regards the promotional activities on behalf of the Member States, BG reported that information and guidelines for the economic operators on UCC REX were published, adding that seminars with the representatives of customs agencies and economic operators were held.

CZ informed that a special group exists for the implementation of both UCC AES and UCC NCTS-P5, composed of business and IT experts, experts from customs offices, contractors and a helpdesk. Regarding the EU SWE-C, CZ noted that a presentation on NSW was given during the Europe and Central Asia Network (ECA) meeting in Prague/Cheb and a CBG project group meeting.

DK reported participating in promotional activities, including workshops, seminars and working groups on UCC CDS, UCC BTI, UCC AEO, UCC AES, UCC NCTS, UCC REX, COPIS, CRMS2, UCC e-Commerce and CP 42/67, UCC ICS2, UCC AN/PN/TS, UCC SP, CUP-MIS, UCC PoUS, UCC eATA, National Systems Implementation by IT Collaboration Projects and CCN2.

DE communicated that information on the implementation of the UCC requirements with regard to UCC AEO is regularly published on the customs administration website¹⁵¹. In addition, DE confirmed the participation of the CRMS2 users in a workshop organised by the Commission. Regarding UCC SP, meetings took place with the trade community and other UCC INF project group participants. DE underlined that contact with economic operators was established via e-mail in order to resolve any outstanding issues.

EE attended promotional activities for UCC CDS via IT and project group meetings. In addition, training webinars were organised for UCC BTI. Regarding UCC NCTS, EE participated in webinars and trainings organised by DG TAXUD. In relation to UCC EU SWE-C, information on changes was sent directly to the declarant e-mailing list, while pertinent documentation was provided on the taxation and customs website¹⁵². Moreover, EE participated in webinars organised by DG TAXUD and DG MOVE for UCC PoUS and EMSWe, respectively.

EL reported that information on UCC AES was published on the national portal dedicated to the trade community. Moreover, regular meetings were held with the national postal operators with regard to UCC ICS2.

FR organised seminars with economic operators and federations and held working groups with customs experts regarding UCC SP and UCC CCI. Furthermore, technical meetings took place for CCN2.

HR reported regular meetings held for UCC CDS and UCC NCTS-P5. As regards UCC AES, HR noted that workshops took place periodically with the company developing the UCC AES application as well as one seminar organised for the trade community in 2022. Furthermore, with CCN2 already in operation, HR held presentations during seminars, focusing only on specific systems integrated with the network. Lastly, joint meetings, workshops and seminars took place with the business sector representatives to examine the potential usage of the UCC UUM&DS infrastructure.

¹⁵¹ [Customs administration website of DE](#)

¹⁵² [Taxation and customs website of EE](#)

IT organised events with economic operators to inform them of the expected changes regarding UCC ICS2. In addition, IT established working groups with postal operators, air carriers and express integrators and a working group with internal departments responsible for risk analysis and procedures.

LT communicated that the economic operators were provided with information on UCC ICS2.

HU informed that a webpage dedicated to UCC CCI was created on the national taxation and customs administration website¹⁵³.

MT reported engaging in promotional activities via the customs web portal for UCC CDS, UCC BTI, UCC AEO, UCC AES, UCC NCTS, UCC REX, COPIS, UCC EU SWE-C, CLASS, UCC e-Commerce and CP 42/63, UCC ICS2, UCC AN/PN/TS and UCC SP.

AT noted that several UCC CDS workshops were held in various parts of the country. Regarding UCC AES and UCC NCTS, meetings with customs experts in the Federal Ministry of Finance (BMF) and the Customs Authority of AT (ZAÖ) were organised to understand the impact on national processes and the needs of national organisations. Furthermore, training videos on UCC ICS2 were prepared and presented to customs officials. Lastly, customs and trade community activities took place to support the implementation and rollout of UCC AN/PN/TS and UCC CCI.

RO reported that information on establishing the UCC AEO connection was published in the pertinent section of the customs authority's website.

SI noted that a one-day workshop was organised on CRMS2 for national users, describing the necessary steps to follow when using the system and its main functionalities.

FI reported having organised workshops for UCC ICS2 and attended the UCC INF project group in 2022.

Concerning UCC EU SWE-C, PT reported keeping the interconnection between UCC NIS and EU CSW-CVED v1.5.1. As regards UCC UUM&DS, PT conducted promotional activities via working group meetings and workshops. More specifically, the following workshops took place in 2022: (a) UCC UUM&DS R2.3 and upgrading of the MS node component from eIDAS v1.4 to eIDAS v2.5 (process and status of migration), (b) technical workshop and demo on 'Certificates registration' simplification, and (c) technical workshop on the validation of requirements for the Extended X Border delegation.

PL provided internal and external users with information on UCC CDS through newsletters and the national website. Regarding UCC AES, the customs administration conducted seminars on the new strategy for implementing the new TES. They were held as open webinars with the Customs Department of the Ministry of Finance, project teams and representatives of customs agencies and the software providers. In addition, the national project teams collaborated closely with software providers collecting remarks on national IT specifications and practical solutions.

Regarding UCC NCTS, PL reported that all the UCC NCTS information (i.e. the registration procedure for traders and their representatives, NCTS manuals for traders, Extensible Markup Language (XML) specifications and availability notices and instructions) was published on the national portal¹⁵⁴ together with information on other e-

¹⁵³ [Taxation and customs administration website of HU](#)

¹⁵⁴ [The national portal of PL](#)

Customs services in PL. Significant changes and announcements were also distributed to traders via newsletters sent directly to their e-mailboxes. UCC NCTS was generally promoted to the traders operating in their area through NCTS liaison officers and local trainers. A number of informative materials (i.e. leaflets, posters) and items (i.e. pens, bags, document files, notebooks and calendars) have been distributed to the traders via regional or local customs offices. Lastly, traders were constantly informed about upcoming changes. The national project team and the Ministry of Finance organised seminars and bilateral conference calls with the trade community and several IT providers. The objective was to clarify doubts regarding the new XML specification and the new IT environment and advise them on optimising their software and BCP.

Concerning UCC EU SWE-C, PL noted the organisation of two pilot phases by national project groups and trade representatives. In addition, the Ministry of Finance arranged bilateral meetings with the relevant PCAs. Promotional activities took place during the 9th International Maritime Congress held in Szczecin, while webinars, training and on-site workshops were provided to trade representatives. In reference to UCC GUM, users and system administrators were trained after the production launch and support was provided as part of the helpdesk. Lastly, PL communicated that knowledge was shared via the national points of contact during meetings and reports in relation to UCC UUM&DS.

1.6.3 Consultations with economic operators

The implementation of the e-Customs projects requires that the Member States' administrations and Commission engage in a regular dialogue with the economic operators and their representative associations to ensure transparency in the implementation of national and EU measures. Over the course of 2022, the Member States organised a series of seminars, workshops and meetings in close cooperation with the 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 the economic operators to foster an environment conducive to collaboration.

Both the Member States' customs authorities and Commission regularly informed the representatives of the 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 the 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 perspective of the economic operators. Furthermore, several Member States published information on their national websites as well as guidelines for diverse systems, while national helpdesks were utilised as a means to provide support to the economic operators.

2022 marked significant progress towards launching consultation activities that contributed to simplifying procedures for the economic operators. Common challenges related to UCC CDS, UCC AEO MRA, UCC AES, UCC NCTS, UCC REX, e-Commerce and CP 42/63, UCC ICS2, CCN2 and UCC UUM&DS were proactively tackled by the majority of the Member States through online meetings and publications, while a substantial amount of work was devoted to developing and refining user manuals and training modules for these systems. Likewise, several Member States carried out informational activities on the procedures pertaining to UCC AN/PN/TS, Adjustments of the existing import applications under the UCC and other activities.

During the reporting year, particular emphasis was placed on informing the economic operators about the progress achieved on the TES systems. A trade outreach strategy

for UCC AES and UCC NCTS was ongoing to promote a shift of focus towards the preparation of the trade community. On this basis, full transparency of the coordination programmes was established to keep the economic operators informed on the national administrations' progress towards implementing the aforesaid TES systems.

Additionally, active forums for the economic operators were organised in the national administrations, where the benefits of the new TES systems for businesses were analysed using practical cases and examples. More specifically, the UCC ICS2 communication campaign, launched in 2020, continued running to inform the economic operators involved in the air transportation of the technical documentation in order to complete the adaptation of their IT systems based on the UCC ICS2 R2 requirements by 1 March 2023. To achieve this goal, factsheets and other audio-visual materials were produced and disseminated in several languages throughout the campaign. Moreover, the Commission maintained a Frequently Asked Questions (FAQ) section in specialised and general media publications and took part in various trade and customs events. Further activities included the organisation of events in collaboration with trade associations, such as FIATA, CLECAT, EurTradeNet, UPU, PostEurope and ERA to share information about the UCC ICS2 R2 project as well as conducting related presentations during bilateral meetings with the customs administrations of third countries. The Commission also organised a bilateral meeting with FONASBA/ECASBA in June 2022 to discuss their collaboration on UCC ICS2 R3. In July of the same year, a workshop was conducted by CLECAT to provide high level information on UCC ICS2 R3, while further guidance on the aforesaid release was provided in bilateral meetings with customs administrations of third countries.

During the various meetings organised by the Commission in 2022, the necessity of the Member States to provide their economic operators with full transparency of their NPPs by publishing quarterly reports on the TES systems and adhere to the key milestones was highlighted. In addition, the Commission requested that the Member States persistently inform their economic operators on the progress achieved towards creating the latter's specifications and the national testing environment, while considering the potential issues deriving from the derogation requests and the identified delays for the deployment of the customs IT systems.

e-Commerce and CP 42/63 and UCC ICS2 are developed in close cooperation with the national postal operators and express carriers. BG organised meetings with the economic operators to clarify the functionalities of the UCC REX Trader Portal. In addition, BG offered an opportunity to the economic operators to make inquiries on UCC EORI2 and UCC UUM&DS through the service desk platform, e-mail and telephone. Two UCC ICS2 conferences were also held in June and November 2022 as part of BG's information campaign to ensure an effortless transition period for the economic operators.

CZ organised online meetings and seminars with the economic operators on UCC AES, UCC NCTS and UCC ICS2.

DK used the existing forums to communicate changes and/or upgrades to UCC CDS, UCC BTI, UCC AEO MRA, UCC REX, COPIS and UCC SP. Additionally, DK informed about the organisation of several thematic meetings with the economic operators on UCC AES and UCC NCTS. Furthermore, DK reported an ongoing dialogue with the customs administrations and associated networks of the economic operators affected by the upgrades of UCC SURV3 and UCC AN/PN/TS, while the economic operators were also engaged in a dialogue on the eATA Carnet project.

DE reported the regular publication of information on its national webpage¹⁵⁵, regarding the implementation of the UCC requirements for UCC CDS, UCC EORI2, e-Commerce and CP 42/63, UCC AN/PN/TS and UCC CCI. DE also held online meetings with the economic operators and Commission on UCC SP.

EE organised seminars and online meetings on UCC AEO MRA, UCC AES, e-Commerce and CP 42/63, UCC GUM, UCC SP and UCC CCI. EE further informed that frequent UCC NCTS meetings with the economic operators took place quarterly. Moreover, EE met with the economic operators in April and November 2022 to introduce the state of play of the UCC ICS2 developments and notify that the national deployment of UCC ICS2 R2 would be delayed, while the aforesaid information was also published on EE's national website. Lastly, EE informed about the organisation of a bi-annual meeting for the economic operators on EU SWE-C.

EL published the presentations and supporting materials for UCC AES on its national website¹⁵⁶ to update the economic operators on their legal obligations and the national activities related to the system. EL also circulated the informational materials for UCC NCTS on the national portal for the economic operators.

FR held several meetings and seminars with the economic operators and service providers as well as working groups with customs experts on UCC NCTS-P5, UCC AN/PN/TS, UCC SP and UCC CCI.

HR organised regular online meetings and awareness seminars with representatives of the IT application vendors and economic operators on UCC AES and UCC NCTS-P5. Similar meetings and workshops with the economic operators were also held on UCC ICS2 and UCC UUM&DS.

IT informed that any requests on UCC REX submitted by the economic operators were handled by the national helpdesk. In addition, IT established a permanent working group to share information with the economic operators on UCC ICS2.

LV held regular meetings of the Customs Advisory Council with the participation of the economic operators' representatives.

LT provided information for the economic operators on UCC ICS2.

HU arranged a full-day consultation session on UCC CCI for the economic operators and the software developers.

NL reported that the Customs Trade Consultation Group on IT met regularly to discuss UCC-related matters.

AT reported that periodic meetings with the economic operators were held on UCC CDS, UCC AES and UCC NCTS. In addition, a national forum was also established for UCC ICS2, along with the organisation of weekly meetings with the national postal operators. Similarly, AT organised several meetings and forums with the economic operators and software suppliers on UCC AN/PN/TS and UCC CCI. Lastly, regarding the e-ATA Carnet project, AT informed about the coordination between the national Chamber of Commerce and the economic operators concerning the utilisation of the ICC WCO infrastructure.

PL reported that through the regularly updated NPPs, the economic operators were informed about changes related to UCC AES and UCC NCTS. In addition, PL organised frequent UCC AES seminars and bilateral conference sessions with several IT providers and economic operators to clarify the latter's concerns regarding the new XML

¹⁵⁵ [German customs' webpage \(ZOLL\)](#)

¹⁵⁶ [Independent Authority for Public Revenue \(IAPR\)](#)

specifications and the new UCC AES IT environment, and to advise them on how to optimise their software and BCP. PL also informed that all the up-to-date information on UCC NCTS was published online for the economic operators and their developers. In addition, the latter were given access to the UCC NCTS testing environment to adjust their applications to the new UCC NCTS-P5 requirements and test the parallel operation of UCC NCTS-P4 and UCC NCTS-P5 in accordance with PL's transition strategy. Furthermore, PL conducted UCC NCTS-related informative meetings with the local trading communities. PL also reported organising several EU SWE-C webinars and online workshops with the participation of the economic operators to consult the latter's business needs as well as to promote the utilisation of the NSW e-services.

PT informed that UCC AN/PN/TS would be connected to the MNSW. To this end, a working group with the participation of port authorities initiated its work during the reporting year, in addition to arranging meetings with the economic operators. Furthermore, PT published the national instructions on UCC CCI both for the economic operators and customs officers on the national administration's website.

SI informed that all the UCC AN/PN/TS activities for informing and training the economic operators would be performed after the successful execution of the conformance testing activities.

Lastly, FI held meetings with the economic operators on UCC AES, UCC NCTS, UCC ICS2, UCC AN/PN/TS, UCC SP and Adjustments of the existing import applications under the UCC.

1.6.4 Training for customs officials and other stakeholders¹⁵⁷

The dynamic environment of the e-Customs projects requires high-quality training and consultation on the IT system procedures and customs legislation. To this end, the Commission, in collaboration with the Member States, supports the development of training solutions and services to provide the customs officials and economic operators with the necessary skills and knowledge towards implementing and maintaining the e-Customs projects. A total of 8,595¹¹¹ customs officials were trained¹⁵⁸ with the EU eLearning portfolio in 2022. In addition, seven new eLearning modules related to e-Customs were developed by the Member States and Customs Programme participating countries in 31 languages.

The creation of online training tools and guidelines requires an ongoing long-term learning plan for customs officials and other stakeholders. These electronic materials aim to assist the national customs administrations, economic operators and citizens across the EU in better understanding and implementing the EU customs legislation and its related procedures. Therefore, the establishment of a uniform and efficient environment regarding customs activities enhances consistency in customs operations in the EU.

During 2022, more than 69,000 professionals, including customs officers and representatives from the private sector, engaged in training activities. The most consulted courses were those related to CRMS2, UCC CDS, UCC EOS, UCC EBT13, UCC ICS2 and UCC INF SP. As regards the quality of the eLearning modules, the final users trained through the customs eLearning services expressed their overall satisfaction, with an average score of 75.3 out of 100 compared to 74.7 in 2021,

¹⁵⁷ The information of the current section is based on the Commission's training report accessible via Access to Documents procedure.

¹⁵⁸ The figures are approximate as not all Member States provided information regarding customs officials training.

according to the principles of Kirkpatrick¹⁵⁹. In 2022, maintaining the existing online training courses was very important and three e-Customs-related courses were updated in all EU languages to reflect the updates of the related IT systems.

Throughout the reporting year, the majority of the Member States organised several seminars, trainings and workshops and prepared manuals. More specifically, with regard to UCC CDS, EE and FR reported organising training sessions and informational meetings for their customs officers.

In relation to UCC BTI, EE and FI prepared trainings for the customs officials responsible for the project, while FI also participated in pertinent trainings at the EU level.

Concerning UCC AEO MRA, CZ carried out training activities for its customs officials.

In reference to UCC AES, FR reported that the training activities for its customs and non-customs officials were initiated at the end of the reporting year. LT informed that its customs officials attended the pertinent trainings and webinars organised by the Commission, while AT participated in a workshop to analyse the DDNXA for UCC AES.

As regards UCC NCTS, FR, LT, and AT performed in parallel the same activities carried out for UCC AES. PL informed about the execution of a stationary training dedicated to the UCC NCTS-P5 administrators, local UCC NCTS trainers and consultants, and the staff of the national helpdesk. PL further reported that the local trainers were required to transfer their knowledge to the customs officers working at the national level.

In connection with the UCC REX system, BG informed that the UCC REX registrations were provided only at the EU level. EE participated in the UCC REX training organised by the Commission. HR also participated in trainings conducted by the Commission and performed educational activities, such as regular seminars and workshops for the economic operators and other customs officials.

Concerning COPIS, BG prepared trainings on the UI and COPIS eAFA for the customs officials responsible for the project. CZ organised periodic webinars and seminars on the implementation of COPIS v4. DK developed guidelines for the users of COPIS and organised internal training activities. In addition, DK informed that onboarding training of the new users was carried out by the more experienced users. AT held workshops with the Central Customs Department.

With reference to EU SWE-C, CZ created guidelines for the customs officers and economic operators, reporting that its main task was to provide instructions on the manner the data should be accurately filled in the customs declarations, including the actions that should be followed in cases of errors. DE carried out an online multiplier training course with the customs officers to provide instructions on the procedure before entering in operation. EE also issued guidelines on the usage of the system for both the customs officers and economic operators. PL informed that trainings dedicated to all types of the EU SWE-C system, and especially for customs and PCA officials, were organised by the national unit responsible for the deployment, operation, maintenance and support of the NSW platform.

In relation to EMSWe, EE attended several webinars organised by DG MOVE. Regarding the eATA Carnet project, DK utilised the training materials provided by ICC WCF, while EE created national instructional materials.

¹⁵⁹ Kirkpatrick Learning Model: D. Kirkpatrick's four levels of training evaluation is the most widely used training evaluation model. 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.

With regard to CRMS2, DK informed that the national users were onboarded utilising the materials and guidelines provided by the Commission. Moreover, DK reported that information on the new CRMS2 functionalities, which were presented at the CRMS2 workshop in November 2022, was shared and discussed with the relevant CRMS2 national users. As such, the latter's skills were maintained through peer learning. DE attended the CRMS2 trainings organised by the Commission. In addition, DE created a CRMS2 newsletter for all national users to provide up-to-date information on any news and changes as well as national language translations of some of the instructions. Similar to DE, EE reported that members of other national units participated in several trainings organised by the Commission. SI prepared training materials on CRMS2 and organised a one-day workshop to present the correct method of using the main functionalities of the new IT system.

In connection with e-Commerce and CP 42/63, BG issued instructions to the Territorial Directorates for processing the consignments. DK organised trainings for the customs officials on handling the e-Commerce and CP 42/63 controls, while EE also published related training materials.

Concerning UCC ICS2, CZ conducted trainings for the concerned customs officers, while DK created training materials and videos to prepare the customs authorities for the new release. EE participated in several webinars and trainings organised by the Commission. EL published all related information on UCC ICS2 for the customs officers and economic operators on the national customs portal. HR informed that, considering the granted derogation on UCC ICS2, the training was planned to be performed after the finalisation of the conformance testing activities. IT reported the dissemination of the UCC ICS2 information to the customs officials. IT further informed about its decision for a fully centralised risk analysis office to undertake all the UCC ICS2 activities. On this basis, the aforesaid office has participated in the business and IT analysis and acquired information on the GUI and all national interfaces. In LT, onboarding trainings for the customs officials were provided by the contractor's teams. AT informed that training videos were created and presented in workshops for customs officials. FI organised trainings at different levels and for several groups of officials, and Information and Communications Technology (ICT) personnel.

In relation to UCC SURV3, FI organised skill maintenance trainings, whenever required.

With reference to UCC AN/PN/TS, DK conducted seminars, workshops and onboarding activities regarding the upcoming changes in the system. EE participated in UCC AN/PN/TS webinars organised by the Commission and created pertinent training materials for the customs officials. FR and IT conducted several videoconferences to train the customs officials. FI organised UCC AN/PN/TS trainings at different levels and for several groups of officials and ICT personnel.

With regard to UCC GUM, PL reported that all the national users and system administrations were trained following the system's entry in production, while user support was also provided as part of the national helpdesk.

In connection with UCC INF SP, DE organised multiple online training courses with the customs officers to provide an introduction to the Procedures. PL informed that the project team for the maintenance and deployment of the UCC INF SP system consists of customs officers having practical experience in the field of SP, by participating in the conformance testing activities, preparing the relevant information documents for the system's users or performing trainings for customs offices in the form of workshops and webinars. The UCC INF SP system was utilised by over 2,000 customs officers in PL.

Regarding CUP-MIS, DK informed that the new system's users were onboarded by more experienced colleagues, whenever necessary.

Concerning CCN2, EE informed about the finalisation of the related guidelines for the IT administrators as well as the organisation of different trainings for the existing and new personnel. HR offered courses for the customs officers related to the IT Infrastructure and provided information on the new CCN2 network. PL organised online CCN2 meetings and webinars.

In relation to the UCC UUM&DS project, BG and LT organised trainings for the customs officials and the service desk, while EE provided a manual on how to register a certificate for UCC ICS2 for the economic operators. HR organised joint meetings, workshops and seminars with representatives of the business sector to examine the potential future usage of the UCC UUM&DS infrastructure. PL informed that the national customs administrators were trained, obtaining knowledge from the existing documentation on the system. PT also executed internal training activities for the customs officials within the scope of the UCC UUM&DS updates and the issues that were identified at the national level.

As regards other national projects, EE further informed that internal trainings on TOTS2 and TARIC3 were carried out for the customs officers, while training materials on TARIC3 and the Cash Control System were produced. LV reported that various training courses were created for the customs officials regarding changes and improvements in the National Electronic Customs Data Processing System. AT informed that workshops with the NPMs and the UCC ICS2 national risk analysts took place to explain the mode of operation of the new National Risk Management System provided for UCC ICS2. Considering that PL's ISZTAR4 system has been in use for many years and internal users have been familiar with its functionalities, PL reported that the latter were regularly notified on any upgrades or new capabilities via the customs and tax portals.

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

In 2022, the coordination of the 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 the relevant stakeholders on the necessary requirements for the implementation of the MASP-C Revision 2019 and other e-Customs-related projects.

Alongside the MASP-C Revision 2019 coordination activities carried out by the Commission, presented at length in previous sections, some Member States highlighted the following key activity areas during 2022.

BG reported on UCC CDS that the national applications utilise the EU service to validate the customs decisions. In addition, BG established working groups and organised internal discussions on UCC REX to solve any potential issues in the registration process. In relation to EU SWE-C, coordination meetings were held with the competent authorities, while internal discussions and analyses of the impact of the National Declaration Processing Systems and the preparation of the national functional requirements took place. BG further informed that the EORI web services, which were used by NIS and the national components of UCC NCTS, UCC ICS2 and UCC AES, were validated at the national level. Coordination meetings were organised with the national tax authorities regarding the national activities for the e-Commerce and CP 42/63 project. For the UCC ICS2 project, BG established synergy between NIS, the National Risk Analysis System and the national component of CCN2. Moreover, BG informed about the integration of UCC PoUS with the National Risk Analysis System. With regard to EMSWe, BG reported coordination with BPI Co.

CZ reported establishing integration of UCC AEO MRA with its customs office responsible for conformance testing and the national EORI system, while national coordination activities for COPIS were also ongoing. In addition, during 2022, CZ was in close contact with DG TAXUD and other DGs to discuss the EU SWE-C functionalities. With reference to UCC SURV3, CZ informed that the interface with NIS was changed.

DK reported ongoing dialogues on UCC AES and UCC NCTS with the national stakeholders and a continuous national coordination on COPIS. DK also informed that CRMS2-related data was applied to the national ICS2 system. Concerning the e-Commerce and CP 42/63 project, DK informed about its integration with other units covering OSS-related activities and other systems, such as the Automatic Risk, Profile and Analysis (ARPA) system and the Control and Reporting System (KRIA), for handling the process flow activities related to controls. DK further reported that the ICG and UCC GUM projects require both internal and organisational coordination. Several coordination activities were also performed within the context of the UCC INF SP, UCC CCI and CUP-MIS projects. Lastly, DK informed that UCC UUM&DS was integrated with the national Identity Authorisation Management System (DCS).

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

EE reported changes in the national CRS bridge and messaging process. In addition, EE informed about coordination activities with the affected national systems, departments and agencies with respect to the UCC AES and UCC INF SP projects. Concerning UCC NCTS, EE reported working closely with the national AES project team, other units and the national IT department. Moreover, several consultations on the usage of the CRSM2 system took place between different units and departments. For the UCC ICS2 project, EE cooperated with the IT Centre of the Ministry of Finance (ITC). EE also informed that UCC SURV3 was coordinated with the National Declaration Processing System, the national SURV and the SURV-RECAPP systems, while further cooperation between ITC, the Intelligence Department and the UCC SURV3 developer took place. Concerning UCC GUM, EE worked closely with the national NCTS and NIS project teams, while on EMSWe, EE collaborated with the Transport Administration. Cooperation between different national units and departments also occurred in EE with regard to UCC PoUS. Lastly, EE informed about the automated data transfer from the Cash Control System to the Financial Intelligence Units Information System and the coordination between ITC and the developer of TARIC3 as well as the National Declaration Processing Systems and TARIC.

ES executed UCC CCI collaboration activities with risk analysis' experts and the national teams of SP and NSW.

FR reported progress with the linkage between the changes in UCC NCTS-P5 and the national applications. FR collaborated with BE for providing the application code for UCC AN/PN/TS. In addition, FR reported that the NIS and UCC INF SP import projects were linked and several meetings were held between the competent units and departments to analyse the functionalities and build the national system.

HR integrated the national CDS with other MASP-C projects, such as UCC AES, UCC NCTS, CS/RD2, UCC EOS and CS/MIS2 as well as national systems, such as GUM, CRS v3.0, National Codelist Registry and Risk Analysis System. In addition, the UCC AES projects would be also integrated with UCC NCTS, UCC CDS, CS/RD2, UCC EOS, CS/MIS, national CRS v3.0, National Codelist Registry, TARIC and EMCS. UCC NCTS-P5 would be integrated with UCC AES, UCC CDS, CS/RD2, UCC EOS, CS/MIS2, national GUM, national CRS v3.0, National Codelist Registry and the National Port

Community System, which was developed by the Ministry of the Sea, Transport and Infrastructure. Concerning UCC AN/PN/TS, HR informed about the coordination with the UCC ICS2 and the national AIS projects. For CCN2, collaboration with the department for legislation and procedures for additional integration between UCC ICS2, UCC PN/TS and the new Customs Declarations Processing System (COPS) also took place in HR. Moreover, the communication between the National Tax Administration and the CCN2ng network was upgraded with the taxation component for DAC7 purposes. Lastly, HR reported that during the analysis, implementation and deployment of the UCC UUM&DS project, the project unit coordinated with other business units and departments, such as the legal and procedure department for the integration with the systems that use the UCC UUM&DS infrastructure.

IT informed about its coordination with the following units and departments of various systems for the UCC CDS project: (a) the Legal and Procedural Department and the local customs offices for the UCC CDS project, (b) other MASP-C projects, such as UCC UUM&DS (direct trader access to EIS), UCC AEO MRA, UCC EORI2, UCC NCTS, UCC GUM and CCN2, and (c) other national systems, such as NCTS, ICS2, GUM and the National Authorisation System. In relation to UCC REX, IT cooperated with the Legal and Procedural Department, local customs offices and other MASP-C projects (e.g. UCC EORI2, CCN2 and the national ICS2 system), and exchanged information with the Ministry of Foreign Affairs. Regarding UCC ICS2, IT reported coordinating with the Legal and Procedural Department, other MASP-C projects (e.g. UCC UUM&DS, UCC EORI2, CCN2 and UCC AN/PN/TS) and other national systems (e.g. NIS, eManifest and TS). Finally, IT informed about the interaction between UCC UUM&DS and IAM as well as UCC UUM&DS and the Italian Customs Agency Portal.

LT informed that the web services for receiving CDMS data were updated to allow the national Customs Permits System (MLS) to retrieve the necessary data from CDMS. Regarding UCC GUM, LT reported that additional integration testing of the national GVS system with other Customs Information Systems was performed and any errors or inconsistencies were corrected.

HU worked on CCN2 in coordination with the UCC ICS2 R2 project.

MT informed that the customs authorities were coordinating and discussing aspects of the NSW and the e-Commerce and CP 42/63 project with the different stakeholders involved in the process.

NL regularly discussed the IT developments with the different Ministries and national agencies associated with the IMP and EXP formalities and logistics, such as the Ministry of Infrastructure, the Ministry of Agriculture and the Ministry of Economic Affairs.

AT reported that the national CDS Trader Portal was developed and operated by the Ministry of Finance. With regard to the UCC AES and UCC NCTS projects, cooperation with other units and departments was ongoing. AT also reported coordination between EU SWE-C and the national project for the adjustment of the import system and UCC AES as well as coordination between UCC SURV3 and the National Risk Management System. Concerning UCC AN/PN/TS, AT informed that the dependencies and interactions with other systems and surrounding processes were analysed and adjusted to allow a smooth transition into production. In relation to UCC ICS2, an interdepartmental analysis with the National Risk Management System, UCC UUM&DS, and national service applications was carried out. In the framework of UCC GUM, AT reported the coordination with the national CDS project. Coordination with the National Risk Analysis System was also performed for UCC PoUS. AT further collaborated with the Ministry of Finance on the software infrastructure for the eATA Carnet system.

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 UCC UUM&DS. UCC NCTS interoperated with several systems, including UCC EORI, UCC EOS, UCC AEO, UCC AES, CS/RD, CS/MIS, SPEED, the national Integrated Risk Management System (ZISAR), the national GUM (OSOZ2), Automatic Terminal Information Service (ATIS), AIS, ISZTAR4 and Safe TIR. UCC NCTS also operated in conjunction with TRACES for the verification of the CVED certificates and the Central Service Desk (CSD) for the support of all the Ministry of Finance IT systems. UCC NCTS supplied data to the PL central data warehouse Ariadna2, which were used for control and statistical purposes. In addition, the system utilised the nationally developed mechanisms for user management and authentication, access control and digital signing of messages. PL also informed that the economic operators could submit messages via three different channels, namely, the national SEAP portal¹⁵⁴, a web service and e-mail interfaces. Moreover, PL reported the possibility to integrate the NSW platform and EU CSW-CERTEX R4 in the future, based on the ongoing work at the EU level with regard to the re-engineering of EU CSW-CERTEX. In relation to UCC SP, PL informed that three national IT projects (i.e. AES-supplementation, AIS-supplementation and 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. Concerning UCC UUM&DS, all activities in PL were coordinated with the changes in the internal national portal, which was integrated with the national IAM and UCC UUM&DS modules.

PT kept the interconnection of NIS with EU CSW-CVED v1.5.1. Furthermore, PT reported that the UCC AN/PN/TS system was connected to both the National Risk Management System and UCC ICS2. Lastly, PT organised coordination activities between UCC UUM&DS and other e-Governmental systems.

FI informed that the national UUM&DS solution used authentication and authorisation services provided by the Digital and Population Data Services Agency.

ANNEX 2 – PLANNING OVERVIEW OF MASP-C PROJECTS

Explanatory Note on the Planning Overview of MASP-C Projects

The planning overview of the 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 the forthcoming projects. Any deviations from the planning of the MASP-C Revision 2017 and the MASP-C Revision 2019 Consolidated Project Fiches baseline are indicated – either as delays or earlier deployments – in the white bars to the right and left of the 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 Annex 1 of the MASP-C package (produced in Microsoft Project Plan format) in the revision 2017 and the revision 2019.

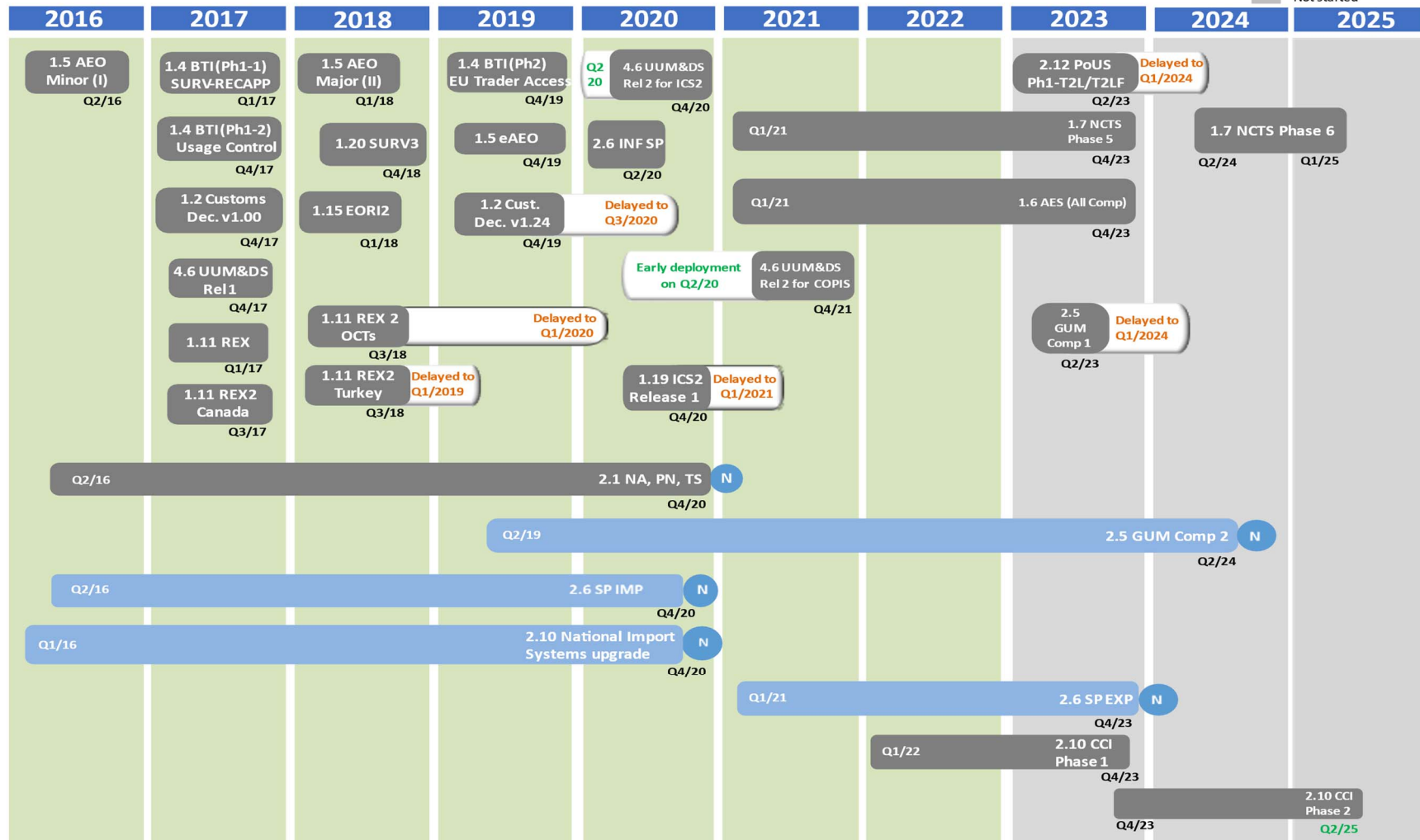
Besides the information provided in this report, it is essential to consider the UCC Progress Reports, which examine in more detail the state of play of the UCC projects and Member States' activities. The UCC Progress Reports¹⁶⁰ are published on the EUROPA website.

¹⁶⁰ 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.

2022 E-CUSTOMS ANNUAL PROGRESS REPORT

Planning Overview MASP-C Dashboard of 2022 Q4 against MASP-C 2017: UCC projects

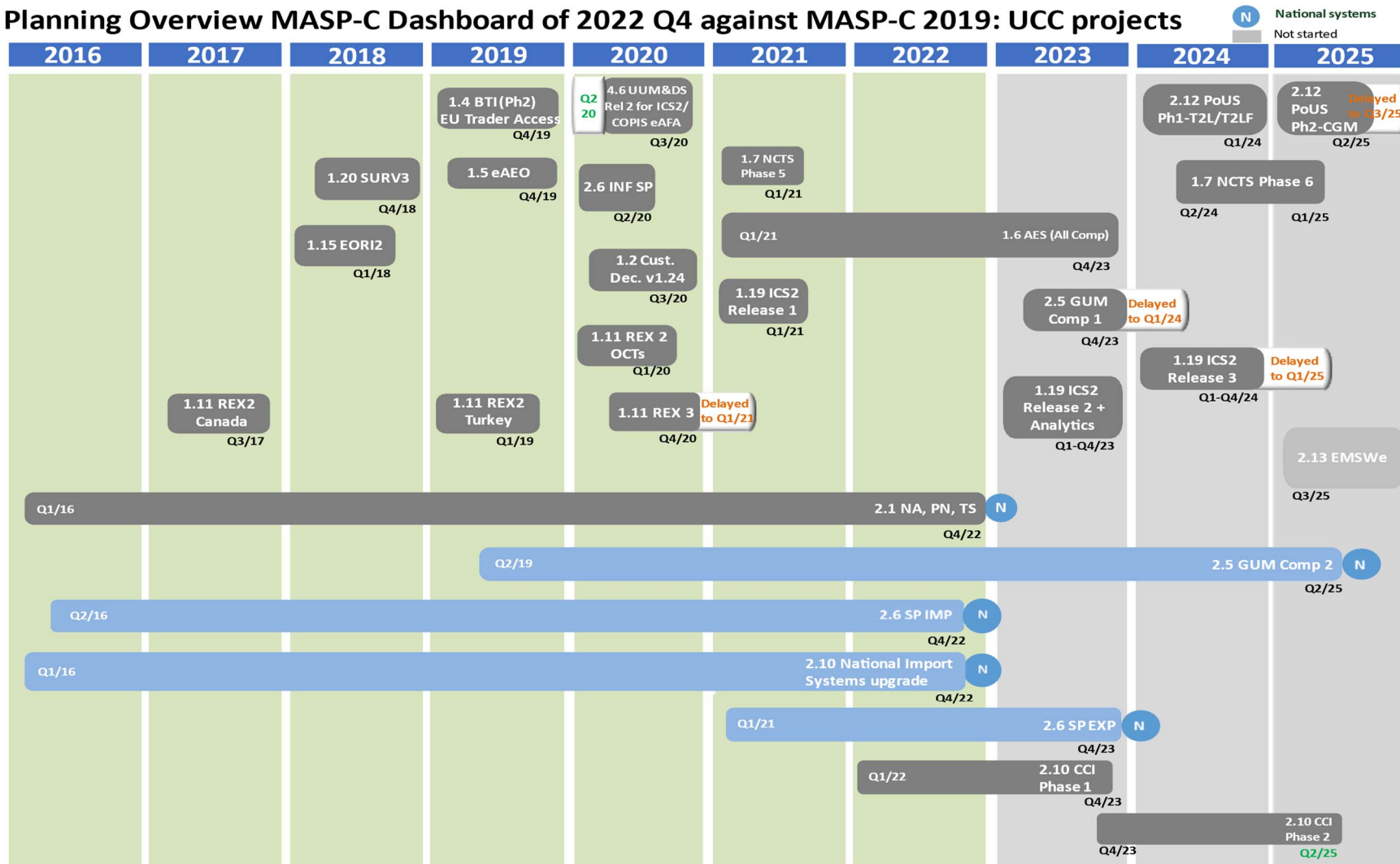
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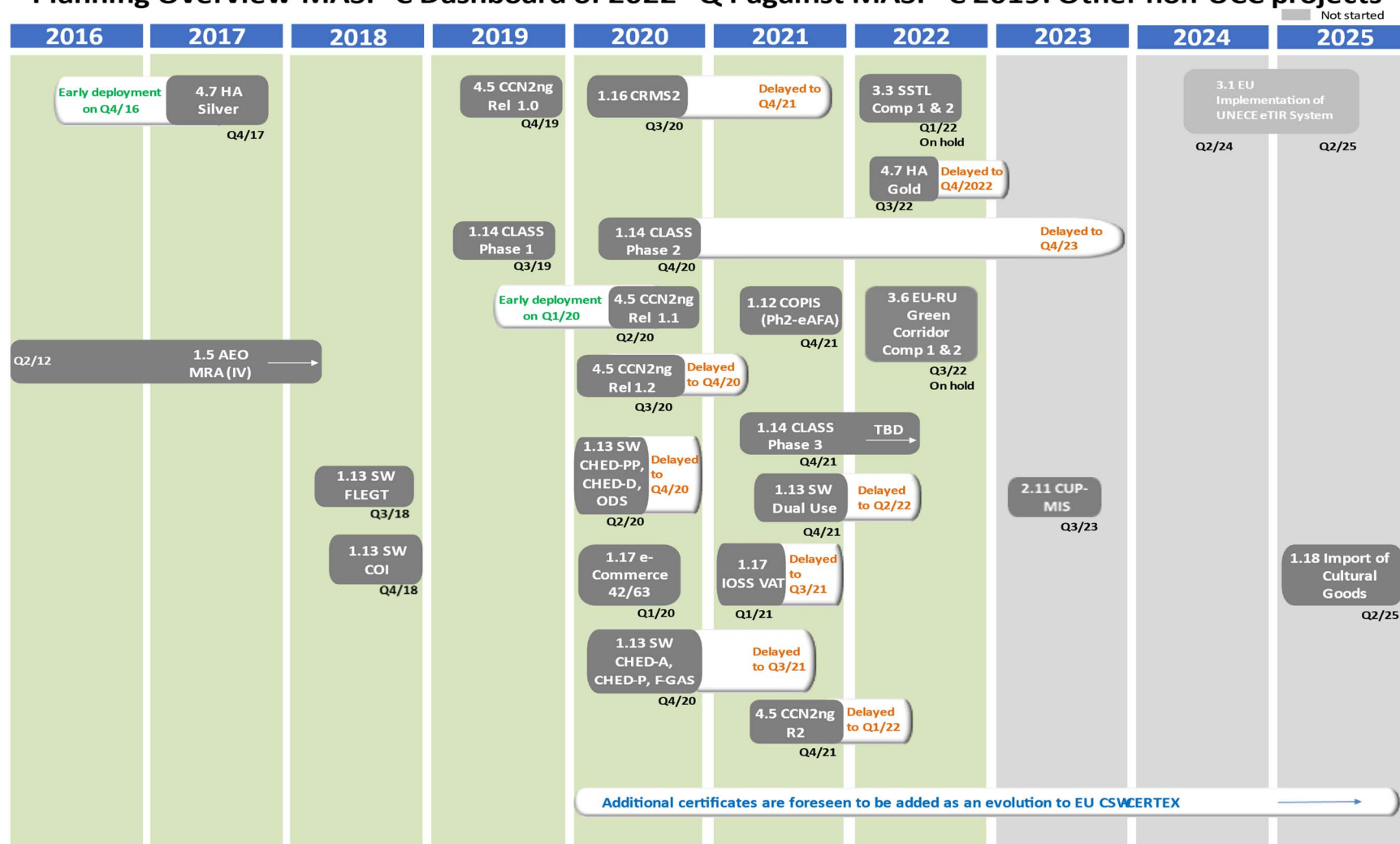
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2022 E-CUSTOMS ANNUAL PROGRESS REPORT

Planning Overview MASP-C Dashboard of 2022 Q4 against MASP-C 2019: UCC projects



Planning Overview MASP-C Dashboard of 2022 Q4 against MASP-C 2019: Other non-UCC projects



ANNEX 3 – ACRONYMS, ABBREVIATIONS & KEY TERMS

| Acronym | Description |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| eAEO | Electronic Authorised Economic Operators system |
| eAFA | Electronic Application for Action |
| eATA | Electronic Admission Temporaire/Temporary Admission |
| 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 |
| API | Application Programming Interface |
| 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 |
| ARPA | Automatic Risk, Profile and Analysis system of DK |
| ASEO | National Decision System of CZ |
| ASSUC | European Association of Sugar Traders |
| ATA | Admission Temporaire/Temporary Admission |
| ATIS | Automatic Terminal Information Service |
| ATLAS | Automated Customs Tariff and Local Processing Application System |
| AVSEC | AViation SECurity |
| eBTI | Electronic Binding Tariff Information |
| B2C | Business-to-Consumer |
| B2G | Business-to-Government |
| BAC | Business Acceptance Criteria |

| Acronym | Description |
|-----------|--------------------------------------------------------------|
| BAP | Common User Management Portal of LT |
| BCA | Business Critical Assistance |
| BCMS | Business Continuity Management System |
| BCP | Business Continuity Plan |
| BCP | Business Continuity Procedure |
| BMF | Federal Ministry of Finance of AT |
| BOI | Binding Origin Information |
| BPI Co. | Bulgarian Ports Infrastructure Company |
| BPM | Business Process Model |
| BTI | Binding Tariff Information |
| BVI | Binding Valuation Information |
| C/ieCA | Central Information Exchange Converter Application |
| CAB | Change Advisory Board |
| CAP | Common Agricultural Policy |
| CBAM | Carbon Border Adjustment Mechanism |
| 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 |
| CELBET | Customs Eastern and South-Eastern Land Border Expert Team |
| CENcomm | Customs Enforcement Network Communication Platform of ES |
| CER | Community of European Railway and Infrastructure Companies |

| Acronym | Description |
|----------------|----------------------------------------------------------------------------------------------------------|
| CERTEX | Certificates Exchange Project |
| CFSS | Common Functional System Specifications |
| CTSS | Common Technical 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 |
| CITES | Certificates for International trade of endangered species of wild fauna and flora |
| CLASS | Classification Information System |
| CLEP | Common Learning Event Programme |
| 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 |
| COPS | Customs Declarations Processing System of HR |
| 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 |

| Acronym | Description |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CRS | Customer Reference Services |
| 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 |
| DAC7 | Dispositions d'Application du Code 7 |
| DC | Data Centre |
| DCS | Identity Authorisation Management System of DK |
| DDCOM | Design Document for Common Operations and Methods |
| DDNCA | Design Document for National Customs Application |
| DDNTA | Design Document for National Transit Application |
| DDNXA | Design Document for National Export 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 |

| Acronym | Description |
|-------------|----------------------------------------------------------------------------------------------------------|
| DIH | Data Integration and Harmonisation |
| DMS | Declaration Management System of DK |
| DPO | Deferred Payment Authorisation |
| DR | Disaster Recovery |
| DRR | Digital Reporting Requirements |
| DTTF | Digital Transport and Trade Facilitation |
| DuES | Dual-use Export Controls |
| e-PoC | electronic Proofs of Origin Certificates |
| EAM | Enterprise Architecture Model |
| EBTI | European Binding Tariff Information |
| EBSI | European Blockchain Services Infrastructure |
| EC | European Commission |
| ECA | Europe and Central Asia Network |
| ECASBA | European Community Association of Ship Brokers and Agents |
| ECCG | Electronic Customs Coordination Group |
| ECG | Export of Cultural Goods |
| ECICS | European Customs Inventory of Chemical Substances |
| ECS | Export Control System |
| EDB | Enforcement Database |
| EESC | European Economic and Social Committee |
| eIDAS | electronic Identification and Trust Services |
| EIDR | Entry In the Declarant's Records |
| EIS | European Information Systems |
| eMan/TS | electronic cargo Manifest/Trading Services |
| EMCS | Excise Movement and Control System |
| EMSA | European Maritime Safety Agency |
| EMSWe | European Maritime Single Window environment |
| ENS | Entry Summary Declaration |
| ENVI | Environment, Public Health and Food Safety |
| 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 |

| Acronym | Description |
|------------|--------------------------------------------------------------------------|
| ETCIT | Expert Teams on new approaches to develop and operate Customs IT systems |
| eTIR | Electronic TIR |
| ETS | Emission Trading System |
| EU | European Union |
| EUCDM | European Union Customs Data Model |
| EUCTP | European Union Customs Trader Portal |
| EUIPO | European Union Intellectual Property Office |
| EXP | Export |
| EXS | Exit Summary Declaration |
| EXT | External |
| FAQ | Frequently Asked Questions |
| FGAS | Fluorinated Greenhouse Gases |
| FINTRAFFIC | Finnish Maritime Traffic Control |
| FLEGT | Forest Law Enforcement, Governance and Trade |
| FONASBA | Federation of National Associations of Ship Brokers and Agents |
| FSS | Functional System Specifications |
| G2G | Government-to-Government |
| GA | Goods Accounting |
| 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 |
| GVMS | Goods Vehicle Movement Service |
| GVS | National Guarantees Management System of LT |
| H/W | Hardware |
| HA | High Availability |
| HCI | Hyper-Converged Infrastructure |
| HLPG | The High-Level Project Group |
| HLSG | High Level Steering Group |
| HMRC | UK Revenue and Customs Service |
| HTI | Harmonised Trader Interface |
| IA | Implementing Act |

| Acronym | Description |
|-----------|-------------------------------------------------------------|
| IaC | Infrastructure as Code |
| IAM | Identity and Access Management |
| IATA | International Air Transport Association |
| IE/Ni | Ireland/Northern Ireland |
| ICC | International Chambers of Commerce |
| ICD | Interface Control Document |
| ICG | Import of Cultural Goods |
| ICGD | General Description for the Import of Cultural Goods |
| ICGL | Import Licence for Cultural Goods |
| ICGS | Import of Cultural Goods Importer Statement |
| ICS; ICS2 | Import Control System; Import Control System 2 |
| ICT | Information and Communications Technology |
| IDPR | Institutions' Data Protection Regulation |
| IDS | Integrated Data Set |
| IE | Information Exchange messages |
| 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 |
| IMSOC | Information Management System for Official Controls |
| INT | Internal |
| INTERPOL | International Criminal Police Organization |
| 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 |

| Acronym | Description |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |
| JSON | JavaScript Object Notation |
| KEL | Known Error List |
| KPI | Key Performance Indicators |
| KRIA | Control and Reporting System of DK |
| L1 BPM | Level 1 – Global BPM (overview of EU Customs Business Domain and Global Business Data). |
| 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). |
| e-licencing | Electronic Licencing |
| 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 |
| MCA | Multi-Criteria Analysis |
| MCS | Military Customs System |
| MFF | Multi-Annual Financial Framework |
| MIG | Message Implementation Guide |
| MIP | Multi-annual Implementation Plan |
| MLS | National Customs Permits System of LT |
| MNSW | Maritime National Single Window |
| MOSS | Mini One-Stop Shop |
| MoU | Memorandum of Understanding |

| Acronym | Description |
|----------|-------------------------------------------|
| MPR | Customs Client Register of LT |
| MR | Mutual Recognition |
| MRA | Mutual Recognition Agreement |
| MS | Member States |
| MSW | Maritime Single Window |
| NATO | North Atlantic Treaty Organisation |
| NCTS | New Computerised Transit System |
| NECA | National Export Control Application |
| 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 |
| NIS | National Import System |
| NOVIS | Reference Information Management System |
| 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 |
| OP EX/IM | Outward Processing Export/Import |
| OSS | One-Stop Shop |
| P | Phase |
| PCA | Partner Competent Authority |
| PEM | Pan-Euro-Mediterranean |
| PGS | Play-Ground System |

| Acronym | Description |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Advanced Cargo Information |
| PN | Presentation Notification |
| PoC | Proof of Concept |
| PoUS | Proof of Union Status |
| PPMKS | National Information System for the Presentation of Goods for Customs Control of LT |
| PUESC | National Trader Portal of PL |
| QUOTA | Electronic system for quota management / allocation |
| R | Release |
| REN | Re-export Notification |
| 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 |
| RMDCM | Risk Management Data Consolidation Module |
| RP | Recovery Point |
| RRF | Recovery and Resilience Facility |
| RRP | Recovery and Resilience Plan |
| RSB | Regulatory Scrutiny Board |
| RSP | Reusable Solutions Platform |
| RTC | Rational Team Concert |
| RTE | Real-Time Exercise |
| S/W | Software |
| S2S | System-to-System |
| SAD | Single Administrative Document |
| SAMANCTA | Sampling Manual for Customs and Taxation Authorities |

| Acronym | Description |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAT | Site Acceptance Testing |
| SCI | Supervising Customs Office for Centralised Clearance for Import |
| SD | Security Dashboard |
| SDLC | Software Development Life Cycle |
| SDR | Surveillance Declaration Record |
| SEED | System for Exchange of Excise Data |
| SG | Secretariat General |
| SIAIS2 | Slovenian Automated Import System |
| SLA | Service Level Agreement |
| SME | Medium-Sized Enterprises |
| SMS | Specimen Management System |
| SMT | Service Management Tool (Synergia) |
| SOA | Service Oriented Architecture |
| SOC | Security Operations Centre |
| SOFT-DEV | Software development |
| SP | Special Procedures |
| SPA | Single Page Application |
| SPEED; SPEED2 | Single Point for Entry or Exit of Data; Single Point for Entry or Exit of Data 2 |
| SPS | Sanitary and Phytosanitary (SPS) |
| SRDS | Super Reduced Data Set |
| SRR | Security Risk Rules |
| SRV4DEV | Service for developers |
| SSA | Safety and Security Analytics |
| SSL | Secure Sockets Layer |
| SSTL | Smart and Secure Trade Lanes |
| STI | Shared Trader Interface |
| STP | Specific Trader Portal |
| SURV | Surveillance |
| 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 |
| SURV-RECAPP | Surveillance Reception Application |
| SW | Single Window |
| SW-C | Single Window Environment for Customs |

| Acronym | Description |
|---------------|--------------------------------------------------------------------------------------------------------------------|
| 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 |
| TAPAS | DG TAXUD Access Point for AS4 System |
| 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 |
| TED | Transit ENS Data Processing Bridge |
| 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 |
| TOTS2 | Control Task Management System of EE |
| TP | Testing Protocol |
| 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 |

| Acronym | Description |
|---------------|---------------------------------------------------------------------------------------------------------------------------|
| UPU | Universal Postal Union |
| UTU | National Declaration System of FI |
| UUM&DS | Uniform User Management & Digital Signature |
| VAT | Value Added Tax |
| VIES | VAT Information Exchange System |
| VIISP | State Information Resource Interoperability Platform of LT |
| VoW | Vies on the Web |
| VLS | National Single-Window System of LT |
| WA | Withdrawal Agreement |
| WAF | Web Application Firewall |
| WAN | Wide Area Network |
| WCF | World Chambers Federation |
| WCO | World Customs Organisation |
| WG | Working Group |
| WPG | Wise Persons Group |
| WTO | World Trade Organisation |
| XML | Extensible Markup Language |
| ZAÖ | Zollamt Österreich (Customs Authority of AT) |
| ZISAR | Integrated Risk Management System of PL |
| Country codes | http://www.iso.org/iso/country_codes.htm (ISO 3166) ¹⁶¹ |

Table 1: Abbreviations and acronyms

¹⁶¹ 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.

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