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Electronic Customs Multi-Annual Strategic Plan
2016 REVISION

MASP Rev. 2016
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1. PURPOSE OF THIS DOCUMENT

This document is known as the electronic customs Multi-Annual Strategic Plan (MASP). It is a **management and planning tool**[1] drawn up by the European Commission in partnership with Member States in accordance with Article 8(2) of the e-Customs decision[2]. The MASP ensures effective and coherent management of IT projects by setting down both a strategic framework and milestones. It is to be endorsed by Member States in the Customs Policy Group (CPG). Endorsement takes place based on expert advice provided by the Electronic Customs Coordination Group (ECCG) and consultations with trade at the Trade Contact Group (TCG).

The MASP has been referred to as the necessary instrument to justify budgetary requests made by national customs administrations, as well as to ensure overall governance of legal, business and IT-technical aspects of new IT projects in the area of customs.

By being instrumental to these aims it enables a smoother and more coordinated implementation cycle. A final aim of the MASP is to ensure agreements are reached for projects identified in Annex 2 and that those are reflected in the detailed planning found in Annex 1. Stakeholders are required to take the necessary measures and make commitments to deliver accordingly.

1.1. MASP REVISION 2016

At the 6th ECCG on 23rd and 24th March 2015, and following the previous yearly revisions, COM proposed a planning for the **revision of the MASP**. This revision is known as MASP Revision 2016 and follows MASP Revision 2014.

This revision provides a complete and up-to-date overview of **all future customs projects and envisaged IT requirements** as well as a **detailed planning**. It further reflects progress in diverse policy domains such as the Union Customs Code (MCC Recast – hereinafter referred to as the 'UCC'[3]), Authorised Economic Operators Mutual Recognition, Safety and Security and Single Window.

1.2. SYNCHRONICITY OF THE MASP AND UCC WP

This update of the MASP takes the UCC adoption and application schedule into account. Therefore MASP Rev. 2016 establishes links with the UCC Work Programme (UCC WP) following the provisions of Article 280 of the UCC:

"The Commission is to draw up a work programme relating the development and deployment of the electronic systems. The work programme is in particular important for the establishment of the transitional measures related to the electronic systems and the timing for the cases where systems are not yet operational by the date of application of the Code, i.e. 1 May 2016."

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[1] The MASP is based on the current budget proposal to be considered under the Customs 2020 program, however, if the approved budget is lower than expected, then the MASP will need be updated accordingly.

[2] Decision No 70/2008/EC of the European Parliament and of the Council of 15 January 2008 on a paperless customs environment for customs and trade, OJ 2008, Nº L23, p. 21.

[3] Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (recast), OJL269 of 10.10.2013, p. 1.

According to Article 16 and 280 of the UCC, the UCC WP is to support the development of electronic systems and the transitional measures which can be applied until 31 December 2020.

As per the Commission's implementing decision of *[date to be completed as soon as available]* , laying down the UCC Work Programme[4], the projects contained in the UCC WP are a selection of projects inscribed in the MASP and are subject to the same approaches applicable to any other projects detailed in the MASP:

"The work programme should contain a list of the electronic systems which should be developed by the Member States and the Commission, in close cooperation, in order for the [Union Customs] Code to become applicable in practice. That list is based on the existing planning document related to all IT related customs projects, called the multi-annual strategic plan ('MASP'), (...).

(...) The electronic systems referred to in the work programme should be subject to the same project management approach and prepared and developed as established in the MASP"

The Work Programme is priority-based as stipulated by Article 280(2) of the UCC and aims to plan and manage the development of the electronic systems in a proper and staged manner by selecting electronic systems

"(...) in view of their expected impact in terms of the priorities defined in the [Union Customs] Code. One of the main priorities in this regard is to be able to offer economic operators a wide range of electronic customs services throughout the customs territory of the Union. Furthermore, the electronic systems should aim at enhancing the efficiency, effectiveness and harmonisation of customs processes across the Union.

The order of and the timetable for the deployment of the systems included in the work programme should be based on practical and project management considerations such as the spreading of efforts and resources, the interconnection between the projects, the specific prerequisites of each system and the project maturity."

The UCC WP itself provides a high level description of projects known as 'UCC Projects and related Electronic Systems' as well as their legal bases related to provisions of the UCC, key milestones for the completion of stable technical specifications and the envisaged dates for systems entering into operation[5]. MASP Annex 2 contains the detailed project fiches that correspond to the projects listed in the UCC WP.

The yearly update of the UCC WP is performed in tandem with the revision of MASP, as provided by Article 3(1) and (2) of the decision on establishing the UCC WP:

"The work programme shall be subject to regular updates in order to ensure alignment and adjustments with the latest developments in the implementation of the Code and to take into account the actual progress made in the preparation and

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[4] Commission Implementing Decision No 2014/255/EU of 29 April 2014 establishing the Work Programme for the Union Customs Code (OJ L 134, 07.05.2014, p. 46)

[5] The envisaged operational date of the electronic system, referred to as the target start date of deployment of the electronic system, being equal to the end date of the transitional period.

development of the electronic systems, and in particular as regards the availability of commonly agreed specifications and the realisation of the entering into operation of the electronic systems. (...) In order to ensure synchronicity between the work programme and the multi-annual strategic plan ('MASP') the work programme shall be updated at least every year."

In view of the substantial number of systems and interfaces to be developed, deployed and maintained, and the high costs involved to fully implement the UCC WP by the year 2020, a close follow up and monitoring of the UCC WP implementation should be ensured by the ECCG. An assessment of the overall progress on a yearly basis should be envisaged for the update of the MASP and the UCC WP. Based on that, the UCC WP revision in 2017 should assess the feasibility of the UCC projects planning by 2020.

1.3. TOWARDS A COHERENT APPROACH

Several different project fiches maintained in MASP Rev. 12 contain actions which impact single systems. These many-to-one relationship provide a level of complexity which has triggered MS to request a more clear and coherent approach towards the implementation of UCC and eCustoms systems.

MASP Rev. 2014 addressed this request by adopting a revisited perspective on fiches maintained in Annex 2. Where opportunities exist and are deemed feasible, clustered project fiches now integrate elements relevant to the same system. These clusters typically absorb fiches that were isolated in the previous revision of MASP. Thus, instead of considering fiches to make up a collection of independent and normalised records on projects, MASP Rev. 2014 presented a first increment towards defining an integrated system landscape and did so from a business viewpoint. This coherent approach adopted a view of grouping project fiches into clusters and did so by business topic. The approach was valid for the following topics: The adaptation of movement systems; Import; Transit; Special procedures and AEO.

Further to this, it promoted weaving elements contained in a cluster together by means of providing internal and external information on correlation, inter-linkages and shared purpose. Finally it sought to not omit relevant information by the act of joining fiches. In practice this meant that:

- Annex 2 project fiches that have been subject to consolidation through clustering were marked to be deleted and kept as placeholders. These placeholder fiches acted as a reference point to corresponding project fiches contained in MASP Revision 12;

- Fiche numbers of consolidated fiches were not repurposed. This was to provide a consistent frame of reference;

- A change history contained in applicable fiches briefed the history of transformations applied to them.

The above mentioned principles were applied also during the MASP Rev.2016. The deleted fiches were marked as such, keeping the numbering and placeholders for the purposes of traceability and consistency.

Some fiches were moved to another group. Again, the placeholders were left in the initial groups, indicating new fiche numbers for easy reference.

MASP Annex 6 presents resulting transformations in order to provide the reader with clear guidelines for approaching transformations realised in MASP Revision 2016 versus the MASP Revision 2014. In addition, it explains the yearly review process the MASP undergoes.

1.4. PROCESS MANAGEMENT THROUGH BPM

The **Business Process Management and the embedded Business Process Modelling (BPM) approach**[6] are identified to be powerful instruments in supporting and improving the Customs Union's functioning, including the correct understanding of the EU legislation as well as the harmonised implementation of customs procedures and formalities and the related electronic systems across the EU.

Business Process Models (BPM) help visualise and understand customs processes. BPM were initially requested by Member States in order to understand and agree on the customs processes and procedures to be inscribed in the implementing provisions for the Modernised Customs Code[7]. Meanwhile, the BPM approach has demonstrated its usefulness and is being expanded to other customs policy areas. An EU customs BPM policy was established as a standard framework for the further development, covering all of the key customs processes.

This is closely associated with Member States' request to prepare BPM with a sufficient level of detailed functional requirements as a first phase in the design of the future IT systems. The general BPM levelling approach has been integrated in the MASP body text and is reflected in the MASP Annexes.

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[6] Business Process Modelling is the activity of representing processes of an enterprise, so that the current process may be analysed and improved. BPM is typically performed by business analysts and managers who are seeking to improve process efficiency and quality.

[7] 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.)

2. BACKGROUND

The Union and Member States have committed themselves to action within the framework of e-Europe and in particular e-Government[8]. Moreover, the Council Resolution of 5 December 2003, which endorsed the Communication by the Commission on a simple and paperless environment for customs and trade[9], invites the Commission to:

"*Draw up, in close co-operation with Member States, a multi-annual strategic plan, aiming at creating a European electronic environment, which is consistent with the operational and legislative projects and developments scheduled or underway in the areas of customs and indirect taxation*"[10]

The e-Customs decision requires the Commission to draw up and maintain a Multi-Annual Strategic Plan (MASP) which allocates tasks in the realm of electronic customs systems to the Commission and Member States.

Following the decision to fully focus on new developments, currently operational trans-European and central IT systems are no longer maintained in the MASP and have been removed from the MASP Annexes 1 and 2. This change has been effective since Rev.12. Further, some initiatives listed in the annual Work Programme of Customs 2020 are not considered to be transferred into MASP for operational reasons. Finally the MASP does not contain all pilot projects which are under discussion, however some of them, which are in an advanced stage, are reflected in Annex 2 (e.g. SSTL), and some others, which are less advanced, but important to be brought to the scope of the anticipated activities, are reflected under point 5.4 of this document (e.g. eManifest).

An overview of currently operational systems is defined in Annex 2 (See project fiche 4.8 'Maintenance and updates of operational IT systems').

The next phase of evolution of IT systems, European Interoperability Strategy systems (EIS), is reflected in this new version of the MASP, and particularly in Annex 1 and Annex 2. Future EIS are linked to new developments in several customs policy areas, but mainly in view of the implementation of the UCC[11]. The UCC further promotes the global shift to a paperless environment for customs and trade. In this area, key activities have been undertaken to contribute to the production of MASP Rev. 12 and subsequently MASP Rev. 2014 and Rev. 2016:

Firstly, the Commission (COM) services prepared BPM that would allow them to understand and agree on legal provisions in the context of the UCC.

Secondly, an IT scoping document was prepared by COM services. The outcome of the realization of this internal document was that, in 2012, budget estimations for the C2020 programme were presented to the High-Level Steering Group. The IT scoping document provided an overview of requirements for use of data processing techniques allowing exchange and storage of information for customs purposes as

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[8] Communication from the Commission to the Council, the E.P, the EESC and the CoR on "the role of e-Government for Europe's future" 26.09.2003, COM (2003) 567.

[9] COM(2003) 452, 24.07.2003.

[10] OJ No C 305, p. 1.

[11] Draft Regulation of the European Parliament and the Council laying down the Union Customs Code (COM(2012) 64 final)

introduced by the UCC. Further, it offered a practical vision towards a possible IT implementation. A detailed suggestion on IT priorities is found as an Annex to this document.

This MASP Revision contains a list of implementation actions covered by MASP project fiches (see Annex 2). It also includes a timetable which is to be agreed on and thus to be respected by all involved parties (see Annex 1).

Important dates that need to be borne in mind in terms of planning for eCustoms are:

- Entry into application of the UCC on 01/05/2016; and
- End 2020 for implementation of all systems envisaged in the UCC.

2.1. LEGAL OBLIGATION TO USE DATA-PROCESSING TECHNIQUES FOR THE PROVISION OF INFORMATION AS REQUIRED BY CUSTOMS

2.1.1. Legal bases

Article 1 of the "e-Customs Decision": obligations for the Commission and the Member States (IT common and national domain)

"The Commission and the Member States shall set up secure, integrated, interoperable and accessible electronic customs systems for the exchange of data contained in customs declarations, documents accompanying customs declarations and certificates and the exchange of other relevant information.

The Commission and the Member States shall provide the structure and means for the operation of those electronic customs systems."

Article 6(1), of the UCC: obligations for customs authorities and economic operators (IT national and external domain)

Principle (in UCC):

"All exchanges of information, such as declarations, applications or decisions, between customs authorities and between economic operators and customs authorities, and the storage of such information, as required under the customs legislation, shall be made using electronic data-processing techniques."

Article 16(1) of the UCC: cooperation between Member States and Commission

"Member States shall cooperate with the Commission to develop, maintain and employ electronic systems for the exchange of information between customs authorities and with the Commission and for the storage of such information, in accordance with the Code."

2.1.2. Scope of the obligation

The scope of the obligation includes information exchange between economic operators and customs authorities, interactions between customs authorities themselves and transactions related to the storage of information.

Information which is to be exchanged between economic operators and customs authorities can include a myriad of elements. These elements are **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.) and **certificates** (e.g. CVED, etc.).

On the level of information exchange between customs authorities, transactions may include elements such as **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) and **notifications** (e.g. "anticipated export record" notifications and "exit result" messages).

3. VISION AND OBJECTIVES OF ELECTRONIC CUSTOMS

When defining the specific objectives of a paperless or electronic customs, the overall mission of customs should be the driving force.

Article 3 of the UCC defines the mission of the customs authorities as follows:

"Customs authorities shall be primarily responsible for the supervision of the Union's international trade, thereby contributing to fair and open trade, to the implementation of the external aspects of the internal market, of the common trade policy and of the other common Union policies having a bearing on trade, and to overall supply chain security. Customs authorities shall put in place measures aimed, in particular, at the following:

(a) Protecting the financial interests of the Union and its Member States;

(b) Protecting the Union from unfair and illegal trade while supporting legitimate business activity;

(c) Ensuring the security and safety of the Union and its residents, and the protection of the environment, where appropriate in close cooperation with other authorities; and

(d) Maintaining a proper balance between customs controls and facilitation of legitimate trade."

In order to support the EU customs authorities' mission, the Commission and Member States set up and operate secure, integrated, interoperable and accessible computerised customs systems (also referred to as EIS). Their goal is mainly to facilitate customs processes for the movement of goods into and out of the European Union and to reduce all risks, such as the threats to the safety and security of citizens and the financial risks. They do so by minimising the remaining differences between Member States' customs processes.

In general the EIS will be built according to international standards[12], thus allowing future interaction with third countries' systems.

The Commission and the Member States are also committed to delivering European e-Government services. These services provide efficient, effective and interoperable information and communication systems between public administrations, as well as between administrations' front and back offices, in order to securely exchange and process public sector information across Europe.

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[12] 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.

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 the Commission, customs administrations and other EU border agencies can exchange electronic information in order to:

- Control and facilitate the movement of goods into and out of the internal market through efficient import and export procedures;

- Increase the competitiveness of European trade through a reduction of compliance and administrative costs and an improvement in clearance times;

- Facilitate legitimate trade through a coordinated approach relating to the control of goods;

- Improve the safety and security of citizens with regard to dangerous and illicit goods;

- Offer improved protection of the financial interests of the European Union and its Member States;

- Contribute to the fight against international crime and terrorism by providing rapid and relevant information with regard to the international supply chain;

- Allow for a seamless flow of data between the authorities of exporting and importing countries on the basis of Reg. (EC) 648/2005 and new legislation that is to be implemented.

In order to achieve these objectives, 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 can do so from their premises, irrespective of the Member State in which the goods are entering into the Union or leaving it;

- In principle, the collection and the 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 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 starts or ends;

- Whenever required, these computerised 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);

- All authorities and agencies involved in import and export transactions are enabled to exchange electronic information, including with third countries if an international agreement provides for this. Customs will take a leading role in establishing a single window for these authorities and agencies;

- All physical controls are ideally carried out at the same time and at the same place (one-stop shop).

The objectives set out in this Section will be achieved by at least the following means[13]:

- Harmonised exchange of information on the basis of internationally accepted data models and message formats;

- Re-engineering of customs and customs-related processes with a view to optimise their efficiency and effectiveness, their simplification and reducing the costs of customs compliance;

- Offering a wide range of electronic customs services to economic operators, enabling those operators to interact with customs authorities of any Member State in a uniform manner;

- The appropriate legal framework to enable the achieving these objectives.

Furthermore, the UCC aims at the **adaptation of customs legislation** in order to

- Both fit and govern the electronic environment for customs and trade;

- Carry out a major overhaul of the customs rules in order to make them simpler and better structured.

Besides, in order to allow administrations and economic operators adequate time to undertake the necessary investments and to ensure a phased and binding but realistic implementation of electronic processes, the Commission will continue to work with all stakeholders with a view to ensure that the new electronic processing environment will be operational by 31 December 2020 at the latest.

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[13] The first three bullet points are defined in Article 2§2 of the e-Customs Decision. No 70/2008/EC of the European Parliament and of the Council of 15 January 2008 on a paperless customs environment for customs and trade, OJ 2008, Nº L23, p. 21.

4. GOVERNANCE OF THE IMPLEMENTATION OF ELECTRONIC CUSTOMS

The Commission services, assisted by the Customs Policy Group (CPG), which will act as steering group for the implementation of electronic customs, shall ensure the implementation of the e-Customs decision and the MASP.

Article 8 of the e-Customs decision stipulates that the CPG shall assist the Commission to:

- *"Define strategies, resources and development phases;*

- *Ensure the coherence of all activities related to electronic customs as outlined in the MASP;*

- *Ensure resources are used in the best and most efficient manner, including the use of resources already allocated at national and Union level;*

- *Coordinate legal and operational aspects, as well as training and IT development and ensure provision of information to customs authorities and economic operators in this respect;*

- *Steer the implementation activities of all stakeholders;*

- *Ensure respect for agreed deadlines."*

For the implementation of the electronic customs projects, the Commission services and CPG will work in close cooperation and/or consultation with the following bodies:

- The Electronic Customs Coordination Group (ECCG), created under the Customs 2020 Programme, with regard to updating the MASP and the overall planning and coordination of upcoming projects. The group is supported by business and technical groups;

- The Customs Code Committee (CCC) (General and Specific sections) and possibly other committees involved in legal work, by providing formal opinions (voting) in line with the appropriate comitology procedure;

- The Customs Code Expert Group involved in the consultation process on the UCC;

- The Customs 2020 Committee concerning the Programme's organisational and financial framework;

- The Trade Contact Group (TCG), consisting of key trade associations and being the Commission's main consultation body for all aspects related to trade.

Member States are responsible to ensure the highest level of coordination when representing their country in all the different bodies (CPG, CCC, ECCG, etc.) and to ensure consultation with their traders in the preparation and implementation of electronic customs at national level.

Annex 3 describes the layered approach and aspects of governance with more detail.

5. STAGED APPROACH TOWARDS IMPLEMENTATION

5.1. STAGED APPROACH AT INDIVIDUAL PROJECT LEVEL

The staged approach applied on the level of individual projects will be valid for the management and implementation of all single customs projects and EIS identified in the MASP. The following sections further detail the individual stages:

- Stage 1 – Business Analysis and Policy and Legal framing;

- Stage 2 – Creation of Technical System Specifications;

- Stage 3 – Creation of National and Trade Specifications;

- Stage 4 – Deployment of EIS.

5.1.1. Stage 1 – Business Analysis and Policy and Legal framing

The first stage for EIS entails that business analytical work is carried out in parallel with policy and legal work. The purpose of the modelling activity is to ensure that the proposed business process, as supported by the legal provisions, makes sense in a real-world business environment and that the business process' impacts, including transversal impacts on projects and EIS, can be understood and evaluated by decision makers.

In order to obtain these objectives it is proposed Level 3 Business Requirement BPM are developed in parallel with the creation of legislation and other related documents.

Furthermore, in order to guarantee that the envisaged operational EIS will function according to the business requirements and supporting legal provisions, Level 4 Functional Requirement BPM are developed. These Level 4 BPM are the equivalent to "Functional System Specifications" (FSS). The BPM have the same role as FSS and are also relatively similar to "System Process Models and Requirements" previously produced for some centralised IT systems.

5.1.2. Stage 2 – Creation of Technical System Specifications

The second stage is the first part of the IT project work for the systems. This concerns the creation of technical system specifications either at Commission-level or through collaboration initiatives between the Commission, national customs administrations and, where appropriate, trade representatives. The ECCG will be kept informed of the status and progress.

This activity encompasses the following horizontal tasks:

- Assessment of impact on overall projects (e.g. Adaptation of Movement Systems due to changes coming from horizontal and core projects, for instance AEO);

- Introduction of a management process to handle interactions and dependencies between MASP Projects and to define the transversal business impact;

- Harmonization of data, e.g. Customs Declarations across customs domains.

5.1.3. Stage 3 – Creation of National and Trade Specifications

In the third stage, both national and trade specifications are developed where necessary. These specifications enable software development and acceptance testing.

5.1.4. Stage 4 – Deployment of EIS

In the fourth stage, the EIS will be deployed and operations will be started in accordance with the phases and architecture as defined in related MASP fiches.

On the basis of the e-Customs decision, the UCC and its IT work programme and any other customs legislation containing legal deadlines for implementation towards all the actors involved, Member States need to establish their own implementation strategy which sets out the conditions for the migration path towards electronic customs.

Member States will implement each of the systems within a time-frame that will allow for conformance testing, deployment and entry into operation for the systems within the timeframe as defined in the legal basis for the system concerned. In other words, by the final date set in the legislation and inscribed in the MASP, the identified systems must be operational in all Member States.

It is essential to commit to clear and binding milestones as defined for the agreed projects (see Annex 1 and 2 – MASP fiches Group 1) to avoid an extended period during which computerised and paper-based solutions are used alongside as a result of individual Member States not having met target dates.

In order to facilitate this process, the MASP will be maintained, reviewed, and updated to provide precise and updated information regarding the individual steps, tasks and responsibilities, their co-ordination, and their timeframe.

5.2. STAGED APPROACH TO REACHING AN OVERALL AGREED IT IMPLEMENTATION PLAN (MASP)

In order to achieve a coordinated implementation of the plan, it is essential that the Commission and Member States agree upon and accept milestones driven by the legally binding deadlines inscribed in EU customs legislation and international agreements.

Article 278 of the UCC establishes that all UCC related EIS shall be operational by the end of 2020. By this time also EIS resulting from international agreements (e.g. AEO Mutual Recognition) and other legal basis such as the e-Customs Decision, Counterfeit and origin legislation need to be implemented. This is a very challenging task for both Member States and the Commission, which can only be achieved through a staged approach.

In order to correctly plan the implementation of all electronic customs projects within a time-frame of nearly a decade, it is necessary to have a clear view on the content of business plans, to agree on the business needs to implement them, to have an agreed upon IT architecture and implementation strategy in place, to agree on priorities and finally to agree on the governance mechanism for achieving the above and keeping the plan up to date.

5.3. GROUPING OF FICHES

The goal to achieve agreement on an overall IT Implementation plan may be too ambitious at this stage as discussions on legislation and BPM are still on-going. Therefore it is proposed to break the implementation plan down in several parts or groups. This typology is based on the achieved degree of legal, business and technical clarification and agreement. As such, project fiches listed in MASP Annex 2 are categorized according to the following four groups:

- **Group 1: Customs European information Systems**

  The first group contains the project fiches, procedures and projects for which common agreement on the scope and time plan exists so that progress can be made. Group 1 can include project fiches on bilateral international initiatives.

- **Group 2: Customs European initiatives needing further study and agreement**

  The second group contains projects for which further discussion will be required before they can find a concrete place in the IT plan. Group 2 can include project fiches on bilateral international initiatives.

- **Group 3: Customs International Information Systems**

  The third group concerns projects managed by international organisations in which the EU and its Member States play an active role, but are not the project organisers or owners.

- **Group 4: Customs Cooperation initiatives and technological developments to facilitate Customs EIS**

  The fourth group concerns 'Customs Cooperation initiatives'[14], which in the context of MASP fiche grouping bespeaks efforts to strengthen cooperation between Member States. The group also regards initiatives driving progress in the field of technology in order to create new functions in the planned EIS.

In between MASP revisions fiches may shift from one Group to another. For instance, if an initiative which is currently categorised under Group 2 reaches a sufficient level of clarification in 6 months' time, it can be shifted to Group 1 during the next revision of the MASP.

5.4. PILOT ACTIVITIES

The MASP does not contain all pilot projects which are under discussion, however some of them, which are in an advanced stage, are reflected in Annex 2 (e.g. SSTL), and this chapter is intended to provide a general overview on those, which are less advanced, but important to be brought to the scope of the anticipated activities.

eManifest Pilot Project

During the MASP Rev.2014 the fiche 1.9. "Blue Belt initiative and eManifest" was deleted, as it became evident that no separate Customs Information System will be

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[14] The term "Customs Cooperation initiatives", as appropriated in this document, should not be confused with what the term denotes when used in the context of policy and legal domains, for instance on the topic of mutual assistance and "International Customs Co-operation".

required for the implementation of 'Customs Goods Manifest' (terminology used in the UCC IA/DA for the eManifest).

Nevertheless, activities on the full eManifest are continued through the cooperation of DG TAXUD and DG MOVE, resulting in a plan to launch a pilot project, demonstrating how the full EU Manifest, including different formalities such a general and cargo declaration, can be reported by electronic means in a harmonised manner in the EU with assistance of the maritime National Single Window and Safe Sea Net.

The overall objective of this pilot project, formally managed by DG MOVE in association with DG TAXUD and EMSA, is to test procedures that would simplify reporting formalities, thus facilitating trade and reducing the administrative burden and multiple submission of identical information to different authorities.

It foresees that data elements, which economic operators are requested to submit to various authorities including customs, could be reported as an additional channel for information submission through a single submission (where possible) to the maritime national single window, and would subsequently be distributed by the national single window to the competent national authorities, as needed.

The pilot project is at the early stage of development, meaning the description and preparations for drafting specifications. The customs formalities and respective sets of data elements that will form the scope of the project are currently under discussion between DG TAXUD and DG MOVE and are based upon customs legislation and especially the data annexes.

During the next revision of the MASP the reinstatement of a separate fiche for the eManifest project will be considered, depending on the progress of the pilot project.

EU-Russia 'Green Corridor' pilot project

EU-Russia Project Group on AEO Programmes and Risk Management is developing a 'Green corridor' pilot project that would offer faster customs clearance and reduction of customs controls for the goods exported by participating AEOs from one of the participating EU Member States with the destination in Russian Federation, moved by the road mode of transport. Benefits for the participating AEOs would be offered at the border crossing points and inland customs offices where an import declaration will be lodged. Exporters, transport operators and importers, having an EU AEO status or RU Low Risk Operator status could participate in the pilot project on a voluntary basis.

To support implementation of this pilot project an automated data exchange needs to be developed. Export declaration data (agreed subset, which is only exchanged on EU Common Domain) would be sent to Russia. Control results at import would be sent back to EU.

At a later stage the pilot project could be extended to cover other modes of transport (air, rail and sea) and also to cover the goods exported from Russia to the EU.

The proposed data exchange scheme foresees the data received from EU to be used on Russian side in 2 instances: first, once the goods arrive at the BCP and the MRN of the export declaration is provided by the transport operator to the customs office at the border in order to get the border crossing facilitations; second, once the import declaration is lodged containing a reference to the MRN of the export declaration.

Pilot project would consist of two components: 1) international exchanges between the EU and Russia; 2) EU internal exchanges between the EU MS and Commission. Implementation of the international component will be based on the WCO Globally Networked Customs (GNC) Utility Block for Control Mutual Recognition.

6. BPM POLICY AND APPROACH

6.1. INTRODUCTION

Business Process Management, embedding Business Process Modelling, has been considered to be a powerful support instrument for the Customs Union to address its need to obtain a higher level of uniformity and harmonisation, effectiveness, efficiency and automation. In 2009 the first steps towards a BPM policy have been taken with the endorsement of a vision statement at CPG-level.

The BPM policy serves several purposes. Specifically it aims to:

- Identify possible economic gains and potential quality improvements in the business case;

- Depict business processes foreseen in legal drafts and other policy documents and to render these processes understandable;

- Check the business logic provided in the legal draft and to provide comments on proposed business processes;

- Check the soundness of the business process and to identify opportunities for streamlining;

- Perform a quality control on the legal text and to provide comments on the legal draft;

- Define what processes should be automated and how, ensuring the correct reengineering and identifying synergies between processes;

- Guarantee the envisaged automated systems will function as described in the legislation.

In the context of EU customs, the overall purpose of business process modelling (BPM) is to increase the common understanding of the customs process flows and of the practical implications of their implementation. The full BPM policy statement may be found in Annex 4.

6.2. GOVERNANCE OF BPM

BPM activities are included in the process or functional analysis depending on the applied degree of levelling. For Level 1, 2 and 3 BPM this corresponds with business/legal process analysis and for Level 4 BPM this corresponds with functional analysis.

The Commission is responsible for drafting and maintaining BPM and related business analysis documents (or artefacts) and will associate Member States and trade representatives as experts during this activity. The BPM will be analysed, reviewed and approved at ECCG level.

For Level 1, 2 and 3 BPM the Customs Code Expert Group, the Customs Code Committee (or other Committees if applicable) will be involved in parallel to the ECCG as the aim of those BPM is to reflect the analysis of business processes and to support translation into draft legal texts. Feedback loops between the involved bodies are of major importance.

A defined change management procedure is in place for handling subsequent updates of BPM. This change management procedure is based on the TEMPO "Change Management Reference Manual" and is implemented in conformance with TEMPO methodology. Its appropriation is not limited to the treatment of BPM updates as the procedure's wider and consistent application can be found in MASP revision management and project management as well (ut infra, see section 8.1 and 8.2 accordingly).

The ECCG, CCEG and CCC will be the main reviewers of BPM, whilst the ECCG will be responsible for their acceptance. Following the outcome of the BPM review and acceptance cycle, CCC will need to decide whether comments lead to an update of the legal text. The CPG will be informed of progress and may take policy decisions on issues referred to them.

6.3. IMPACT ON PROJECT LIFECYCLE

As laid down in the BPM policy statement, business analysis and modelling is an essential ingredient of the project life cycle (see Section 9 of this document). The following flowchart (Figure 1) illustrates where the business analysis and modelling activity fits in the overall end-to-end process:
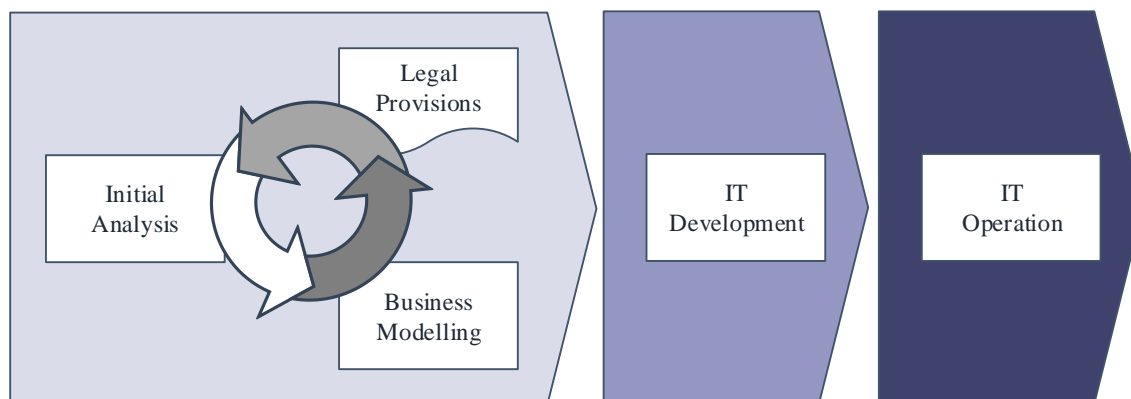

Figure 1 - Impact of BPM on the Project Lifecycle

6.4. BPM LEVELLING DEFINITIONS

Levelling refers to different levels (or layers) of abstraction by which the representation of business processes is structured. Hierarchical modelling enables the development of a holistic view of the Customs organisation. This perspective can be presented to and understood by a wider audience (policy makers, customs legal experts, project managers, IT technical experts, etc.).

It is necessary to define the degree of detail for each level of abstraction in the hierarchy (L1, L2, L3 and L4). This level of detail connotes what to model and from whose perspective the modelling is done. As such it assists the modeller in providing the right level of elaboration, and to ensure that levels are interlinked. It is essential to adapt the level of detail in a model depending on its intended audience and the model's purpose. Each level should be linked and have a common thread running throughout the hierarchy.
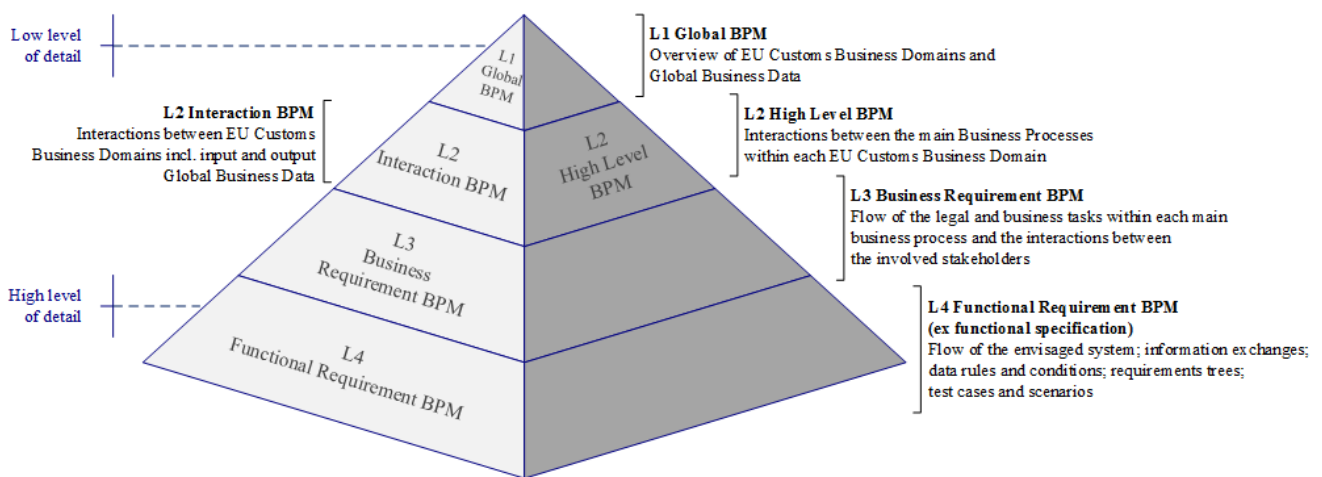

Figure 2 - An overview of the different levels of BPM

A full description of each level of the BPM[15] may be found in Annex 4.

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[15] For those who have access to ARIS Business Publisher, the global BPM may be found at the following location: https://itsmtaxud.europa.eu/businesspublisher.

7. IT STRATEGIC FRAMEWORK

7.1. CONTEXT

The new IT strategy has been developed within the overall framework of European Interoperability Strategy (EIS) and the European Interoperability Framework (EIF) which have been elaborated as part of the digital agenda 2020 to foster interoperability of public services across Europe[16].

The modernisation of customs, taxation and excise is itself part of the modernisation of public services throughout Europe foreseen in the Digital agenda for Europe and the European eGovernment action plan 2011-2015.

EU Customs has already reached a very high degree of automation. For example over 93% of customs declarations are already being processed electronically. Bearing in mind this high degree of automation, it is obvious that any change to the legislation has to be carefully examined as most of these changes imply profound alterations to related IT systems are to be made.

Planned IT activities for the UCC and e-Customs legislations, encompassing safety and security, affect more than 1000 operational systems in the Member States in various degrees. Impacts may include re-engineering of national systems.

Therefore activities related to the way that IT is applied in the Customs Union have been performed as part of the CCN2 study[17] and as part of the definition of the future business architecture for the Customs Union study[18].

In essence the Member States pointed out the need to reduce cost and redundancy of efforts involved in the application of IT in Customs. They requested that the current way of working is shared amongst the Member States and the Commission, which involves repetition of the same duties throughout the Union for the implementation of common systems, such as the Import Control System.

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[16] Commission communication on interoperability - European Interoperability Framework (EIF) (COM(2010) 744).

[17] CCN 2 Study, Iteration 2, Member State Interview Report, Deloitte, 2011.

[18] 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.

7.2. "DO MORE WITH LESS"-STRATEGY

The detailed articulation of this "Do more with less"-strategy has been discussed and agreed on with Member States during a seminar in June 2011, the conclusion of which has been presented and endorsed by the ECG of July 2011.

In this framework, the IT strategy is to implement the customs Union business objectives while reducing the overall IT investment necessary in the Union to the maximum extent possible, cutting down costs made by trade and the Member States.

A parallel aim of the IT strategy is to gradually achieve convergence in Customs IT at the EU-level by adopting practices to streamline Customs IT operation and to improve the quality of services.

This "Do more with less"-strategy is motivated by the general economic downturn's effect on public budgets in many Member States and leads to a change of the way IT systems that are developed and operated in the European Union.

7.3. CORNERSTONES OF THE STRATEGY

The cornerstones of the IT strategy are the following:

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

  The future IT systems shall be designed and implemented using a service-oriented architecture which favours the emergence of flexible, modular, easy to change IT systems that benefit from the reuse of existing functionality in different Member States or in the Commission. By adopting a service-oriented approach as advocated in the European Interoperability Framework in the design of new systems, DG TAXUD aims at producing modular IT systems that can reuse some pieces of collaboratively developed software as well as less or non-synergetic components, such as those that are independently developed.

- **CCN2**

  A new generation of CCN shall be implemented as the interoperability infrastructure which enables the new service-oriented architecture. By adopting the renovation of CCN called CCN2, DG TAXUD creates an interoperability infrastructure which offers location independent access to services and services that are backwards compatible with existing customs systems.

- **Central EIS**

  Where appropriate and in view of total cost reduction and subject to a positive business case, EIS could be centrally implemented.

  For example in the case of the customs decisions project, the Commission could develop national domain functionality and a single access point for trade, made accessible at the appropriate level of availability and performance. Such an approach could provide savings in the range of 40 to 50 Million € in the EU for the Customs Decisions project. In this case the Member States would capture the benefits whilst doubling or tripling the cost and effort necessary at the Commission's end.

In order to achieve this objective COM has started creating a high availability IT infrastructure that offers appropriate service levels. However, practice in the customs decision project shows that such a central implementation is not welcomed by all MS. This is because of various reasons, e.g. MS argue that they also have other national decisions to manage and they wish to do so by means of a single system.

This drives the need for designing modular systems which, using the service oriented architecture capability, allow to plug the related functionality into national systems while simultaneously foreseeing specific interfaces for MS 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 (compared to a single central functionality) and it is less agile in addressing change.

- **Collaboration**

  Collaboration between willing customs administrations in the design and (possible) implementation of future systems shall be favoured in order to avoid repetition and to reduce redundancy of effort and total cost in the European Union. Collaboration does not necessarily create identical systems nor is it considered to be possible to create a single customs system.

- **Enterprise Architecture**

  A reference architecture (enterprise architecture) for Customs IT shall be developed so as to build a common language and planning basis for future systems.

- **EU Harmonised Interface & Single Access Point for Trade**

  Future systems should offer a single access point for trade, thus reducing the number of connections of trade to the customs Union from 28 to 1. By addressing future trader access systems related to declarations using the above practices and techniques, we could reduce the trade cost significantly. Moreover, such interface could also be hosted at the Commission, thus de-facto reducing the interfaces to trade to one. It is well understood that this delicate matter will be 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 there would be a shift of responsibilities from MS to the COM following agreements reached at strategic level and reflected in the appropriate legal frameworks, then adequate resources will need to be available to guarantee a correct implementation (also additional human resources would be provided from the Member States using virtual teams and internet collaboration, to employ these resources from their usual assignment and living place, in order to ensure that national requirements are implemented effectively).

The Commission has included provisions to support the above strategy in its proposal establishing an action programme for customs in the European Union for the period 2015-2020 (CUSTOMS 2020)[19].

The full text of the IT strategy is contained within MASP Annex 5.

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[19] Regulation (EU) No 1294/2013 of the European Parliament and the Council of 11 December 2013 establishing an action programme for customs in the European Union for the period 2014-2020 (Customs 2020) and repealing Decision No 624/2007/EC

8. MANAGEMENT OF THE MASP AND ITS PROJECTS

8.1. CHANGE MANAGEMENT

It is the task and responsibility of the Commission to ensure that the MASP remains up-to-date. A new version of the MASP is prepared in close cooperation between the Commission, the Member States and in consultation with Trade (as represented in the Trade Contact Group). In principle an agreed version of MASP will remain valid for one year.

The goal of the Change Management process is to ensure that standardised methods and procedures are used for efficiently handling all changes to MASP. When something needs to be changed in the MASP – either in this document (the main body) or one of the MASP's Annexes, the Commission services, Member States and Trade representatives are authorised to submit a "Request for Change" in writing. They then act as a "Change Initiator". The Change Initiator addresses the corresponding Change Request to the "Change Manager".

The Change Manager at the Commission's end is DG TAXUD Unit A3, Customs Processes and Project Management Unit. The Change Manager:

- Organises consultations with other involved DG TAXUD Units and sets up Change Advisory Board (CAB) meetings;

- Lists and sends the requests for change for discussion;

- Chairs the meeting and minutes the meetings;

- Keeps an inventory of Requests for Changes as well as Approved Changes.

The Change Initiator is kept informed of the progress of the change (rejection, approval and acceptance).

The ECCG is the MASP Change Advisory Board (CAB) which takes a decision on proposed changes.

The agreed upon changes are implemented in the next MASP revision. The CPG is kept informed of approved changes and provide the final approval of the updated version of MASP on a yearly basis.

8.2. PROJECT MANAGEMENT

In order to maintain transparency and to establish confidence in the progress made by Member States and the Commission and the evolution of projects, it is important to have a clear methodology for achieving results. The staged approach referred to in Section 5 sets broad guidelines for the implementation of EIS. However, these implementations will only be realised if there is an agreed approach for coordinated EIS development.

Each project will need to operate within an overall timeframe as set out in the projects planning (see MASP Annex 1). In order to enable a project to respect the scheduled date to start operations in all EU Member States, there must be strict adherence to agreed deadlines for each step of the project, e.g. Level 3 Business Requirement BPM, Level 4 Functional Requirement BPM, Technical Specifications (System Process Model, software development, testing, etc.). The Commission proposes to use the above approach and to also integrate the dates which concern external stakeholders in the planning.

For each major deliverable (e.g. BPM, system specification, etc.) in a project, there will be a "review and acceptance cycle" with Member States. Trade will also be consulted during this review cycle. Each document to be approved will be submitted for review, with a pre-announced and adequate given period for providing comments. At the end of this "review period", a consolidated list of all received comments will be prepared and a meeting will be convened to discuss the actions to be taken on each comment. Based on the taken review decision, a revised updated document is created and submitted for decision at the ECCG. For issues of principle or policy, the CPG will be involved.

Once agreement on the document has been reached at ECCG-level, the agreement is considered as definitive and the CPG is informed about this agreement. If an agreement cannot be reached at the ECCG-level, the matter is referred to the CPG. The CPG may be used as the final escalation route to resolve important matters if no agreement can be reached at ECCG or CPG-level under exceptional circumstances. From the date a document is agreed on onward, this document will be available to all concerned and its contents must be respected by all parties.

These same principles are also applicable for MASP, so that at the end of the revision cycle the approved version contains deadlines which all parties need to respect. In the event of unexpected and major delays to projects occur, the agreed deadlines may be amended by following the same change management procedures as described above (see 8.1) and in accordance with the Governance Scheme (see Annex 3). This may also entail steps are taken to adapt the deadlines inscribed in the legal basis.

For good management of all EIS-projects defined in the MASP, it is essential that this methodology is respected. All parties, whether national administrations, the Commission or economic operators, must be able to plan and commit resources in the confidence that everyone is working towards the same deadline on the basis of the same agreed documentation. Furthermore, the complexity of the inter-dependence of the various projects means that careful coordination is necessary to ensure that delays related to projects running out of synch with the schedule do not occur.

9. IT PROJECT LIFECYCLE

DG TAXUD designs, implements and operates large-scale trans-European systems for Customs, Excise and Taxation. DG TAXUD applies the RUP@EC methodology for IT Projects aiming at the provision of IT systems that effectively meet business objectives while assuring implementations that are high quality, on-time and within budget.

In the RUP@EC methodology the IT Project Lifecycle is divided into a sequence of phases for which a set of milestones, tasks and deliverables have been defined to address the unique needs of the project at each phase. The project lifecycle provides stakeholders with oversight, transparency, and steering mechanisms to control project funding, scope, risk exposure, value provided, and other aspects of the process. The IT Project lifecycle phases, as defined in the RUP@EC, are the following:

9.1. INCEPTION PHASE

Output: project is defined

The aim of the Inception Phase is to define the project scope and objectives, identify key functionality, examine implementation alternatives, define cost and schedule and decide to implement the defined project.

Key outputs are the Business process model and high-level requirements (L2 & L3 analysis being completed and the start of L4 definition activity), high level system architecture allowing sharing duties between the COM and MS, high-level estimate for cost and schedule, as well as potential technical solutions. These are documented in Business Case and Vision Documents that have to be submitted to the IT governance bodies for IT Project approval, both internally in the Commission and with MS.

9.2. ELABORATION PHASE

Output: System is specified

The aim of the Elaboration Phase is to refine the business processes (L4 BPM analysis is completed); define the functional and non-functional requirements of the overall system; the technical IT system specifications, including the requirements of the working IT applications composing it and their interfaces; the design and test (possibly in a prototype) of the IT system architecture and interfaces; plan the System Construction phase and to organise the 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, the System interoperability model and related interfaces).

The project groups responsible for the implementation of the defined IT applications (in the COM and/or the MS) also define the detailed functional specifications of the applications they are responsible for and the related test plans. They further interact with their users on the topic of usability the applications and testing the IT architecture in prototypes. In this phase the high-level project plan and budget is also refined and detailed. This can be an iterative process. The specifications produced in

the Elaboration Phase may need to receive minor revisions in the Construction Phase – this is done in light of the reality of the implementation.

9.3. CONSTRUCTION PHASE

Output: System is constructed

The aim is to complete the development of the system based on outputs of previous phases. The Construction Phase engages (possibly) parallel construction activities in the Commission and the MS. Tasks such as application design, application building, integration and testing activities are included.

9.4. TRANSITION PHASE

Output: System is operating

The aim is to ensure that the software is ready for delivery to users. Tasks such as Deployment and Rollout, Conformance testing, data migration, training of users and adjustment of existing business processes are part of the related duties.

10. TRAINING

The implementation application and adoption of electronic customs by Member States and businesses require systematic support through training and competency building 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 business in areas where national action alone is insufficient[20]. Such an approach is consistent with the educational and learning aspects of the Community's Europe 2020 strategy.

Any common training measure in this field should be designed to help translate e-Government into practice and thus enable businesses and governments to reap the benefits of electronic customs in full.

To achieve this goal, common training measures are best developed in partnership with all concerned stakeholders and should comply with a few key principles: be driven by user's needs and be multi-channel, cross-governmental and cross-national.

The Commission proposes to pursue the following methodology in particular:

- Mapping of new knowledge, skills and competency requirements related to the centralised part of electronic 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 electronic 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 will contribute to the success of electronic customs services; it will be instrumental in the actual adoption of services and enable governments and the business sector to turn this adoption into value.

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[20] Common training support can be provided as far as supported by the customs cooperation programme Customs 2020.

11. COMMUNICATION

The implementation, application and adoption of electronic customs by Member States and trade will require information and communication actions to raise awareness on e-Customs both in terms of the benefits it brings and the uptake of proposed measures. Specific communication actions will be proposed and introduced as the electronic customs project develops. The Commission will be responsible for activities at EU level. The EU Communication Network for Taxation and Customs will be the forum for the Commission and Member States to coordinate communication actions.

12. MONITORING AND MEASUREMENT OF RESULTS

The achievement of the vision of a paperless customs environment demands that the timetable set out in this plan and the e-Customs decision be adhered to. It is also important to assess whether the objectives of the electronic customs initiative are being met. To this end the Commission, together with Member States, will undertake monitoring activities to ensure the EIS are being achieved. This includes annual reporting on the tasks allocated under the e-Customs decision.

In addition and in order to measure results, the Commission and Member States will ensure that the development of EIS will take the need to collect data for the purpose of the measurement of results into account.

The monitoring and measurement 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.

13. CONCLUSION

Increasing the efficiency and effectiveness of customs procedures and processes through simplifications or otherwise, as well as providing for interoperable customs systems accessible to economic operators throughout the Union, are the principal objectives of the electronic customs initiative. This initiative is based upon and in line with the Commission Communication on e-Government and the Council Resolution on a paperless environment for customs and trade. Member States have further committed themselves to the objectives of the electronic customs initiative when adopting the e-Customs decision and the UCC and its work programme, which both provide a firm legal framework for this initiative. Within this framework the MASP, a "rolling plan" maintained under tight management, sets out more detailed guidelines for the development of electronic customs systems (or EIS). The commitment of Member States to the timetable set out in the e-Customs decision and further detailed in the MASP is a key element for the success of electronic customs projects.