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2017 E-CUSTOMS PROGRESS REPORT

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1 INTRODUCTION

The 2017 e-Customs annual progress report is the tenth report prepared pursuant to Article 12 of the e-Customs Decision (Decision 70/2008/EC)¹ under which Member States are required to assess the progress made towards coordinating the implementation of the e-Customs initiative. The Commission prepares a comprehensive report covering the annual technical operational activities and financial strategic goals of the Member States within the scope of the e-Customs projects and supporting initiatives.

This year the Commission received 25 national e-Customs progress reports.

2 BACKGROUND

2.1 E-Customs Initiative

In 2003, the Commission issued an e-Customs Communication² that contained proposals about a simple and paperless environment for customs and trade. The subsequent 2003 Council Resolution³ endorsed the ideas raised in the e-Customs Communication, thus setting the framework for the e-Customs initiative. The e-Customs Communication carved out an important path towards radically simplifying customs regulations and procedures and integrating effective and uniform working methods within the EU Customs Union. Decision 70/2008/EC⁴ on a paperless environment for customs and trade, also known as the e-Customs Decision, is the key piece of legislation related to the e-Customs initiative, promoting a shift to an interoperable electronic customs environment with a unified data system to facilitate communication between customs authorities and economic operators.

2.2 Tasks and Coordination

Articles 5, 6 and 7 of the e-Customs Decision define the main components of the e-Customs systems and assign tasks to the Commission and Member States required for the development and implementation of IT projects.

2.3 Governance of the e-Customs Implementation

Article 8(2) of the e-Customs Decision provides that the Commission and the Member States should jointly establish a Multi-Annual Strategic Plan (MASP) to ensure the management and coordination of all activities and tasks related to e-Customs future projects. As an overall project management tool, the MASP lays out the strategic framework and milestones for the implementation of the e-Customs initiative. It is an essential instrument for ensuring operational planning and implementation of all e-Customs IT projects. This implementation is based on a three-tier governance model, which consists of the Customs Policy Group (CPG) acting as a steering body at the policy level, the Electronic Customs Coordination Group (ECCG) at the coordination level and several groups consisting of specialists from Member State administrations at expertise level.

¹ Decision No 70/2008/EC of the European Parliament and of the Council of 15/01/2008 on a paperless environment for customs and trade, OJ L 23, 26/01/2008, p. 21–26.

² 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.

³ 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.

⁴ See footnote 1.

2.4 European Commission and Member States Tasks

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

3 SUMMARY OF E-CUSTOMS PROGRESS PERFORMANCE

3.1 E-Customs Key Milestones and Achievements in 2017

3.1.1 Core Legislative Framework

The modernisation of EU customs law has been a priority in the evolution of the EU Customs Union. Since its establishment on 1 July 1968, considerable progress has been made by the Commission towards reforming the legal framework for customs procedures to accommodate increasing volumes of trade, new business models and a constantly-evolving technological environment. In this climate of significant change, the emphasis of the EU customs modernisation over the last two decades shifted away from traditional business processes towards the creation of a paperless environment for customs based on electronic exchange. In pursuit of this goal, the Commission outlined a course of action in 2012 for a more robust and unified EU Customs Union by 2020.⁵ Following the impact of the significant legal changes introduced by the Treaty of Lisbon,⁶ a new legislative framework was needed for an enhanced level of uniformity between economic operators and customs administrations, more efficient customs transactions and digitalisation of customs processes. Consequently, the Union Customs Code (UCC), adopted on 09/10/2013 as Regulation (EU) No 952/2013⁷ of the European Parliament and of the Council, serves as the legal basis for the modern and electronic customs environment.

The Commission, national customs administrations and trade representatives have been engaged in lengthy discussions related to the development of the UCC Implementing Provisions which were adopted as the Delegated Act⁸ (DA) and the Implementing Act⁹ (IA) to the UCC. The UCC DA/IA came into force across all EU Member States as of 01/05/2016. It represents a package of legal measures for the development of new IT systems and enhancements to existing systems, including transitional arrangements for proper application of the UCC before the applicable IT systems become operational at the end of 2020. In 2017, discussions were initiated to negotiate a reasonable extension of the timeframe for the development of the UCC systems due to the complexities and magnitude of

⁵ 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/2012/791 final.

⁶ Treaty of Lisbon amending the Treaty on European Union and the Treaty Establishing the European Community, 2007 OJ C 306, 17/12/2007, p. 1–271.

⁷ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 09/10/2013 laying down the Union Customs Code, OJ L 269, 10/10/2013, p. 1–101.

⁸ 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.

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.

⁹ 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.

Commission Implementing Regulation (EU) 2017/989 of 8 June 2017 correcting and amending Implementing Regulation (EU) 2015/2447 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 149, 13.6.2017, p. 19–56.

work involved in the preparation for system deployment. Consensus was attained on extending the current deadline until the end of 2025. A legislative proposal will be issued in 2018 to continue using transitional arrangements with respect to the electronic systems that cannot be fully implemented by 2020.

In collaboration with Member States, the Commission is coordinating the implementation of the UCC through the UCC Work Programme¹⁰ (UCC WP) and the MASP. The UCC WP lays down the IT architecture for the development and deployment of electronic systems, as well as the harmonisation and standardisation of interfaces. The UCC WP is of pivotal importance for establishing the transitional measures related to the electronic systems and its content is closely linked to the MASP. On 11/04/2016, the Commission adopted a new version of the UCC WP which sets out the planning for the development and deployment of the 17 essential electronic systems. In accordance with Article 4(1) of the new Decision establishing the UCC WP, the Commission and Member States share information concerning the planning and progress of each of the systems contained in the UCC WP.

Since the entry into force of the UCC, ongoing dialogues about relevant legal issues among various stakeholders have led to further additions and amendments to the UCC legal package. The adoption of the amendment to the UCC Implementing Act on 08/06/2017 adapts the legislation to better match the needs of competent authorities and economic operators to guarantee effective and uniform application of the law. An additional amendment to the UCC DA was proposed in 2017 to clarify certain provisions of the existing legislation. Its adoption is foreseen by mid-2018. Likewise, the proposed amendment of Article 84 of the UCC DA has been the subject of a separate discussion within the Customs Expert Group. This amendment addresses the issues encountered in using a comprehensive guarantee, including the conditions under which the comprehensive guarantee reductions or the waiver for potential customs debt should be granted.

To support the functionality requirements of electronic systems, the Commission continued its work towards drafting a new Implementing Regulation¹¹ to cover technical arrangements for developing, maintaining and employing electronic systems for the exchange of information with customs authorities. The applicable legislative provisions of this proposal, its structure and scope of application were thoroughly discussed with the Customs Code Committee – General Customs Legislation section (CCC-GEN) throughout 2017. This regulation, governing the UCC Customs Decisions (CDS) and the Uniform User Management & Digital Signature (UUM&DS) systems, was adopted on 14/11/2017. Discussions have been initiated with the Member States to enlarge its scope to other existing electronic systems.

3.1.2 E-Customs Governance

The Customs 2020 Programme maintains the support for coordination between the customs administrations of EU Member States by providing a platform for the electronic exchange of information and the development of common guidelines and IT systems. In 2017, the programme furthered its objectives of supporting the implementation of Union law and policy in the field of e-Customs by sharpening its focus on the amendments to the UCC legal package, the MASP revision, trade facilitation and customs IT governance. Echoing this precedence, 166 e-Customs related meetings with a total of 2,502 participants were convened during 2017 under the auspices of the Customs 2020 Programme.

The Commission has made considerable progress towards advancing the e-Customs IT strategy. The yearly review of the MASP activities is an important factor in ensuring a well-coordinated approach to planning and project management. This process enables the relevant stakeholders to complete different stages of review cycles for business and IT deliverables and to assess changes and trends in various

¹⁰ Commission Implementing Decision (EU) 2016/578 of 11 April 2016 establishing the Work Programme relating to the development and deployment of the electronic systems provided for in the Union Customs Code, OJ L 99, 15.4.2016, p. 6–20.

¹¹ Commission Implementing Regulation (EU) 2017/2089 of 14 November 2017 on technical arrangements for developing, maintaining and employing electronic systems for the exchange of information and for the storage of such information under the Union Customs Code, OJ L 297, 15.11.2017, p. 13-21.

domains, including policy development, legislative measures, business requirements and technology advances. The MASP Revision 2016 (v1.30) served as a basis for the preparation of the next MASP and UCC WP revisions.

Planning exercises were carried out in 2017 to elaborate the current MASP Revision 2017 (v1.4), during which the Commission collaborated actively with the Member States via the ECCG platform and ad-hoc project groups. A number of changes were introduced which mainly relate to an update of the project fiches' content and a revised planning for the IT projects based on the experience gained from the first system deployments. Following the assessment of the overall progress, it was decided that the deployment window for seven UCC systems (AES trans-European component and national component, NCTS Phase 5 & Phase 6, PoUS, GUM Components 1 & 2, ICS2, CCI Phase 1 & Phase 2, Special Procedures Export) would be postponed beyond the 2020 deadline. New project fiches were added on CRMS2 (1.16) and EU-Russia 'Green Corridor' pilot project (3.6), whereas the project fiches related to SEAP (4.4), Business Continuity (4.9) and CS/RD2 (4.10) were deleted as agreed in the previous MASP revision. The MASP revision 2017 (v1.4) was accepted by the ECCG in December 2017 and subsequently endorsed at the CPG meeting on 12-13 December 2017.

During 2017, the Commission showed its continued commitment to feed into the debate about redefining the IT landscape and its delivery models. The future strategy for the customs IT systems represents a long-term implementation of the activities needed to optimise customs procedures by providing a considerable benefit to economic operators and promoting transparency in the performance of the Customs Union. In 2017, high-level discussions were held in various governance platforms to further identify key challenges related to the prioritisation of the UCC WP projects. Member States were encouraged to provide their reflections on IT system prioritisation by focusing primarily on the planning process anticipated for national and trans-European systems, as well as issues of sequencing that might generate difficulties for system implementation beyond 2020. On the longer-term, a realistic timeline for project deployment could be achieved through fostering collaboration, pooling existing resources and building on the lessons learnt from the UCC implementation process. Following the Council Conclusions¹² of 11/07/2017, the Commission intends to carry out an in-depth study on the long-term IT strategy for customs systems by 2018.

3.1.3 E-Customs Project Groups¹³

The Commission performs an organising and facilitating role to ensure the proper functioning of the Customs 2020 Programme by linking its activities with the overall e-Customs objectives. One of the assets of this programme is to capitalise on the knowledge of experts from EU Member States who collaborate in project groups to analyse national customs practices and identify challenges in the correct implementation of EU customs legislation. In this context, various project groups were established to address specific concerns and render recommendation reports on IT system implementation. Chaired by DG TAXUD, these project groups held several sessions in 2017.

In the framework of the evolution of the EU Customs Single Window (SW) project, the EU Customs SW Project Group¹⁴ continued to hold its regular meetings over the course of 2017. With the participation of 19 Member States and 6 representatives of economic operators,¹⁵ this project group was set up at the end of 2016 as a discussion platform to provide insight on defining the scope of the EU SW environment for customs and assess the legal and policy instruments suitable for this initiative. The 'EU Customs SW Initiative' would represent a new EU initiative whereby cross-border related information, including data and the means to submit these data are harmonised on multiple levels across business, technical and organisational structures.

¹² Outcome of the Council Meeting 3572 of 7 November 2017 on Economic and Financial Affairs.

¹³ The UCC project groups are established at expertise level based on the governance model outlined in MASP/Annex3.

¹⁴ Project Group to Study a Possible Framework for Developing the EU Single Window Environment for Customs.

¹⁵ Representatives of industry associations engage in regular consultations at Union level through the Trade Contact Group platform on the development and implementation of customs policy.

In 2017, the focus of the SW Project Group activities was placed on analysing the building blocks that form the foundation for an EU SW environment for customs. In close collaboration with the Commission, the Member States and representatives of economic operators proposed a set of policy options to further progress the work on the introduction of a legal proposal. These options will be structured around the government-to-government (G2G) and business-to-government (B2G) domains to facilitate various levels of information sharing and interaction between the stakeholders engaged in the cross-border movement of goods. As a first step in this process, the Commission has started working towards drafting the inception impact assessment and consultation strategy to provide an overview of the scope of the initiative in the coming year. Member States have expressed clear interest in the progress of this initiative, while also seeing a large potential in the automatic exchange of certificates' data.

Union customs legislation requires a guarantee to cover an existing or potential customs debt for a large variety of customs procedures and formalities. Pursuant to Article 89 (2) (b) of the UCC, such guarantees must be established throughout the customs territory of the Union. To support the full application of the UCC legal requirements, the Customs 2020 Project Group on the EU Guarantee Management System Design (GUMD) was initiated at the end of 2016 to draft a Business Case outlining the best implementation option for the Guarantee Management System. With the participation of 35 national experts from 20 Member States, the project group prepared a draft Business Case which concluded that the decentralised system architecture was the preferred solution for system implementation. The group's activities were finalised in May 2017.

Upon the publication of the results of the Project Group on UCC Centralised Clearance Import Design (CCID), the scope of activities on Centralised Clearance expanded into a new project group. The Customs 2020 Project Group on the UCC Centralised Clearance Import System (CCIS) was appointed to provide recommendations for the preparation of Level 4 (L4) Business Process Models (BPM) and the Functional System Specifications (FSS) package for CCIS within the 2020 implementation timeframe specified in the UCC WP. The project group started its activities in September 2017, and its work is anticipated to be completed by mid-2018. The findings of the group will be primarily presented to the ECCG and the CBG and made available to other forums where legal issues are discussed.

Following the work accomplished by the project groups dedicated to the UCC Automated Export System (AES) and the New Computerised Transit System (NCTS), the Commission in collaboration with the Member States carried out a detailed analysis in 2017 to further assess the transition strategies for these projects.

The Import Control System (ICS2) underwent further development in 2017. Considering its complexity and multi-disciplinary nature, DG TAXUD created a dedicated ICS2 Project Team to strengthen management effectiveness across all facets of the programme's activities. The team became operational at the beginning of March 2017 and, throughout 2017, worked in collaboration with the ICS2 Project Group to prepare the common specifications for the ICS2 system (including the Harmonised Trader Interface (HTI) specifications) and to further elaborate on the ICS2 Transition Strategy & Plan.

As an integral part of the ICS2 Programme, the Shared Trader Interface (STI) project is intended to support different functions and services required for the operational implementation of the ICS2 system. In mid-2017, the ICS2 Project Team submitted a proposal¹⁶ elaborating on the implementation of the STI in parallel with the national trader interface (NTI) alternative. Following the approval of this proposal by the ECCG and the CPG, the Customs 2020 Project Group on STI was established in Q4 2017 to address the inception and elaboration phase activities of the STI project for the Member States. In view of the inception activities for Block 1.a implementation, the project group supported the drafting of the ICS2 STI Vision Document. Composed of 8 Member States and 5 representatives of economic operators, the project group is anticipated to continue its work on elaboration phase activities until Q3 2018.

¹⁶ "Shared Trader Interface Project Proposal" attached to note ARES (2017)2826621 of 06/06/2017.

Two other project groups have been organised around the project scope, design, requirements and maintenance of the electronic systems. The IT Technology and Infrastructure Group (ITIG) started its activities in 2016 to analyse system design, technical specifications and future releases related to MASP Group 4 fiches, including the current CCN operations. Similarly, the IT System Development Group (IT SD) started its activities in 2016 to address system architecture and development for MASP project fiches under Groups 1, 2 and 3 followed by the review and coordination of IT deliverables. Each group held three meetings during 2017. The results of the groups' work have been taken into consideration for the annual update of the UCC WP and the annual revision of the MASP.

In view of the first release of the UCC CDS on 02/10/2017, COM organised 13 webinars throughout 2017 to familiarise users and administrators with a range of features and system versatility. In addition, three IT workshops were arranged to address the most pressing issues affecting the legal and business aspects of the CDS. Further detailed information on this system is provided under section 4.1.1.1.

In addition to the project groups, the Commission supports the development of pilot projects, which are designed to test the feasibility and usefulness of specific activities in the area of e-Customs. In this respect, the eManifest project was an important ongoing pilot activity during 2017. Administered by DG MOVE in collaboration with the European Maritime Safety Agency (EMSA) and DG TAXUD, the overall objective of the eManifest pilot project is to test procedures that could further lead to simplified reporting formalities by lodging standardised information through an electronic single window. Based on the requirements set out in Directive 2010/65/EU,¹⁷ the eManifest pilot foresees the establishment of a fully harmonised electronic manifest encompassing cargo data required by both maritime and customs authorities, which can be reported in a harmonised manner via a European Maritime Single Window (EMSW) prototype. With the participation of 14 Member States and shipping industry associations, the eManifest project group advanced its work during 2017 to further streamline these requirements. Phase 2 testing, covering data mapping for arrival formalities and reporting by multiple customs providers, has been completed, while the second version of the EMSW prototype was tested in mid-2017. Phase 3 testing will explore customs formalities related to the departure of cargo, which will be mapped in one unique maximum set of data elements to reflect the approach whereby economic operators are only required to report once.

The harmonisation of e-Customs relies on active collaboration between the Commission and Member State authorities. As highlighted in the 2016 Commission Communication, a shared overall vision between the Commission and Member States is a priority for long-term collaboration and full operational potential in the future. Although Member States may progress and operate at different speeds based on national priorities, the Commission has taken action to maximise business continuity with the existing systems.

3.1.4 Supporting Instruments

One of the essential instruments supporting the EU Customs Union in its efforts to modernise customs procedures and IT systems is the Business Process Modelling (BPM) policy. Given the complex business environment of EU customs, the BPMs aim to ensure a more holistic view of customs process flows and the practical implications of their implementation. As such, the enhancement of the BPM policy remains a paramount objective for the e-Customs architecture. In 2017, Level 2 (L2) UCC Interaction BPMs and Level 3 (L3) UCC Business Requirements BPMs were aligned across all UCC domains. The relevant updates are elaborated in detail under section 4.1.1 of the report.

The BPMs are facilitated by ARIS, a software tool which enables the reusability and continuous improvement of business processes and data. In 2017, the ARIS Platform & ARIS Publisher achieved 99.6% availability rate for systems in production and 99.9% for conformance testing. Major updates to the master documentation introduced improvements in modelling and analysis functionalities, which accelerated the performance of BPM releases. To this end, 1,023 new models were created for

¹⁷ Directive 2010/65/EU of the European Parliament and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC, OJ L 283, 29.10.2010, p. 1-10.

different modelling projects. In 2017, the total number of ARIS users was 1,377, including Member States, economic operators and Commission staff.

Equally important, data exchange is indispensable to the efficient functioning of the e-Customs architecture. The trans-European IT systems and national customs clearance systems will be based on the EU Customs Data Model (EU CDM) which is built upon the World Customs Organisation Data Model. The EU CDM serves as a technical instrument that models the data requirements laid down in EU customs legislation by presenting a single and genuine source of information for the technical developments of different IT systems used by EU customs. The EU CDM v1.1 incorporates the UCC DA/IA datasets, formats, codes and cardinalities. The Commission is looking at possible solutions to extend the scope of EU CDM by integrating data elements used for the purpose of data exchange between customs authorities.

In 2017, the Commission continued supporting the electronic exchange of information through the Common Communication Network / Common System Interface (CCN/CSI) and the CCN product services, which achieved a 99.43% availability rate of systems in production.

3.1.5 EU Single Window

The ongoing process of digitalisation offers a large potential to generate faster and more efficient customs clearance and control procedures. However, this opportunity is not fully seized in the entire supply chain. As the customs domain is progressively transformed into a paperless electronic environment, the clearance process imposes multiple non-customs formalities that must be fulfilled separately and not always electronically. These formalities are regulated by other government agencies or departments responsible for monitoring compliance with the veterinary, sanitary, phytosanitary, agricultural and environmental regulations. In order to ensure supply chain visibility and harness the full potential of cooperation between customs and other authorities, the Commission has supported the development of single window initiatives.

The e-Customs Decision called on the Member States and the Commission to develop ‘a framework of single window services’¹⁸ in the EU supporting the seamless flow of data between customs authorities, the Commission, economic operators, and other regulatory agencies. The 2014 evaluation¹⁹ of the e-Customs Decision concluded that the single window was one of the outstanding objectives that remain to be achieved. In December 2014, the Council adopted the Venice Declaration which called for a progressive action plan to implement an EU SW environment for customs and the establishment of a legal framework for its development.²⁰ Subsequently, in the 2016 Communication on "Developing the EU Customs Union and Governance,"²¹ the Commission announced its plan to explore a workable solution for the creation of an EU SW environment for customs.

At its core, the single window is a trade facilitation measure, which permits the economic operator to fulfil regulatory requirements by submitting data in a standardised manner to multiple recipients via a single-entry point. The single window paradigm represents a new wave of customs modernisation with the potential to bring about multiple gains, benefitting both the economic operators and regulatory authorities. Despite the apparent benefits of single window services for cross-border operations, the complexity associated with building an EU SW environment for customs is notably attributable to the involvement of a high number of authorities and the multiplicity of their respective procedures and IT systems in the EU Member States. Given this context, a phased approach was adopted for the implementation of the EU SW environment for customs.

¹⁸ See footnote 1.

¹⁹ "Evaluation of the electronic customs implementation in the EU," Final report, 21 January 2015. https://ec.europa.eu/taxation_customs/sites/taxation/files/docs/body/ecust_evaluation_final_en.pdf

²⁰ Draft Council Conclusions on Developing the EU Customs Union and its Governance, Doc. 16507/14 UD 275.

²¹ Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on Developing the EU Customs Union and Its Governance. COM (2016) 813 final.

The first stage of this approach consisted in establishing a pilot project²² in 2015 enabling the Member State customs administrations to accept electronic certificates issued by other authorities and submitted with a customs declaration for which a database is set up at EU level. This project was administered jointly by DG TAXUD and DG SANTE to provide automated validity checks for various types of certificates. The successive “EU Customs Single Window: Certificates exchange” project (EU SW CERTEX) is intended to accommodate the integration of new digitalised certificates and enhanced system functionalities.

In parallel with these developments, DG TAXUD has been exploring options to address the interface between economic operators and government through a harmonised approach across the EU. In this context, discussions have been underway to lay out the policy and legal foundations for the initiative related to the EU SW environment for customs. As outlined in section 3.1.3, the EU Customs SW Project Group has been engaged throughout 2017 in preparing the groundwork for a legal proposal to support the establishment of an integrated and coherent environment for customs single window services in the EU. Among its main activities, the project group is working towards preparing a comprehensive paper to present the overall framework for this initiative with a view to charting the path towards a regulatory scheme for the EU SW environment for customs. Structured in two parts, the paper provides an overview of the current single window landscape from a national and EU perspective and proposes a targeted set of solutions for the correlation and harmonisation of the currently isolated initiatives, as well as a potential implementation roadmap for the introduction of a legal proposal. Following the outcome of first phase project activities, the legal initiative was launched in April 2017 and received political validation²³ on 20/06/2017.

The second phase of project group activities was devoted to the analysis and definition of the core elements that support the legal initiative. This included the drafting of the problem tree, policy objectives and policy options paper, which will feed into the preparation of the impact assessment study carried out in view of the legislative proposal. All relevant potential options will be subject to further analysis in the impact assessment study based on the benefits and opportunities they represent to the stakeholders involved. Both open and targeted consultation methods will be used to achieve a balanced and comprehensive coverage of stakeholders.

3.1.6 Innovative Technology Solutions

In 2017, the Commission (DG TAXUD) launched the "Blockchain@TAXUD" initiative to explore the possible use of the blockchain technology in the context of e-Customs and taxation policies in a progressive, incremental way.

Part of the objective of the UCC is to render customs procedures fully digital. In this context, the Commission (DG TAXUD) started in 2017 to identify several opportunities for the use of blockchain, such as CS/RD, EOS, UCC CDS, the EU Single Window environment for customs, the Entry into Declarant's Records, as well as more complex data sharing workflows for NCTS, ECS, etc.

The Commission (DG TAXUD) is also working with the World Customs Organisation (WCO) on related initiatives. Among them, the "eATA" (electronic Admission Temporaire/Temporary Admission) project aims to computerise the temporary admission process by replicating the paper ATA (Admission Temporaire/Temporary Admission) Carnet in a digital system and providing worldwide electronic data exchange between countries or customs unions (ATA partners). Given the importance of the ATA carnets for the EU Member States, and in order to ensure that all ATA member countries can trust the International Chamber of Commerce (ICC) to manage the eATA system centrally, DG TAXUD proposed to the ICC to test a blockchain as an additional trust layer ensuring data integrity in ICC's eATA "Mercury" pilot solution (anchoring "eATA" Carnet and transactions fingerprints).

²² “EU Single Window – Common Veterinary Entry Document” (EU SW-CVED)

²³ <https://ec.europa.eu/info/sites/info/files/better-regulation-guidelines-better-regulation-commission.pdf>

The scope of the blockchain-based solution has been discussed with key business and IT eATA stakeholders and proposed to the WCO eATA steering committee at the end of 2017. In addition, the proposal has already received positive feedback from several EU Member States' customs administrations who wish to collaborate on this Proof of Concept activity. The Commission (DG TAXUD) sees this proof of concept as a significant source of learning on the use of blockchain by customs. Even though the technology is still evolving and technical challenges remain, the results so far have been very encouraging.

Given these promising outcomes, DG TAXUD's next step and priority is to determine if the blockchain can be included in its technology portfolio to support the design of new policies and trans-European systems. An important aspect is to test if it can be realistically deployed and operated across Member States. Only with this assurance can opportunities and real projects be reasonably pursued in collaboration with all stakeholders.

3.2 Challenges to Successful e-Customs Implementation

Throughout 2017, the e-Customs reform remained a priority for the proper functioning of the EU Customs Union. In pursuit of this goal, the Commission served as a catalyst in fostering open communication and cooperation amongst national customs administrations and representatives of economic operators at both national and EU level. In a similar vein, the Member States showed both leadership and significant commitment in pursuing these objectives and progressing with the e-Customs reform. Most specifically, considerable effort was put into the management and implementation of 17 electronic systems, which culminated in the deployment of the UCC REX on 01/01/2017 as well as CDS and UUM&DS systems on 02/10/2017.

A significant number of activities were ongoing to consolidate the implementation for the other MASP projects. In March 2017, the High-Level Project Group meeting on the implementation of the UCC and e-Customs focused on key challenges related to the prioritisation of the UCC WP projects and a long-term vision of IT architecture, placing emphasis on system interoperability issues. Through continuous dialogue and consultation with the Member States and the representatives of economic operators, it became evident that the large portfolio of IT systems could not be fully completed by this deadline given the complexity involved and the budgetary constraints of introducing new IT systems across the EU. Taking this factor into consideration and the challenge of efficiently managing inter-project interdependencies, the Commission conducted the MASP Revision 2017 in close collaboration with the Member States as a resource planning exercise for IT projects in the field of e-Customs. The targets and milestones were updated based on the status of all MASP projects with a view to renewing the commitment for several UCC MASP projects beyond the 2020 deadline for most systems with anticipated delivery delays. To this end, the Commission proposed to amend some UCC provisions to allow the continued use of transitional measures beyond 2020 for the IT systems that require further implementation work. The related legislative proposal to extend the deadline to 2025 is expected to be adopted in 2018.

Despite the challenges posed over the period covered in this report, national customs administrations made considerable progress towards aligning their IT systems with the UCC data requirements stemming from the adoption of the UCC legislative package in 2016. Accordingly, the Commission reaffirmed its position to work in close consultation with concerned stakeholders on addressing further improvements or technical amendments to the UCC legal package necessary for a smooth management of e-Customs activities. In terms of new developments, progress was most pronounced in the approach adopted in relation to the ICS2 project. The transition from the ICS2.0 project to the ICS2 Programme was the outcome of a complex consultation and consensus-building process with national customs authorities and representatives of economic operators which reflects a reformed approach to the EU advance cargo information system and the implementation of the EU customs risk management strategy and action plan.

In a similar vein, in 2017 discussions were underway to further progress the work on the introduction of a legal proposal to support the development of the EU SW environment for customs whose adoption is anticipated by the end of 2019. The introduction of a proper legal framework would enable uniform use of the EU SW CERTEX system, ensure interoperability between the certificate management and customs systems and streamline reporting processes for economic operators. In

addition, the Commission evaluated the applicability of new technologies by launching the "Blockchain@TAXUD" initiative to explore practical use cases of how workflow processes would be deployed in the context of e-Customs. On an international level, the Commission cooperated with partner countries, such as Turkey and Hong Kong, in response to an increasing interest in AEO MRA modalities.

The manifold activities performed in the context of e-Customs implementation, ranging from highly specialised project groups to online trainings tailored to meet the specific needs of customs officials from different EU Member States are a clear indication of the dynamic and successful partnership between the Commission, national customs authorities of the Member States, economic operators and their representatives. Building on the experience and lessons learned along the path of e-Customs reform, the Commission will continue to look for new and innovative ways of ensuring efficiency and coordination of cross-border activities across the EU.

4 IT SYSTEMS PROGRESS ACTIVITIES

4.1 MASP Projects²⁴

The MASP is a living document that will evolve continually in response to the effective implementation of the UCC and e-Customs projects. This section summarises the contribution made by the Commission and the Member States in 2017 towards the implementation of MASP e-Customs projects, and achievements thereunder.

4.1.1 MASP Group 1 - Customs European Information Systems

4.1.1.1 UCC Customs Decisions (1.2)

In 2017, the Commission took significant steps towards implementing the UCC Customs Decisions (UCC CDS) project. As one of the earliest and biggest UCC projects, the Customs Decisions System (CDS) aims at standardising electronic customs data across the EU. The first phase of the CDS entered into production as scheduled on 02/10/2017. During 2017, 25 Member States were already using the central CDMS and Trader Portal modules, while ES chose a hybrid²⁵ scenario for system implementation. In 2017, DK and NL did not join the central system due to requirements for additional system improvements and the need for further testing. The UUM&DS Release 1 and CCN2 Release 1 entered in production on 02/10/2017 to support the CDS. The UUM&DS Release 1 platform enables access to the CDS Trader Portal and federates all 28 Member States' Identity and Access Management systems for economic operators. To support the CDS operations, all Member States have established connectivity with CCN2 which delivered 100% service availability in 2017.

The CRS sub-project v1.2 became operational on 01/01/2017. AT, BE, CZ, EE, FI, HR, HU, IE, IT, LV, NL, SE and SI passed the conformance tests required for the central CRS. CDMS Release 1 and the Trader Portal modules were used for conformance testing with all Member States apart from MT for CDMS and UK, MT and PT for the Trader Portal. System-to-system conformance tests for CDMS were successfully completed with CZ, EE, FI, IT, LV and SE and were ongoing with ES, FR, HU and PT. Given that the CDS database will only be available in English, the Member States translated the CS/RD2 reference data used in the CDS in the respective official national languages. The material required for the translations was published on CIRCABC.

The following statistics were provided at the end of 2017 regarding construction phase activities:

- 1,436 applications submitted to the Trader Portal from EU economic operators;
- 15,281 access requests to the EU Trader Portal through UUM&DS;
- 363 decisions taken in CDMS by customs officers using the applications from economic operators in the EU Trader Portal;
- 896 pre-existing authorisations added in CDMS by customs officers.

²⁴ All milestones presented in this report are based on the MASP 2016 Revision.

²⁵ https://ec.europa.eu/taxation_customs/business/customs-procedures/customs-decisions_en

To ensure a smooth functioning of the system, the Commission and Member States were engaged in lengthy discussions to draft an Implementing Regulation²⁶ related to technical arrangements for developing, maintaining and employing electronic systems for the exchange of information with customs authorities. During 2017, considerable effort was put into the development of a communication strategy to raise awareness and enhance the understanding of the measures taken by the Commission for the implementation of the UCC CDS project. For this reason, an e-Learning module²⁷ was made publicly available on the Europa website. This initiative was complemented by a workspace established on the PICS platform in July 2017 to improve communication and knowledge sharing among stakeholders. In addition, the Commission drafted a Business User Guide to provide explanatory information for the relevant operating procedures concerning the Trader Portal and the CDMS. In view of this, 22 end-user starting guides were also created for the 22 types of applications²⁸ that will be introduced in the Trader Portal. The user-guides were submitted for review to the Member States and the representatives of economic operators at the end of 2017. Once accepted, these end-user guides will form the basis for Trader Portal tooltips to be displayed in the system.

Progress on the UCC CDS project was periodically communicated to the Member States and the representatives of economic operators via the ECCG, CBG and TCG platforms. Specific trainings²⁹ were conducted to clarify outstanding issues related to system functioning. In addition to these trainings, several workshops and webinars were organised to improve system usability following the release of the CDS in March 2017. Additional CDS releases were also launched in late 2017. At the end of 2017, a decision was made to establish the Customs 2020 Project Group dedicated to the UCC CDS to identify potential issues as raised by Member States at an early stage and proactively define solutions for the continuous improvement of the system. Through the project groups, Member States are requested to establish the expectations regarding change requests for the improvement of the UCC CDS.

In 2017, the majority of the Member States (BE, BG, CZ, DE, DK, EE, FI, HU, IE, LT, MT, PT, SE, SI, SK and UK) reported on the operational status of the system. AT analysed specifications for the national CDMS component, began the design and implementation of the national Trader Portal component and developed its canonical data. BG reported on the establishment of National Service Desks to support the operations of the CDMS and the Trader Portal. Various technical and business issues were addressed stemming from the need to align the system with the adopted versions of the UCC legislation. At the end of 2017, CY had begun to use the central CDMS and was evaluating the potential to further adopt CRS. CZ reported on activities related to the improvement of the CDS national components and new validations between the ICS and national data storage for customs decisions, while identifying the need to align the system with the latest version of the EU legislation. To mitigate these issues, CZ created manuals and organised several trainings during 2017 for CDMS system users. DE developed an interface between national and central system components and evaluated the potential to use the hybrid solution upon implementation of the national system. DK identified very limited use of the system until issues affecting usability and legal compliance are solved. EE established the necessary interfaces and prepared documentation for the development of national components, including technical specifications.

FI focused on national project execution, acceptance testing and deployment and explored options for enabling a data replication functionality. FR observed a number of new CDS releases during 2017, requiring frequent revisions to hybrid components and alignment with the central system, while keeping up conformance message exchanges. HU, MT and UK finalised all necessary project development activities. MT announced its plan to use the central system for the national CDS and to launch a call for tender for the development of an e-authorisation system that will handle the national CDS. IE provided continued support to internal and external users and cooperated with the

²⁶ Commission Implementing Regulation (EU) 2017/2089 of 14 November 2017 on technical arrangements for developing, maintaining and employing electronic systems for the exchange of information and for the storage of such information under the Union Customs Code, OJ L 297, 15.11.2017.

²⁷ https://ec.europa.eu/taxation_customs/eu-training/general-overview/ucc-elearning-programme_en

²⁸ https://ec.europa.eu/taxation_customs/business/customs-procedures/customs-decisions_en

²⁹ Please refer to section 4.3.3 of the current report.

Commission to resolve system issues through fixes or enhancements. LT started the procurement of the national system development services and implemented translation of software. In Q3 2017, LV developed and installed in production the new functionality of the national Electronic Customs Data Processing System to enable connection to the CDMS. SI continued system deployment activities, whereas EL reported on the development of national user requirements for data retrieval to the national information system through the CRS. HR focused on integrating the electronic signature in the national application to enable customs officers to better manage digital documents. PL reported on preparatory activities focused on developing the hybrid architecture and observed that work on the national system was temporarily suspended until a new contractor is selected. RO temporarily placed the national project on hold during reorganisation of the IT structure of the National Agency for Fiscal Administration (NAFA) in late 2017. Development activities in RO included the preparation of functional and technical specifications for the inception phase of the system.

4.1.1.2 *UCC Binding Tariff Information (UCC BTI) (1.4)*

The UCC BTI project made significant progress during 2017. Construction activities for UCC BTI Phase 1 Step 1 (the implementation of the new Surveillance Reception Application (SURV-RECAP)) and Step 2 (new UCC EBTI-3 release with extended BTI usage control) were completed in Q1 and Q4 2017 respectively. After a number of corrections were implemented, the EBTI-3 system was migrated to UCC BTI Phase 1 in October 2017. Given the decision to build the BTI usage control functionality in Surveillance3 Phase 1, development and construction activities for this phase were conducted in parallel with UCC BTI Phase 1, resulting in system rollout on 02/10/2017. The following operational statistics were collected in 2017:

- BTIs in database: 970,040;
- active BTIs in database: 251,510;
- total number of BTIs created in 2017: 51,415;
- total number of BTI applications created in 2017: 2,607.

UCC BTI Phase 2 will introduce an additional functionality to facilitate electronic access to EBTI-3 for economic operators whereby BTI applications and decisions will be submitted through an EU harmonised trader interface. In preparation for the implementation of Phase 2, the Commission updated the UCC BTI Phase 2 Vision Document, which was accepted by the Member States and representatives of economic operators in early 2017. Furthermore, the Commission worked towards the development of the graphical user environment and the system process model for the Generic Trader Portal (GTP), which will also be used for other projects, like the UCC INF for Special Procedures and EU AEO Direct Trader Access. Preparations to develop the GTP Vision Document have started, and the Commission will be actively involved in its planning process over the next year.

During 2017, AT, DK, EL, FR, IE, PL and UK reported activities relating to continued system operation. AT performed maintenance updates, bug fixes and provided early life support to reach a steady state of operations. DK tested system releases through the centrally developed application and examined the prospects for providing electronic access to economic operators. CY and EL reported using the central system developed by the Commission, and CY announced that the use of CRS would be evaluated at a later stage. FR performed critical hotfix upgrades due to problems encountered before system rollout. Although several issues persisted after the system was put into production, FR reported that operations ran smoothly. IE and PL monitored developments on the EBTI-3 application. PL reviewed the technical documentation, made the necessary adjustments for the implementation of functional requirements and successfully completed EBTI-3 conformance tests. Likewise, EE completed SURV-RECAP conformance tests and deployed the new national surveillance system (Arctic STATISTICS) in April 2017, incorporating 14 data elements in the updated UCC format.

DE carried out development and maintenance activities within the framework of the overall ATLAS system and reported that the electronic application for trade is planned to be operational on 01/10/2019. BE and HR performed analysis and modelling related to system design. HR carried out construction phase activities which progressed on schedule. FI, MT, PT, RO, SI and SK reported that the project was put on hold. FI acknowledged that the deployment of SURV-RECAP required additional effort to align database schemas. A new BTI application form was created and translated in

line with the UCC provisions, while several hotfixes were performed to address systemic concerns after the new EBTI-3 release was launched. In the framework of the national UTU-programme,³⁰ FI focused on the development of the customs warehouse system for special procedures, which is planned to be implemented in late 2018. RO developed functional and technical specifications to implement automatic validation with the national import system through the central BTI system, while noting that part of the funding received for customs activities will be allocated to support project updates as needed. MT announced its intention to produce the User Requirements Document after the specifications for the Central System would be finalised and planned on extending the national Document Processing System to the web services that will be made available by the central system.

4.1.1.3 *UCC AEO and impacts of MRA (1.5)*

This project fiche covers four main components: EU AEO Minor Enhancement, EU AEO Major Enhancement, EU AEO Direct Trader Access and AEO Mutual Recognition Enhancement. In 2017, the Commission completed construction activities to support the implementation of the Economic Operators' System (EOS) release for the EU AEO Major Enhancement (UCC related) and EORI2³¹ projects in line with the requirements of the UCC legislative package. An updated version of the deployment plan for the transition to the UCC AEO Major Enhancement and EORI2 was approved by the Member States in Q2 2017. Conformance tests began in Q4 2017 and progressed according to schedule. The Commission arranged 10 webinars to inform end-users about the EOS release planning and changes in functionalities brought about by the legal developments of recent years and the application of international Mutual Recognition Agreements (MRA). The UCC AEO eLearning course was localised in ES, NL, LV, SL, HR and RS during 2017.

The Commission cooperated with partner countries regarding the AEO MRAs. As of 2017, MRA modalities between the EU and China, Japan and the USA were operational. Development activities with Norway were complete in Q3 2017 after the final version of the Interface Control Document (ICD) was approved. Conformance tests started in Q4 2017 upon system deployment. Business negotiations with Canadian customs authorities were put on hold due to the lack of input from Canada. In addition, the ICD form was provided to the customs authority in Hong Kong given their interest in becoming an MRA partner country.

In 2017, AT, BE DK, EE, IE and SE were involved in operational activities. BE and SE carried out analysis and modelling activities as well as system maintenance and upgrades. SI focused on similar activities relating to system design. AT made minor modifications to ensure the proper download of XML files in the national website for the new AEO numbers. DK reported on conformance tests related to AEO Major Enhancement. EE conducted a review of the project's documentation, participated in testing and webinars and addressed translation issues in the context of the new EOS release. Likewise, IE analysed documentation and proposals in relation to project development from a business perspective. FR and CZ performed upgrades to the national AEO systems in line with the UCC requirements, while DE successfully completed conformance testing and the implementation of AEO as part of EOS Release 3.9.0.0 in the framework of the national ATLAS system. CY and EL reported using the central application for AEO. CY announced that CRS development would be evaluated at a later stage. MT reported on national acceptance testing and announced that the upgrade process was proceeding according to schedule. As a user of an EOS lite client for AEO, HR was involved in regular meetings with the AEO network and the production of translations for EOS. PT and SK placed the project on hold. Similarly, PL terminated a year-long pilot project dedicated to the analysis of the AEO process due to the lack of funding to address process errors.

4.1.1.4 *UCC Automated Export System (AES) (1.6)*

The Commission continued its development activities throughout 2017 to fine-tune the AES L4 BPMs/FSS package in line with the UCC legislative package. Progress was periodically reported at

³⁰ Initiative launched by FI in 2014 to replace existing customs declaration systems, covering MASP projects 1.4, 1.6, 1.7, 2.1, 2.6, 2.8 and 2.10.

³¹ Please refer to section 4.1.1.7 of the current report.

the ECCG meetings where agreement was reached with the Member States and representatives of economic operators on project priorities and areas requiring further consideration. As a result of these efforts to advance project development, the pending issues related to the L4 BPMs/FSS package were under discussion until the end of 2017 with the intention to be submitted for Member States' acceptance by Q1 2018. In cooperation with the Member States, the Commission took the necessary actions to ensure a smooth transition from ECS Phase 2 to AES implementation. A dedicated CBG meeting was held in October 2017 to present and discuss the Transition Strategy for AES and NCTS Phase 5, which was approved by the ECCG in December 2017. The acceptance of the AES and NCTS Transition Strategy triggered the update of the Business Case and Vision Documents for both systems, which were published for Member States' review at the end of 2017.

A significant number of Member States (CY, CZ, DK, EE, EL, HR, IE, PL, PT and SI) reported activities in progress. CY, EL and HR carried out activities pertaining to national user requirements, while FI reported on analysis and modelling related to national functional specifications. HR prepared a Summary of Operations document outlining the main project development phases and deliverables. BE, CZ, DE, FR and PT were involved in operational activities, whereas HU completed deployment. The national project in BE will be a component of the future AES implemented in alignment with the UCC requirements. CZ reported continuous service improvements and fewer issues compared to the previous year. Further national system development in DE was covered under a procurement contract completed in early 2017, aiming to implement UCC requirements until 2020. FR performed maintenance and upgrades, while addressing initial requirements for the upcoming UCC AES phase. Operational, maintenance and support activities in PT were delivered through contracted services, whereas EE, IE and SI reviewed project documentation. In view of deployment activities, PL analysed message structures and created specifications for XML messages in line with EU requirements. Apart from facilitating system adaptation to the CDS and NCTS, BG started preparations to implement the functionality for managing re-export notifications in the national ECS2 Phase 2 application. Project implementation was put on hold in FI, MT, SE and SK. MT announced its plan to incorporate the new AES functionality in the existing National Export System (NES).

4.1.1.5 *UCC Transit System including NCTS (1.7)*

The NCTS Phase 5 and AES developments took place contemporarily during 2017. All preparation activities for the L4 BPMs/FSS package, the update of the Business Case, Vision Document and creation of the Transition Strategy Document required significant effort from the Commission, the Member States and representatives of economic operators who were engaged in regular discussions through the ECCG, CBG and TCG platforms to determine the most appropriate solution for system implementation.

During 2017, the Member States attached priority to national project development, particularly as it pertained to the alignment of project operations with the UCC requirements. BE, CY, CZ, DK, EE, EL, FR, IE, LT, PL, PT and SI reported their activities in progress. Apart from analysis/modelling activities and system upgrades, BE rewrote and aligned the existing NCTS application to meet the framework of its overall ICT strategy for finance. CY, EL and LT were involved in the development of national user requirements, while LT also facilitated procurement services for the development of the new national system. FR performed activities related to national system design and announced its intent to release the new national system by November 2018. CZ, DE, PL and PT reported activities on continued system operation, while HU completed system deployment. Operational, maintenance and support activities in PT were delivered through contracted services. CZ reported continuous service improvement and fewer issues compared to the previous year. DE performed development and maintenance activities within the framework of the overall national ATLAS system, whereas SI reported on reallocation of staff resources for project initiation. PL implemented timely system improvements through external contracted services. Deployed on a common infrastructure platform, NCTS PL2 shares the relevant components of this environment with other e-Customs national systems. Project implementation was put on hold in FI, HR, MT and SK. MT expressed its intention to align the existing system with the UCC requirements once a decision is rendered on a system upgrade or replacement. HR focused on national technical specifications and reported that development activities for NCTS Phase 5 have not started. FI and HR developed national functional and technical

specifications respectively. In addition, BG reviewed the UCC WP milestones related to national project initiation and re-engineered processes to establish a service-oriented architecture (SOA).

4.1.1.6 *Registered Exporter System (REX) (1.11)*

The Registered Exporters System (REX) was deployed on 01/01/2017. System-to-system conformance testing was successfully finalised during January 2017 with ES, FR and CH. Following further necessary improvements, an upgrade of the REX system to version 1.3 was performed in mid-2017 to update validation rules and register EU exporters for both GSP and CETA³² business processes through the national modules. In addition, work was in progress to define the scope of Release 1.4, which is expected to implement system improvements concerning administrative, reporting and monitoring tasks and integrate REX with the CRS component.

In 2017, the Commission held various meetings with the Member States and representatives of economic operators to discuss the system from an IT and customs business perspective. Prominent among the activities at the international level were a dedicated REX project group³³ meeting and an IT workshop in India with more than 70 user participants. The Commission also shared technical and business knowledge with Turkey upon their request, engaging in initial discussions to extend the REX application to Turkey as a partner country. By the end of 2017, Member States and beneficiary countries completed 21,365 and 11,570 active REX registrations respectively. The REX eLearning module was published in 2017 to support system deployment. The FR, RO, HU and HR versions were published and other translated versions will follow.

The majority of Member States (AT, BE, BG, CY, CZ, DE, EE, EL, FR, HR, HU, IE, LT, MT, PL, PT, SI, SK and UK) reported activities relating to continued system operation. In addition to various bug fixes, AT performed automated checks on the customs clearance process and implemented the CRS replication of national REX data to support system deployment. Furthermore, AT announced its plan to implement a national system in Q4 2019 equipped with an electronic trader access. Operational, maintenance and support activities in PT were delivered through contracted services. CY, DE, HR, MT and SK reported using the centrally developed REX system. Due to the lack of translation, HR is producing the REX decision manually based on the English version. IE performed updates to the national declaration and customs reference systems to ensure correct interfacing with the centrally developed REX system. No major issues were reported on the operational system in PL, while interest was expressed in a wider access to registered exporter data from GSP countries. LT interfaced CRS with the EU REX system, whereas FR planned to implement the new REX version in 2018. EL validated REX numbers recorded in Box 44 of the Single Administrative Document (SAD), while using the web services provided by the Commission. EE interfaced REX with the national declaration system in January 2017 and performed automatic checks on the validity of the REX number in the customs declaration. CZ facilitated message exchange between the REX system and the CRS component through the National Single Window (NSW) solution. Online controls of REX numbers were implemented in the import module of the ICS system through message exchange with the Single Window system. Plans are underway to also accommodate controls on certificates in ICS. RO placed the system on hold. Development activities included the preparation of functional and technical specifications for the inception phase. In addition, part of the funding received for customs activities would be used to implement the automatic validation of REX numbers through the national export system based on the central REX module.

4.1.1.7 *COPIS (1.12)*

The COPIS project encompasses the following applications:

- COPIS 1.2.0;

³² The Comprehensive Economic and Trade Agreement between the EU and Canada (CETA) entered into force on 21 September 2017.

³³ Participating countries: Mauritius, Armenia, Myanmar, Bolivia, Sri Lanka, Swaziland, Argentina, Maldives, Niger, Rwanda, Gambia, Guinea, Malawi, Tanzania, Ghana, Cameroon.

- COPIS Interface with Anti-Fraud Information System (AFIS);
- COPIS implementation of electronic Application for Action (AFA);
- Feasibility study on the interconnection with the Office for Harmonisation in the Internal Market (OHIM) Enforcement Database (EDB).

The centrally developed COPIS 1.2.0 became operational in 2014. In 2017, the Commission focused on the implementation of the COPIS interface with AFIS (Phase 1) and the implementation of electronic AFA. Construction activities for COPIS-AFIS were completed in Q3 2017 resulting in system deployment in late 2017. Conformance testing was performed by the European Anti-Fraud Office (OLAF) with no impact on the Member States. In addition, development activities were finalised concerning interoperability between COPIS-AFIS and Norwegian customs systems. Areas of priority for further project development regarding the COPIS AFA (Phase2) included the acceptance of the Business Case by the Member States in 2017 and the preparation of the Vision Document.

In 2017, CY, CZ, FR, HU, IE, MT, PL and SI maintained the system in the operational environment. PL produced system documentation and implemented new functional rules in preparation for the conformance testing campaign. CZ performed the necessary adjustments and verifications to align the national system with the new central COPIS release and other national systems, such as the CZ Industrial Property Office. In addition, plans are in place to facilitate the electronic submission of AFAs through the national customs website in 2018. AT deployed bug fixes in the national test environment and took the necessary steps towards the replication of COPIS data and automated checks on customs clearance. While no major issues were identified with the operating system, AT announced its plan to implement a national system in Q4 2019 enhanced with an electronic trader access. CY and MT reported using the central COPIS application developed by the Commission. DK performed initial system analysis to define the project scope and shape the development of national technical specifications, while the COPIS project team engaged in discussions with the UUM&DS counterparts to specify the integration and structure of AFAs. FR announced its plan to deploy the new COPIS release in early 2018. The system was put on hold in SK. EE took similar action by postponing its deployment activities.

4.1.1.8 *EU Customs Single Window program (1.13)*

In 2017, the Commission was actively engaged in activities related to the certificates' exchange solution. The Business Case for the "EU Customs Single Window: Certificates Exchange" project was approved by the Commission's IT Board in Q1 2017. Although Release 1.4.0 of the EU Single Window Common Veterinary Entry Document project (EU SW-CVED) entered in production in Q3 2017, the conformance testing activities are scheduled to continue into 2018. This project entails the interconnection between national customs systems and DG SANTE's database (TRACES), which hosts the CVED and Common Entry Document (CED) certificates through DG TAXUD's IT solution. The development of a new EU SW-CVED release (1.4.1) has been successfully completed, providing enhanced functionalities for three certificates (CVED-A, CVED-P and CED certificates³⁴). This release is anticipated to be succeeded by the EU Customs SW CERTEX 2.0 project whose scope will be extended to include three additional EU certificates (FLEGT, COI and CHED-PP³⁵) to further improve the integration of customs processes with those of other competent authorities. To this end, DG TAXUD established close cooperation with DG ENV, DG AGRI and DG SANTE to carry out relevant work towards the production of the business deliverables package, including L3-L4 BPMs, data mapping analysis and rules tables. The BPMs for CHED-PP, COI, FLEGT and the updated

³⁴ CVED-A: Common Veterinary Entry Document for Animals (DG SANTE)

CVED-P: Common Veterinary Entry Document for Products of Animal Origin (DG SANTE)

CED: Common Entry Document (DG SANTE)

³⁵ FLEGT: Forest Law Enforcement, Governance and Trade Action Plan (DG ENV) – Timber Import

COI: Certificate of Organic Inspection (DG AGRI)

CHED-PP: Common Health Entry Document module for Plant Protection (DG SANTE)

CVED/CED certificates were released for external review in Q2 2017 followed by a Guideline Document for FLEGT and COI certificates supporting Release 1.1.0 and the approval of the EU Customs SW CERTEX 2.0 Vision Document in Q3 2017. Throughout 2017, discussions took place with Member States and representatives of economic operators on the evolution of the CERTEX project. In addition, DG TAXUD initiated consultations with DG CLIMA regarding the integration of Ozone-Depleting Substances (ODS) and Fluorinated Gases (FGAS) certificates in the EU SW CERTEX project.

In 2017, BG, CY, EE and FR maintained the system in the operational environment. BG aligned the NSW platform with the EU SW-CVED version 1.3 and facilitated veterinary controls through the interconnection between the NCTS and TRACES systems. CY deployed EU SW-CVED release 1.4.1, whereas EE implemented EU-SW CVED in the national declaration processing system for import and special procedures. IE and CZ performed system upgrades, while the latter interconnected the CVED and REX systems, developed the FLEGT IT system, and concluded discussions with the Ministry of the Environment on depreciating licenses. DE, FI and MT progressed with the development of national user requirements, whereas BE carried out analysis and modelling activities. MT reported on its plans to implement a NSW for integration with EU SW CERTEX, encompassing all facets of the SW process for customs operations, including certificate verification. Work will commence on producing the User Requirements Document once funding is approved. DE developed a high-level project plan, while considering the prospect of creating an interface between TRACES and ATLAS Release 9.1. LV aligned the national Electronic Customs Data Processing System with TRACES version 1.4. PT, SI advanced with the completion of conformance testing, while it concurrently started to implement Release 1.4.0. PL was involved in preparing national functional specifications and reported on ongoing developments undertaken by the National Revenue Administration to implement the NSW system within the framework of the PUESC³⁶ Project. To this end, a dedicated project group has been established on a national level to develop the concept of the SW environment for customs, all necessary documentation and the implementation approach. The system was put on hold in RO and SK. RO further reported being involved in project initiation phase activities, focusing primarily on the development of functional and technical specifications. In addition, it acknowledged that part of the funding received for customs activities would be allocated to support the development and implementation of the SW system.

4.1.1.9 *Classification Information System (CLASS) (1.14)*

Further progress was recorded in the development of the CLASS project during 2017. Service specifications were submitted for Member States' review, resulting in the completion of the elaboration phase in Q2 2017. The necessary steps were taken to ensure timely construction activities for system deployment in 2018. FR was reported as the only Member State that has requested to implement a system-to-system interface with the CLASS publication services.

In view of project development, DK and EE reported progress on analysis and modelling activities. DK also evaluated future strategies for the national implementation of CLASS and reported that the project team will determine further action upon system release. FR carried out operational activities and upgraded the national CCN component. BE and MT put the project on hold, while MT announced its plan to use the central system developed by the Commission. Project related issues and relevant documentation were addressed at the ECCG meetings throughout 2017.

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

The EORI2 project aims to update the existing EORI system and the EOS web services in alignment with the legal changes resulting from Annex 12-01 of the UCC DA/IA. Development and elaboration activities for EORI2 were completed in Q1 2017 following the approval of the deployment plan by the Member States. The construction phase for EOS implementation was finalised in Q2 2017 targeting Q2 2018 for the launch of operations.

³⁶ Electronic Services Platform for the Revenue and Customs Services.

BE, CY, FR, IE, RO and UK reported that EORI2 was deployed in operational mode. DK, EE, LT, PL and SI advanced the system design phase through developing or modifying user interfaces and performing conformance tests. PL designed a temporary solution for EORI consultation with EOS EORI, which is anticipated to be developed in early 2018. AT, FI, MT and SK carried out national acceptance testing, whereas HR and PT started conformance testing to align the functionalities of the national EOS application with the UCC requirements. DE finalised conformance testing and EORI2 implementation, while EL completed the development of national technical specifications. The new customer register in FI was updated with the EORI feature in Q4 2017. In addition, CZ performed system upgrades, whereas LV gave priority to the improvements needed to ensure interoperability between the national system and EORI2.

4.1.2 MASP Group 2 - Customs European initiatives needing further study and agreement

Group 2 contains projects that require further review and discussions before being mapped on the IT planning chart.

4.1.2.1 UCC Notification of Arrival, Presentation Notification and Temporary Storage (2.1)

The development activities related to this project are a purely national responsibility. Its goal is to enable the automation of processes at national level for the notifications of arrival of the means of transport and the presentation of goods and declarations for temporary storage as described in the UCC, aiming to support harmonisation across Member States for data exchange between economic operators and customs. During 2017, the Member States reported on various national activities related to system development and maintenance. BE, CZ, DK and FI worked on developing national functional specifications, whereas CY, HR, MT and EL performed analysis and modelling activities to define national user requirements. To this end, HR prepared a Summary of Operations document, outlining the main project development phases and deliverables. DK developed specifications for a new tender proposal and anticipated that the implementation of national import systems would exceed the 2020 deadline. SI upgraded the national application to ensure compliance with the data requirements established under Annex B of the UCC DA. Likewise, PL performed a partial system upgrade to align the declarations for temporary storage with the UCC requirements, whereas LV aligned data elements for the submission and processing of these declarations in the national Electronic Customs Data Processing system. DE carried out system development and maintenance activities on the Notification of Arrival and Temporary Storage procedures within the framework of the overall ATLAS system. SE focused on similar activities relating to system design. FI, FR, IE, MT, PT and SK placed their activities on hold.

4.1.2.2 UCC Guarantee Management (GUM) (2.5)

In 2017, the Customs 2020 Project Group on the EU Guarantee Management System Design (GUMD) finalised the draft Business Case for a harmonised Guarantee Management system. The members of the project group identified the decentralised architecture as the preferred system implementation alternative and provided recommendations for further project development in line with the UCC DA/IA requirements. Among the key findings of the project group was the need to revisit the legal issues regarding the proper monitoring of guarantees with union-wide validity, which required further scrutiny and formal legal advice from the Commission's experts. Similarly, a survey conducted with representatives of economic operators revealed that a high degree of uncertainty remains regarding the legal provisions. However, the reallocation of staff resources due to priority projects led to delays in conducting the external review of the Business Case, which is postponed until Q4 2019 with foreseen adoption by Q2 2020.

Several Member States (BG, CZ, EE, FI, FR, LT and PL) reported their activities in progress. EE, FI, FR and LT focused on user requirements analysis, while CZ and PL were involved in operational activities. BG analysed digital solutions for the national system, prepared the Vision Document and managed the construction phase of the project. LT developed Terms of Reference for the procurement

of the national guarantee management system. Relevant work was carried out in FI to analyse the management of guarantee requirements within the scope of the program centred on the renewal of cash flow systems. In view of the discussions stemming from the GUMD Project Group meetings, EE assessed modifications to the national system and analysed different legal issues concerning the interpretation of the UCC. PL performed changes to the system following the entry into force of the national regulation regarding excise guarantees. SI deployed a system upgrade and developed national technical specifications. In addition, national system development was put on hold in BE, DE, DK, IE, MT and SK. CZ underwent system upgrades and met maintenance related commitments. Due to the shift in priorities for UCC system implementation, HR reported that operational readiness is foreseen after 2020. CY and MT expressed preference for using the central component developed by the Commission, although MT was open to exploring opportunities for additional services if necessary. DK performed an initial analysis of the central guarantee management system to evaluate the impact on other national systems and solutions, while the national project team debriefed various stakeholders on future requirements related to key process parameters.

4.1.2.3 UCC Special Procedures (2.6)

The implementation of the UCC Special Procedures (UCC INF SP) project is considered in two approaches:

- UCC Special Procedures Harmonisation: national IT developments for the harmonisation of special procedures and alignment with the legal provisions defined in the UCC IA/DA;
- UCC Standardised Exchange of Information for Special Procedures: central services provided for the management of standardised information developed for inward and outward processing procedures.

The first release of the UCC INF SP system will consist of a pilot phase where all Member States can contribute information from the customs declarations, but only a selected number of economic operators will supply INF data. The exchange of information between customs authorities and economic operators will be automated and facilitated via a Central Trader Portal. The elaboration phase for the pilot implementation was completed in Q2 2017 and discussions were initiated on the integration of the UCC INF SP with the Generic Trader Portal (GTP). Construction phase activities started in September 2017 with the development of use-case specifications, system process models and the graphical environment through which the user would interact with the Trader Portal. To this end, the Commission focused on preparing Graphical User Interface Specifications (GUIS) and Graphical User Interface Prototype (GUIP) for Member States' review. A corrective RfC was also launched to improve the quality of the INF SP L4 BPMs. Following the outcome of discussions with Member States at the CBG meeting in January 2017, it was determined that the system-to-system interface between the national Customs Declaration Processing Systems and INF SP will be considered for Release 2 of the INF SP system.

In 2017, several Member States (BE, BG, CY, DE, EE, FI and PL) reported their activities in progress, while the national systems in DE and SE were ready for continued operation. BG and FI performed analysis and modelling work related to the design of the national system. The construction phase activities carried out in BG consisted in providing required national solutions for import related special procedures reported under MASP project fiche 2.10 (*Adjustments of the existing import applications under the UCC*). In view of the harmonisation of UCC SP, BG focused its efforts on developing the necessary digital solutions for special procedures related to export, which will be implemented together with the UCC AES. Other activities surrounding the development of the UCC INF SP in BG were dedicated to the review of specifications and functional requirements as well as the preparation of L4 BPMs and the Vision Document. Likewise, PL reported that the UCC INF SP will be implemented through the national electronic solutions and services embedded within four projects: UCC AES, UCC national import systems upgrade, the national system designed for the management of special procedures and the national INF SP system in cooperation with the central project. CY and BE performed analysis and modelling activities for national user requirements and national functional specifications respectively. FR, IE, MT and SK placed the project on hold, whereas DE and SE increased the focus on operations and maintenance activities. SE anticipates standardising and automating processes and IT support for the management of customs warehouses.

4.1.2.4 *Surveillance3 (2.7)*

The Surveillance3 system collects customs declaration data to ensure the control and traceability of the import and export of specific goods throughout the customs clearance and warehousing process. The decision to merge the implementation timelines for the Surveillance3 and UCC BTI projects resulted in the development of the new SURV-RECAPP application, the evolution of the EBTI-3 system and the alignment of functions required for the correct use of BTI. 2017 marked the completion of development and construction activities for Surveillance3 Phase 1, which consists of the data warehousing component and the reporting functionality required to maintain control over BTI use for UCC BTI Phase 1. As part of these activities, the SURV-RECAPP application became operational on 01/03/2017 to maintain a new list of 40 surveillance data elements for UCC BTI Step 1. Surveillance3 Phase 1 entered in production on 02/10/2017 to support UCC BTI Phase 1 Step 2 by aligning the EBTI-3 system to the standard process for UCC CDS as defined in the UCC DA&IA. Construction phase activities for Surveillance3 Phase 2 had already begun in Q4 2017.

In 2017, BE, BG, CY, DE, DK, EE, FR, HU, MT and SI reported their activities in progress. BE, EE and SI prepared documentation on national user requirements, while PT implemented 14 data elements with a new message format in the production environment. EE granted user access to the BTI usage reports in Q4 2017. MT focused on national technical specifications, upgraded the national Surveillance2 system to version 3 and announced timely implementation in line with the MASP. FR outlined its plan to start analysis and modelling activities by the second half of 2018 and deploy the new version of Surveillance3 in 2020, while CY announced its intention to use the central system component developed by the Commission. DK carried out maintenance and upgrades to coordinate the design phase of the project, completed the technical specifications and explored options for procuring a new surveillance system. DE prepared for the SURV-RECAPP conformance testing and reported that system implementation and the upgrade of 40 surveillance data elements for import and export would be delayed until the national systems are aligned. LV defined user requirements and specifications for the Integrated Tariff Management System in accordance with the UCC Surveillance 3 guidelines and anticipates developing an operational system by June 2018. Project implementation was put on hold in IE, PL, RO and SK. PL, BG and SI conducted an overall review and analysis of the documentation provided by the Commission, whereas IE reported that additional data elements will not be transferred until the update to the national import application is in place in 2020. RO developed system functional and technical specifications and expressed the intent to allocate some of the funding received for customs activities to the Surveillance3 project.

4.1.2.5 *UCC – ICS2.0 for strengthening the Security of the Supply Chain at Entry (2.8)*

Due to the complexity of the ICS2 system and budget constraints, a phased approach was adopted for project implementation, which received a positive reaction from the CPG meeting in June 2016. In 2017, the Commission created a dedicated ICS2 Project Team to support the effectiveness of this approach across all facets of the programme's activities. The team became operational at the beginning of March 2017 and worked in collaboration with the ICS2 Project Group to prepare common specifications for the ICS2 system. The main deliverable of the project team was the updated version of the ICS2 Business Case, which made the transition from the ICS2.0 project to the ICS2 programme. This programme consists of several projects and activities, including the Common Repository, CRMS2 link, Trader Interface (national/Shared Trader Interfaces (STI)), National Risk Management systems, Risk Management support, e-screening, TES Helpdesk, National Declaration Processing Systems and Arrival/Presentation Notification controls for national systems.

In close cooperation with the Member States, the ICS2 dedicated team and representatives of economic operators analysed the ICS2 common system specifications package, which comprised business model specifications (L3.5 BPMs), functional specifications (L4 BPMs) and message specifications. The publication of the business model specifications was released in Q4 2017, whereas the rest of the package is anticipated to be completed by Q1 2018. In June 2017, the ICS2 Project Team submitted an STI project proposal³⁷ to the CPG, elaborating on the implementation of the STI in

³⁷ “Shared Trader Interface Project Proposal” attached to note ARES (2017)2826621 of 06/06/2017.

parallel with the national trader interface alternative. Following the endorsement of this proposal by the CPG, the ICS2 team in collaboration with the STI Project Group performed inception activities related to the STI project which resulted in the acceptance of the ICS2 STI Vision Document by the CPG in December 2017. In addition, the ICS2 Project Group developed the Transition Strategy and Plan with the objective of providing general guidance on the rollout plan and approach to the system transition. The document defined the implementation of three releases with a specific scope for the transport modes and business models and was endorsed by the CPG in December 2017.

During 2017, the ICS2 Project Team organised various meetings to address the project scope, design, requirements and system implementation, including 13 project group meetings with an average of 15 participants and two Security Risk Rules project group meetings with 43 participants. The progress of the ICS2 programme was periodically presented at the CBG, CBG-RIMSCO, ECCG, TCG and CPG meetings. In addition, two working sessions were held with NL to exchange views on the ICS2 Transition Plan and Strategy.

The Member States continued their activities to prepare for the UCC related changes to the ICS2 system by conducting an overall review and analysis of project documentation at EU level, including the ICS2 Transition Plan, STI Vision Document and system specifications. CZ, EL and SI reported on activities related to national user requirements. CZ acknowledged that the start of project development is yet to be determined, while EL and SI carried out analysis and modelling activities. FI, HU, IE, MT and SK placed the project on hold. MT expressed its interest in using centrally developed services and reported that the existing system would be upgraded to facilitate the exchange of messages with these services. FI focused on analysis and modelling for the national functional specifications. FR performed a system upgrade following an internal request for changes and reported progress on the ICS2 specifications and interfaces. HU conducted national acceptance testing, processed a change request form in the test environment and developed system security checking in line with national requirements. DE reported on maintenance and operational activities and informed that the national roadmap for project implementation is not yet finalised.

4.1.2.6 *Adjustments of the existing import applications under the UCC (2.10)*

The inception phase of this project was closely linked to the progress made during 2017 by the Customs 2020 Project Groups on UCC Centralised Clearance Import Design (CCID PG) and UCC Centralised Clearance Import Specifications (CCIS PG). The CCID PG analysed and defined the project scope, recommending the decentralised system architecture as the preferred implementation option. This approach also promoted the re-usability of existing national import systems and collaboration between national administrations through the simplification and digitalisation of customs procedures. The CCID PG prepared a final report that laid the groundwork for the creation of the Business Case, which was accepted by the ECCG in Q4 2017. With the support of the CCIS PG, the Commission launched activities in Q3 2017 to produce L4 BPMs and functional system specifications. The project documentation is anticipated to be finalised and reviewed by the Member States in 2018.

The Member States reviewed the project's MASP fiche and the EU CDM requirements. BE, CZ, DE, DK, FI, HR, IE, LT, PL, PT, SE and SK reported their activities in progress, whereas CY, HR, IE and MT performed analysis and modelling activities to define national user requirements. HR conducted a comparative analysis of the old and new customs declarations and updated the logical access controls of the existing automated import system in line with the recently implemented UCC CDS and REX systems. BE, DK and FI worked on developing national functional specifications. DK focused its implementation efforts on imports, notification of arrival, presentation notification and temporary storage procedures. While working towards developing specifications for a new tender proposal that will include these projects, DK reported that the implementation of national import systems might exceed the 2020 deadline. LT focused on national system design through defining user requirements and specifications for the national import declaration system in line with the UCC and reported that the operational system is anticipated by June 2018. HU, SE and SI performed analysis and modelling activities, whereas CZ and PL implemented system upgrades. PL signed an IT contract with an external company to manage the implementation of RFCs and partially aligned the national import system with the UCC requirements. CZ finalised all planned changes and prepared to implement new modifications at national and EU level in line with the UCC requirements. DE, PT and SK reported

activities relating to continued system operation. DE carried out activities concerning the national import project within the framework of the overall ATLAS (Automated Customs Tariff and Local Processing Application System) system, which was upgraded to Release 8.8 in Q3 2017. SK's system became operational in Q4 2017 for standard and simplified procedures. Project development was put on hold in BG, EE, FR, MT and RO. The national project team in BG reviewed the draft versions of the BPMs and developed national functional specifications. MT expressed the intention to explore its compliance strategy with the EU CDM and subsequently perform a simultaneous upgrade of its core systems in line with the UCC requirements. RO developed functional and technical specifications to align the national import application with the UCC data requirements and announced its intent to allocate some of the funding received for customs activities to support this project.

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

The CUP-MIS project is a tool for measuring performance in the EU Customs Union, which assesses areas of progress in the overall governance structure and other areas needing improvement, while sharing best practices and promoting continuous development. No progress was recorded concerning this project in 2017. Although the Business Case has been completed, project activities were put on hold. At national level, BE reported on follow-up activities, whereas CY expressed the intention to use the central component that will be developed by the Commission.

4.1.2.8 *UCC Proof of Union Status (PoUS) (2.12)*

The progress of this project faced challenges stemming from the insufficient legal basis to support additional system functionalities requested by the representatives of economic operators, namely the partial use of the proof and the additional load of goods to an existing proof. An agreement was reached regarding the partial use of the proof, where the system would be enhanced with a calculation module. However, legal amendments concerning the extra loading functionality were considered complicated for implementation. These issues were explored at length at the CBG meeting in January 2017 dedicated to the UCC PoUS, and discussions continued throughout 2017 at the TCG/ECCG meetings or bilateral meetings with the representatives of economic operators. While the Commission focused on analysing the requirements for additional functionalities and their legal grounds, project activities related to the update of the Business Case, Vision Document and Level 4 BPMs were put on hold.

Although several Member States (DE, EE, FR IE, PT, SI, MT and SK) reported that the project was put on hold, PL performed national acceptance testing activities and acknowledged that the PoUS system will be part of the new export (AES) system. In view of this, a confirmation service for the status of EU customs goods was created and tested, while the national specifications of XML messages were developed in line with the UCC requirements. MT announced its intention to use the central system, noting that system development would be addressed at a later stage. DE reported that activities related to the PoUS system are highly contingent on the progress of trans-European projects.

4.1.3 MASP Group 3 - Customs International Information Systems

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

4.1.3.1 *EU Implementation of UNECE eTIR System (3.1)*

The eTIR System aims to secure electronic data exchange between national customs systems for the international transit of goods, vehicles and containers. This project was launched by the contracting parties³⁸ of the TIR Convention³⁹ under the auspices of the United Nations Economic Commission for

³⁸ <https://www.unece.org/tir/system/countries.html>

³⁹ http://www.unece.org/fileadmin/DAM/tir/handbook/english/newtirhand/TIR-6Rev9EN_Convention.pdf

Europe (UNECE) to provide an exchange platform for all actors involved in the TIR system, including customs authorities, the guarantee chain and transport operators.

The implementation scope of the eTIR System in the EU is twofold: adaptation of NCTS to handle TIR operations as defined in the eTIR Reference Model Document⁴⁰ and adaptation of SPEED to enable data exchange between the NCTS and eTIR system. The Commission will facilitate the exchange of data between the NCTS and the eTIR system potentially through SPEED. The Member States will play a role in providing support and guidance, while implementing national tasks where necessary. Updates on progress will be communicated at Commission level when the tasks are delegated to the contracting parties. No new project activities were initiated during 2017 by the Commission or Member States, except for HR which started developing national user requirements in November 2017.

4.1.3.2 *EU Implementation of the eATA Carnet Project (3.2)*

The objective of this project is the development of a new electronic communication system to facilitate information sharing between a series of stakeholders (economic operators, chambers of commerce, customs administrations) involved in the temporary admission of goods procedure in various countries or customs territories. To replace the paper-based ATA Carnet modalities, the WCO formed an eATA Carnet Working Group in 2007 to lead the elaboration of the concept and assess the feasibility of its application throughout contracting parties. Subsequently, the International Chamber of Commerce (ICC) announced it was leading the development of a new eATA Carnet system proposal.⁴¹ The Commission intends to develop a single EU central system to exchange eATA Carnet System data with other participating parties. In 2017, the Commission announced its plan to contribute to this project by undertaking a proof of concept study for using the Blockchain technology as outlined in Section 3.1.6. Among the Member States, EE and FR reported “in-progress” project status, HR and CY continued inception phase activities, whereas BE, MT, SI and SK put project activities on hold.

4.1.3.3 *Smart and Secure Trade Lanes (SSTL) (3.3)*

The SSTL is a pilot project between the EU (BE, DE, ES, FR, IT, NL, PL, UK), CN and HK aiming to strengthen supply chain security and provide trade facilitation to participating economic operators through maritime, air and rail trade lanes between the countries involved. This project consists of two main components: international exchanges between the EU, CN and HK and international exchanges between the EU Member States and the Commission. The Business Case for both components was approved by the ECCG and the IT Board in September and December 2017 respectively. The Member States did not report any activities during 2017 apart from analysis and modelling undertaken by HU. Inception phase activities are scheduled to take place in Q1 2018.

4.1.3.4 *Exchange of TIR movement data via SPEED2 to Republic of Moldova and Ukraine (3.4)*

This pilot project aims to provide advance electronic information on the TIR Carnet to the customs services of the Republic Moldova and Ukraine to improve risk management and facilitate trade between the EU and these countries. This includes national TIR operations created in the Member States bordering Moldova and Ukraine, which currently do not require a message exchange via CCN/CSI. The Commission established contact with these countries at IT level in July 2016. The Vision Document was completed and accepted by the ECCG in March 2017. The project is currently on hold until both countries decide to resume their activities. There was no reporting from the Member States during 2017.

⁴⁰ <https://www.unece.org/trans/bcf/etir/references.html>

⁴¹ Please refer to section 4.1.4.2 of the 2016 e-Customs Progress Report for more details.

4.1.3.5 *EU-CH EXS data exchange for indirect exports from Switzerland (3.5)*

The main purpose of this project is to develop an automated data exchange between the EU and the Swiss Confederation on the simplification of goods inspections, formalities and customs security measures. The Commission and Member States did not report any activity during 2017.

4.1.4 MASP Group 4 - Customs cooperation initiatives and technological development to facilitate Customs EIS (including current CCN operations)

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

4.1.4.1 *National Core Systems Implementation by Collaborating Projects (4.1)*

During 2017, the Commission and Member States did not report any project-related activities. MT observed that with the advent of central systems developed by the Commission, there is no longer a need for collaboration on the implementation of national systems.

4.1.4.2 *Single Electronic Access Point (SEAP) (4.4)*

The intention behind this project is to analyse the potential interactions between the central and national implementations of customs applications and to consider the applicability of the SEAP concept for each new system brought into production. The Commission and Member States did not report any project-related activities during 2017.

4.1.4.3 *CCN2 (4.5)*

Although the implementation of the CCN2 project has proved more challenging than anticipated, the Commission's CCN2 team made significant efforts to advance the planning for the key milestones. In 2017, all Member States established connectivity with CCN2 Release 1.1.2, which entered in production on 02/10/2017 to support the UCC CDS. Focusing primarily on SOA enablement and core security services, this release was reported to ensure 100% availability. To further facilitate the provision of technical support, the Commission conducted 5 training sessions that focused primarily on SOA principles and improvement of operational and administration procedures. In Q4 2017, a specific task force was established to address performance issues stemming from low throughput. While exploring a number of topics that could lead to improved system performance, the task force proposed a redesign of the CCN2 solution and its components, taking into account the new requirements to support ICS2. In addition, two corrective maintenance releases are anticipated to become operational in 2018 to improve high availability and performance and to also cover missing/new features.

The design and specifications for CCN2 Release 2 progressed slowly during 2017. This delay was mainly attributed to limited resources, which were assigned to handle priority issues affecting CCN2 Release 1. The migration strategy and adapter architecture were finalised in Q1 2017, whereas the infrastructure requirements were delivered for review at the end of 2017. Additionally, three proof of concepts/feasibility studies were successfully performed in the context of CCN/CSI, resulting in the deployment of Release 7.4.0 whose main purpose is to refine future integration with CCN2.

During 2017, all Member States completed Mode 1 connectivity testing and 26 completed Mode 2 functional testing. CZ used Release 1 conformance testing platform for CRS and CDMS web services. During the testing phase, EE successfully solved some issues that were encountered with the application environment. Other key activities performed by EE involved system configuration and the creation of user accounts. FI dedicated considerable effort to the correct processing of the Security Assertion Markup Language (SAML) specifications in incoming requests and reported concerns about the appropriate validation of SAML tokens in the production environment. To this end, FI submitted a memorandum for consideration by the CCN2 developer, outlining the details of this

procedure and the potential repercussions for system security. SI reported that the difference between IAM components in the conformance testing and production environments remained an open issue.

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

In 2017, the UUM&DS project progressed as planned with the deployment of Release 1 on 02/10/2017. This platform enables access to the UCC CDS Trader Portal and federates all national Identity and Access Management (IAM) systems for economic operators, incorporating also disaster recovery and monitoring capabilities. The major project deliverables were revised in alignment with the eIDAS protocol specifications, and no significant incidents were reported by the Member States and representatives of economic operators. During 2017, work was in progress to carry out implementation activities for Release 1.5, which will provide enhanced functionalities for access management, SSO and web-services. Likewise, inception activities started for UUM&DS Release 2, whose development will support additional functionalities for ICS2 and COPIS, namely S2S secure connectivity, certificates management and digital signature services. In 2017, the Commission organised two webinars with the Member States to finalise functionality enhancements for Releases 1.5 and 2, while discussions were initiated with the Member States, ICS2 & COPIS 2.0 project teams about pre-inception phase activities.

In 2017, configuration and connectivity activities for Release 1 were implemented successfully by all Member States in both conformance testing and production environments. By the end of 2017, 15,281 access requests were made to the EU Trader Portal through the UUM&DS platform. To enable user authentication and authorisation, the majority of Member States have used their national IAM system(s) that can be directly interfaced with UUM&DS and are categorised under type A, B and C solutions.⁴² The other Member States (DE, EE, FR, MT, RO, SK, UK) with no IAM system fall under a type D solution.⁴² In 2017, EE and FR started working on system migration to the type A solution, whereas FI reported intentions on integrating the national IAM to the UUM&DS platform. LT implemented a temporary national solution to grant user access to the EU central services and started analysis activities relating to national system development. In PL, both user and delegation management were processed in the national IAM system. The data model for national authorisation attributes was aligned and expanded according to required business roles and profiles in central services. For this purpose, a mapping module was introduced to automatically convert national business roles to central business roles without the need for alteration in the integrated systems.

AT changed the IAM configuration and finalised the SAML assertion, enabling registered users from EORI enterprises to successfully login to the central UCC CDS Trader Portal since 02/10/2017. With the deployment of the national IAM project and its integration with the UUM&DS platform, BG fulfilled some of the requirements set out in its national e-Customs Roadmap 2016-2020. In a similar vein, LV upgraded the National Electronic Declaration system to provide its economic operators with access to the European Information Systems. Project activities in DE were focused on the use of the central UUM&DS component, although the planning process is targeted towards integration within a wider "Citizens and business customer portal," anticipated to be developed by the Federal Customs Authority. Likewise, under the coordination of the Ministry of Public Finance, RO's National Agency for Fiscal Administration will allocate some of the funding received for customs activities to support UUM&DS updates. CZ and HR reported working on the impact analysis related to Releases 1.5 and 2, whereas SI installed the eIDAS node in the national system.

⁴² Type A: One consolidated IAM system that can be directly interfaced with the UUM&DS.

Type B: Two IAM systems, one of which is used as the single point of contact with UUM&DS.

Type C: Multiple IAMs – Member States shall provide a unified IAM to interface with UUM&DS.

Type D: No IAM system to interface with the UUM&DS.

4.1.4.5 *High Availability DG TAXUD operational capabilities (4.7)*

The Commission has developed high availability and disaster recovery capabilities in the two DG TAXUD data centres hosted in Luxembourg. The following activities were conducted during 2017:

- Successful failover testing of 39 central applications;
- Updated procedures for disaster recovery activities;
- Deployment of new servers and storage capacity to implement new operational and technical requirements;
- Procurement and deployment of new security devices to protect applications from network attacks, malware and other threats;
- Implementation of out of band management (OoB) access to improve the security by segregating the production flow of traffic with the management traffic.

The Member States did not deliver any specific activities relevant to this project, except for BE which reported progress in the current phase of activities.

4.1.4.6 *Maintenance and Updates of Operational IT systems (4.8)*

This section provides an overview of the trans-European systems' operations in 2017, including the error rate evaluation and system availability. The figures contained in the section depict the evolution of the message volume exchanged in the common domain within a certain timeframe.

This section places emphasis on NCTS, ICS and ECS operations and maintenance, although a number of Member States such as FI, EE and CY reported activities related to TARIC3 in their 2017 national progress report. The majority of Member States reported on ongoing maintenance and enhancements of the operational systems. Among the maintenance activities carried out, the analysis of RfCs and the implementation of the Known Error Lists (KELs) were the most prevalent.

4.1.4.6.1 *New Computerised Transit System (NCTS Phase 4)*

With regard to maintenance and modifications to the NCTS, the RfC-List.29 contained various improvements and corrective changes, which had a positive impact on the quality of global operations during 2017. The RfC-List.29, that was formally accepted at ECCG20 in October 2016, was deployed to production by 35 countries on 01/10/2017, apart from RO that delayed their alignment without any major impact on system performance.

11.2 million transit movements were released during 2017. Figure 1 depicts the evolution of movements since 2006, the average number of which reached 44,412 movements released per business day (+7% compared to 2016). This growth is attributed mainly to the increase in the number of movements that was observed after RS, TR and MK acceded to the Common Transit Convention⁴³ joining the NCTS procedures (respectively 213%, 30% and 120%). Similarly, the total number of messages exchanged in the common domain significantly increased in 2017, after a relatively stable period between 2012-2015. The improvement in the quality of operations is depicted in the decrease of the average error rate in 2017 (0.10% compared to 0.17% in 2016) without any major business impact. Since 2014, the error rate is decreasing as a result of the continuous efforts of NAs (supported by DG TAXUD) to improve their applications.

As mentioned in the previous year's progress report, a full scope CT activity has started and is anticipated to continue during 2018. BE has completed their CT activities, whereas BG is expected to deploy the new National Transit Application (NTA) by the end of Q1 2018. Furthermore, all the NCTS common domain messages (except those from CH) were automatically duplicated by DG TAXUD to OLAF without any technical issue.

⁴³ Convention on Common Transit: The Convention of 20 May 1987 on a common transit procedure forms the basis for the movement of goods between the 28 EU Member States, the 4 EFTA countries (Iceland, Norway, Liechtenstein and Switzerland), Turkey (since 2012), the former Yugoslav Republic of Macedonia (since 2015) and Serbia (since 2016).

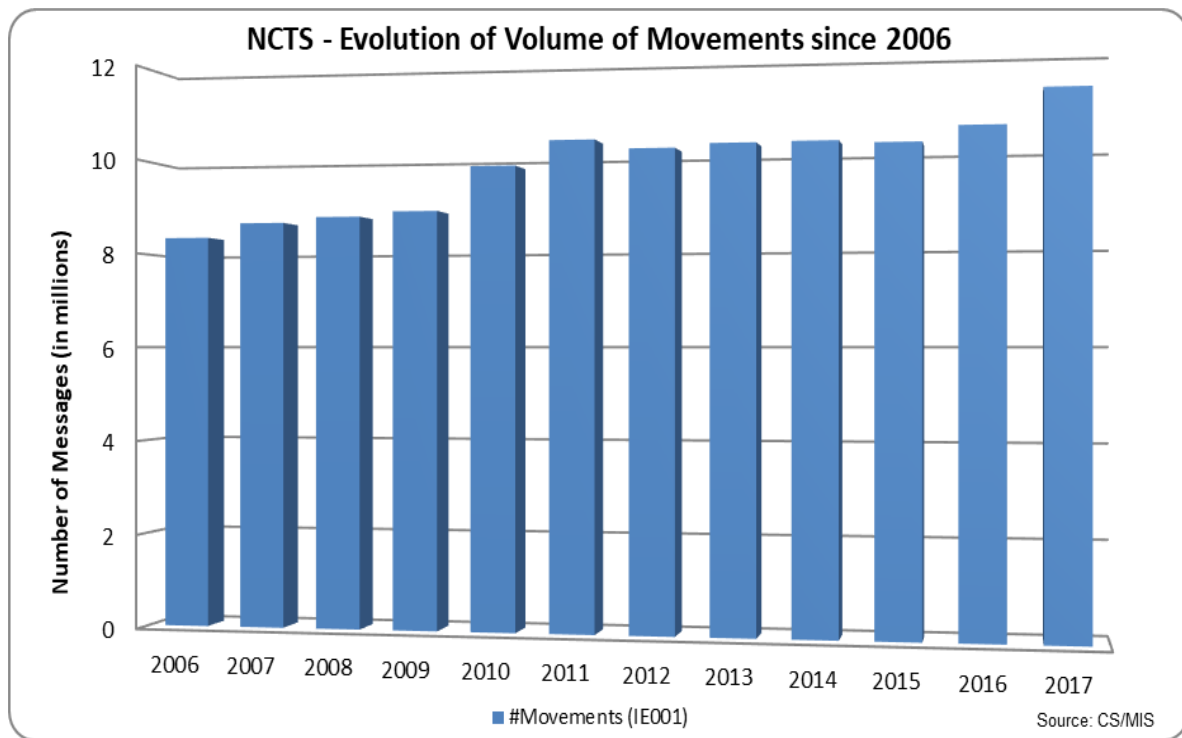


Figure 1: NCTS - Evolution of movements (message IE001)

4.1.4.6.2 *Export Control System (ECS Phase 2)*

Similar to the NCTS, the RfC-List.29 contained improvements and corrective changes to the ECS and was deployed by 28 countries on 01/10/2017. BE, DE, FR and NL delayed their alignment, resulting in a number of error messages, whereas LT's national system will be aligned in 2018.

The number of movements released (approximately 15.1 million electronic messages 'IE501') during 2017 increased by 5.9% compared to 2016, resulting in an increase of 9.36% in the total number of exchanged messages. The evolution of movements depicted in Figure 2 demonstrates that the number of ECS messages exchanged annually between the Member States in the common domain grew by 18.4% from 2012 to 2017. The annual error rate has slightly decreased from 0.27% to 0.26% and was mainly impacted by the rejections of messages on old (archived) movements, the invalidation of reference data in CS/RD2 (without immediate synchronisation by some MSs) and the deployment of the RfC-List.29 on 01/10/2017. All the ECS common domain messages were replicated by DG TAXUD to OLAF in 2017 without any technical issue. As mentioned in the previous year's progress report, FR launched a limited CT campaign to test a new translator for the application. However, upon further investigation, it was determined that testing needed to be conducted on a wider scale before deployment. The new Polish National Export Control Application (NECA) that passed CT in August 2016 was successfully deployed in November 2017.

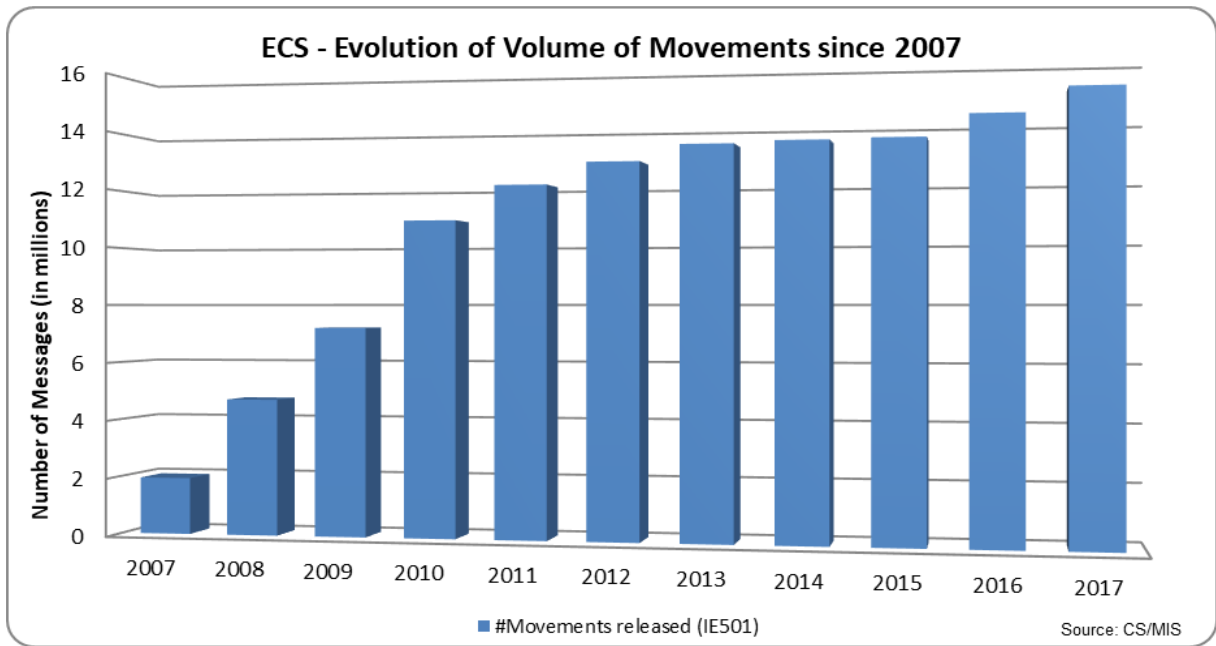


Figure 2: ECS - Evolution of movements released (message IE501)

4.1.4.6.3 Import Control System (ICS Phase 1)

An excellent quality of ICS operations was carried out during 2017. The deployment of the RfC-List.29 has been applied by most countries on 01/10/2017, apart from RO (22/11/2017) and LT (implementation date planned for 30/01/2018) without any major impact on system performance.

As depicted in Figure 3, approximately 48 million Entry Summary Declarations (ENS) were lodged in the EU during 2017 with an increase of 9% compared to 2016. Variations in comparison with 2016 were recorded in the Member States, showing an increase in activity of up to 60% and a decrease of up to 41%. The most noteworthy variations were observed in DE (+26%), EL (+60%), NL (+27%) and IT (-26%), UK (-7%), PL (-41%). The main contributors remained DE with 36% of the overall ENS, followed by FR (15%) and UK (14%), which sum up to an aggregate of approximately 64% of the total ENS lodged. In addition, about 62% of the total ENS movements were submitted for air transport.

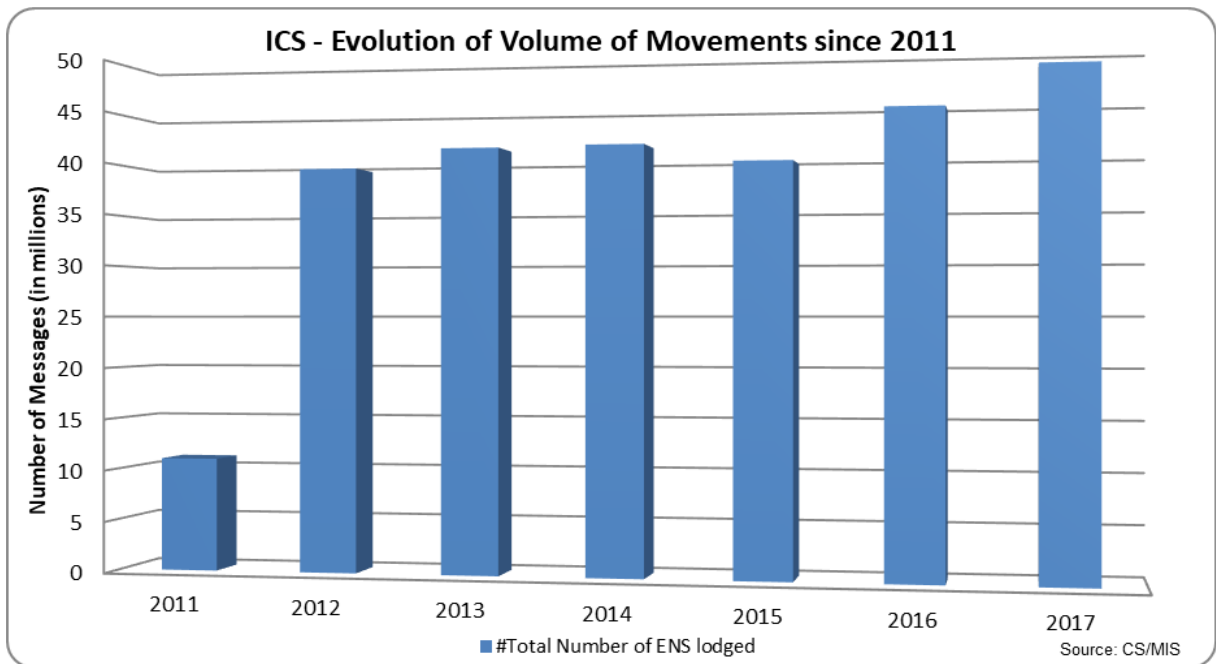


Figure 3: ICS - Evolution of number of ENS

4.1.4.7 Business Continuity (4.9)

In 2017, no new activities were initiated by the Commission or Member States, with the exception of FI which implemented application performance monitoring, management software, migration of database servers/products to ensure business continuity and scalability.

For information purposes, this report also presents a statistical overview of the Common Communication Network (CCN), which experienced steady growth over 2017. The CCN applications exchanged 4.79 billion messages marking an increase of 5.45% over 2016 when 4.54 billion messages were exchanged. This growth is attributed to the increase of message quantity and volume raised by 12.75% (6.56 TBs) in 2017 compared to (5.82 TBs) in 2016. Figure 4 below delineates the evolution of CCN message quantities and volume exchanged since 2008.

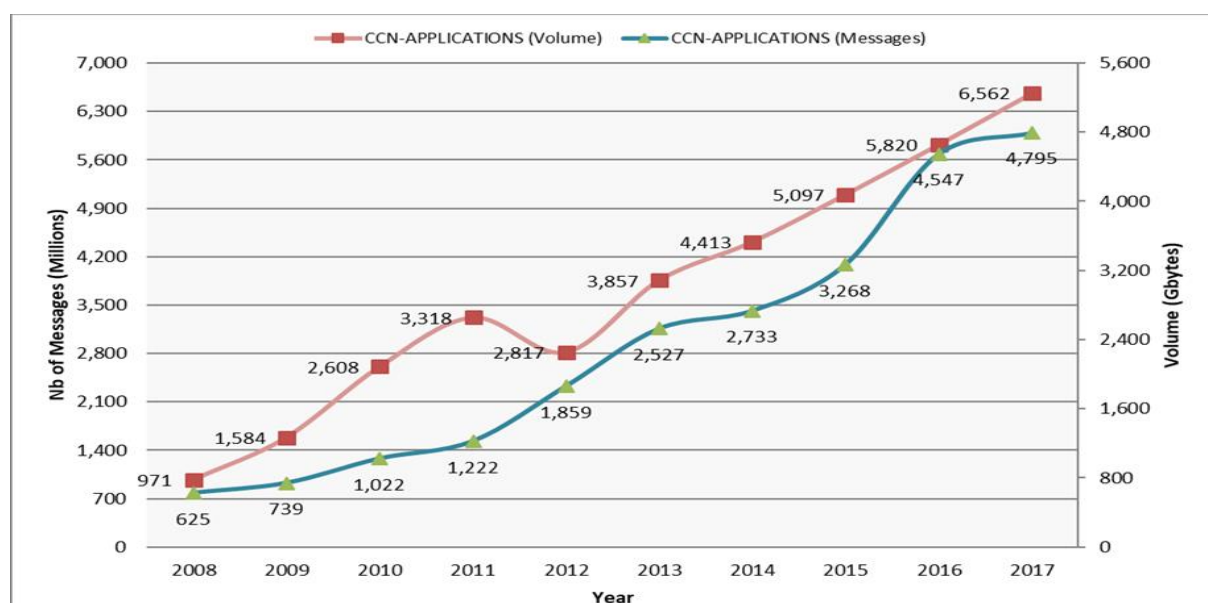


Figure 4: Evolution of CCN message quantities/volume

This figure reflects an increase in the number of exchanged messages through the years⁴⁴. A slower growth in the number of the exchanged messages is observed in 2017 in comparison to the previous reporting period. Similarly, the volume growth⁴⁵ depicts a slight decrease of 1.42%.

⁴⁴ Since 2016, the growth in the number of messages continues to be increased with a 5.45% in 2017.

⁴⁵ In 2016, the message volume growth was 14.17%, experiencing a slight decrease of 12.75% in 2017.

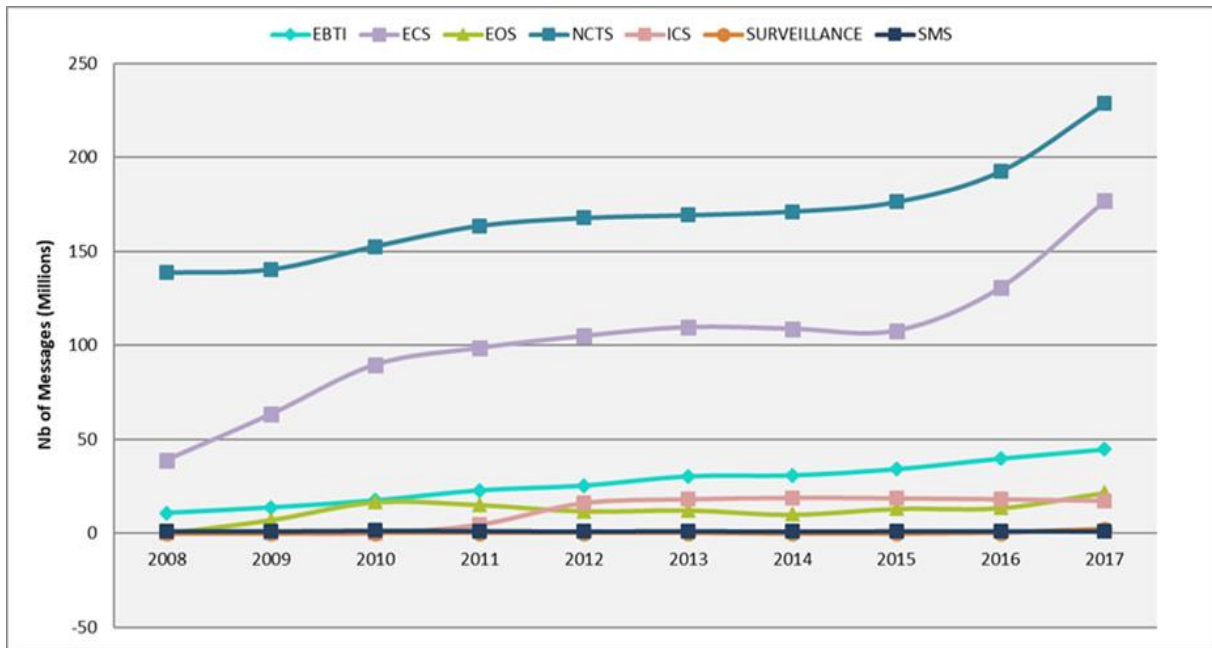


Figure 5: System message evolution

Figure 5 presents the evolution of the exchanged message quantities over the years for NCTS⁴⁶, ECS⁴⁷, ICS, EOS, EBTI, Surveillance and SMS. In comparison to 2016, EBTI, EOS, ECS, Surveillance and NCTS experienced an increase in 2017, whereas ICS and SMS indicated a minor decrease.

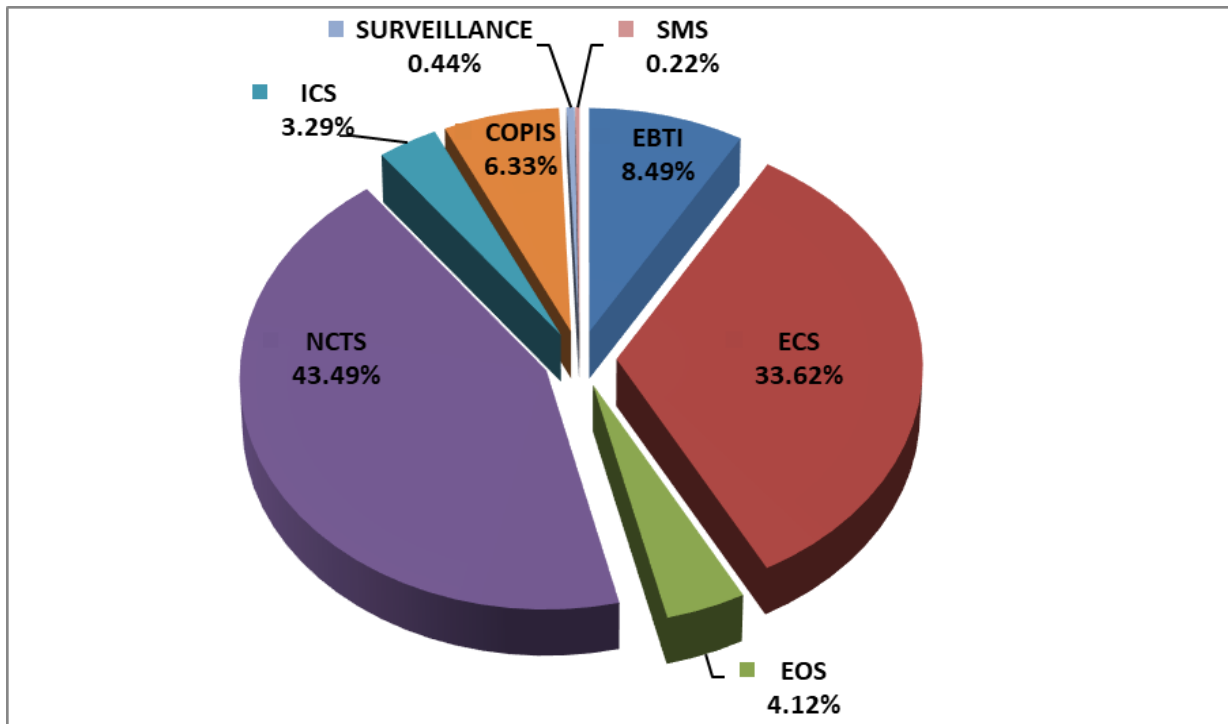


Figure 6: CCN messages distribution per application

⁴⁶ Please refer to section 4.1.4.6.1 of the current report.

⁴⁷ Please refer to section 4.1.4.6.2 of the current report.

Figure 6 depicts the number of messages exchanged per system (NCTS, ECS, ICS, EOS, EBTI, Surveillance, COPIS and SMS). The quantity of messages exchanged by the movement systems, such as NCTS, ECS, and ICS, constitutes 80.40% of the total messages exchanged by all systems versus 79.07% in 2016. Hence, this percentage has experienced a slight increase of 1.33%.

4.1.4.8 *Common Services / Reference Data 2 (CS/RD2) (4.10)*

The CS/RD2 project aims to provide an up-to-date, consistent baseline of well-maintained business and technical reference data available to distributed, hybrid and central IT systems across the EU. This system remained operational throughout 2017. The issues detected during the first production period were rectified in accordance with a “fast track” change management process. In 2017, the Commission established an expert team to draft a governance document of reference data aimed at identifying data sources and data management, the roles of involved stakeholders, the set-up of the Change Advisory Board and the standards applicable to the publication of reference data via the Europa website. In addition, the Commission discussed with Member States via the ECCG platform the phasing out of backward compatibility functions, including EDIFACT/old XML messages and CCN queues.

The Member States reported various maintenance activities related to this project. DE carried out conformance testing as well as system development and maintenance activities within the scope of the overall ATLAS system upgrade. MT focused on identifying the systems that would be impacted by CS/RD2 and the changes required in view of launching the new release. AT maintained an EU code list in the national database to provide information to other national services within a cross-sectoral framework. The CS/RD2 national project team in PL performed analysis to support CS/RD2 generic XML syntax messages in the NCTS2 system, reported bugs encountered during system operation and conducted tests to integrate the CCN communication module via webservice. Although PL’s systems still use CS/RD2 mostly in backward compatibility mode, work was undertaken in 2017 to switch to new message syntax and methods of communication. In addition, EL used the Commission’s centrally deployed application, whereas SK reported that the project was put on hold.

4.1.4.9 *Conformance Testing Application (CTA) (4.11)*

The Commission has maintained a wide range of different conformance testing tools across its business threads. A single Conformance Testing Application (CTA) was deployed into production in Q2 2017 to unify existing tools by providing simplified and accelerated procedures, which would result in reduced resources and better quality of national application developments. 2017 was dedicated to conformance testing, yet there are no immediate plans to put the CTA in production for customs systems. Further enhancements to this application are scheduled for the near future. BE reported that this project has been in operation since April 2017, whereas CY announced its plans to use the central component developed by the Commission.

4.2 **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, LV implemented the International Freight Logistics and Port Information System in close communication with the Ministry of Transport. This project is based on the national SafeSeaNet system, facilitating data exchange through the national Electronic Customs Data Processing System. In addition, the guarantee, advance payment and exemption control functionality of the Import Control System entered into production in June 2017, whereas the post-clearance functionality of the national Export Control System was deployed in September 2017. LV also maintained and enhanced the national Electronic Customs Data Processing System modules, including ICS, ECS, TCS and EORI.

In the same vein, FI deployed a national data service to provide decision data to all operational systems via automated interfaces, whereas EE deployed the new national Tariff and Quota System and the e-Customs Control System in April 2017. MT launched the new National Import System in the second quarter of 2017, which will facilitate message exchange with the Surveillance3 system. PL modified existing validation rules for the national Export Control System and created a new repository component dedicated to storing messages. DE monitored and maintained the ATLAS project to ensure

effectiveness of core business processes and internal controls. In addition, EE modified the existing Guarantee Management Systems in coordination with the service bureaus and customs offices.

4.3 Supporting activities

One of the objectives of the EU Customs Union in the area of e-Customs reform is the support for cooperation between the different customs administrations of Member States at national level. This approach toward cooperation contributes to ensuring coherence of customs operations by spreading 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 2017, the Member States reported on their main activities related to the promotion of e-Customs services, training for customs officials, consultation with economic operators, as well as the coordination of activities between e-Customs and other e-Government services.

4.3.1 Supporting tools used for collaboration and communication between EU and EU Member State administrations

The Commission continued to take an active role in facilitating supporting application tools to ensure the effective coordination of the e-Customs projects. The Programmes Information and Collaboration Space (PICS) and the ARIS Publisher are the two primary supporting tools that have been developed to enhance information-sharing and optimise business processes respectively.

PICS is a dedicated online platform administered by DG TAXUD, which provides access to diverse information related to the implementation of the Customs 2020 Programme activities. Similarly, ARIS is a software tool designed to facilitate the development and continuous improvement of the EU customs business process modelling. In 2017, ARIS version 9.8.4 was actively maintained for change control management procedures.

4.3.2 Consultation with economic operators

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

The Member State customs authorities regularly informed the representatives of economic operators of the potential impact of the UCC-related changes on the national IT systems. The majority of meetings organised addressed the latest procedural and legislative changes introduced by the UCC legal package. More specifically, these meetings tackled issues related to system deployment and functionality for projects such as UCC CD, REX, BTI, AEO and Impacts of MRA, Automated Export System (AES), Transit System including NCTS, EORI2 and UUM&DS. In addition, economic operators were informed about the interfaces implemented or updated to integrate national IT systems to various MASP projects.

2017 marked significant progress towards spearheading consultation activities that contributed to simplifying procedures for economic operators. In this context, seminars, webinars and information sessions were organised to inform economic operators on the present and anticipated developments in the field of e-Customs. Common challenges related to the UCC CDS, UUM&DS and REX systems were proactively addressed by the majority of Member States through regular meetings and online publications, while a substantial amount of work was devoted to developing and refining user manuals and training modules for these systems. The majority of the eLearning modules developed by DG TAXUD focus on customs officials and the specific profile of economic operators. All courses without confidential or sensitive information are published on the Europa website for use by the economic operators. Likewise, several Member States carried out informational activities on the procedures

pertaining to the UCC Notification of Arrival, Presentation Notification and Temporary Storage, Adjustments of the Existing Import Applications under the UCC and the Maintenance and Updates of Operational IT systems, as well as EBTI-3 evolutions, the deployment timeframe for NCTS Phase 5 and the EU Customs SW: CERTEX system upgrades.

More specifically, FI organised a webinar on the overall MASP projects with 350 participants from 130 economic operators and their representatives. The introduction of electronic declarations in customs warehousing was discussed in three national trade contact group meetings, and a separate workshop was organised to address the format of the customs warehousing application form. DK's Implementation Center for Customs established a regular forum for consultations with economic operators under the auspices of the Ministry of Taxation's Trade Contact Group to advise and give updates on the status of UCC implementation COPIS, GUM and Surveillance³ and other projects. Likewise, CZ's customs authorities held regular consultations with economic operators throughout the year to discuss changes affecting the management of guarantees, whereas EE's customs administration maintained steady contact with the banking sector and economic operators to identify their specific needs and priorities concerning guarantee management. DE conducted ad-hoc workgroup meetings for port/terminal operators and express carriers to improve the quality of operational processes. NL reported consultation activities with economic operators at the national level through the Customs-Trade Consultation Group on IT, which met regularly during 2017, specifically on the topic of UCC CDS. Regular communication channels were established between LV's customs administration and representatives from State Joint-Stock Companies providing railway infrastructure management and postal services. In the case of MT, reported consultations are significant as part of its implementation of a new NSW.

4.3.3 Training for Customs officials and other stakeholders⁴⁸

The changing dynamics of the e-Customs environment require a common core of high quality training and consultation on IT system procedures and customs legislation. To this end, the Commission and Member States have supported the development of training solutions and services for customs officials to provide the necessary skills and knowledge towards implementing and maintaining e-Customs projects. In particular, the establishment of online training tools and guidelines entails a continuous long-term learning plan for customs officials and other stakeholders.

In 2017, the Commission allocated 247,284.08 € to eLearning courses to build and strengthen the technical and operational capacity of national administrations and their staff in various customs subjects. Most notably, the UCC EU eLearning Programme, launched in 2016, was designed to ensure that customs officers in the EU are properly trained on the implementation of EU customs legislation and policies. This programme is developed in 17 modules targeting 3 different learning levels ranging from basic to expert knowledge. Translated in various EU languages, the modules are designed as stand-alone courses to meet the professional competency needs of EU customs and other competent officials. Courses free of sensitive content are also made available via the Europa website to economic operators, representatives of academia and the general public. As detailed in the figure below, 31,669 customs officials followed the UCC eLearning courses in 2017 resulting in a 47% increase in users over the previous year. This significant growth can be attributed to a combination of well-orchestrated promotions, the availability of several courses in local languages and the lifecycle of the programme.

⁴⁸ The data presented in this section is based on the EU eLearning Survey Report 2017 drafted by the Commission.

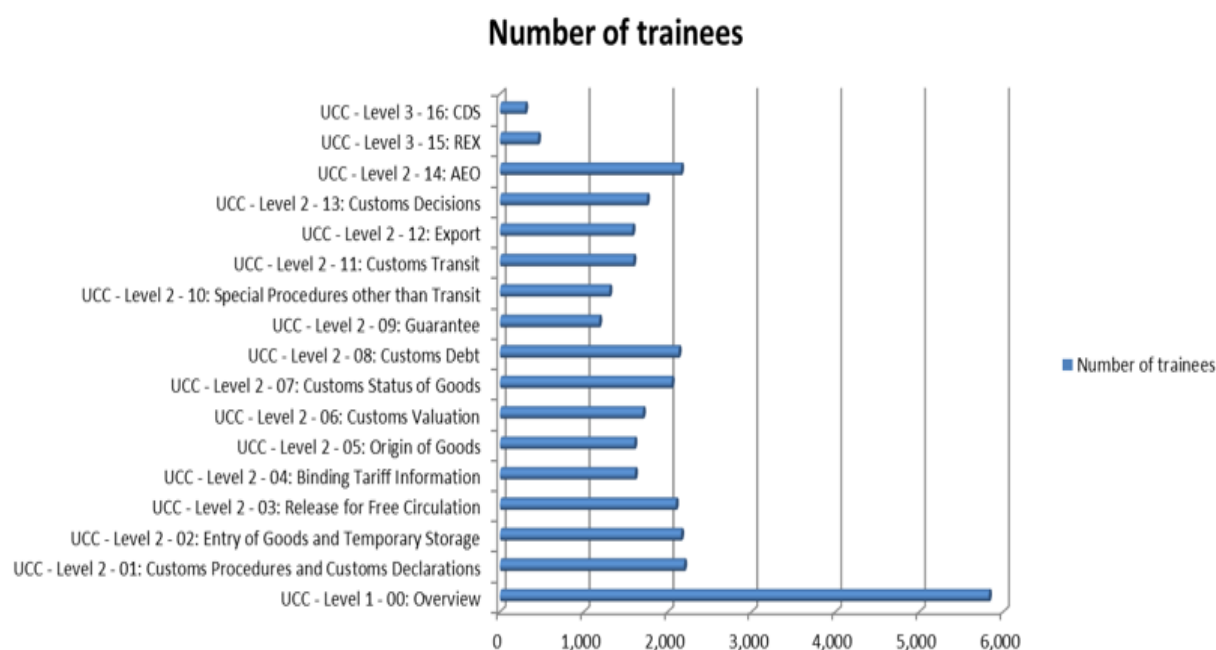


Figure 7: Number of trainees for the UCC eLearning Programme during 2017

The overall performance of the eLearning initiative was monitored through data collected at national level from 21 Member States and participating countries, downloads from the Europa website and user satisfaction surveys. The results of 943 online surveys from users (EU-wide user survey) overall satisfaction with the customs eLearning services, with an average score of 73.1 out of 100. Scores were particularly high (76.8 out of 100) on Level 3 of the UCC Programme which provides two eLearning courses on the legal requirements and process flows related to the recently deployed UCC REX and CDS. The number of trainees/training providers that downloaded the REX module reached 1,252 in 2017 representing an exponential increase compared to 58 in 2016.

In 2017, 11,997 downloads from the Europa website were registered for customs eLearning courses, 8,973 of which pertained to the UCC Programme. 18 Member States reported using the full curriculum of the customs eLearning Programme. FR, IT, HR, LU, PT, SE and SL expressed interest in translating the eLearning modules in their national languages, which was deemed a potential factor in boosting user engagement. Other Member States, such as CY and LV, expressed preference to further enhance and refine existing modules through interactive exercises and case studies. CY acknowledged using a blended learning approach, incorporating both online courses and in-house training, while IE's customs officials shared their knowledge of UCC CDS with other internal and external system users through a train-the-trainer approach.

Working in close collaboration with the policy units and national administrations, the Commission intends to continue improving the eLearning programme to ensure delivery of services that meets user needs. This entails the availability of course material in local languages after the release of the English master version, production of high-quality training guidelines as well as the introduction of audio-visual material and interactive learning tools.

4.3.4 Promotion and implementation of e-Customs services

The promotion of cooperation within national customs administrations constitutes an integral part of optimising customs process flows. In 2017, the Commission and Member State authorities conducted various meetings and seminars with project working groups, national partners, trade contact groups, governmental and customs institutions, tax authorities, IT support centres, chambers of commerce, economic operators and technical universities to promote an integrated level of administration collaborating towards the implementation of e-Customs services.

The Commission conducted 128 meetings with Member States' customs officials with expertise in areas such as legislation, project management, operations, planning and IT, addressing all aspects of e-Customs projects. A UCC poster promoting the UCC CDS project was distributed to all the heads of the national customs and tariff administrations and the WCO in December 2017. In addition, the EU Customs Competency Framework (CFW)⁴⁹ is being implemented on a voluntary basis at national level to harmonise customs performance standards across the EU. Serving as the foundation of a core competency framework for customs professionals, the CFW has been developed in collaboration with EU experts from the public and private sectors and the World Customs Organisation to modernise the customs workforce through training and human resource initiatives.

Likewise, the Member States supported promotion activities targeted at the ongoing task of developing, implementing and performing updates to various projects, such as UCC CD, Transit System including NCTS, REX, AEO and Impacts of MRA, EORI2, Notification of Arrival, Presentation Notification and Temporary Storage, GUM, UUM&DS, Special Procedures, Maintenance and Updates of Operational IT systems and CCN2.

EE organised various meetings for economic operators and their representatives to present future plans for the development of the national e-Customs solution, predominantly focusing on the UCC CD, EORI2, UUM&DS, AEO and Impacts of MRA, Maintenance and updates of operational IT systems and the EU Customs SW Program. HU ran monthly workshops on NCTS and coordinated the participation of economic operators in 10 seminars to present practical cases of the application of the UCC CDS. In September 2017, LV organised an informative seminar for economic operators about changes affecting the Temporary Storage functionality. CZ promoted the implementation of GUM e-Customs services and introduced the measures taken to enable full use of the systems within the National Trade Contact Group. In addition, CZ held several seminars with the Trade Contact Group on developments relating to the AES and NCTS projects. PL promoted the implementation of e-Customs services for the national AIS and AES systems in view of the legal provisions concerning the UCC Special Procedures. During 2017, the Revenue Administration Chamber in Poznań assigned 186 REX numbers and addressed over 150 inquiries concerning REX registration. Additionally, NCTS liaison officials and local trainers in PL promoted the NCTS PL2 national project to economic operators and local businesses.

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

In 2017, the coordination of e-Customs activities with other e-Government services was managed through cooperation with various ministries, ICT departments, tax administrations, national banks, economic operators, certification and statistical authorities, customs clearance and excise services, national competent authorities for veterinary control as well as port and immigration authorities. The objective was to inform all relevant stakeholders on the necessary requirements for the implementation of the MASP and other e-Customs related projects.

Alongside the MASP coordination activities carried out by the Commission discussed at length in previous sections, the Member States highlighted the following key areas of activity during 2017:

- The NCTS2 system in PL was interfaced with CS/RD, CS/MIS, ATIS, SPEED, the national Risk Management System, EORI/EOS/AEO, national guarantee management system, AES, AIS, Customs Tariff System, Safe TIR and TRACES. While supplying control and statistical data to the central data warehouse, the system also used the nationally developed mechanisms for user authentication, user access control and the digital signature of messages. Similarly, AES was interfaced with the national Risk Management System, EORI/EOS/AEO, Customs Tariff System, EMCS application, NCTS2, the Reference Data Processing System and the National Support Centre for Agriculture for exporting CAP goods. Discussions also took place with the IT Department of the Ministry of Finance in view of CCN2 testing and the Ministry of Digitalisation to analyse a potential solution for UUM&DS.

⁴⁹ https://ec.europa.eu/taxation_customs/eu-training/eu-customs-competency-framework_en

- EE coordinated single window related activities with the the Veterinary and Food Board and IT Centre of the Ministry of Finance. Cooperation with other units and departments of the Tax and Customs Board was facilitated on a daily basis with regard to the CDS. The IT Centre of Ministry of Finance was also involved in a technical cooperation capacity in the BTI and EORI2 projects.
- Discussions with economic operators and other implicated stakeholders have been underway in MT to address the integration of maritime formalities in the national ICS and the application of the single window concept. For the latter, MT has requested funding for developing a national system. Work will commence on producing the User Requirements Document once funding is approved. In addition, the Information Technology Agency is collecting information on the most appropriate user management solution for UUM&DS.
- CZ collaborated with the Ministry of Industry and Trade and the Ministry of Environment on developments related to the EU Customs SW program. The UCC REX was integrated with the national Customs Declaration Processing System and several other national systems were upgraded due to major changes stemming from the EOS v3.9.0 release. Furthermore, a steering group was established in 2017 to ensure the coordination of the e-Customs projects under the MASP and the UCC Work Programme. In view of the UCC UUM&DS, a project group was organised in collaboration with other customs departments focusing on the Identity and Access Management System.
- BG's National Customs Administration collaborated closely with the National Competent Authority for Veterinary Control on the EU Customs SW program. Furthermore, BG implemented the national e-Customs Roadmap 2016-2020, which includes measures and requirements related to the integration of national projects pertaining to the MASP.
- Throughout 2017, NL maintained regular communication with other national agencies and ministries involved in import and export activities to discuss e-Customs related developments.
- LT prepared the Terms of Reference for the procurement of the national Guarantee Management System and implemented RfC-List.29 for the National Transit System.
- HR held discussions with the tax authorities on the potential use of the CCN2 system for taxation purposes.
- DK remained focused on project management maturity and areas where transformation planning is needed for the effective implementation of UCC projects.

5 COSTS

5.1 COSTS INCURRED BY DG TAXUD ON IT SYSTEMS DEVELOPMENT IN 2017

Figure 8 depicts the Commission's costs committed under the 2017 budget for IT system development and maintenance as well as customs coordination. The common Customs 2020 joint action costs pertain to participation costs in the programme events, such as the ECCG and the technical sub-group meetings. Other costs associated with joint actions that cover IT training sessions under the Customs 2020 programme are also included in this category.

System/Activity		Commission Committed budget for 2017 (EUR)	
Customs Projects	AEO MR adaptation	150,000.00	
	UCC Customs Decisions	500,000.00	
	UCC BTI Phase 1	500,000.00	
	UCC Automated Export System (AES)	575,000.00	
	UCC Common and Community Transit System (UCC NCTS)	575,000.00	
	REX	368,892.40	
	COPIS Interface with AFIS	75,000.00	
	COPIS eAFA	300,000.00	
	Contingency projects (e.g migration of applications)	800,000.00	
	UCC Special Procedures (information sheets)	200,000.00	
	UCC Guarantee Management - MS project only	300,000.00	
	UCC Strengthening the Security of the Supply Chain at Entry (including Air Cargo Security) and Customs Risk Management in the EU - ICS2	1,380,000.00	
	UCC ICS2 programme transversal activities	400,000.00	
	UCC ICS2 - STI	600,000.00	
	CLASS	281,000.00	
	EU Single Window - Certificates Exchange	200,000.00	
	Uniform user management & digital signature (UUM&DS)	996,645.00	
IT architecture Customs	325,000.00		
Total:	8,526,537.40		
CCN2	4,975,270.57		
Studies and Development Total	13,501,807.97		
Maintenance (corrective/evolutive) of Customs systems	5,928,257.72		
Operations of IT systems	43,440,877.02		
Communication network CCN/CSI and other middleware (e.g. SPEED2)	3,217,468.29		
Hosting	831,373.64		
Common costs Customs2020	E-customs joint actions - ECCG meetings	1,912,100.00	
	E-customs joint actions - Trainings	367,178.00	
	UCC EU elearning courses	UCC eLearning localisation (UCC Level 1 modules in DK)	8,844.68
		UCC eBook concept and pilot on EU AEO Guidelines (development in EN)	46,904.70
		UCC CDS IT system eLearning module (development in EN)	38,754.90
		UCC REX IT system eLearning module (update in EN)	7,578.60
		UCC REX IT system eLearning localisation (in FR)	12,803.55
		UCC EBTI-3 IT system eLearning (development in EN)	27,514.50
		UCC REX IT system eLearning localisation (in RO)	11,911.05
		UCC REX IT system eLearning localisation (in HU)	11,911.05
		UCC REX IT system eLearning localisation (in SI)	11,911.05
		UCC Level 2 – 14 eLearning modules - localisation (for MK)	69,150.00
	Promotion activity	1,043.00	
	Quality Assurance including TEMPO	5,800,000.00	
DIH and Data modelling (including interface ARIS and GEFEG consulting and licenses)	441,464.72		
BPM	1,246,464.72		
Intra-muros services	8,025,401.54		
Other administrative budget	469,747.07		
Cost for non MASP Revision 2016 projects	1,420,000.00		
System Development Life Cycle (SDLC)	150,000.00		
Integration (SPRINT)	300,000.00		
GRAND TOTAL	87,300,467.77		

Figure 8: Commission allocated costs in year 2017 (expressed in €)

As detailed in Figure 8, the Commission’s dedicated budget for e-Customs has reached 87,300,467.77 € in 2017. In contrast to the overall costs allocated in 2016 (61,120,899.45 €), a 42.83% increase is observed in 2017 due to the initiation of additional projects.

Figure 9 below represents the main categories of the Commission’s costs which were mostly absorbed by two categories, operations and the studies and development of IT systems. In comparison to 2016, IT systems operations’ costs had a significant increase of 49% in 2017. This increase is attributed to major releases, such as the deployment of REX on 01/01/2017 and UCC CDS (TP, CDMS, CRS) on 02/10/2017. Similarly, the UUM&DS Release 1 and CCN2 Release 1 were deployed to production on 02/10/2017, to support the UCC CDS. In 2017, system studies and development costs increased by 18% due to further alignments with the UCC legal requirements and inception phase activities carried out for new MASP projects.

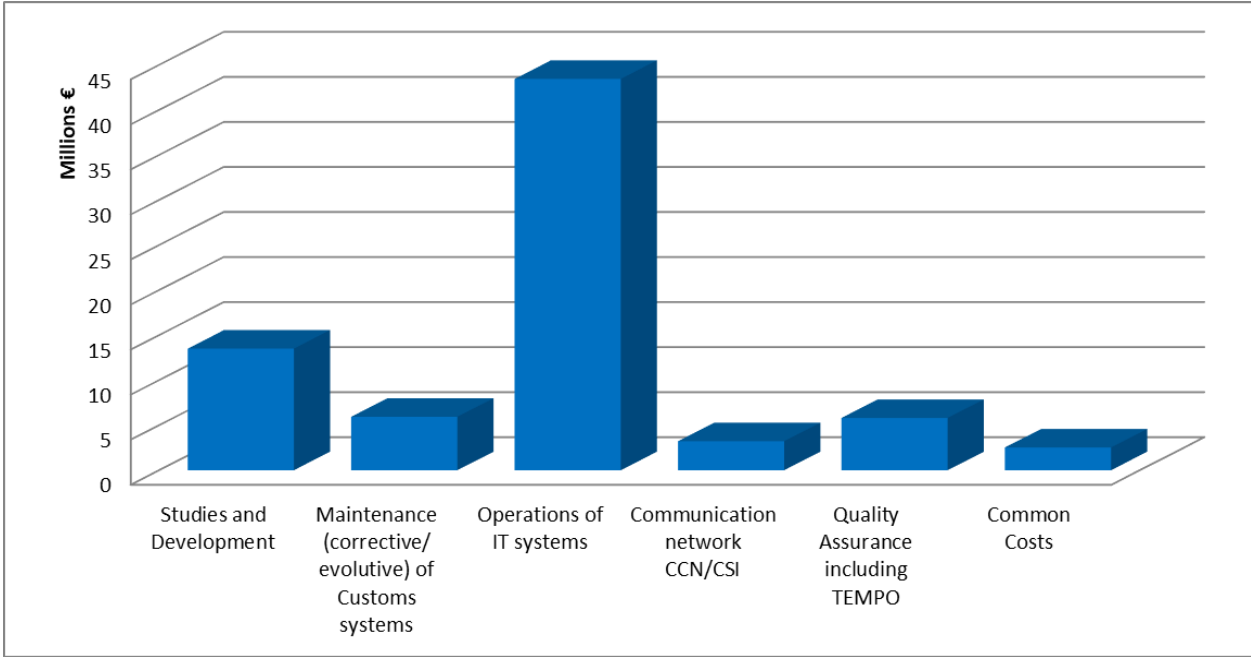


Figure 9: Main categories of Commission Costs in year 2017

5.2 COSTS INCURRED BY MEMBER STATES IN 2017

Figure 10⁵⁰ below illustrates Member States’ investment per project according to the MASP Revision 2016, as reported in the national annual reports.

⁵⁰ The Smart and Secure Trade Lanes (3.3) project is excluded from the graph due to zero cost reported.

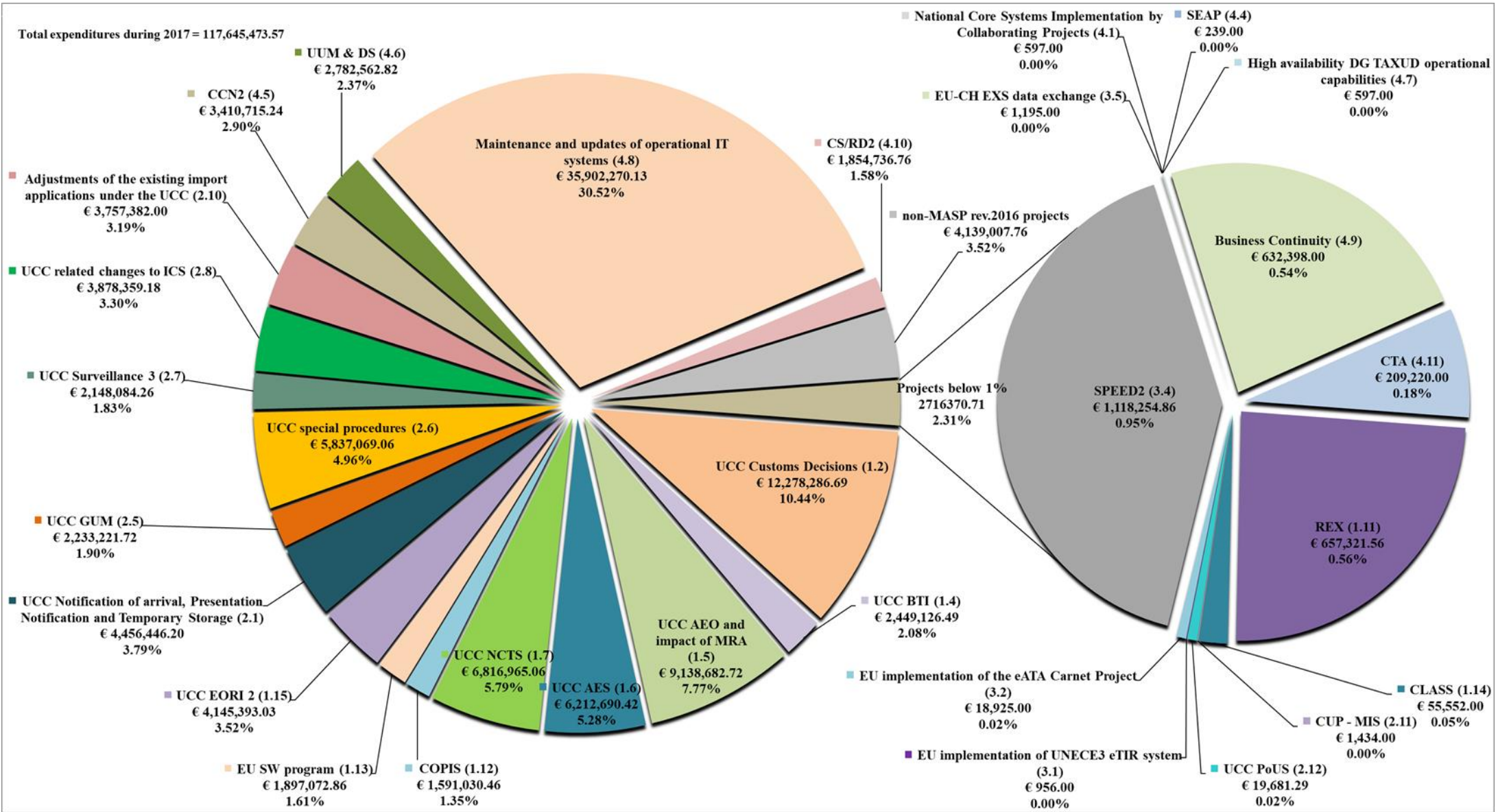


Figure 10: Member States costs of Customs IT systems in 2017

Member States had to report on 32 MASP projects. The number of reported projects increased by 4 in 2017 (32 instead of 28) due to the structure and content-related transformations that took place during the MASP Revision 2016. However, the total number of projects reported was 31 due to no activities on Smart and Secure Trade Lanes (3.3) project.

According to Figure 10, the greatest share of the Member States’ budget in 2017 was consumed for the maintenance and updates of the operational IT systems which constituted 30.52% of the total expenditure. However, this figure was considerably reduced from 45.36% in 2016. This decrease was primarily due to the substantial functionality of the operational systems, resulting in a reduced need for updates and maintenance required in 2017. In addition, the UCC CDS (1.2), UCC AEO and impacts of MRA (1.5), the UCC Transit System including NCTS (1.7) and the UCC Automated Export System (1.6) absorbed approximately 7.32% of the overall expenditure (respectively 10.44%, 7.77%, 5.79% and 5.28%). Furthermore, a noteworthy decrease was observed in the expenditure of the “non-MASP rev.2016 projects”, which hold an aggregate percentage of 3.52% of the total investment compared to 8.20% in 2016. This indicates that the Member States allocated a part of their budget mainly for the maintenance and upgrades of their national systems.

As regards the UCC CDS (1.2), CCN2 (4.5) and UUM&DS (4.6), Member States increased expenditures of 3.22%, 2.49% and 0.42% respectively throughout 2017 in comparison to 2016, which is mainly attributed to the deployment of the UCC CDS (1.2) on 02/10/2017. Likewise, this increase was reflected in the budget allocation for CCN2 (4.5) and UUM&DS (4.6) since they serve as the supporting technology for this project.

Figure 11 depicts the comparison between the operational and non-operational IT systems’ costs, consuming respectively 30.52% and 69.48% of the overall system expenditure reported in 2017. A significant increase of 14.84% has been recorded for non-operational IT systems in 2017 (69.48%) compared to 54.64% in 2016 and 38.70% in 2015. The cost increase could be attributed to the fact that Member States allocated a considerable part of their budget to the existing systems in order to align them with the UCC requirements.

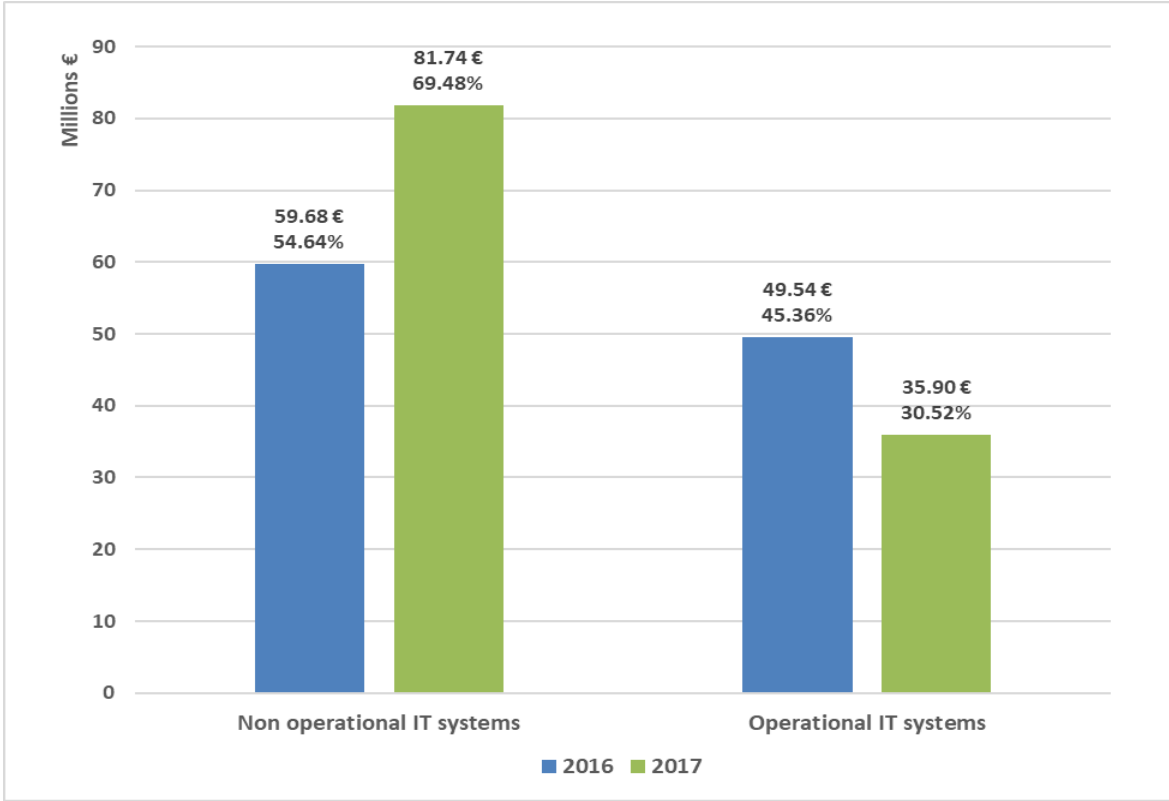


Figure 11: Costs on Operational IT systems and non-Operational IT systems as part of all systems in 2017

Figure 12 presents the accumulated cost of the MASP Revision 2016 project groups. 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 presents Customs cooperation initiatives and technological developments to facilitate Customs EIS, along with the maintenance of existing projects. The main budget consumption consisting in 38.46% was absorbed by Group 1. Group 4 consumed 38.07% of the total budget followed by Group 2, which utilised 18.98%. In contrast, Group 3 consumed only 0.97% of the overall budget for MASP groups. In comparison to 2016, the Member States’ allocated budget for “non-MASP rev.2016 projects” in 2017 was mainly consumed for the maintenance and upgrades of their national systems, marking a decrease from 8.20% to 3.52%.

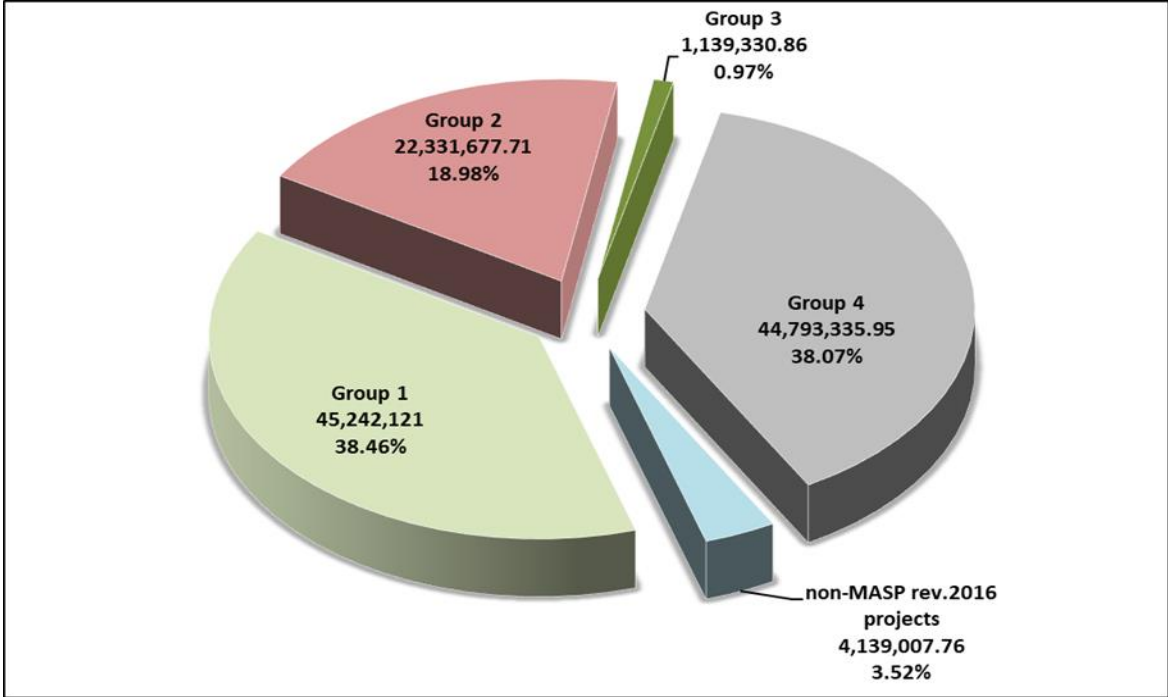


Figure 12: Cost spent per MASP revision 2016 Project Groups

According to the cost figures reported in the Member States’ annual reports, it is observed that:

- The number of Member States that contributed budgetary information is not the same throughout the years. Since 2008, approximately 22-25 Member States⁵¹ have reported on their budget allocation, apart from 2011, when only 12 reports were received.
- Various approaches pursued by the Member States result in diverse reporting for the project phases and/or costs associated to them (i.e. project progress, software/hardware costs). This expenditure is aggregated under the respective project as reported.
- Member States’ national systems could be developed on common platforms and the costs of numerous systems could be noted only under one reference baseline. Consequently, this affects the results and the accuracy of the data.

As shown in figure 13, Member States reported less expenditures for the maintenance and the updates of the operational IT systems in 2017, since the main focus was addressed to the development and implementation of the MASP projects. More explicitly, the majority of Member States’ budgets were allocated to MASP project groups, which accounted for 66% of total expenditures on electronic systems, while maintenance costs consumed only 30% of the overall

⁵¹ 12 in 2011, 22 in 2008 and 2014, 23 in 2010, 24 in 2015 and 2013, 25 in 2009, 2012, 2016 and 2017.

budget. This represents a decrease from 45% in 2016. Similarly, Member States' cost for the “non-MASP rev.2016 projects” accounted for 4% of the total expenditure.

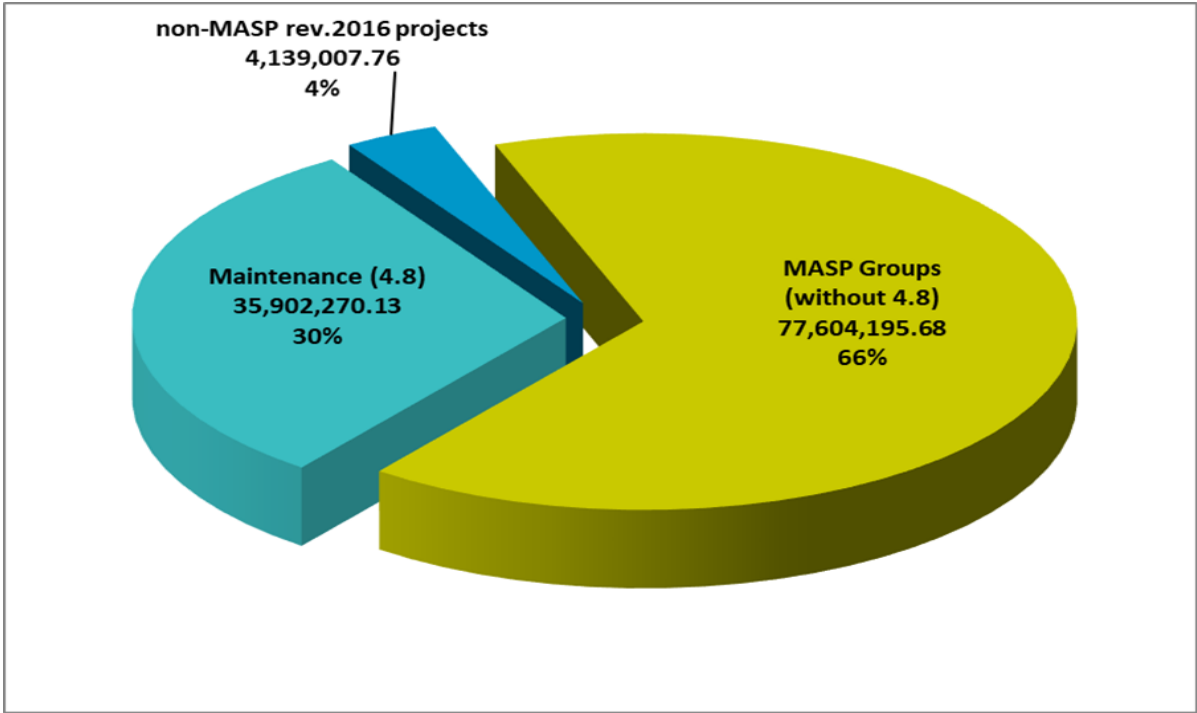


Figure 13: Distribution of Member States' expenditure

Figure 14 below presents the total investment of Member States in customs IT systems for the period 2008-2017. The cited figures are not directly comparable due to the uneven number of Member States reporting over the years, which is respectively presented at the top of each bar for all years, in which data were collected.

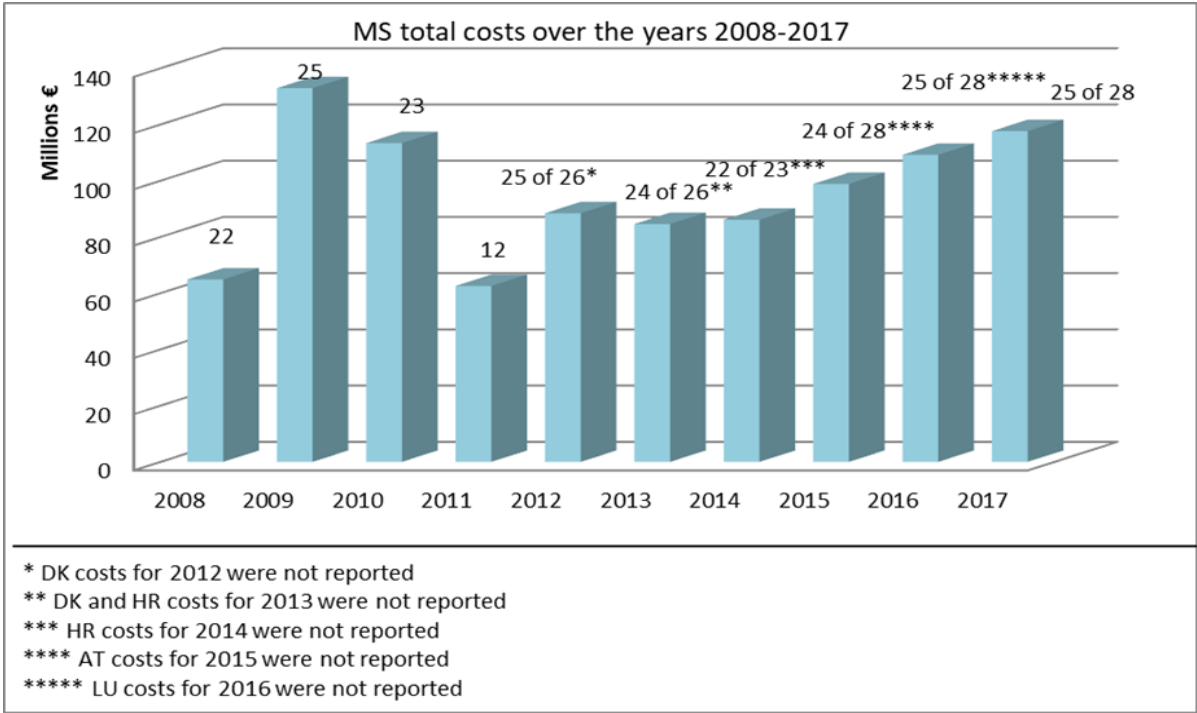


Figure 14: Member States' costs, 2008-2017

Figure 15 delineates the average cost per Member State through the years 2008-2017. The total sum dispensed by Member States for each year is divided by the number of Member States reported during this time period.

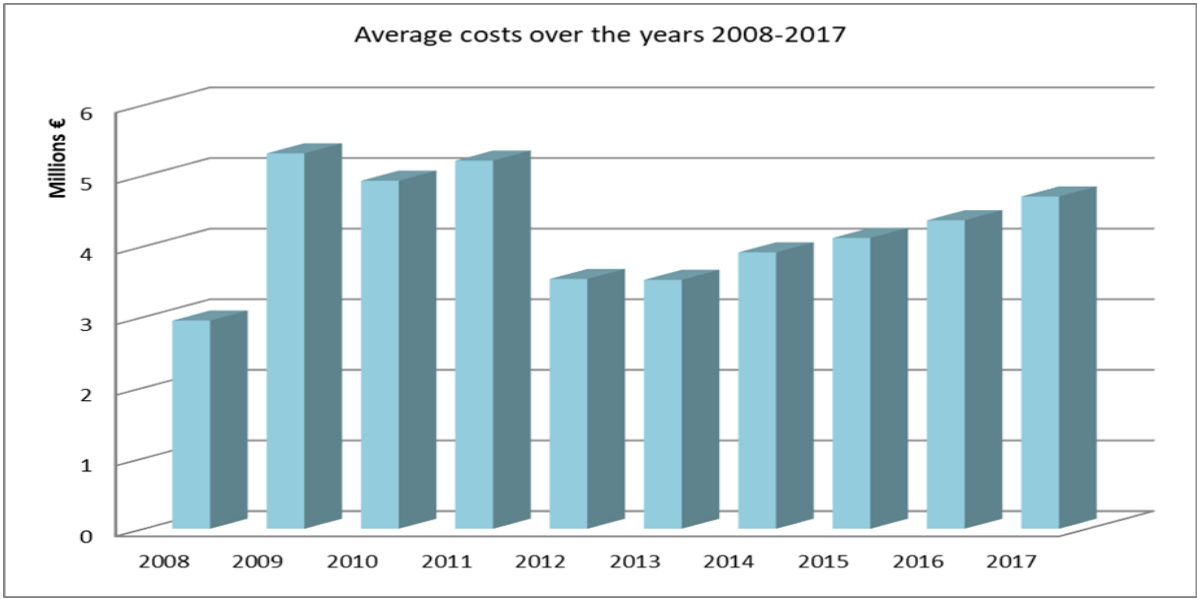


Figure 15: Average Member States’ costs, 2008-2017

As shown in the figure above, the average disbursed cost per Member State has increased by 7.7% in 2017 compared to 2016. As demonstrated in the graph, the total project expenditure dropped to its lowest levels (22.91%) in the period between 2012 and 2013, however the past four years were marked by an increase of 20.22% by 2017. This sharp trend reversal is also justified in the following Figure 16, which presents the total amounts utilised by FI, HU, LT, NL, PL, PT, SE, and UK for the period 2008-2017. The expenditure in 2017 has increased by 6.54% in comparison to 2016. This can be interpreted as a result of the growing activities of the MASP projects and the step by step preparation and analysis for the implementation of the UCC.

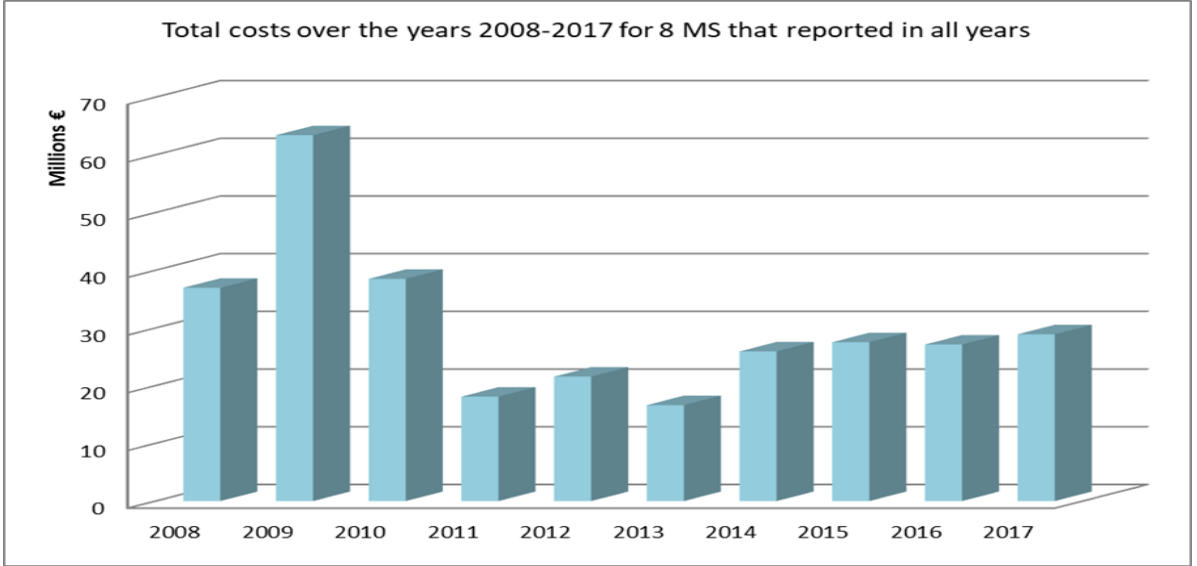


Figure 16: Total costs over the years 2008-2017 for 8 Member States that reported in all years

Furthermore, Member States’ consumption of man-hours is illustrated in the following Figure 17⁵² for each project of the MASP revision 2016.

⁵² The Smart and Secure Trade Lanes (3.3) project is excluded from the graph due to zero working hours reported.

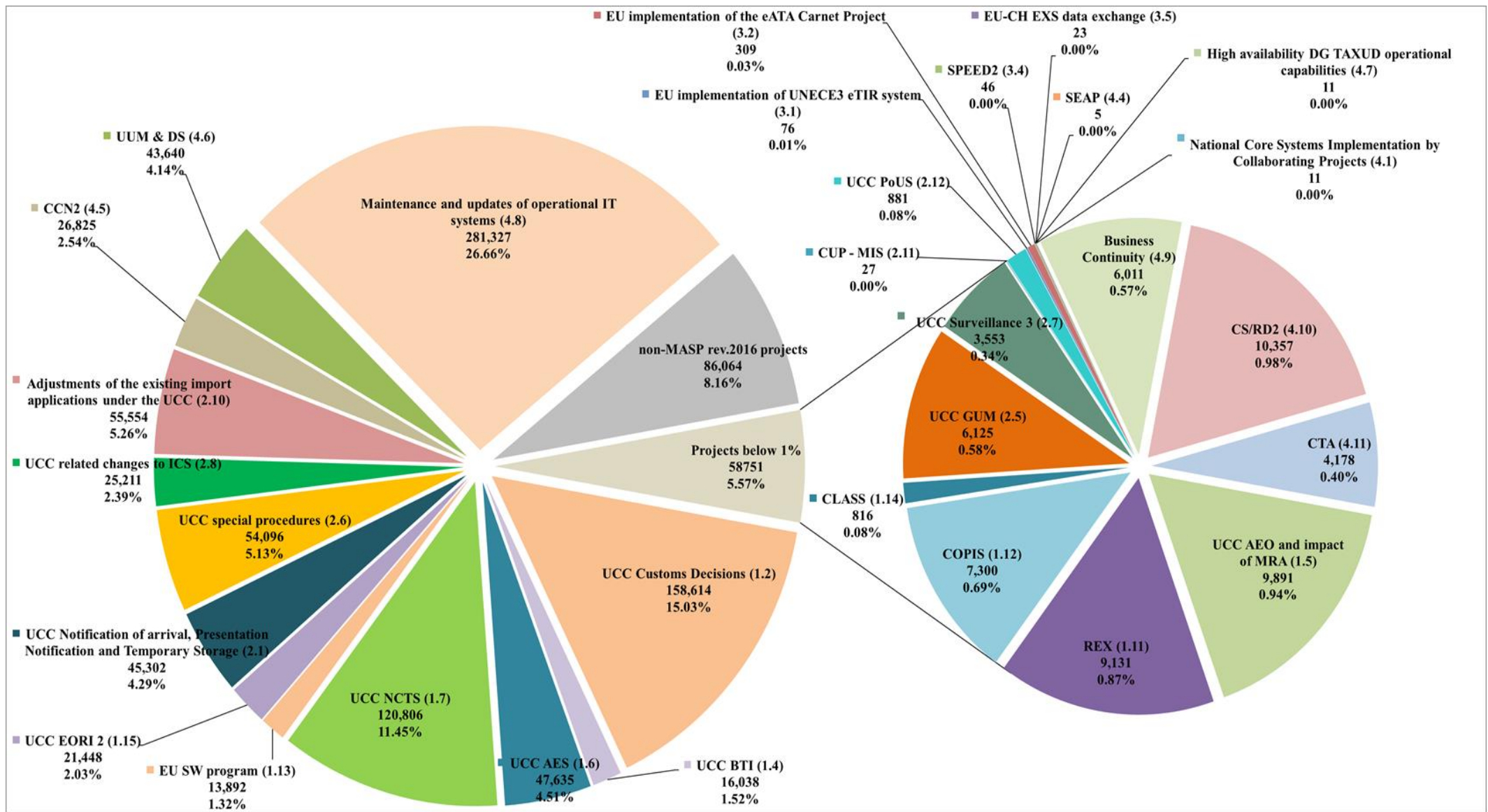


Figure 17: Member States' man-hours for Customs IT systems in 2017

According to Figure 17 the main proportion of the utilisation of man-hours in 2017 was the maintenance and updates of the operational IT systems, incorporating 26.66% of the total time spent. This consumption is proportional to the Member States' cost that was absorbed by Maintenance and Updates of Operational IT systems (4.8), the UCC CDS (1.2), the UCC Transit System including NCTS (1.7) and the Adjustments of the existing import applications under the UCC (2.10) projects, which employed a great share of the man-hours by consuming 15.03%, 11.45% and 5.26% respectively.

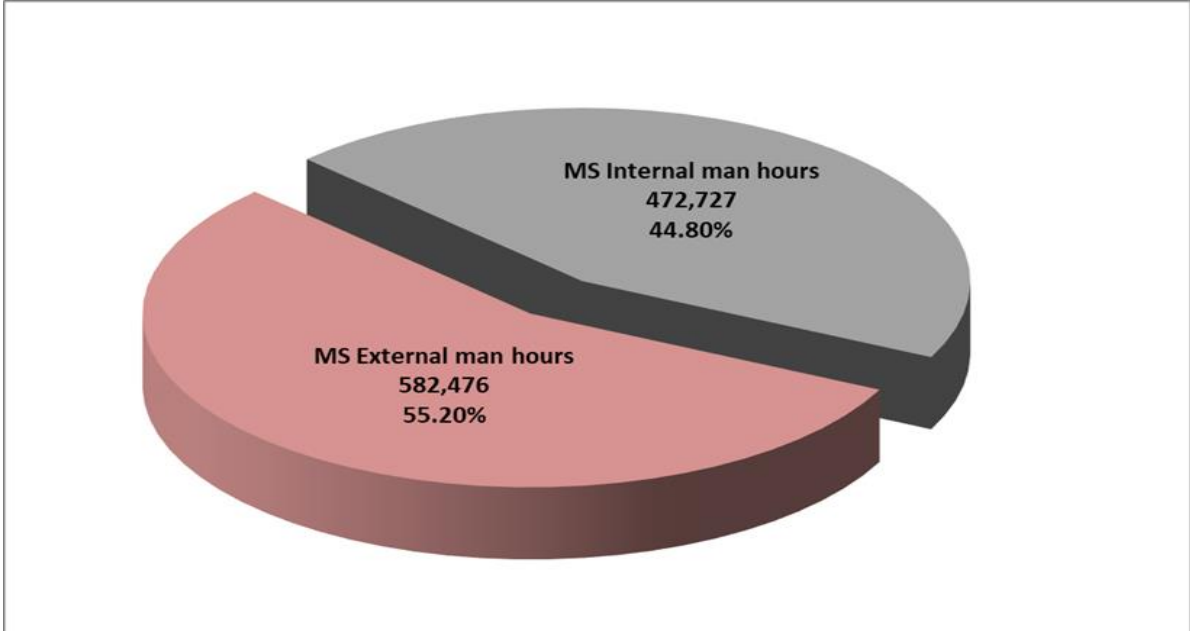


Figure 18: Member States' man-hours consumed in 2017

Lastly, Figure 18 displays the man-hours that the Member States have devoted to all MASP projects in 2017. As illustrated in the figure above, the external man-hours make up the majority of the projects' activities, more explicitly 55.20% in contrast to the internal man-hours that absorbed 44.80%. This consumption is proportional to the Member States' allocated cost for the external contracted services during 2017. According to Figure 19, approximately 48.36% of the overall Member State's investment was allocated to the external contracted services, representing an increase of 7.13% compared to 41.23% in 2016.

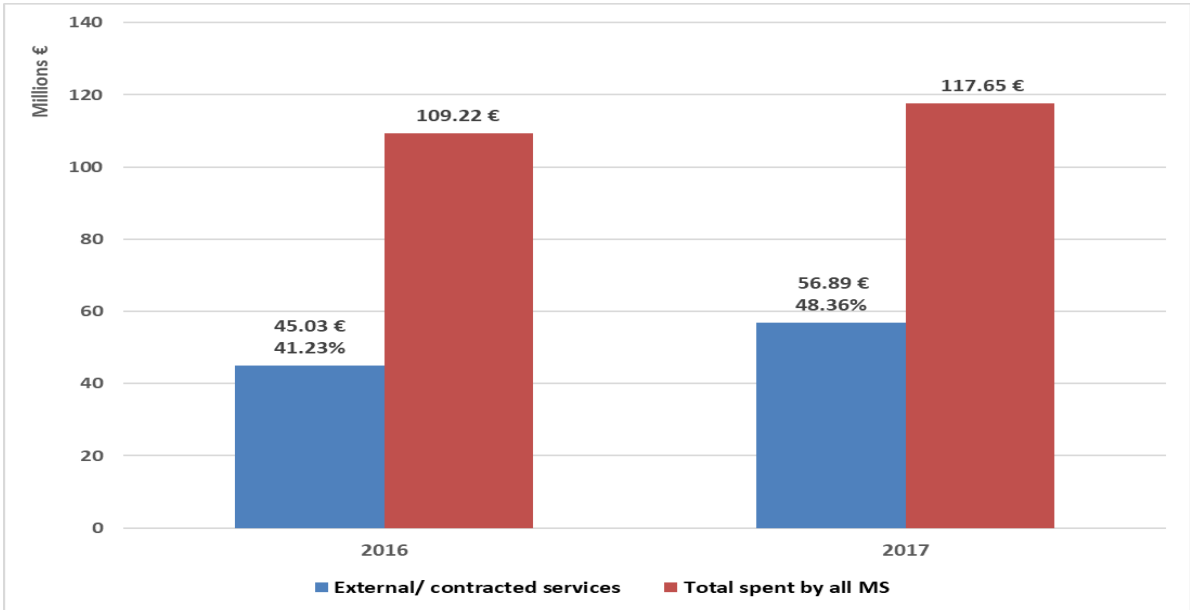


Figure 19: Member States' costs for external/contracted services in 2017

In conclusion, during 2017, the Commission and the Member States made considerable progress towards the implementation of e-Customs IT projects. The Commission's dedicated budget for e-Customs has increased significantly in comparison to 2016, whilst the Member States allocated a considerable part of their budget for the MASP projects. In 2017, the Member States reported less expenditures for the maintenance and the updates of the operational IT systems, since the main focus was the development and implementation of the MASP projects in alignment with the UCC requirements. Moreover, the cost reduction trend observed in the period between 2012 and 2013 has reversed over the past four years. However, even though the average expenditure increased in 2017, the Member States have not yet reached the high proportion of expenditures that was observed in the period between 2009 and 2011 when the development and deployment of NCTS, ECS and ICS took place.

6 ACRONYMS AND ABBREVIATIONS

Acronym	Description
AEO	Authorised Economic Operator
AES	Automated Export System
AFA	Application for Action
AFIS	Anti-Fraud Information System
AIS	Automated Import System
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 ARIS9.8.4
ATIS	Anti-Fraud Transit Information System
ATLAS	Automated Customs Tariff and Local Processing Application System
B2G	Business to Government
BPM	Business Process Modelling
BTI	Binding Tariff Information
CAP	Common Agricultural Policy
CBG	Customs Business Group
CCC-GEN	Customs Code Committee – General Customs Legislation section
CCI	Centralised Clearance for Import
CCID	Centralised Clearance Import Design
CCIS	Centralised Clearance Import System
CCN; CCN2	Common Communication Network; Common Communication Network 2
CDS	Customs Decisions System
CDM	Customs Data Model
CDMS	Customs Decisions Management System
CED	Common Entry Document
CERTEX	Certificates Exchange Project
CETA	Comprehensive Economic and Trade Agreement
CFW	Customs Competency Framework
CHED-PP	Common Health Entry Document module for Plant Protection
CIRCABC	Communication and Information Resource Centre for Administrations, Businesses and Citizens
CLASS	Classification Information System
COI	Certificate of Organic Inspection
COM	European Commission
CONF	Conformance
COPIS	Anti-Counterfeiting and Anti-Piracy System

Acronym	Description
CPG	Customs Policy Group
CRMS	Customs Risk Management System
CRS	Customer Reference Services
CS/MIS	Central Services - Management Information System
CS/RD; CS/RD2	Central Services – Reference Data; Central Services – Reference Data 2
CSI	Common Systems Interface
CTA	Conformance Testing Application
CUP-MIS	Customs Union Performance – Management information System
Customs 2020	EU cooperation programme providing national customs administrations with the possibility to create and exchange information and expertise.
CVED	Common Veterinary Entry Document
CVEDA	Common Veterinary Entry Document for Animals
CVEDP	Common Veterinary Entry Document for Animal Products
DA	Delegated Act
DG AGRI	Directorate General for Agriculture and Rural Development
DG CLIMA	Directorate General for Climate Action
DG ENV	Directorate General for Environment
DG MOVE	Directorate General for Mobility and Transport
DG TAXUD	Directorate General for Taxation and Customs Union
DG SANTE	Directorate-General for Health and Food Safety
DIH	Data Integration and Harmonisation
eATA	Electronic Admission Temporaire/Temporary Admission
EBTI	European Binding Tariff Information
ECCG	Electronic Customs Coordination Group
ECS	Export Control System
EDB	Enforcement Database
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
eIDAS	An EU regulation on electronic identification and trust services for electronic transactions in the internal market.
EIS	European Information Systems
EMCS	Excise Movement and Control System
EMSA	European Maritime Safety Agency
EMSW	European Maritime Single Window
ENS	Entry Summary Declaration
EORI	Economic Operators Registration and Identification
EOS	Economic Operators System
eTIR	Electronic TIR

Acronym	Description
EU	European Union
FGAS	Fluorinated Gases
FSS	Functional System Specifications
G2G	Government to Government
GSP	Generalised System of Preferences
GTP	Generic Trader Portal
GUIP	Graphical User Interface Prototype
GUIS	Graphical User Interface Specifications
GUM	Guarantee Management System
GUMD	Guarantee Management System Design
HTI	Harmonised Trader Interface
IA	Implementing Act
IAM	Identity and Access Management
ICC	International Chambers of Commerce
ICD	Interface Control Document
ICS; ICS2	Import Control System; Import Control System 2
ICT	Information and Communications Technology
INF	Information Sheet
IT	Information Technology
IT SD	IT System Development Group
ITIG	IT Technology and Infrastructure Group
KEL	Known Error List
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).
MASP	Multi-Annual Strategic Plan
MRA	Mutual Recognition Agreement
NTA	National Transit Application
NTI	National Trader Interface
NECA	National Electrical Contractors Association
NES	National Export System
NCTS; NCTS2	New Computerised Transit System; New Computerised Transit System 2

Acronym	Description
NSW	National Single Window
NTA	National Transit Application
ODS	Ozone Depleting Substances
OHIM	Office for Harmonisation in the Internal Market
OJ	Official Journal
OLAF	European Anti-Fraud Office
OoB	Out of Band Management
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)
PoUS	Proof of Union Status
PROD	Production
PUESC	Electronic Services Platform for the Revenue and Customs Services
QUOTA	Electronic system for quota management / allocation
REX	Registered Exporters System
RfC	Request for Change
RIMSCO	Risk Management and Security Consultancy
SAD	Single Administrative Document
SAML	Security Assertion Markup Language
SDLC	System Development Life Cycle
SEAP	Single Electronic Access Point
STI	Shared Trader Interface
SMS	Specimen Management System
SOA	Service Oriented Architecture
SP	Special Procedures
SPEED; SPEED2	Single Point for Entry or Exit of Data; Single Point for Entry or Exit of Data 2
SPRINT	Sequential PROject INtegration Testing
SSO	Single sign-on
SSTL	Smart and Secure Trade Lanes
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-CVED	Single Window – Common Veterinary Entry Document
TARIC 3	Integrated Tariff of the European Communities 3
TB	Terabyte

Acronym	Description
TCS	Trade Customs Solutions
TCG	Trade Contact Group
TES	Trans-European System
TIR	Transports Internationaux Routiers / International Road Transports
TRACES	Trade Control and Expert System
UCC	Union Customs Code
UUM&DS	Uniform User Management & Digital Signature
UCC WP	Union Customs Code Work Programme
UNECE	United Nations Economic Commission for Europe
WCO	World Customs Organisation
XML	Extensible Markup Language
Country codes	http://www.iso.org/iso/country_codes.htm (ISO 3166)