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# **Electronic Customs Multi-Annual Strategic Plan for Customs 2023 Revision**

**MASP-C Rev. 2023 v1.0**

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## 1. INTRODUCTION

Information technology (IT) extends to all aspects of the activities of the Directorate for Customs and Taxation (DG TAXUD), helping us fulfil an active role in modernising customs procedures to meet the demand of increasing trade flows, while adapting to new challenges posed by digitalisation. In pursuit of this goal, the Multi-Annual Strategic Plan for Customs (MASP-C) was developed in accordance with Article 8(2) of the e-Customs Decision<sup>1</sup> to outline DG TAXUD's priorities and strategic direction for coordinating and monitoring all IT activities and planning requirements in the area of electronic customs.

The MASP-C is a management and planning tool prepared and regularly updated by DG TAXUD in partnership with Member State customs administrations and with collaborative input from representatives of EU trade associations. Its development is an iterative multi-stage process that includes internal and external revisions and assessments, aligning business and IT strategy to the requirements of EU customs legislation to effectively manage and coordinate all activities and planning requirements for existing and future electronic customs projects. Within this framework, the MASP-C is an agile planning tool that allows the Commission to plan extensively up-front and keep project cycles manageable to meet the key legal milestones defined in EU customs legislation, notably the Union Customs Code (UCC), its work programme (UCC WP) and other applicable EU Regulations or tertiary legislation. To deliver on these objectives, the MASP-C maps out a timeline of several technical milestones deriving from the legally mandated delivery schedules defined in these pieces of legislation. The plan is endorsed by the Member States participating in the Customs Policy Group (CPG) based on the expert advice of the Electronic Customs Coordination Group (ECCG) and consultations with the Trade Contact Group (TCG).

This document is accompanied by six complementary annexes. The detailed planning of all project deliverables and milestones is listed in Annex 2 and displayed in a Gantt chart visual in Annex 1 to highlight project execution timelines. The other annexes provide a more comprehensive overview of specific themes highlighted in this document, including the governance framework, business process modelling, IT strategy process, and an overview of changes introduced during the revision process. Together, this suite of documents provides overarching guidance for setting business and IT priorities to ensure that our work is moving ahead towards the full implementation of electronic customs projects. DG TAXUD is committed to working in partnership with the Member States to execute the goals established in the MASP-C, while engaging collaboratively with internal stakeholders to determine lead and oversight responsibility for each project and initiative.

The MASP-C Revision 2019 v1.1, endorsed by the CPG in December 2019, serves as the baseline for the current revision. Nonetheless, its predecessor, MASP Rev. 2017 v1.4 remains a fundamental reference point for the implementation planning of e-Customs projects.

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<sup>1</sup> Decision No 70/2008/EC of the European Parliament and of the Council of 15 January 2008 on a paperless environment for customs and trade, OJ L 23, 26.1.2008, p. 21–26.

## 2. ELECTRONIC CUSTOMS: MISSION, VISION AND GUIDING PRINCIPLES

Customs is a dynamic policy area facing a rapidly changing IT environment and evolving business needs in a highly competitive global market. These challenges increase the demand for supporting Member State customs authorities with innovative IT solutions for enhanced cooperation and information sharing. The broader digitalisation agenda pursued by the Commission and particularly DG TAXUD since the early 2000s promotes a new simplified paperless environment for customs and trade. The e-Customs Decision is a key piece of legislation advancing this agenda towards an interoperable electronic customs environment with a unified data system to further facilitate the exchange of information between customs authorities and economic operators, while enhancing security at EU's external borders. In the area of customs, Article 8, paragraph 2 of the e-Customs Decision calls on the EU Commission and the Member States to jointly establish a Multi-Annual Strategic Plan<sup>2</sup> to ensure the effective management and coordination of all activities and tasks related to ongoing and future e-Customs projects.

The EU Commission continued to fulfil an active role in optimising the customs legal framework and procedures, which culminated with the adoption of the UCC legislation in 2013. The purpose of the UCC is to encourage the use of modern tools and technology to promote the uniform application of customs legislation and modernised approaches to customs control. These overarching goals are the basis for the vision set forth in this document. The mission of customs authorities remains the driving force behind efforts to attain these goals. As outlined in Article 3 of the UCC, customs authorities are tasked with facilitating legitimate trade and ensuring the security and safety of the EU and its residents, and the protection of the environment in close cooperation with other regulatory authorities. To support this mission, the EU Commission aims to have a digital single market based on interoperable applications<sup>3</sup>. At the policy level, the Commission follows the objectives of the EU e-Government Action Plan 2016-2020<sup>4</sup>, which seeks to increase the efficiency of public services by removing existing digital barriers, reducing administrative burdens, and improving the quality of interactions between national administrations.

More specifically, this means that the Commission and Member States set up and operate secure, integrated, interoperable and accessible computerised customs systems in line with the European Interoperability Strategy (EIS)<sup>5</sup>. These systems are designed to facilitate customs processes for the movement of goods into and out of the European Union and to strengthen protection against increasing IT security, financial and privacy threats. EIS will be built according to international standards<sup>6</sup> to allow future interaction with third countries' systems. Its development is closely linked to the UCC legislation and data annexes. The objective is for trans-European IT systems and national customs clearance systems to be based on the EU

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<sup>2</sup> Since 2018, the Multi-Annual Strategic Plan is abbreviated as MASP-C, with the suffix of 'C' denoting the specific focus on customs IT systems. This change is due to the elaboration in parallel of a MASP-T for taxation IT systems. Alignment between the MASP-C and MASP-T will facilitate a more coherent approach to the implementation of IT systems where the customs and taxation domains overlap. Due to this transition, MASP-C and other variations referring to the MASP framework are used interchangeably.

<sup>3</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Digital Agenda for Europe, 2010.

<sup>4</sup> COM/2016/0179 final

<sup>5</sup> COM(2010) 744 final

<sup>6</sup> The international standards used are for instance the WCO data model, ISO and UN norms where applicable, and other standards like International Maritime Organization (IMO), number or European Vessel Identification (ENI), IATA/ICAO flight numbers, IATA structure of numbers of ULD containers.

Customs Data Model (EU CDM), which in turn builds on the UCC annexes (UCC DA/IA Annex A, Annex B and Annex 12-01). 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. Besides the legal data requirements for customs data, the EU CDM also contains the mapping of the EU CDM data elements towards the World Customs Organisation (WCO) Data Model, thus allowing the understanding of the EU legal requirements for the international community of customs professionals. New system specifications should take into account the legal requirements for business processes and data along with the existing specifications and systems at national and EU level, whilst further enhancing harmonisation at international level via the EU CDM.

Information exchange is essential to the efficient functioning of the electronic customs architecture. Economic operators and customs authorities can exchange a variety of digital information, such as:

- Data (i.e., the particulars of a customs declaration)
- Accompanying documents (i.e., documents supporting an application for a decision)
- Decisions (i.e., exchanges in the context of the decision-making process)
- Notifications (e.g., notifications of the customs debt, arrival notifications, "do not load" notifications, etc.)
- Certificates/licences (e.g., documents supporting the customs declaration, such as the Common Health Entry Document).

Similarly, the information exchanged between customs authorities may include:

- Data (e.g., transmission of risk analysis results to a subsequent port)
- Decisions (e.g., the consultation process between MS on applications for AEO or Centralised Clearance)
- Notifications (e.g., "anticipated export record" notifications and "exit result" messages).

As stated in Article 2(1) of the e-Customs Decision, the Commission and Member States will aim to provide the structure and means by which electronic information can be exchanged. The main objective behind this commitment is to control and facilitate the movement of goods into and out of the internal market through efficient import and export procedures. This in turn will offer improved protection of the financial interests of the EU and its Member States, increase the competitiveness of European trade by reducing compliance and administrative costs and decreasing clearance times, improve the safety and security of citizens with regard to dangerous and illicit goods, contribute to the fight against international crime and terrorism by providing rapid and relevant information on the international supply chain, and facilitate legitimate trade through a coordinated approach to the control of goods.

In light of the above, the Commission and the Member States will aim to ensure that:

- Electronic data exchange between customs offices throughout the Union is possible where required for any customs procedure or any other purpose related to the movement of goods across Union borders.
- Economic operators can lodge their summary and/or customs declarations in electronic format and from their premises, irrespective of the Member State in which the goods are entering into or exiting from the Union.

- The collection and repayment/remission of customs duties will be handled by the customs authority responsible for the location where the importer/exporter is established and keeps his customs records.
- The selection of goods for customs controls at border and inland customs offices is based on automated risk analysis using international, common and national criteria.
- Traders will have to register in only one Member State for customs purposes, even if they perform customs transactions in other Member States.
- Traders will have access to information portals and single electronic access points for import and export transactions and for security related customs procedures, irrespective of the Member State in which the transaction is processed.
- Whenever required, the electronic customs systems are interfaced with existing and future systems in areas other than customs (e.g., the Excise Movement and Control System for monitoring intra-Community movements of excise goods).
- Regulatory authorities and agencies involved in import and export transactions are enabled to exchange information electronically, including with third countries if provided for in an international agreement.
- All physical controls are ideally carried out at the same time and place (one-stop shop).

These objectives will be achieved through the following means:

- Harmonised exchange of information based on internationally accepted data models and message formats.
- Re-engineering of customs and customs-related processes with a view to optimise their efficiency and effectiveness, simplify clearance procedures and reduce customs compliance costs.
- Offering a wide range of electronic customs services to economic operators to enable them to interact with the customs authorities of any Member State in a uniform manner.
- Enabling the appropriate legal framework to contribute to the fulfilment of these objectives.

The following diagram provides an overview of the vision and mission of the MASP-C, along with the guiding principles that serve as foundational commitments.

**VISION**  
Establish and operate secure, integrated and reliable IT customs systems to support the mission of customs authorities in facilitating international trade and ensuring the safety and security of EU citizens in the single market.

**MISSION**  
Prepare and regularly revise a high-level planning instrument to effectively implement all electronic customs projects in line with EU customs legislation.

**GUIDING PRINCIPLES**

- Enable a paperless workspace for customs authorities and trade according to agreed planning.
- Provide a common understanding and coherence between EU electronic customs projects and their dependencies.
- Ensure overall governance of legal, business and IT needs for all projects in the area of electronic customs.
- Work collaboratively with the Member State customs authorities to contribute to better customs services.
- Offer a wide range of electronic customs services to EU operators to enable them to interact with customs authorities in a uniform manner.

**Figure 1 – Mission, vision and guiding principles of the MASP-C**



### 3. STRATEGIC PLANNING OVERVIEW

#### 3.1. LEGAL BASIS

Articles 1 and 8(2) of the e-Customs Decision and Articles 6(1) and 16(1) of the UCC provide the legal basis for the MASP-C. Article 1 of the e-Customs Decision sets clear obligations for the Commission and Member States to provide the structure and means for operating the relevant IT customs systems in the common and national domains. Article 6(1) of the UCC sets obligations for the information exchanged between customs authorities and economic operators, whereas Article 16(1) calls for cooperation between Member States and the Commission. The Customs programme Regulation<sup>7</sup> provides the legal basis for EU funding and divides the responsibilities of the Commission and the Member States (Article 11) in terms of the development and operation of the European electronic systems, including their design, specification, conformance testing, deployment, maintenance, evolution, modernisation, security, quality assurance and quality control.



#### Legal basis

- ❖ E-Customs Decision Articles 1 and 8(2)
- ❖ UCC Articles 6(1) and 16(1)
- ❖ Customs programme Regulation Article 11

The protection of personal data is a high priority for the Commission. The General Data Protection Regulation (GDPR)<sup>8</sup> sets a new framework governing data protection law across organisations and companies in the EU. The legislation is designed to harmonise data privacy laws and to give greater protection and rights to individuals through lawful, fair and transparent data processing. Data processing operations carried out by EU institutions and bodies are governed by the Internal Data Protection Regulation (IDPR)<sup>9</sup>, which is fully aligned with the GDPR standards. The Commission is committed to implementing the new data protection rules by complying with the same requirements as those applicable in the Member States.

#### 3.2. ALIGNMENT WITH THE UCC WORK PROGRAMME

In line with Article 280 of the UCC, the Commission has adopted a work programme (UCC WP)<sup>10</sup> to support the development and deployment of electronic systems provided for in the UCC. The UCC WP contains a list of 17 electronic systems that must be developed either by the Member States (national systems) or by the Member States in collaboration with the Commission (trans-European systems).

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<sup>7</sup> Regulation (EU) 2021/444 establishing the EU's programme for cooperation in the field of customs, OJ L 87, 15.3.2021, p. 1–16.

<sup>8</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119, 4.5.2016, p. 1–88.

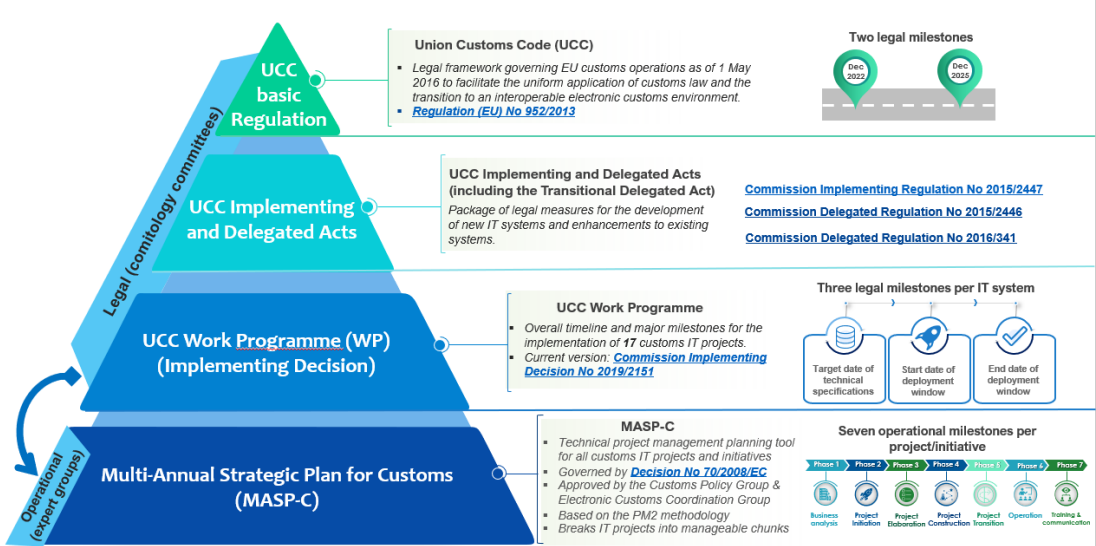
<sup>9</sup> Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, OJ L 295, 21.11.2018, p. 39-98

<sup>10</sup> Commission Implementing Decision (EU) 2019/2151 of 13 December 2019 establishing the work programme relating to the development and deployment of the electronic systems provided for in the Union Customs Code, OJ L 325, 16.12.2019, p. 168.

The UCC WP provides a high-level description of UCC projects and related electronic systems, their legal basis as established by the UCC provisions, key milestones for the completion of stable technical specifications and anticipated start and end dates for system deployment. The UCC WP has been subject to regular updates to keep pace with the latest developments of the UCC and ensure alignment with the MASP-C revision. Annex 2 of the MASP-C Revision 2023 contains the detailed project fiches corresponding to the projects listed in the UCC WP.

In 2019, the UCC was amended to extend to the end of December 2022 the timeframe for the development of several UCC systems that could not be fully implemented by 2020 due to the complex technical transition from currently operational systems to system upgrades or new systems<sup>11</sup>. Since the adoption of this amendment, four major and partially unforeseen developments arose all having a significant impact on the resources of customs authorities: the COVID-19 pandemic, the implementation of new regulations on e-commerce, Brexit and the implementation of the sanctions related to the Russian invasion of Ukraine. These exceptional circumstances caused significant delays in the ongoing IT developments and prevented many customs authorities from completing the deployment of national entry and import systems by the end of December 2022 and ICS2-R2 by March 2023. For this reason, the Commission proposed five implementing decisions to grant derogations to several Member States, allowing them to temporarily use means other than electronic data-processing techniques, as defined in the UCC, for the exchange of information in relation to these systems. Other derogations requested by the Member States on the trans-European systems, such as CCI, AES and NCTS Phase 5 were assessed during 2023.

The successful implementation of the UCC WP IT projects is a priority for the Commission and the EU Member States. While the ECCG ensures a close follow-up and monitoring of the UCC WP implementation, the Commission also reports annually to the Council and European Parliament on the progress and national planning related to these projects until their full implementation by December 2025. The key legal milestones defined in the UCC package and the MASP-C are illustrated in the figure below.

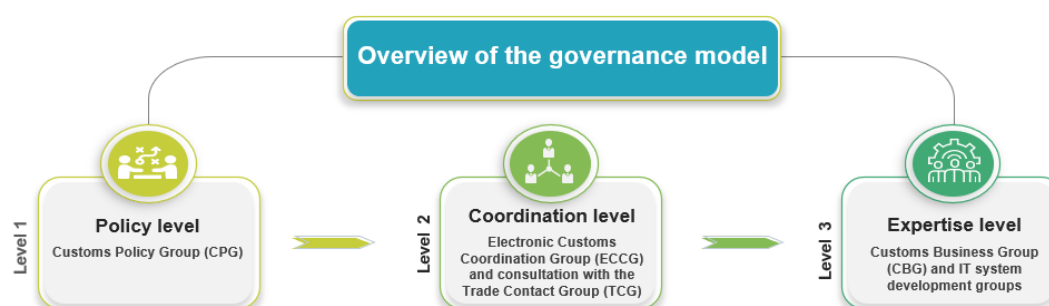


**Figure 2 – Legal and operational milestones of the UCC and MASP-C**

<sup>11</sup> Regulation (EU) 2019/632 amending Regulation (EU) No 952/2013 to prolong the transitional use of means other than the electronic data-processing techniques provided for in the Union Customs Code.

### 3.3. GOVERNANCE STRUCTURE

The implementation of e-Customs IT projects listed in the MASP-C 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 the expertise level. The objective of this scheme is to enhance transparency and coordination among all stakeholders. Member States, in particular, are responsible for ensuring consultation with their traders in the preparation and implementation of electronic customs at national level.



**Figure 3 – Overview of the MASP-C governance model**

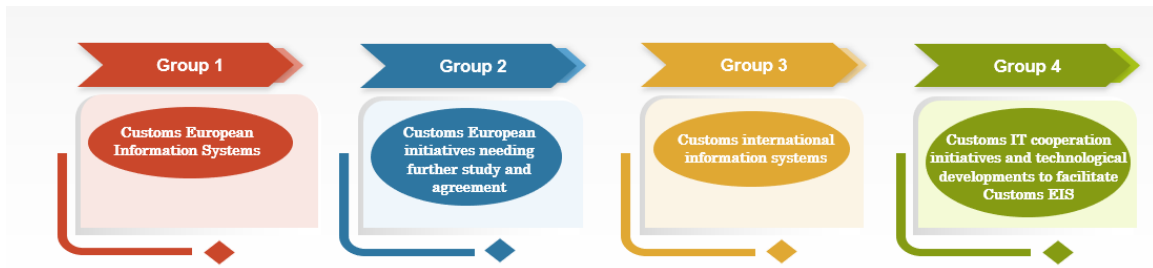
The Customs 2027 programme is the funding instrument that facilitates and enhances cooperation between national administrations in the EU to implement interoperable customs IT systems. In line with this programme, DG TAXUD is responsible for the overall coordination of the development and operation of European electronic systems ensuring their operability, cyber-resilience, interconnectivity, continuous improvement and uniform implementation. An ongoing priority for DG TAXUD is to facilitate effective communication with and between Member States on matters related to these systems in their effort to develop the national system components in a harmonised way.

Annex 3 of the MASP-C Revision 2023 describes the tiered structure and other aspects of the governance model in more detail.

### 3.4. AN INTEGRATED APPROACH TO PLANNING

The MASP-C is a living document that has evolved continually in response to the effective implementation of the UCC and e-Customs projects. The initial structure of the revisions consisted in several project fiches for each IT system. This one-to-many relationship added a level of complexity that urged Member States to require a more coherent and efficient approach to tackling the planning for the implementation of UCC and e-Customs systems. The MASP Revision 2014 addressed this request by grouping the project fiches listed in Annex 2 by business topic, integrating all elements relevant to the same system in one fiche. If during a specific revision of the MASP-C, certain fiches are marked as deleted due to project constraints or cancellations, associated placeholders are kept for purposes of traceability and consistency, while the numbering sequence of the other fiches remains the same.

The overall IT implementation plan is divided into four groups, which are further subdivided into phases based on the degree of legal, business and technical clarity and agreement that has been attained, as shown in the figure below.



**Figure 4 – Grouping of the MASP-C project fiches**

The first group “Customs European information Systems” contains projects with a clearly defined scope that need to be delivered within an agreed timeline. The second group “Customs European initiatives needing further study and agreement” contains projects requiring further discussion before they can be mapped on the IT plan, including bilateral international initiatives between the EU and third countries. The third group “Customs International Information Systems” consists of a handful of projects managed by international organisations for which the Member States and the EU Commission play an active role in their development. The fourth group “Customs Cooperation initiatives and technological developments to facilitate Customs EIS” includes customs cooperation initiatives undertaken to strengthen the cooperation between Member States and to accelerate the technological development of the European Information Systems.

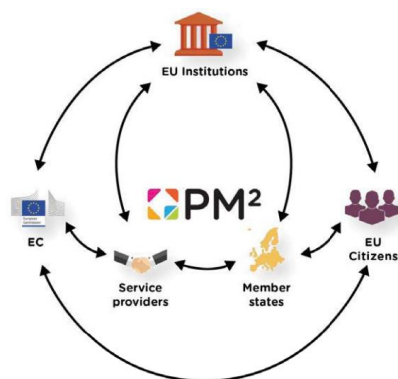
During each revision, certain project fiches may be moved from one group to another. For instance, if an initiative, currently categorised under Group 2, reaches a sufficient level of clarity, it can be moved to Group 1 during the next revision of the MASP-C.

Annex 6 documents the review process and the sequence of applicable changes to provide the reader with clear guidelines for identifying the main differences between the MASP-C Revisions 2023 and 2019.

## 4. STRATEGIC PLANNING PROCESS

### 4.1. PM<sup>2</sup> METHODOLOGY

To maintain transparency and track the progress made by the Commission and Member States towards implementing the IT customs projects, it is important to have a clear and detailed methodology for achieving results. DG TAXUD uses the corporate standard PM<sup>2</sup> project management methods to effectively manage the entire lifecycle of customs IT projects. PM<sup>2</sup> is an easy-to-implement methodology built on elements from a wide range of globally accepted project management best practices. It offers a blueprint for assigning the roles and responsibilities of the relevant business and IT project managers and mapping out the processes and artefacts across the project lifecycle. This methodology has been singled out as an important enabler for the implementation of the European Digital Agenda.



**Figure 5 – PM<sup>2</sup> vision and synergies**

It is important to note that the names used to identify the project lifecycle phases outlined in section 4.2 reflect the terminology of the former software development methodology applied by DG TAXUD, known as the Rational Unified Process (RUP@EC). While the objectives and targets of these phases dovetail with those used in the PM<sup>2</sup> methodology, the former terminology was kept for business continuity purposes. Another change introduced in this revision of the MASP-C is the replacement of the term “vision document” with “project charter” in line with the PM<sup>2</sup> methodology. The project charter is a document created during the inception phase of projects to define their scope and milestones. This term is applied to all relevant new project fiches in Annex 2.

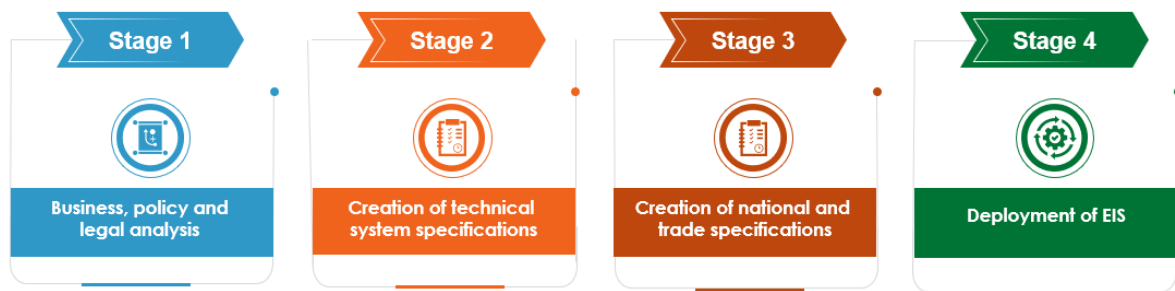
While PM<sup>2</sup> was custom developed to fit the specific needs and constraints of EU Institutions and public administrations, it also incorporates agile principles and practices. Agile PM<sup>2</sup> offers a well-balanced model that enables project teams to apply agile practices while ensuring alignment with PM<sup>2</sup> best practices. This model promotes adaptive planning and continuous project improvement by establishing working methods that are highly flexible and using short feedback loops to quickly respond to change and improve processes. The development teams of DG TAXUD and the Member States are embracing the agile software development approach, with DG TAXUD IT project managers already participating in training related to the Commission’s corporate “PM<sup>2</sup> Agile” methodology.



**Figure 6 – PM<sup>2</sup> Agile rhythm**

## **4.2. PHASED IMPLEMENTATION**

As the term suggests, “phased implementation” is the project planning strategy where customs and EIS projects identified in the MASP-C are managed and rolled out in stages rather than all at once. A phased implementation approach is one in which functionalities of the system are introduced in a particular sequence as outlined in the figure below.



**Figure 7 – Phased implementation of the MASP-C projects**

### **4.2.1. Stage 1 – Business, policy and legal analysis**

During the first stage of project development, business analysis is carried out in parallel with the policy and legal requirements. The purpose of the modelling activity is to ensure that the proposed business process, as supported by the legal provisions, remains relevant to the needs of the business environment, and its impact on various projects and EIS can be understood and evaluated by decision makers. In this context, Level 3 Business Requirement BPMs are proposed to be developed in parallel with the legislative drafting and other related documents. Likewise, Level 4 Functional Requirement BPMs are developed to guarantee the operational alignment of future EIS with business requirements and supporting legal provisions.

### **4.2.2. Stage 2 – Creation of technical system specifications**

The second stage involves the initial IT project work towards system development, primarily intended to prepare the technical system specifications at the Commission level or through collaboration between the Commission, national customs administrations and, where appropriate, trade representatives. This phase of activity is focused on assessing the overall impact of individual projects on the customs IT landscape, managing the interactions and dependencies between the MASP-C projects and cross-sectoral initiatives and ensuring the harmonisation of data across customs domains.



### 4.2.3. Stage 3 – Creation of national and trade specifications

National and, where necessary, trade specifications are developed during the third phase to enable software development and acceptance testing.

### 4.2.4. Stage 4 – Deployment of EIS

The fourth stage covers EIS deployment and the start of operations in line with the agreed project schedule defined in Annex 2.

Based on the e-Customs Decision, the UCC package and any other customs legislation proposing legally mandated deadlines for all actors involved in system implementation, the Member States need to establish their own implementation strategy to migrate to the electronic customs systems within a timeframe that will allow for conformance testing, deployment and entry into operation. As such, the systems in question must be operational in all Member States by the deadline specified in the legislation and the MASP-C.

To facilitate this process, the MASP-C is maintained and reviewed regularly to reflect updated information on major project steps and planned milestones for better coordination of tasks and responsibilities. However, a coordinated implementation of the MASP-C planning requires that the Commission and Member States agree upon the milestones deriving from the legally mandated delivery schedules defined in EU customs legislation and international agreements. In this respect, it is necessary to have a clear view on the content of business plans, address relevant business needs, agree upon the IT architecture, implementation strategy and the governance mechanism for progressively updating this plan.

## 4.3. PROJECT LIFECYCLE

DG TAXUD designs, implements and operates large-scale trans-European systems for customs, excise and taxation domains to effectively meet its strategic business objectives while delivering high quality projects completed on time and within budget. The IT project lifecycle is broken down into a sequence of phases tailored to address the unique needs of each individual project through a set of pre-agreed milestones and deliverables. The project lifecycle provides stakeholders with oversight, transparency, and steering mechanisms to control project funding, scope, schedule, risk, value, and other related aspects. The figure below depicts the phases making up the path that takes customs IT projects from the beginning to completion. Each of these phases is described in detail in the rest of this subsection.

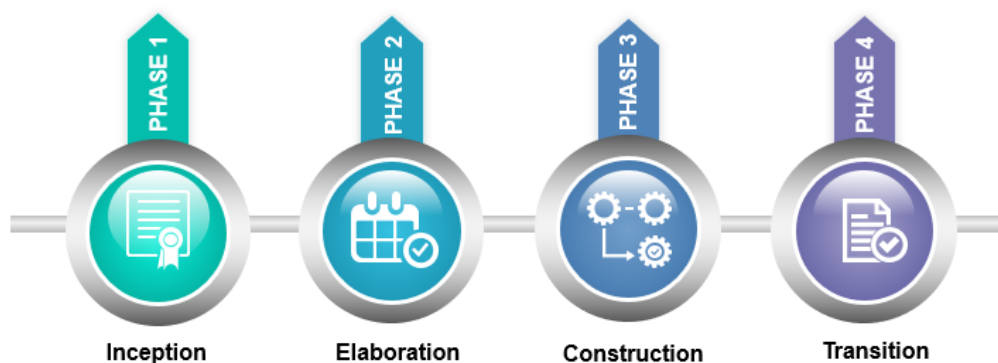


Figure 8 – MASP-C project lifecycle phases

#### **Inception Phase** (*Output: project is defined*)

The Inception Phase encompasses everything from early-stage ideation, project scope and objectives to key functionalities, implementation alternatives and estimated cost and schedule.

Key outputs of this phase are the business process models and high-level requirements, high-level system architecture, and potential technical solutions. These are documented in the Business Case and Project Charter that must be submitted to the IT governance bodies for IT project approval.

#### **Elaboration Phase** (*Output: system is specified*)

The aim of the Elaboration Phase is to refine business processes, define the functional and non-functional requirements of the system as a whole, develop the technical system specifications, plan the system construction phase and prepare system test plans.

The technical system specifications comprise the IT system architecture, requirements of the IT applications composing the system, related use cases, data modelling, system interoperability model and related interfaces. The project groups responsible for the implementation of the relevant IT applications at national and/or EU level also define the detailed functional specifications and related test plans. They further interact with their users on topics such as the usability of the applications and the testing of the IT architecture in prototypes. In this phase, the high-level project plan and budget is also refined and detailed through an iterative process. The specifications produced during the Elaboration Phase may need to receive minor revisions in the Construction Phase to address the potential gap between implementation and reality.

#### **Construction Phase** (*Output: system is built*)

This phase marks the completion of the system based on the outputs of the previous phases. The Commission and Member States often work in parallel, engaging in tasks such as application design, application building, integration and testing activities.

#### **Transition Phase** (*Output: system is operational*)

The primary purpose of this phase is to ensure that the software is ready for delivery to users. Tasks such as deployment and rollout, conformance testing, data migration, user training and adjustment of existing business processes are part of the related work.

### **4.4. BPM POLICY**

The Business Process Modelling (BPM) policy<sup>12</sup> is an essential instrument for the Customs Union in supporting its efforts to modernise and harmonise customs procedures and IT systems. The BPMs aim at enhancing the common understanding of the customs process flows and the practical implications of their implementation in line with EU customs legislation.

The BPMs were initially requested by Member States to understand and agree on the customs processes and procedures defined in the Implementing Provisions of the Modernised Customs Code<sup>13</sup>, in particular the level of detail needed for functional requirements during the initial phases of future IT system design. Since then, the EU customs BPM policy was established as a standard framework to facilitate the alignment between legal and business requirements when interpreting the UCC legal provisions. This approach has demonstrated its usefulness

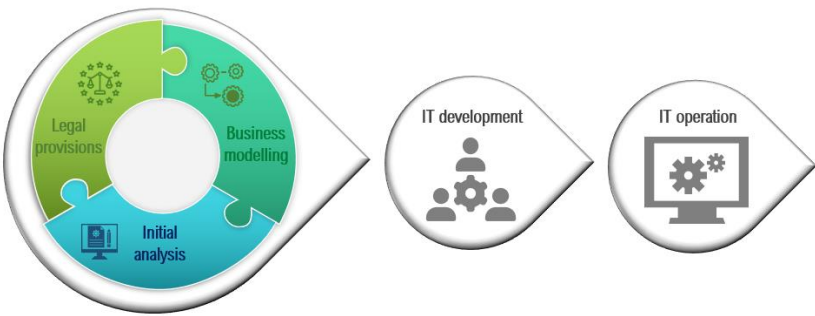
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<sup>12</sup> Business Process Modelling is a way of representing and controlling the processes that are present in an organization to ensure they run smoothly and can be improved over time. This activity is typically performed by business analysts and managers seeking to improve process efficiency and quality.

<sup>13</sup> Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code) (OJ 2008, N° L145, p. 1).



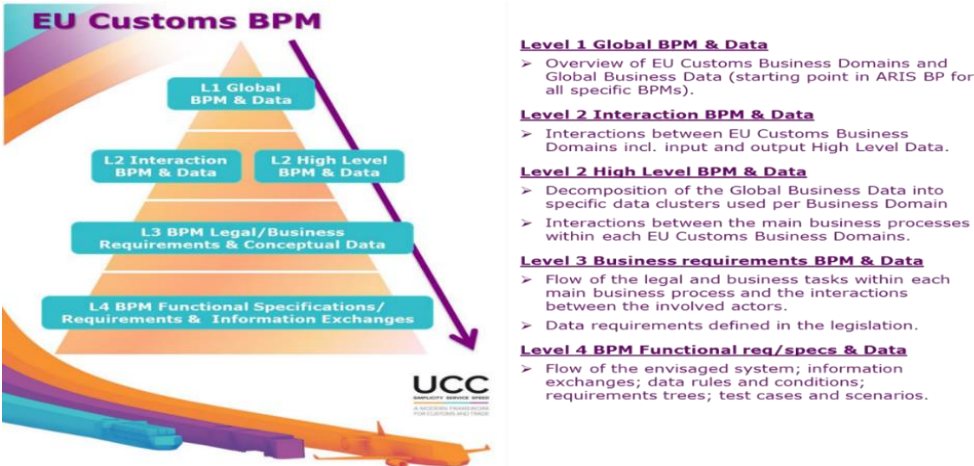
and is being expanded to other customs policy areas. The figure below illustrates how the business analysis and modelling activity are integrated in the overall end-to-end process.



**Figure 9 – Impact of BPMs on the project lifecycle**

The enhancement of the BPM policy<sup>14</sup> remains an important objective for the e-Customs architecture. Given the complex business environment of EU customs, DG TAXUD is considering ways of improving its delivery model to streamline the preparation and implementation of the functional and technical specifications. This would entail the introduction of agile practices to enhance the end-to-end view of the various project artefacts and cross-systems alignments, while creating a more efficient environment for the analysis of requirements. Careful consideration will be given to the impact that these changes may have on the different stakeholders, in particular the Member States and trade. In this respect, DG TAXUD intends to hold consultations and organize workshops to present and discuss the integration of these agile solutions into the current modelling discipline. This streamlining exercise will aim at facilitating a smooth transition across project lifecycle phases, while supporting the timely deployment of customs IT systems.

As depicted in the figure below, the EU customs BPM methodology is arranged in hierarchical levels to ensure a holistic view of the legal, business and IT aspects of EU customs processes that can be presented in a manner that is readily understood by a wider audience.



**Figure 10 – An overview of the different levels of BPM**

<sup>14</sup> ARIS is used as a facilitating instrument for the BPMs, enabling the reusability and continuous improvement of business processes and data. All EU Customs BPMs are available to the Member States and the economic operators via the ARIS Business Publisher, which can be found at the following link: <https://itsmtaxud.europa.eu/businesspublisher>.

The levelling approach and other important elements of the BPM policy are outlined in greater detail in Annex 4 of the MASP-C Revision 2023.

**4.5. CHANGE MANAGEMENT PROCEDURE**

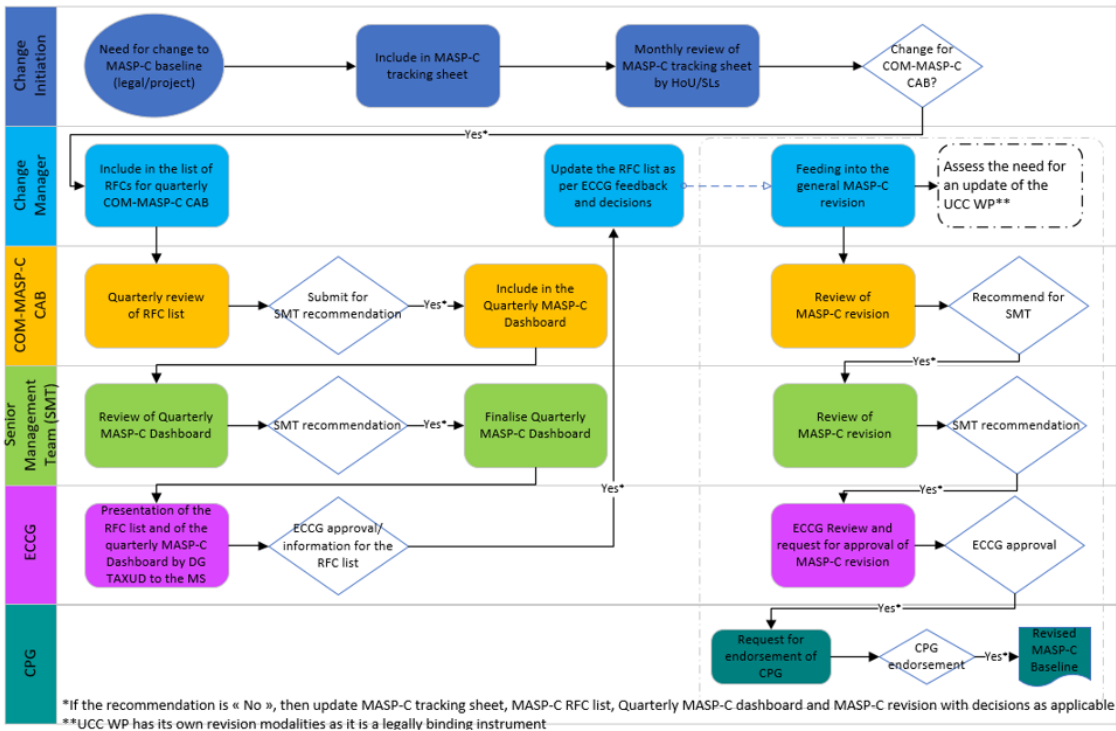
The Change Management process ensures that standardised methods and procedures are used to efficiently handle all changes made to the MASP-C package, the approach to their implementation and any other requirements that may apply throughout the entire project cycle. This process also defines the roles and responsibilities assigned to the Commission services on the approval and management of related changes.

When the need for a change is identified, the Commission services, Member States and trade representatives act as "Change Initiators" and are authorised to submit a written "Request for Change" (RfC) to the "Change Manager". DG TAXUD’s Unit B1 is the responsible Change Manager for the Commission ensuring consultation and coordination with other involved DG TAXUD units and arranging the Change Advisory Board (CAB) meetings.

The RfCs are prepared for changes to the planning of the following MASP-C milestones:

- Availability of the Technical System Specifications (TSS) to Member States and national administrations
- Start of the conformance testing period
- Operational start date
- Other important decisions, such as project cancellation, etc.

Changes to other milestones are communicated to senior management and DG TAXUD’s IT Steering Committee (ITSC) via the MASP-C Quarterly Dashboard. All changes approved by the CAB are submitted for approval to the ITSC and subsequently to the Member States as per the appropriate channels defined in the governance annex of the MASP-C package. The figure below represents an overview of the MASP-C change management workflow.

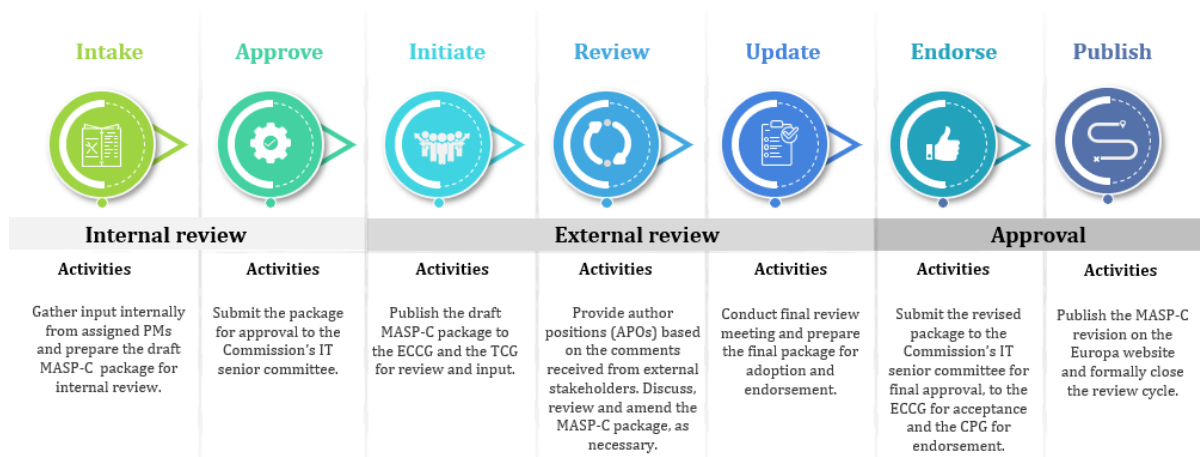


**Figure 11 – MASP-C change management workflow**

#### 4.6. REVISION CYCLE

Each customs IT project must be completed within a designated timeframe set out in the detailed project planning outlined in Annex 2. In order to take the appropriate planning steps for an intended project to meet the required specifications and completion date in all EU Member States, there must be strict adherence to agreed deadlines. Therefore, the MASP-C package is subject to a comprehensive internal and external review and approval by DG TAXUD and the Member States respectively, supported with consultation from trade representatives.

For each MASP-C revision, DG TAXUD prepares the revised package with input from assigned project and IT managers. After internal approval from the Commission’s IT senior committee, the package is submitted to the Member State customs administrations and trade representatives for external review with a pre-announced deadline for providing comments. This process is coordinated by the Electronic Customs Coordination Group (ECCG), a platform where DG TAXUD, national customs and trade representatives discuss developments on electronic customs projects. At the end of the review period, DG TAXUD follows up with the relevant project owners to discuss the actions to be taken on each comment. A consolidated summary of all comments is then published to the ECCG along with DG TAXUD’s position. Member States and trade representatives check the updated version of the package produced after the review to establish whether the authors carefully and adequately addressed their comments. Once agreement is reached with the ECCG, the final package is submitted to the Customs Policy Group (CPG) for endorsement and then published on the EUROPA website.



**Figure 12 – MASP-C revision cycle**

The CPG may be used as the final escalation route to resolve important matters if no agreement can be reached at the ECCG. Once all documents have been approved, the MASP-C package should be respected by all parties concerned. In the event of unexpected and major project delays, the agreed deadlines may be amended by following the Change Management procedures described in section 4.4 and in compliance with the institutional governance framework (see Annex 3). This may also result in taking the necessary actions to adjust the relevant legal deadlines.

## 5. IT STRATEGIC FRAMEWORK

### 5.1. CONTEXT

The Customs Union has undergone a number of modernisation steps since its creation. The design and deployment of the 17 UCC systems aim to consolidate the digitalised EU Customs Union, enabling the electronic processing of more than 99% of all customs declarations. The Commission's digital strategy is anchored within the overall framework of European Interoperability Strategy (EIS) and the European Interoperability Framework (EIF)<sup>15</sup>. These initiatives are part of the Digital Agenda for Europe 2020<sup>16</sup> and the European eGovernment Action Plan 2016-2020, which seek to modernise digital public services and make them interoperable across the EU.

IT activities related to safety and security affect more than 1000 operational systems in the Member States in various degrees. Within this context, investigations related to the way IT is implemented in the Customs Union have been performed as part of the CCN2 study<sup>17</sup> and as part of the definition of the future business architecture for the Customs Union<sup>18</sup>. These findings underscored that the development and upgrade of IT systems required for the completion of customs formalities are a joint responsibility of the Member States and the Commission. As such, one of the main goals of the IT strategy is to rationalise the total cost of ownership of the customs IT systems, without altering the way national authorities exercise their responsibilities. DG TAXUD is committed to providing stable, secure and scalable IT solutions and services that are fit for purpose and will meet the user needs in a consistent, innovative and agile delivery model. In doing so, DG TAXUD works closely with the Member States to deliver on many aspects that are key to the realisation of customs IT systems in line with the EU customs legislation and the MASP-C milestones.

### 5.2. KEY IT OPERATIONS

The IT strategy identifies a number of key elements which are discussed in more detail below.

- **Service-oriented Architecture (SOA)**

The Service-Oriented Architecture (SOA) is a design model that aims to align the business processes, rules and workflows with the world of computing. This architecture supports the emergence of flexible, modular and adaptable IT systems that benefit from the reuse of existing functionalities at national and EU level. The adoption of a service-oriented approach is in line with the principles of the European Interoperability Framework (EIF), which recommends this model to design new services or reengineer existing ones and reuse, whenever possible, services and data components. DG TAXUD aims at producing modular IT systems that can reuse several pieces of collaboratively developed software and non-synergetic components, such as those that are independently developed. Where appropriate,

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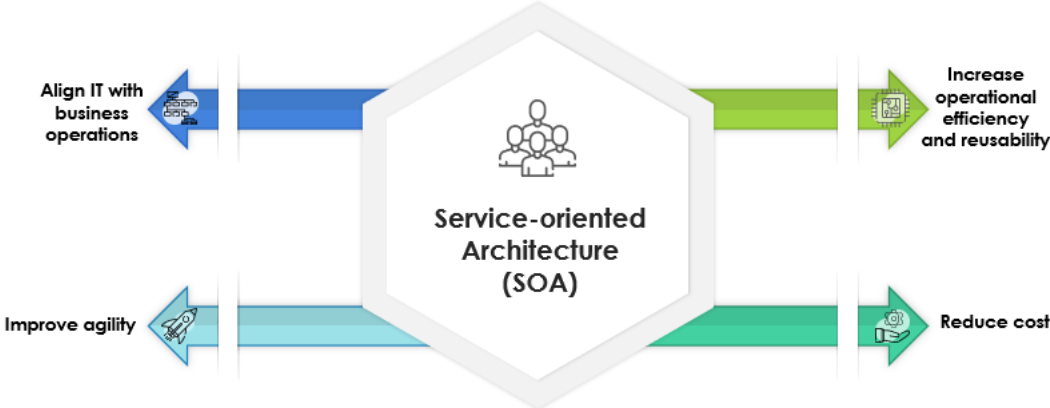
<sup>15</sup> Commission communication on interoperability - European Interoperability Framework (EIF) (COM(2010) 744).

<sup>16</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Digital Agenda for Europe, 2010.

<sup>17</sup> CCN 2 Study, Iteration 2, Member State Interview Report, Deloitte, 2011.

<sup>18</sup> Deloitte study - Future business architecture for the Customs Union and cooperative model in the taxation area in Europe; Final Report on Task 2.2 Strengths and weaknesses of the current organisation model.

active consideration is also given to the use of open-source software (OSS), a model that is promoted as an enabler of the EIF principle on reusability.



**Figure 13 – Benefits of the service-oriented architecture**

- **CCN2(ng)**

A new generation of the Common Communication Network (CCN) will be implemented as the interoperability infrastructure to enable the new service-oriented architecture. CCN2(ng) is the evolution of the current CCN architecture that provides a set of value-added services to support the evolution of new application development and deployment paradigms. Its operational infrastructure consists of a closed, secured network infrastructure provided by the Commission to facilitate the exchange of information between the national administrations in the areas of customs and taxation.

- **Centralisation**

Where appropriate, IT projects with a legitimate business case could be centrally implemented to reduce the total cost of ownership of customs IT systems. To achieve this objective, the Commission has created a high availability IT infrastructure that offers appropriate service levels. However, recent practice with respect to the Customs Decisions project shows that such a central implementation is not welcomed by all Member States due to other national decisions, which they wish to manage through a single system.

This drives the need for a modular system design, that through the service-oriented architecture capability, allows plugging the related functionality into the national systems, while simultaneously planning specific interfaces for the Member States that wish to develop their IT system in full. This hybrid architecture is more complex and time-intensive to design and implement by the Commission and less agile in addressing change (compared to a single central functionality). However, as evidenced in the case of the Customs Decisions project, this architecture supports (1) Member States that are developing their own systems to accommodate national needs and obligations, and (2) Member States that opt for a centrally developed system. The interoperability of the national systems with the central system assures consistency of the data collected and processed.

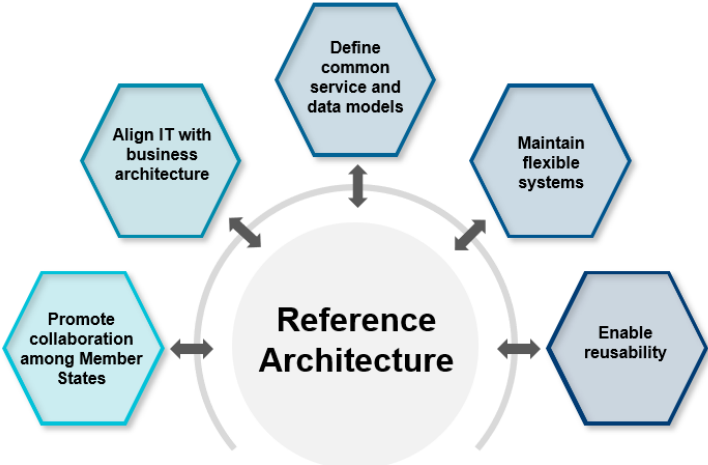
- **Customs IT Collaboration**

The Member States and the Commission share the objective of delivering customs IT projects efficiently and in line with national budgetary priorities. To this end, measures are actively taken to avoid duplication of efforts by stakeholders in the development of electronic systems for customs. The scale of upgrades to existing systems and the creation of new IT systems necessary to implement the UCC, reinforces the need for cost-effective allocation of resources by the Member States and the Commission.

Notable progress was accomplished in the area of customs IT collaboration through the activities of the “Expert Team on new approaches to develop and operate Customs IT systems” (ETCIT). Working under the supervision of DG TAXUD, the ETC IT provides expertise and recommendations on how to develop, fund, maintain and operate customs IT systems through further expanding cooperation between EU customs administrations. Following the establishment of ETCIT I in 2018, the second expert team ETCIT II focused on further expanding the collaborative ways of delivering customs IT in the future, aiming to increase the efficiency and quality of the customs IT delivery and operations for strategic collaboration post-2025. An extension of the work under a third phase (ETCIT III) started in April 2022, focusing on taking the possibilities of IT collaboration further.

- **Reference Architecture**

Reference architecture is a discipline of enterprise architecture intended to provide a common vocabulary to express system implementations. This architecture will be developed for customs IT systems to build a common language and planning foundation for future IT systems. This will in turn help to achieve a common understanding of IT systems and services, their business value and purpose, and their evolution over time.



**Figure 14 – Principles of reference architecture**

- **EU Harmonised Trader Interface**

The IT Strategy aims to harmonise the external domain specifications for new systems and to offer a single access point for trade in order to reduce the number of connections to the Customs Union for trade. By using the above practices and techniques for future trader access systems related to declarations, the costs borne by trade could be significantly reduced. Such interface could also be hosted at the Commission, thus reducing the interfaces to trade to one. However, this remains subject to further discussion based on the results of specific feasibility studies and business case analysis generating the necessary level of trust and detailed understanding on a case-by-case basis.

- **Resource Availability**

If agreements reached at strategic level and reflected in the appropriate legal frameworks allow to shift responsibilities from the Member States to the Commission, adequate resources and coordinated efforts will be required to guarantee a timely and correct system implementation. Additional workforce would also be required from the Member States through virtual teams and remote collaboration, to reallocate resources in ways that would ensure the effective implementation of national requirements.



- **Connecting Europe Facility (CEF) Building Blocks**

The EU Commission supports the development of high-performing, sustainable and interconnected trans-European networks in the area of digital infrastructure through the Connecting Europe Facility (CEF) programme. This facility was set up as a dedicated financing instrument to channel EU funding into the development of infrastructure networks. CEF is funding a set of generic and reusable Digital Service Infrastructures (DSI), also known as building blocks (e.g., eDelivery, eID and eInvoicing) to interconnect complex digital services and IT systems across the EU. The basis for the CEF building blocks are interoperability agreements between the Member States. The blocks represent basic capabilities that can be reused in any project, where appropriate, to facilitate the delivery of digital public services across borders and sectors. Recently, the Commission introduced three new building blocks (Big Data Test Infrastructure, Context Broker and eArchiving) to provide reliable services across different domains and bring added value to the areas of data infrastructures, digital archiving and real-time data in line with the vision laid out in the Tallinn Declaration on eGovernment<sup>19</sup>.



**Figure 15 – CEF building blocks**

The Commission supports the IT capacity building and the IT strategy through the multi-annual Customs programmes. Annex 5 of the MASP-C Revision 2023 provides a thorough overview of the IT strategy.

### **5.3. IT MODERNISATION PROGRAMME**

As the electronic customs environment continues to evolve, DG TAXUD has engaged in several efforts to modernise existing IT systems, to improve processes for the development of new solutions, and to restructure underlying frameworks for service and lifecycle management. As outlined in Annex 5 of MASP-C, the Commission and Member States have agreed on an IT strategy to rationalise the total cost of ownership of the customs IT systems, without altering the responsibilities fulfilled by the national authorities. While the high availability and reliability of centralised IT services are identified as key objectives of the IT strategy, it is essential to design, develop, deploy, operate and maintain resilient and secure solutions, which are flexible enough to provide short response times to new challenges. To address these priorities, an IT modernisation programme was launched in 2020 to enhance the IT service provided to the Member States and internal stakeholders. This initiative

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<sup>19</sup> <https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration>

complements the infrastructure and systems upgrades defined in the MASP-C with the necessary reusable architecture components, using agile and flexible software development approaches. The IT modernisation programme will allow Member States and DG TAXUD to reduce the time-to-deploy for new and upgraded systems, to increase flexibility in addressing new challenges and to stay technologically relevant in a competitive IT market. DG TAXUD's Directorate B has an essential role in leading and managing this modernisation programme in an effort to promote its coherent implementation.

The IT modernisation programme focuses on the five key tracks below viewed as pivotal for accelerating the move towards IT modernisation:

- **Track 1: IT governance, programme and project management**

Track 1 focuses on modernisation efforts to improve general governance, programme and project management activities through adopting corporate standard PM<sup>2</sup> project management methods, streamlining quality assurance processes and implementing comprehensive information security and data protection strategies.

- **Track 2: IT architecture and infrastructure**

Track 2 concerns the IT architecture and infrastructure set out in MASP-C fiche 4.7, aiming to implement by 2022 all architecture and infrastructure layers required for the deployment and operation of central services in order for the trans-European systems to be highly available, flexible and secure.

- **Track 3: IT service continuity**

Track 3 focuses on IT service continuity in support and alignment with DG TAXUD's overarching business continuity objectives outlined in the MASP-C fiche 4.9. The aim is to ensure that DG TAXUD investments in preparedness will be effectively reflected in recoverability when required, in line with its business aims and priorities.

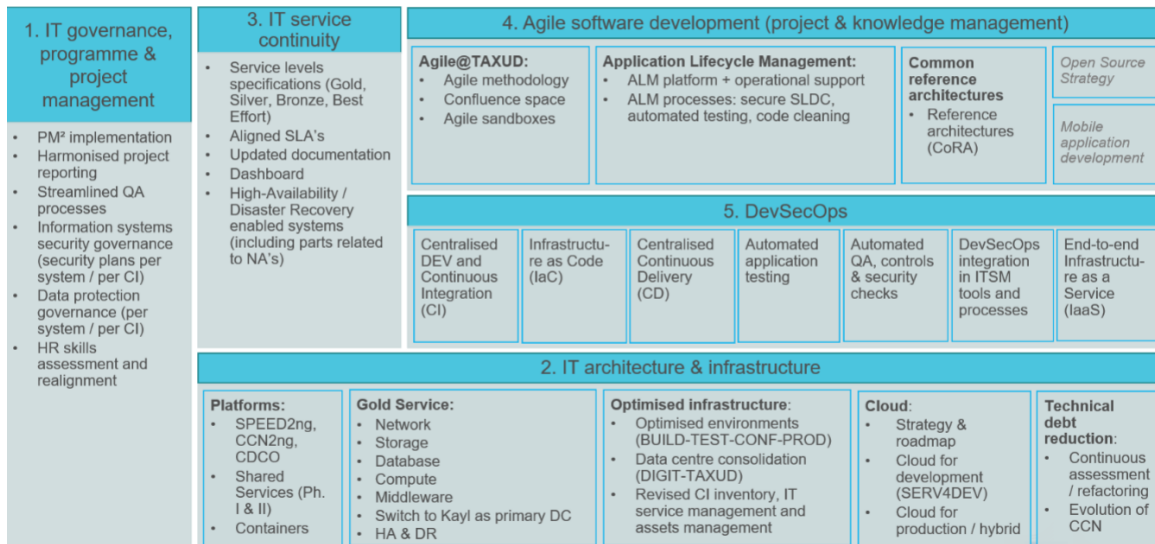
- **Track 4: Agile software development**

Track 4 outlines an agile process for software development to help leverage innovation, maximise the return on investment and reduce risks posed by obsolete IT systems.

- **Track 5: Development, Security and Operations (DevSecOps)**

Track 5 focuses on adopting modern approaches to development and operations through DevSecOps capabilities to drastically reduce delays and to improve the efficiency and effectiveness of the end-to-end software development lifecycle. The figure below presents an overview of the IT modernisation objectives and their underlying principles and infrastructure, while a detailed description of the five tracks is provided in Annex 5 of the MASP-C Revision 2023.





**Figure 16 – IT modernisation objectives**

#### 5.4. IT BUSINESS CONTINUITY MANAGEMENT SYSTEM (IT BCMS)

Since the previous MASP-C revision, DG TAXUD has adopted several business continuity measures and conducted various activities to define and standardise the Continuity and Availability Service levels and categorise all DG TAXUD IT systems according to their level of criticality and recovery capabilities. Following the launch of the IT Business Continuity Management System (IT BCMS) in 2018, DG TAXUD initiated Phase III of the IT BCMS revamping project in mid-2020, which is expected to further raise overall system maturity through the review and standardisation of the new Availability and Continuity Service levels adopted in Phase II.

More specifically, Phase III of the project will ensure that all current arrangements and operations as well as future planning, actions and implementations will consistently support the objective of recoverability and the new Gold Service Level. This will be pursued by continuously updating various crucial BCMS documents, such as the IT Business Impact Analysis and Risk Assessment, the IT Business Continuity and Crisis Management Plans and the Disaster Recovery Plans. In addition, clear roles and responsibilities will be assigned to the IT Duty officer to ensure DG TAXUD's IT continuous readiness for dealing with disruptive incidents and to conduct enhanced monitoring of the continuity system through the implementation of new key performance indicators, dashboards and reporting.

During Phase III of project activities, DG TAXUD intends to develop a roadmap for the implementation of the required arrangements to support the new Gold Service Level with 99,8% availability, by the third quarter of 2022. The IT BCMS will be aligned with all other levels of business continuity management arrangements already in place, taking into account all inter-dependencies within the DG TAXUD's complex ecosystem to effectively meet the IT service continuity needs of its stakeholders. Extended Disaster Recovery testing for IT systems is conducted on an ongoing basis to ensure the effectiveness of the current Disaster Recovery Plans and to identify areas that require further improvements. A current measurement of the performance of IT systems business continuity is indicated in the increased number of the messages exchanged through the Common Communication Network (CCN) applications, which grew by 20.6% from 2020 to 2021<sup>20</sup>.

<sup>20</sup> [2021 E-CUSTOMS ANNUAL PROGRESS REPORT \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/inline-0/attachment-data/file/2021-E-CUSTOMS-ANNUAL-PROGRESS-REPORT.pdf)

## **5.5. SERVICE LEVEL AGREEMENTS (SLA) AND TERMS OF COLLABORATION (TOC)**

The continuous evolution of customs IT systems and the deployment of new ones has resulted in a need to review and update the Service Level Agreements (SLA) and Terms of Collaboration (ToC) for customs trans-European systems in line with the MASP-C Revision 2019. These documents define the rights and obligations between all involved parties and provide a collaborative framework for the delivery of high-quality IT services that meet user needs. The documents are prepared by the Commission and are adopted by the Member States through the ECCG platform. Their proper application is essential for system development and operation.

The main documents reviewed and updated since the MASP-C Revision 2019 are presented below:

- ToC for customs trans-European systems, outlining the terms and conditions under which the identified parties will collaborate to meet the defined project scope.
- ToC for Single Portal for Entry or Exit of Data (SPEED), defining the mutual obligations between DG TAXUD and the national project teams of the Member States and the Russian Federal Customs Service for the SPEED Computerisation Project.
- SLA for Service Desk, specifying a set of mandatory requirements to be fulfilled by all National Service Desks (NSD) and the Central Service Desk (CSD), including incident discovery and incident response activities.
- Service Catalogue for the national administrations, outlining the available services delivered by DG TAXUD and its contractors.
- Guidelines for NSDs, discussing the rules and procedures governing the daily operations of the NSDs, including incident detection and response capabilities fall-back procedures in case of system unavailability.

## **6. STRATEGIC PRIORITIES AND INITIATIVES**

### **6.1. KEY EMERGING AREAS**

In addition to ensuring full alignment with the latest updates required by the UCC WP, the current revision of the MASP-C introduces recent developments and initiatives in the field of customs which have been building gradually since the MASP-C Revision 2019. Some of the key emerging areas are the impact of the Customs Action Plan<sup>21</sup> on IT, legislation on border control, including market surveillance and product safety, the EU Green Deal, and links with the EU Single Window Environment for Customs.

Several initiatives launched after the 2019 MASP-C Revision are introduced as new project fiches, namely the Carbon Border Adjustment Mechanism (CBAM), Smart Border, electronic Proof-of-origin Certificates (e-PoC), Binding Valuation Information (BVI), Binding Origin Information (BOI), Transit of postal consignments and Military customs systems/Form 302. This revision also includes current crosscutting initiatives and ongoing operational elements that are at the core of what is valued across the directorate, such as the outcome of "TAXUD IT modernisation activities", including business continuity, agile development, cloud-computing services, etc.

Concurrent with these developments, DG TAXUD continued to assess additional innovative solutions with a strong focus on data. One key to success in the journey to become data-driven was the creation of a Data Lab in 2021, a central data platform that brings together a comprehensive set of tools, computing resources and data assets that can be used to address the needs of different policy topics, such as Customs Union Performance, customs equipment reporting, customs risks analyses, trade flow monitoring, etc. The main objective behind this platform is to enforce a data architecture that promotes good governance, re-use of resources and lesser errors. Specifically, the Data Lab allows for the consolidation of data assets in a single data environment where information is easily accessible and processed in full compliance with the applicable data protection legislation and principles. This will create a computing environment, which can be harnessed to support policy officers in all aspects of policy making and implementation, such as the design, impact assessment, monitoring and evaluation, thus contributing substantially to maximising the value of data.

### **6.2. NEW INITIATIVES**

The following paragraphs provide a brief overview of the main initiatives launched after the 2019 MASP-C Revision.

The EU's international trade is subject to both customs legislation and other non-customs legislative requirements that apply to specific goods in policy areas such as health and safety, the environment, agriculture, fisheries, cultural heritage and market surveillance. To comply with these requirements traders must engage with multiple authorities, each with its own portal and procedures and different levels of interoperability. The Regulation of the European Parliament and of the Council establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013<sup>22</sup> was adopted in December 2022 to

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<sup>21</sup> [The Customs Action Plan - supporting EU customs to protect revenues, prosperity and security \(europa.eu\)](#)

<sup>22</sup> Regulation (EU) 2022/2399 of the European Parliament and of the Council of 23 November 2022 establishing the European Union Single Window Environment for Customs and amending Regulation (EU) No 952/2013, OJ L317, 9 December 2022.

address these challenges by reducing the administrative burden for traders and making the clearance process simpler and more automated.

More specifically, the regulation aims to enhance cooperation and enable interoperability between the customs and non-customs domains in streamlining the electronic exchange of documents and information required for the goods clearance process. To implement the EU Single Window, a certificates exchange system, namely the electronic European Union Customs Single Window Certificates Exchange System (EU CSW-CERTEX) will be established, that interconnects customs systems of the Member States with EU non-customs systems managing specific non-customs formalities.



The EU Single Window will at first enhance intergovernmental exchanges between customs and non-customs authorities at EU borders, allowing for the automatic verification of non-customs formalities related to health and safety, the environment and product compliance by 2025. This verification will ensure EU-wide quantity management and reduce risks of fraud in the import or export of sensitive goods, such as high emission fluorinated greenhouse gases. A second phase, planned for 2031, will put in place a business-to-government scheme to allow traders to provide data in one single portal in an individual Member State, instead of submitting the data separately to both customs and EU non-customs systems.

The COVID-19 crisis reinforced the need to streamline customs procedures on the rules of origin in the trade with the signatory countries of the Pan Euro-Mediterranean convention. In this context, DG TAXUD aims to develop a central electronic Proof of Origin (e-PoC) system to facilitate trade and integrate the supply chains within this area. The e-PoC system will be designed to streamline administrative cooperation and coordination between customs and the concerned competent authorities by putting in place a central web-based module for the EU established economic operators to obtain certificates of origin. Another initiative in this direction is the development of a central electronic system to collect, manage and exchange information related to the import of cultural goods into the EU territory. This system will automate the application procedure for import licences, the submission of importer statements to customs and the storage and exchange of related information between the Member State competent authorities in charge of this policy area.

To meet the objective of a climate-neutral EU by 2050, in July 2021 the Commission published a proposal to introduce its own carbon border adjustment mechanism ('CBAM')<sup>23</sup> to address the risks of carbon leakage. CBAM applies a carbon price at the border to imports of certain products based on their embedded emissions, or carbon footprint, which is equivalent to the carbon price borne on those products by domestic producers. Under the Commission proposal, EU importers of these products would purchase a sufficient number of CBAM certificates, mirroring the EU Emissions Trading System price, to cover the amount of carbon used in the production of the imports, in order to apply a carbon price on imports in line with the carbon price paid by EU producers.



DG TAXUD will manage the central CBAM system where importers can register. National

<sup>23</sup> COM(2021) 564 final.

authorities will authorise their registration in the CBAM system and review and verify relevant declarations.

DG TAXUD has also introduced two projects on Binding Valuation Information and Binding Origin Information to ensure legal certainty of customs valuation and uniform interpretation of the rules of non-preferential and preferential origin across the EU. These instruments are highly promoted at international level by the WTO and WCO as key tools for customs compliance and trade facilitation.

The Smart Border project is another initiative that has recently gained momentum as a solution to digitalising and accelerating customs processes and formalities related to the cross-border movement of goods in the EU. This project is designed to capitalise on the existing trans-European systems to optimise the use of resources invested by national customs administrations across the EU.



DG TAXUD is also preparing to embark on a new project related to military mobility. Under this project, a new customs document, EU form 302 will be used in addition to the existing NATO form 302 to streamline and simplify the customs formalities for goods moved or used in the context of military activities. The digitalisation of EU form 302 will help reduce operational difficulties resulting from a lack of clarity regarding the use of the form 302 for temporary export and re-import of military goods.

### **6.3. BREXIT: NORTHERN IRELAND PROTOCOL**

As part of the Withdrawal Agreement with the United Kingdom, the EU and UK agreed a Protocol on Ireland/Northern Ireland (NI Protocol) that there would be no new checks on goods crossing the border between Northern Ireland and Ireland.

The protocol aims to:

- avoid a hard border between Northern Ireland and Ireland
- make sure of the integrity of the EU single market for goods
- facilitate free access for Northern Ireland goods to the UK market, and the inclusion of Northern Ireland goods in free trade agreements between the UK and third countries.

The application of the Protocol started on 1 January 2021. As a result, Northern Ireland has in effect remained in the EU single market for goods. This allows goods to flow to and from Northern Ireland to Ireland and the rest of the EU as they did while the UK was a member of the EU, without customs formalities. This means that the UK (in respect of Northern Ireland) remains connected to the trans-European IT systems for customs and is required to implement the IT projects in line with the planning laid down in the MASP-C and UCC Work Programme.

### **6.4. FUNDING INSTRUMENTS**

The Commission has allocated EU-level budgets to provide technical support instruments aimed at assisting Member States in navigating their financial challenges. One such program, the Recovery and Resilience Facility, has been specifically designed to support EU Member States with their recovery from the impacts of the COVID-19 pandemic. Additionally, the Technical Support Instrument (TSI) offers tailored technical expertise to Member States for the purpose of designing and implementing reforms. This demand-driven initiative provides support without requiring co-financing from Member States.

The TSI provides a wide range of assistance, including strategic advice, studies, training, and expert visits to help Member States tackle reform challenges across various policy areas such

as climate action, digital transformation and health. It also supports the preparation, implementation, and revision of national recovery and resilience plans. With a budget of €864 million allocated for the period of 2021-2027, the TSI empowers Member States to support action to recover, improve public services, and foster inclusive economic growth and sustainable and socially responsible reforms.

Of particular significance is the 2024 Flagship Technical Support Project, which offers financial opportunities for Member States seeking to enhance the performance of the IT ecosystem of their tax and customs administrations. With a strong emphasis on ensuring the interoperability and compliance of national systems with EU standards, the TSI delivers a comprehensive range of support measures. These measures include data-driven digital tools, capacity building initiatives, change management strategies, trainings as well as transition and communication plans, all of which contribute to a seamless digital transformation. Within the domain of electronic customs, this flagship project holds significant potential to support Member States during the years 2024 and 2025 in their efforts to implement the Union Customs Code (UCC) IT systems and the European Union Single Window Environment for Customs (EU SWE-C). Member States are encouraged to submit their applications for support through DG REFORM to take full advantage of this opportunity.

## 7. TRAINING AND COMMUNICATION

The implementation, application and adoption of customs IT systems by Member States and businesses require systematic support through competency building and communication measures. In line with the European training and education concept in the field of customs and taxation, common training support is planned to complement and reinforce the training efforts of Member States and businesses in areas where national action alone is insufficient.<sup>24</sup>

Any common training measure in this field has been and should be designed to help the uptake of IT systems at national level or business level and to fully benefit of the customs IT systems. To achieve this goal, common training actions are best developed in partnership with all concerned stakeholders and should comply with a few key principles: be driven by user's needs, be accessible, multi-channel and cross-national with a European approach and up to date.

The Commission proposes to pursue the following methodology in particular:

- Mapping of new knowledge, skills and competency requirements related to the centralised part of e-customs services.
- Identification of common training needs at European level, compared to purely national training needs.
- Alignment of common training support planning with overall project development timeline per e-customs project.
- Selection of most appropriate training tools and delivery methods depending on the target audience and circumstances.
- Development of tailor-made training answers on common training requirements for identified target audiences.
- Provision of an online collaborative space for additional coordination of national training measures between the Member States and with business, where appropriate.

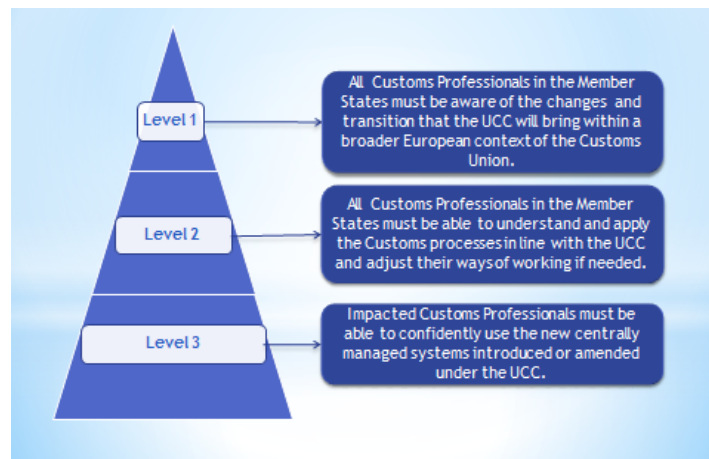
By pursuing the approach outlined above, training and new competency building have and will contribute to the success of customs IT systems. Concrete training development work in support of the MASP-C started in April 2015 when the Commission together with some Member States designed a UCC EU eLearning Roadmap<sup>25</sup>. The roadmap describes how the Commission supports the implementation of the UCC at national level and serves as a guideline to set the scope and requirements for each eLearning course developed to support the UCC implementation. As a general rule, content should be organised in such a way to obtain one hour of learning material per course. The courses should be compatible with mobile devices such as tablets and smartphones.

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<sup>24</sup> Common training support can be provided as far as supported by the Customs programme.

<sup>25</sup> UCC eLearning Roadmap, June 2015, Ares(2015)2883425





**Figure 17 – UCC EU eLearning roadmap**

Following this roadmap, the Commission has delivered one UCC Overview module, Level 1, to raise awareness and focus on the changes and novelties the UCC brought compared to the former customs legislation, Community Customs Code (CCC). This course was delivered in March 2016 and updated in November 2019 to include the latest amendments in legislation and the updated information about the customs IT systems.

The roadmap determined also that the Commission would in parallel develop 14 domain specific courses (Level 2) to help build the customs competencies defined in the EU Customs Competency Framework (CustComp<sup>EU</sup>)<sup>26</sup> in function of the new customs legislation. These courses were delivered from April 2015 to May 2016. While they were initially intended to refresh the knowledge of the customs officers about the UCC, they also served as ideal induction courses for newcomers to customs. Some of these courses have been updated during 2019 and 2020 to include new processes related to IT systems or legislation amendments. Finally, the Roadmap set the foundation for the creation of Level 3 courses, which encompass IT eLearning courses, in-depth guidance and use cases. The IT eLearning courses will support the implementation of the common EU IT systems outlined in the MASP-C and should be delivered prior to the entry into force of the use of each IT system. However, this timely delivery entirely depends on the accessibility of the IT systems in development.

A first UCC IT eLearning was delivered in December 2016, in time to support the implementation of the Registered Exporter System (REX). Another EU eLearning module on the Customs Decisions system has been delivered in December 2017, with a further update during 2018 and 2020. In addition, the EBTI-3 system eLearning module was delivered in April 2018 and updated in 2020. Other modules, such as the EU Customs Trader Portal for eAEO and EU Customs Trader Portal for BTI were developed in 2019 and updated during 2022. In 2020, the EOS module was fully updated, and new modules were launched: CLASS and INF Special procedures: Customs Officer & Trader. The last developed module in this level was “UUM&DS: your passport to EU applications” in 2021.

Further modules are planned to be released in 2022 on NCTS-5, CCI and AES. All modules developed to support the launch of the IT systems will be updated in line with new system releases if needed. Other training courses could be developed outside of the EU UCC eLearning programme if the topic requires it, like, for example, several modules planned for the EU Customs Single Window.

<sup>26</sup> [http://ec.europa.eu/taxation\\_customs/eu-training/eu-customs-competency-framework\\_en](http://ec.europa.eu/taxation_customs/eu-training/eu-customs-competency-framework_en)



## 8. PERFORMANCE MONITORING

Performance monitoring is a key component of the MASP-C as it will indicate the progress the Commission is making to achieve the vision of a paperless customs environment. Measuring performance is a long-term, dynamic effort that should comply with the timetable set out in this plan, while adhering to the core objectives of the e-Customs Decision. The Performance Measurement Framework (PMF) for the Customs programme is required to measure and report on the performance of this programme to ensure sound management, timely delivery, and effective implementation of strategies. This framework builds on the monitoring requirements outlined in the Customs programme legislation<sup>27</sup> and aims to achieve several goals:

- Defining how the achievements of the instrument will be monitored and reported during the 2021-2027 programming period.
- Contributing to transparency and accountability towards external stakeholders.
- Generating factual information for future evaluations and impact assessments.
- Helping identify potential implementation problems.

In accordance with the Better Regulation Guidelines on monitoring, the proposed PMF covers all the objectives of the programme, creates proportionate reporting requirements, reuses when possible existing data sources to reduce costs, ensures that evidence is collected on time, and will be accessible to the public. The table below depicts a comparison of the number of indicators in the current and previous customs programmes. The majority of output and result indicators relate to IT systems, reflecting their weight in programme spending.

Performance Measurement Framework (PMF) for the Customs programme	New PMF	Old PMF
<b>Indicators</b>	16	26
<i>Output</i>	7	10
<i>Result</i>	6	10
<i>Impact</i>	3	6
<b>Sub-indicators</b>	42	86
<i>Output</i>	21	24
<i>Result</i>	16	44
<i>IT systems</i>	21	12
<i>Collaboration and training</i>	15	56
<i>Impact</i>	5	18

**Figure 18 – Comparison of the number of indicators in the current and new PMF**

<sup>27</sup> Regulation (EU) 2021/444 of the European Parliament and the Council of 11 March 2021 establishing the Customs programme for cooperation in the field of customs, recitals (20), article 13 and Annex II.

To this end, the Commission, together with Member States, have undertaken monitoring activities to ensure the EIS are being achieved. This includes annual reporting on the tasks allocated under the e-Customs Decision. The monitoring of the MASP-C implementation will be continuous, and information will be shared with Member States in order to assist in the timely and efficient achievement of the objectives and creation of computerised systems. Specifically in the context of the IT projects, the Commission is required to produce an annual report to the Council and the European Parliament on the progress achieved in the development of the electronic systems provided for under the UCC<sup>28</sup>.

Monitoring the application of the UCC, collecting information and evaluating the functioning of the UCC on the ground is a crucial step in the sequence of policy cycle measures that will make the UCC package operate as intended. Attention must be given to how the new rules are implemented across the EU, ensuring that the Customs Union is functioning properly, and implemented in accordance with the legal provisions and expected standards. In this context, the Commission is reporting on the implementation of the UCC regularly.

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<sup>28</sup> Report from the Commission to the European Parliament and the Council pursuant to Article 278a of the Union Customs Code, on progress in developing the electronic systems provided for under the Code, COM/2021/791 final.

## 9. CONCLUSION

As outlined in this document, the principal objectives of the electronic customs initiative are to increase the efficiency and effectiveness of customs procedures and processes and to provide for interoperable customs systems accessible to economic operators throughout the Union. The key legislation related to this initiative is the e-Customs Decision, which calls on the Commission and the Member States to jointly establish a Multi-Annual Strategic Plan to ensure the effective management and coordination of all activities and tasks related to ongoing and future electronic customs projects. In this framework, the MASP-C is a living document that is regularly updated in response to the delivery schedules mandated by EU legislation.

The rising global challenges that we face today – from the Covid 19 pandemic to the threat of climate change – require focused attention on having a strategic and operational view of IT trends and business needs and delivering responsive IT services while balancing the important principles of IT security and data protection. Within this context, the full implementation of a coherent and interoperable electronic customs environment remains a key priority for the Commission, a commitment reflected in the continuous implementation of legislative, business, IT and operational activities in the electronic customs domain. Likewise, the commitment of the Member States to deliver in line with the MASP-C milestones are vital to the successful implementation of the electronic customs initiative.