

Special Report

A series of delays in Customs IT systems: what went wrong?

(pursuant to Article 287(4), second subparagraph, TFEU)



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ABBREVIATIONS

CPG: Customs Policy Group

DG TAXUD: Directorate-General for Taxation and Customs Union

ECCG: Electronic Customs Coordination Group

EIS: European Information Systems

IT: Information Technology

MCC: Modernised Customs Code

PMF: Performance Measurement Framework

TCG: Trade Contact Group

UCC: Union Customs Code

GLOSSARY

The description of the IT projects mentioned in the report can be found in ***Annex I***.

Business Case and Vision Document: Documents for the initial IT system development project phases, which contain the detailed specification of the scope of each project and precede the decision to launch the technical IT works.

Customs 2020 programme progress report: Annual report that monitors the implementation of the programme pursuant to Article 17 of Regulation (EU) No 1294/2013.

e-Customs progress reports: Annual report that evaluates the progress made towards a paperless environment in customs pursuant to Article 12 of Decision 70/2008/EC.

EU components of the IT systems (Union components): Assets (such as hardware, software, network connections) and services to support IT systems that are common to participating countries (Annex II B of Regulation (EU) No 1294/2013). The EU pays for acquisition, development, installation, maintenance and day-to-day operation of the Union components.

Expert team: Expert teams are a tool from the Customs 2020 programme joint actions to pool expertise in a variety of ways; on a regional, thematic, temporary or permanent basis. This tool allows Member States to enhance their cooperation when implementing policy.

National components of the IT systems (non-Union components): All those components of IT systems that are not identified as Union components (Annex II C of Regulation (EU) No 1294/2013). The Member States pay for the cost of acquisition, development, installation, maintenance and day-to-day operation of the non-Union components.

Modernised Customs Code: It entered into force on 24 June 2008, with a provision that it would be applicable on 24 June 2013 at the latest. However, it was never applied since it was repealed and replaced with the Union Customs Code.

Multi-Annual Strategic Plan: Management and planning tool drawn up by the Commission in partnership with the Member States in accordance with Article 8(2) of the e-Customs Decision. It sets down a strategic framework and milestones for managing IT projects coherently and effectively.

Performance Measurement Framework: A monitoring system that measures the progress of the Customs 2020 programme by means of 86 indicators, made up of 68 output/result indicators and 18 impact indicators.

Project scope: What is included in, or excluded from, a project. The Project Management Institute defines project scope as *“The work that needs to be accomplished to deliver a product, service, or result with the specified features and functions.”*

Trade representatives: These are operators such as importers, customs brokers, transport companies and logistic operators. They are members of the Trade Contact Group, which is an informal meeting platform for trade consultations at Union level on the implementation of customs-related issues and developments of customs policy.

Union Customs Code: It provides a comprehensive framework for customs rules and procedures in the EU customs territory adapted to modern trade realities and communication tools. It entered into force on 1 May 2016, but some transitional arrangements still apply, most notably for customs formalities which are still in the process of being gradually transitioned to electronic systems.

Union Customs Code Work Programme: The work programme was established according to Article 280 of the UCC. It includes transitional measures related to the electronic systems and timing for cases where systems were not yet operational by the date of application of the UCC (1 May 2016).

EXECUTIVE SUMMARY

I. The Customs Union is one of the pillars of the Single Market. The modernisation of customs processes, based on the development of new Information Technology (IT) systems, is an important element for the functioning of the European Union (EU). This modernisation should notably enhance economic activity and growth, and increase the safety and security of the EU citizens. These benefits should provide the necessary incentives for Member States to invest in customs IT systems.

II. The Commission's e-Customs Decision, the Modernised Customs Code (MCC) and ultimately the Union Customs Code (UCC) paved the way towards and outlined the required IT systems for modernising the Customs Union. The Customs 2020 programme finances the Union components of the IT systems. Member States should develop the related national components (non-Union components) and pay the associated costs. The implementation of the IT systems is governed by a multi-layer decision-making process, involving a number of bodies.

III. Our audit looked at whether the Customs 2020 programme, together with the related customs legislation, are likely to deliver the IT systems necessary for improving customs operations in the EU. We carried out this audit during the implementation stage with the view to contribute to the discussions on the next Customs programme, that will start in 2021. We examined whether the programme ensures that IT systems are implemented in a timely manner and, where applicable, we identified the reasons for delays. The audit was mostly based on the analysis of Commission documents, minutes and reports of Committees and Working Groups, and on the results of a survey sent to the Member States.

IV. We found that the implementation of the new IT systems for the Customs Union suffered a series of delays, so that some of the key systems will not be available at the 2020 deadline set in the UCC. The delays are due to several factors, in particular: changing project scope, insufficient resources allocated by the EU and Member States, and a lengthy decision-making process due to the multi-layered governance structure. We also noted that the Commission did not report appropriately on delays, and that the Customs 2020 programme objectives and reporting arrangements are not suitable for monitoring the implementation

of the IT systems. The initial development approach of IT systems was mostly decentralised, with the view of reducing the risk of non-delivery but at the cost of decreased efficiency.

V. We recommend that the Commission:

- (a) propose that the next Customs programme's objectives relate explicitly to the planned IT systems to be developed and propose objectives that are precise and measurable;
- (b) ensure that lessons from previous programmes are duly taken into account and provide Member States with adequate information to take an informed decision on the scope of the projects in due time;
- (c) monitor the risks that a Member State might not be able to meet the deadlines for implementing the national components and, at an early stage, identify potential solutions and facilitate their application at national level; and facilitate a wider use of collaborative IT development;
- (d) streamline the governance of customs IT systems' development, by ensuring more efficient and swift communication with Member States, for example by using additional information exchange solutions to allow decisions to be taken without delay;
- (e) inform all the stakeholders concerned with implementing IT systems at EU and Member State level, in a timely and transparent manner, about delays in the implementation and spending for Union and national components, and set appropriate reporting arrangements and indicators on the overall level of implementation and on individual projects.

INTRODUCTION

The Customs Union is one of the pillars of the Single Market in the European Union

1. In 2018, the European Union (EU) celebrates the 50th anniversary of the Customs Union. The essence of the Customs Union is the absence of customs duties at internal borders between Member States, and the establishment of common customs duties on imports from third countries.
2. To operate as a major trading block, the EU is dependent on the efficient flow of goods into and out of the Customs Union, as well as the free movement of goods within the area of the Single Market. According to the latest available statistics, combined imports and exports represented approximately €3,7 trillion¹. This demonstrates the importance of trade and of the Customs Union to the prosperity of the EU.
3. In addition, the customs duties on imports are an important part of EU revenue. In 2017, they amounted to €20,3 billion, representing 15 % of the total EU budget.



¹ Source: Eurostat statistics on World trade for 2017.

Since 2003 the modernisation of the Customs Union has been on the EU agenda

4. Several key players have expressed the need to modernise the Customs Union since its creation. Improvement should include digitalisation², the introduction of a paperless environment and reducing red tape, thus enhancing economic activity and growth. It should also increase the safety and security of EU citizens, and allow for more efficient collection of duties. The benefits for EU consumers and business of improved EU trade are expected to provide an incentive for the Member States to invest in the customs Information Technology (IT) systems.

5. In 2003, the Commission set out the objective of achieving a simple and paperless environment for customs and trade³. The publication of the e-Customs Decision⁴ in 2008 further emphasized the importance of this objective. In June 2008, the Modernised Customs Code (MCC)⁵ entered into force. It aimed at modernising the Customs Union, including the development of a number of IT systems that were intended to be fully operational by June 2013. For several reasons, including delays in implementing the required IT systems⁶, the MCC was never applied in practice.

² The World Customs Organization (WCO) also considers digitalisation a key feature of modernised customs having developed a Digital Customs Maturity Model.

³ See the Commission's Communication of 24 July 2003 entitled "A simple and paperless environment for customs and trade".

⁴ 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) (the e-Customs Decision).

⁵ 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) (MCC) (OJ L 145, 4.6.2008, p. 1), repealed by Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 (OJ L 269, 10.10.2013, p. 1). MCC entered into force on 24 June 2008, but provided that it would be applicable on 24 June 2013 at the latest.

⁶ See proposal for a Regulation of the European Parliament and of the Council laying down the Union Customs Code (recast) (COM (2012) 64 final), adopted by the Commission on 20 February 2012.

6. In October 2013 the Union Customs Code (UCC)⁷ was adopted, replacing the MCC and again pursuing the objective of moving towards a paperless environment and information exchange based on IT systems. The UCC has been applicable since May 2016, with a transitional period until end 2020 for implementing the IT systems. The IT systems related to the UCC were similar to those previously required for the MCC.

7. In order to comply with the requirements of the e-Customs Decision and UCC, the Commission established strategic planning documents for developing the relevant customs IT systems; the Multi-Annual Strategic Plan⁸ and the UCC Work Programme⁹. The Multi-Annual Strategic Plan takes account of the UCC Work Programme implementation schedule, but includes additional IT systems which require development.

The Customs 2020 programme is the current financial tool for implementing the necessary IT systems

8. The EU funds the development of new IT systems indicated in the Multi-Annual Strategic Plan as well as the maintenance of existing IT systems under a general programme in the area of customs. This “Customs 2020” programme¹⁰ provides funds for the EU components of the IT systems (Union components). These are assets (such as hardware, software, network connections) and services to support IT systems that are common to the

⁷ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (recast) (OJ L 269, 10.10.2013, p. 1) (UCC Regulation).

⁸ The Multi-Annual Strategic Plan is a management and planning tool drawn up by the Commission in partnership with the Member States in accordance with Article 8(2) of the e-Customs Decision. It sets down a strategic framework and milestones for managing IT projects. When approved, each revision is published by DG TAXUD.

⁹ Commission Implementing Decision of 29 April 2014 establishing the Work Programme for the Union Customs Code (2014/255/EU) (OJ L 134, 7.5.2014, p. 46) (UCC Work Programme 2014), repealed by Commission Implementing Decision (EU) 2016/578 of 11 April 2016 establishing the Work Programme relating to the development and deployment of the electronic systems provided for in the Union Customs Code (OJ L 99, 15.4.2016, p. 6) (UCC Work Programme 2016).

¹⁰ Regulation (EU) No 1294/2013 of the European Parliament and of 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 (OJ L 347, 20.12.2013, p. 209).

EU and Member States. Member States are expected to develop the national components (non-Union components) and bear the associated costs¹¹.

9. The Commission set up the Customs 2020 programme to “support the functioning and modernisation of the Customs Union in order to strengthen the internal market by means of cooperation between participating countries, their customs authorities and their officials.” The total budget of this programme amounts to €523 million over seven years (i.e. around €75 million per year)¹². Customs 2020 is a continuation of the previous “Customs” programmes which started in 1991 and the last of which was closed in 2013. The Commission proposes an envelope of €950 million for the Customs programme within the Multi-annual Financial Framework 2021-2027.

10. Three-quarters of the Customs 2020 budget are devoted to IT capacity building, referred to as European Information Systems (EIS) in the Customs 2020 regulation. This budget covers the development, operation and maintenance of the EU parts of these EIS (Union components). The remaining 25 % of the budget is for other actions related to the functioning and modernisation of the Customs Union, namely joint actions (such as project groups and expert teams) and training.

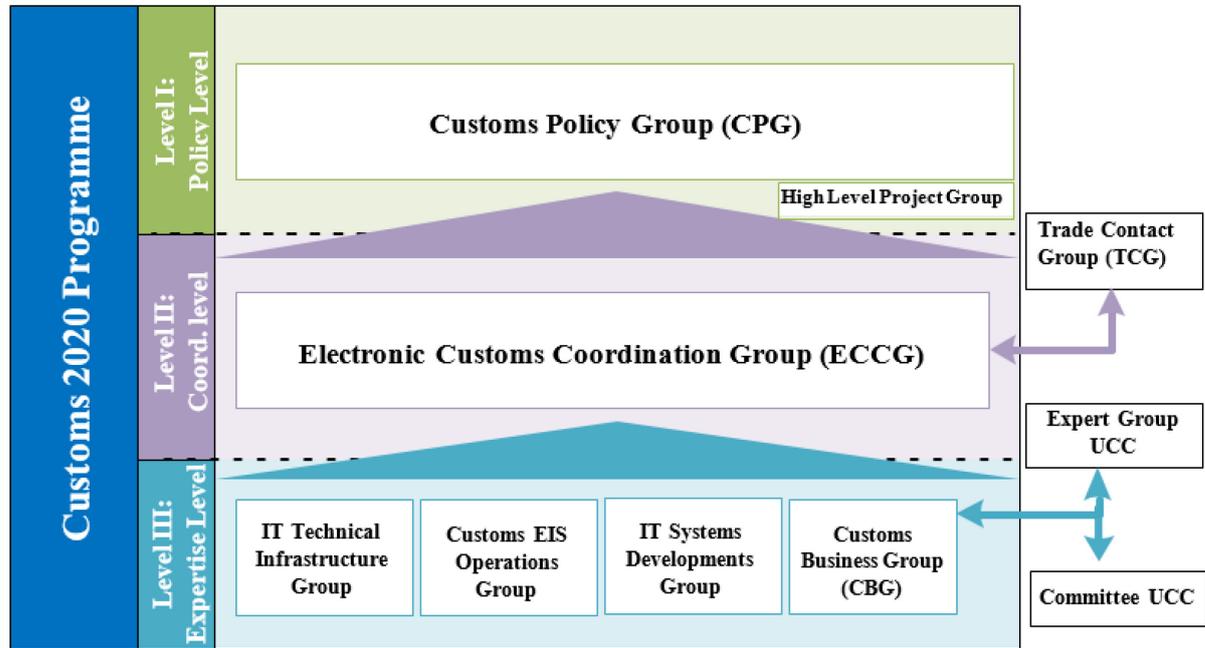
Governance of the implementation of IT systems in the Customs Union is multi-layered

11. **Figure 1** shows the governance of the IT systems’ implementation in the Customs Union. Governance is based on a number of interacting bodies involving the Commission, Member States and trade interests, notably the Customs Policy Group (CPG), the Electronic Customs Coordination Group (ECCG) and the Trade Contact Group (TCG). The Directorate-General for Taxation and Customs Union (DG TAXUD) is responsible for the implementation of Customs 2020 and chairs these groups. Reaching an agreement on individual projects requires a number of discussions on technical, operational, legal and financial matters, and involves experts from the Commission and Member States.

¹¹ Certain Member States are using EU structural funds to cover some of these costs.

¹² This budget does not include IT developments financed solely by Member States (national components). We could not report on the total systems’ costs (see **paragraph 47**).

Figure 1 – Governance for implementing the Multi-Annual Strategic Plan and e-Customs projects



Source: ECA, based on the Annex III - Governance Scheme of Multi-Annual Strategic Plan Rev. 2017.

AUDIT SCOPE AND METHODOLOGY

12. Our audit assessed whether the Customs 2020 programme, together with the related customs legislation, are likely to deliver the IT systems necessary for improving customs operations in the EU. We focused on the development of the Union components of new IT systems. With regards to the national components, we only examined the Commission's supervisory role in coordinating the Member States' implementation in their national IT systems. We did not cover the other actions provided for in Customs 2020 programme, notably the joint actions, the training activities and the operation and maintenance of existing IT systems.

13. Our audit was carried out during the implementation stage of the programme. This approach allowed us performing a mid-term review of IT systems' development and to provide an input in due time for the discussions on the next Customs programme, which will start in 2021 (see **paragraph 9**).

14. We examined whether the programme ensures that IT systems are developed and implemented in a timely manner. Where applicable, we identified reasons for delays. We also reviewed related aspects of the design, monitoring and reporting arrangements¹³. The audit was based on an analysis of Commission documents, minutes and reports of Committees and Working Groups in which the Commission and Member States participate, and interviews with Commission staff in DG TAXUD.

15. In order to have an insight into the implementation of the national components of new IT systems by Member States, we carried out a survey of the 28 national customs authorities.

OBSERVATIONS

Implementation of new IT systems for customs suffered a series of delays

16. The rapid development of IT continuously presents new opportunities, challenges and demands from users in general. This is also true in the area of customs, which requires the Commission and Member States to provide flexible solutions and remain agile in response to external events. Ten years after the adoption of the e-Customs Decision, we noted progress in the development of IT systems. However, a certain number of these systems are not yet fully implemented.

17. The Multi-Annual Strategic Plan 2017 includes 31 IT projects for implementation by the Commission and Member States. They are designed to develop new systems or upgrade the current ones, with a view to modernising the Customs Union and ensuring the full application of the UCC. The deadlines for the delivery of the IT projects were gradually postponed. The 2016 and 2017 Multi-Annual Strategic Plan revisions resulted in the delivery dates for the IT systems being postponed for 28 % and 42 % projects respectively.

¹³ We also took into account the conclusions and recommendations included in special report 19/2017 “Import procedures: shortcomings in the legal framework and an ineffective implementation impact the financial interests of the EU”.

18. ***Annex II*** presents a graph with the additional number of years needed to deliver each IT project. This resulted from the comparison of the deadlines for delivery between the Multi-Annual Strategic Plan 2017 and the initial planning. Our analysis shows that for four projects the initial delivery date was maintained, but many suffered delays and four projects were postponed by five or more years.

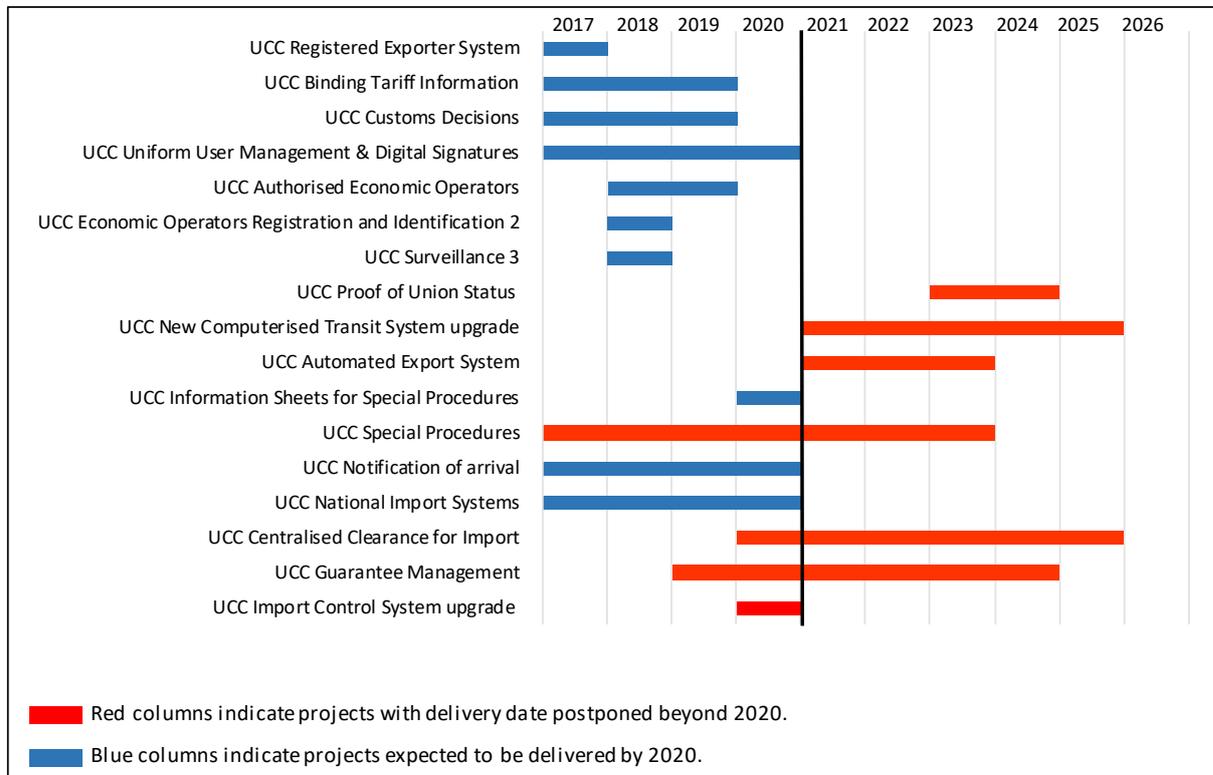
Delivery of some key IT systems required by the Union Customs Code is delayed beyond 2020

19. Full implementation of the UCC is dependent on the availability of a number of IT systems at the Commission and in the Member States. Although the UCC has been applicable from 2016, it provides for a transitional period until 31 December 2020 at the latest, to allow for the 17 IT systems required to be developed by the Commission and the Member States.

20. According to the Multi-Annual Strategic Plan 2017, seven of these IT systems¹⁴ will be fully delivered only after the 2020 deadline. According to the Commission, the overall rate of implementation of the UCC at the end of 2020 will be approximately 75 %. However, such calculation is based on the delivery of the milestones for the Union components, not taking into consideration when the systems will be ready to use. In addition, we found that the delayed projects include key systems for the operation of core customs procedures (import, transit and export), or their upgrades. Member States, in their replies to our survey, considered these systems to be crucial for the efficient functioning and modernisation of the Customs Union (see ***Figure 2***).

¹⁴ UCC projects postponed beyond 2020: UCC Automated Export System, UCC New Computerised Transit System upgrade, UCC Guarantee Management, UCC Special Procedures, UCC Centralised Clearance for Import, UCC Proof of Union Status and UCC Import Control System upgrade.

Figure 2 – Multi-Annual Strategic Plan 2017 for 17 UCC-related projects¹⁵



Source: ECA, based on the Multi-Annual Strategic Plan 2017 (for a detailed description of the IT projects, please see [Annex I](#))

21. In January 2018, the Commission reported to the European Parliament and the Council on the implementation of the UCC and informed them that the UCC 2020 deadline will not be met. In March 2018, it presented a proposal to amend the UCC including an extension of the transitional period for the application of certain provisions until 2025.

¹⁵ Import Control System upgrade planning refers only to the first part of the project. The remaining parts will be delivered after 2020.

There is a risk of not meeting the newly proposed 2025 deadline

22. The 2017 Multi-Annual Strategic Plan revision led to a significant concentration of the Commission's work in the 2023 to 2025 period, when six systems¹⁶ resulting from extensive projects are planned to become operational¹⁷. In addition, a substantial number of Member States are late in implementing their IT systems¹⁸. As a result, there is a risk that the rescheduled deadlines will also not be met and that the UCC deadline is further extended beyond 2025.

Changing scope, insufficient resources allocated and a lengthy decision-making process were the main reasons for delays

23. Our examination of the implementation of the customs IT projects, including an in-depth analysis of five projects¹⁹ and the Member States' replies to our survey, revealed that the main reasons for the delays were the following:

- Changes in the scope of some projects, which added to their complexity (see **paragraphs 24 to 25**);
- Insufficient resources allocated by the Commission and the Member States for implementing the IT systems (see **paragraphs 26 to 32**);

¹⁶ In addition, the second part of the UCC Import Control System upgrade will also fall into this period, although the planning of the second part of the project is not yet included in the Multi-Annual Strategic Plan 2017.

¹⁷ This type of concentration is contrary to the conclusions of the Customs 2020 project group on impacts of the UCC requirements on Member States according to which "overlap of deployment of several major systems within the same time span is to be avoided". The Commission also acknowledged that the EU has never before experienced such a massive transition, and that it will have many operational risks at both the technical and coordination levels.

¹⁸ We compared the current stage (as reported by the Member States to our survey) with the Multi-Annual Strategic Plan milestone foreseen for the first quarter 2018.

¹⁹ Four UCC projects: Registered Exporter System, Surveillance 3, Import Control System upgrade and Centralised Clearance for Import and one additional non-UCC project: EU Single Window (see **Annex I**).

- Lengthy decision-making process due to the multi-layered governance structure²⁰ involving the Commission and Member States (see paragraph 33 to 36).

Changes in the scope of some projects

24. The Commission based the timeline for the development and deployment of customs systems on the IT Master Plan study completed in 2012, and concluded that the 2020 deadline was realistic for the implementation of the IT projects planned at that time.

25. 12 of the 17 projects, which had already been planned in the MCC, which preceded the UCC, were relatively mature²¹. However, during the discussions which followed, the Commission and Member States agreed to significantly change the scope of some IT systems. In addition, some IT developments were shifted from the Member States to the EU level. This resulted in a substantial increase in the workload of the Commission, and the original timeline set turned out to be unattainable.

Insufficient resources allocated by the Commission and the Member States

Commission's budget (Union components)

26. The Commission based resource needs for the Customs 2020 programme on the implementation of the EU's IT strategy for the customs policy area, set out in the Multi-Annual Strategic Plan 2012.

27. The first major indication that the budget available under the Customs 2020 programme might not be sufficient appeared in 2015 in relation to the Import Control System upgrade project. The Vision Document agreed by the Commission and the Member States suggested that a more centralised approach be taken to develop the system, as compared with the original plans. It suggested a revised total budget for implementation of approximately €170

²⁰ 19 out of 24 Member States which provided replies to our survey indicated that the current governance structures are appropriate taking into account the circumstances, however 14 Member States admitted that the working method and the decision-making process could be further improved.

²¹ According to the Business Process Modelling (BPM), the systems already had user or functional requirements defined.

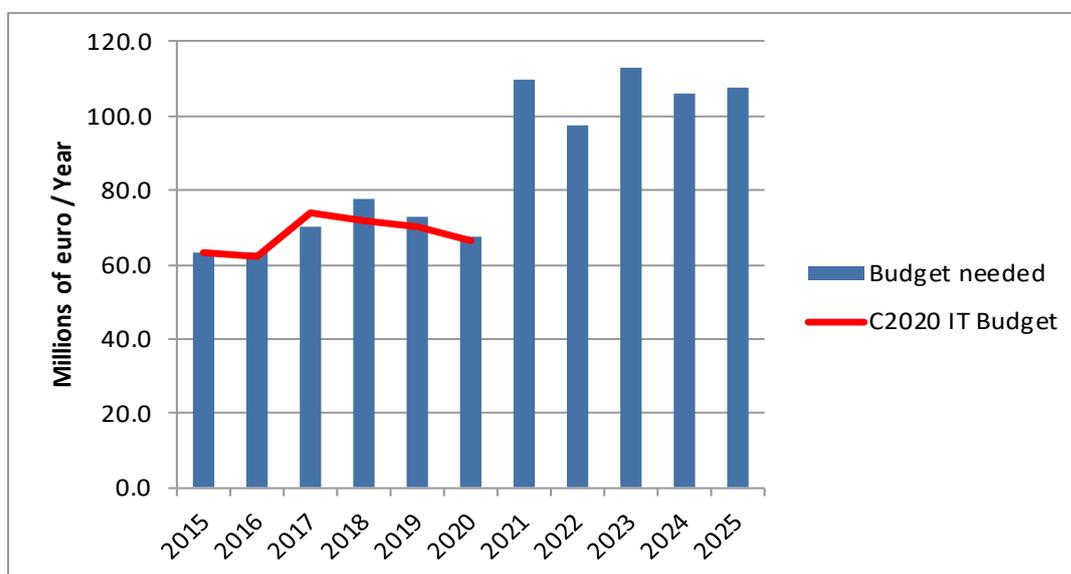
million, more than doubling the previous estimates. As a consequence, the Commission concluded that the remaining IT capacity-building budget for Customs 2020 programme was too low to cover the cost of implementing this system.

28. The Commission decided to mitigate the problem by:

- Dividing the project into blocks and setting a longer implementation period going beyond 2020 with the intention, therefore, of using the budget for future Customs programmes; and
- Securing additional resources for the IT capacity-building budget under the Customs 2020 programme. These efforts were only partially successful.

29. The Commission's forecasts for budgetary requirements for 2021-2025 are significantly higher than the ones for 2014-2020. **Figure 3** illustrates the estimated budget needs for IT systems until the end of the Customs 2020 programming period and the greater budgetary needs envisaged after 2020. The Commission estimates that for the next Customs programme period, it will need approximately €100 – 115 million per year in order to keep all IT systems operational and to finish the remaining projects from the Multi-Annual Strategic Plan postponed beyond 2020.

Figure 3 – Estimated budget needs to implement the 2017 Multi-Annual Strategic Plan revision



Source: Commission's working documents.

Member States' budget (national components)

30. Our survey of Member States showed that for most of them (67 %) one of the main reasons leading to the late implementation of the UCC was insufficient budget allocated at national level. The Commission became aware that some Member States would not make sufficient funds available to customs administrations to enable them to comply with the Multi-Annual Strategic Plan immediately after the approval of the UCC Work Programme in 2014. The Commission informed us that this was partially due to the international macroeconomic crisis starting in 2008. In special report 19/2017, we had already highlighted that underfinancing of trans-European IT systems may delay the Union Customs Code implementation²².

31. The Commission continued to call upon Member States to make national resources available and investigated other options for resolving the problem of insufficient budgets in

²² See paragraphs 33 to 38 of special report 19/2017.

the Member States, for example by facilitating cooperation among Member States (see **Box 1**).

Box 1 – Collaborative development of national components by a group of Member States

The Commission promoted the option for Member States to collaborate on developing national components together, rather than each Member State working on its own. In the area of taxation, DG TAXUD has had positive experience with such collaborative IT development.

In 2017, Estonia prepared a project for setting up a new expert team composed of several Member States' representatives to develop the national components of the customs IT systems together. Such an expert team would, for example, prepare common procurement procedures to achieve economies of scale. The project was approved by the Commission and will receive financing from the Customs 2020 Work Programme for 2018. 15 Member States expressed their interest in participating in this kind of action.

At the time of the audit, the expert team had not yet started the work, therefore it was not possible to fully assess the results of this initiative.

32. Member States keep 20 % of the funds collected from customs duties as collection costs and the remaining 80 % goes to the EU budget as revenue. The retention rate for collection costs would be enough²³ to contribute to covering expenditure incurred by Member States for implementing customs IT systems. We noted, however, that no Member States indicated that they had done so. Instead, they used funds from the national budget and EU structural funds to finance the customs IT systems development.

Lengthy decision-making process due to the multi-layered governance structure involving the Commission and Member States

33. The development of the customs IT systems requires the involvement, close coordination and agreement of a large number of players at several levels in the Commission and Member States (see **paragraph 11**). In addition to the complexity of the IT development

²³ In 2017 Member States retained more than €4 billion as collection costs. At the level of individual Member State, the amounts retained varied between €3 million and €1 billion.

in itself, decision-making is further complicated by the specific national features of customs operations, and by differences between the Member States regarding their progress and capacities in customs IT.

34. The Commission, in its coordinating role, has already experienced this governance structure in the context of the implementation of the existing customs systems, most importantly the first generation of the transit system (the New Computerized Transit System). This demonstrated that seeking an agreement on all aspects of project implementation is a challenging and time-consuming task²⁴.

35. Given the complexity of customs IT projects, the Commission applied a set of detailed milestones for each project to facilitate operational planning and monitoring. These milestones are divided according to the main project phases, and refer to approval of the related documents or actions by the Member States represented in the governance bodies²⁵.

36. We looked at the application of these milestones in our sample of five projects (see ***paragraph 23***). In all cases, the Commission's agreement with the Member States on the initial milestones (Business Case and/or a Vision Document) was delayed²⁶.

The Commission was late in reporting the delays

37. The feasibility of the timelines for completing the IT projects started to be questioned by some Member States and trade representatives (such as importers, customs brokers, transport companies and logistic operators) immediately after the key planning documents had been adopted in 2013 and 2014. Despite this, in 2016 the Commission's official strategic

²⁴ The time needed for the development of the New Computerized Transit System - 12 years - was taken into account when estimating the time needed to develop the new systems in the Iteration 1 Global Estimation Study Document for the IT Master Plan.

²⁵ Customs Policy Group (CPG) and Electronic Customs Coordination Group (ECCG).

²⁶ In two cases (Surveillance 3 and Registered Exporters System), it was possible to catch up and maintain the original (Multi-Annual Strategic Plan 2014) deadline for delivery. In another two cases (Centralised Clearance for Import and Import Control System upgrade), the projects were split into phases extending the final delivery beyond 2020. As regards the EU Single Window, the project was split into several sub-projects and its full delivery is not yet known.

planning documents and reports continued to indicate that all UCC IT systems and several other non-UCC Multi-Annual Strategic Plan projects would be delivered by 2020 (see **Box 2**).

Box 2 – Commission’s reporting (until 2016) indicated that IT systems would be delivered by 2020

The Commission did not mention the risk of failure to deliver the UCC IT systems by 2020 in any of the Customs 2020 progress reports for the years 2014, 2015 and 2016 (see **paragraph 46**).

In the 2016 e-Customs progress report (published in July 2017), the Commission recognised that several projects had been delayed. However, taking into account the progress made in 2016, it stated that timely implementation of the projects was still feasible.

Similar information was presented in the e-Customs progress reports for the years 2014 and 2015.

38. When the Commission identified issues related to the availability of resources and potential delays in implementing the UCC Work Programme in June 2014, it did not change the deadlines in the UCC Work Programme or in the Multi-Annual Strategic Plan. Instead, it created a new internal resource-based operational plan and proposed to manage it in parallel. This resulted in the Multi-Annual Strategic Plan / UCC Work Programme being used externally and the operational plan, which depicted reality, mainly being used internally. From 2015 onwards, the internal operational plan indicated longer deadlines than those in the Multi-Annual Strategic Plan / UCC Work Programme, and included projects to be implemented after the 2020 UCC deadline.

39. The two planning tools co-existed in customs IT development until 2017 when they were reconciled following a review (“reality check”) performed by the Commission. The outcome of this review exercise was the 2017 Multi-Annual Strategic Plan revision, which moved the deadlines for deployment of several IT systems beyond the UCC’s legally binding 2020 deadline. As a result, the Commission was obliged to prepare an update of the UCC Work Programme and to propose an amendment to the UCC Regulation (see **paragraph 21**).

40. The existence of the two planning tools shows that the Commission was aware of the delays. The decision not to include this information in its official reporting prevented the stakeholders (such as the European Parliament, other EU institutions not represented in the

governance structure of Customs 2020 as well as interested companies and citizens) from being fully informed of the risk of delays in real time.

The initial development approach selected was not the most cost efficient

41. When the Customs 2020 programme was designed, the Commission carried out a study to determine the deadlines for implementing the IT systems and the budget required for the Union components (see [paragraph 26](#)). The development approach selected was mostly decentralised. This was despite the fact that centralised implementation was the most cost efficient option (see [Box 3](#)).

Box 3 – Centralised development approach rejected by Member States

In its Impact Assessment the Commission presented four scenarios for the Customs 2020 programme, which differed essentially in the degree of centralised development by the Commission or decentralised development by each individual Member State. The option with the most centralised implementation of IT systems involved shared common development of full core clearance process implementation and of its trader interface.

This centralised solution required a higher budget for the Customs 2020 programme (estimated at around €200 million more, as compared with the option selected). However, it also offered significant economies of scale (one euro invested centrally could generate a saving of four euros for Member States).

This scenario was not selected because Member States considered that a decentralised solution could more appropriately meet specific national requirements and mitigate the risk of project failure.

42. Later, during the individual project scope discussions, Member States requested that the EU develops certain components of IT systems at central level. This led to a more cost efficient solution because of economies of scale, but required more resources from the Customs 2020 programme which were unplanned (see [paragraph 27](#)).

The Customs 2020 programme objectives and reporting arrangements are not suitable for monitoring the IT systems' implementation

43. The specific and operational objectives for IT implementation in the Customs 2020 programme are too general to be used for monitoring and reporting (e.g. “computerization” or “to develop, improve, operate and support the European Information Systems for customs”). In addition, because the specific IT systems to be developed were not set among the above objectives of the Customs 2020 programme, they are not appropriately monitored in the existing reports.

44. The Performance Measurement Framework (PMF) developed to assess the Customs 2020 programme prescribes four indicators for the implementation of new IT systems:

1. number of IT projects in the “research” phase;
2. number of IT projects in the “development” phase;
3. number of new IT systems in the “operation” phase; and
4. ratio of IT projects with “green” status.

45. We found that the first three indicators do not have a target and the target set for the fourth indicator was only that 50 % of the IT projects should be in line with requirements (status “green”). This target was not meaningful because a project can receive a “green” status simply as a consequence of a Multi-Annual Strategic Plan revision, without any actual progress in the implementation of the IT system. Therefore, the four indicators developed to assess IT implementation do not enable delays to be detected and reported.

46. The Commission publishes annual progress reports on the implementation of the Customs 2020 programme. In the three Customs 2020 progress reports published by the time of the audit (2014, 2015 and 2016), the information on the implementation of the IT systems is limited. All three reports state that new developments are largely taking place in line with the planning. The e-Customs progress reports for the three above years contain more detailed information on the level of deployment of the IT systems, but do not provide information on the risk of not meeting the planned deadlines. Given the delays in developing

and deploying new IT systems, the Customs 2020 progress reports did not provide a balanced and comprehensive view²⁷ of the programme implementation.

47. The Commission receives information on the costs incurred by Member States for developing the national components of the IT systems on a regular basis. This information is compiled and presented in the e-Customs progress reports. However, the information provided by Member States is neither complete nor comparable. We confirmed this limitation in our survey, which prevented us from estimating the total costs (Union and national components) to develop the IT systems. Unreliable information on amounts spent prevents the Commission from properly evaluating whether the implementation of the IT projects is effective and provides value for money for the modernisation of the Customs Union.

²⁷ The Customs 2020 progress reports only dedicate one page to the new IT systems (out of around 15 pages) as only 4 out of 68 (output and results) indicators are related to new IT systems.

CONCLUSIONS AND RECOMMENDATIONS

48. Customs processes can have a very significant influence on trade, the collection of duties, and the safety and security of citizens. Modernising these processes is key to the functioning of the EU. Ten years after the adoption of the e-Customs Decision, we noted progress in the development of IT systems towards creating a paperless customs and trade environment. However, these systems are not yet fully implemented.

49. We conclude that:

- Delivery of 7 out of the 17 UCC IT systems will miss the 2020 deadline. Some of them are key systems such as UCC Import Control System upgrade and UCC Centralised Clearance for Import (see **paragraphs 19 to 21**).
- There is a risk that the new 2025 deadline is not met (see **paragraph 22**).
- The original timeline to implement the IT systems, set by the Commission, became unfeasible due to changes in the scope of some projects (see **paragraphs 24 to 25**).
- The actual costs of developing the IT systems for the Union components were significantly higher than those estimated in the initial plan, and the Commission did not allocate sufficient resources for these projects (see **paragraphs 26 to 29**).
- Insufficient budget allocated by the Member States was one of the main reasons for delays (see **paragraphs 30 to 32**).
- The lengthy decision-making process delayed the implementation of some IT systems due to the multi-layered governance structure involving the Commission and the Member States (see **paragraphs 33 to 36**).
- The Commission was late in reporting the delays in the implementation of the IT systems (see **paragraphs 37 to 40**).
- The decision of how much of IT development to centralise at EU level was not always driven by cost-efficiency considerations, but also by Member States' specific

national requirements and by the risks of project failure (see paragraphs 41 and 42).

- The Customs 2020 programme objectives and reporting arrangements are not suitable for monitoring the implementation of IT systems properly (see paragraphs 43 to 47).

50. We recommend that the Commission should take account of the lessons learnt with the Customs 2020 programme and its approach to managing IT projects as outlined in the Multi-Annual Strategic Plan for the future Customs Programmes.

Recommendation 1 - Gear programme design towards IT implementation

For the next Customs programme, the Commission should propose:

- (a) objectives that relate explicitly to the planned IT systems to be developed; and
- (b) objectives which are precise and measurable.

Timeframe for implementation: 2020

Recommendation 2 - Improving IT project time, resource and scope estimates

For future Customs programmes, the Commission should:

- (a) when preparing the timelines and resource allocations, ensure that the lessons from previous programmes (such as risks related to the IT environment and project complexity) are duly taken into account; and
- (b) provide Member States with adequate information to take an informed decision on the scope of the projects in due time.

Timeframe for implementation: 2020

Recommendation 3 - Facilitate cooperative IT development

The Commission should:

- (a) monitor the risk that a Member State might miss deadlines for implementing the national components and, at an early stage, identify potential solutions and facilitate their application at national level; and
- (b) facilitate a wider use of collaborative IT development between Member States.

Timeframe for implementation: 2020

Recommendation 4 - Streamlining governance by enhancing communication

The Commission should streamline the governance of customs IT systems development, by ensuring more efficient and swift communication with Member States, for example by using additional information exchange solutions to allow decisions to be taken without delay.

Timeframe for implementation: 2020

Recommendation 5 - Transparent reporting on IT implementation

The Commission should:

- (a) inform all stakeholders concerned with implementing IT systems at EU and Member State level, in a timely and transparent manner, about delays in the implementation and spending of Union and national components; and
- (b) set appropriate reporting arrangements and indicators on the overall level of implementation and on individual projects in the next Customs programmes' Performance Measurement Framework, and issue the required reporting documents.

Timeframe for implementation: 2021

This Special Report was adopted by Chamber V, headed by Mr Lazaros S. LAZAROU, Member of the Court of Auditors, in Luxembourg at its meeting of 26 September 2018

For the Court of Auditors

Klaus-Heiner LEHNE

President

IT PROJECTS' DESCRIPTION

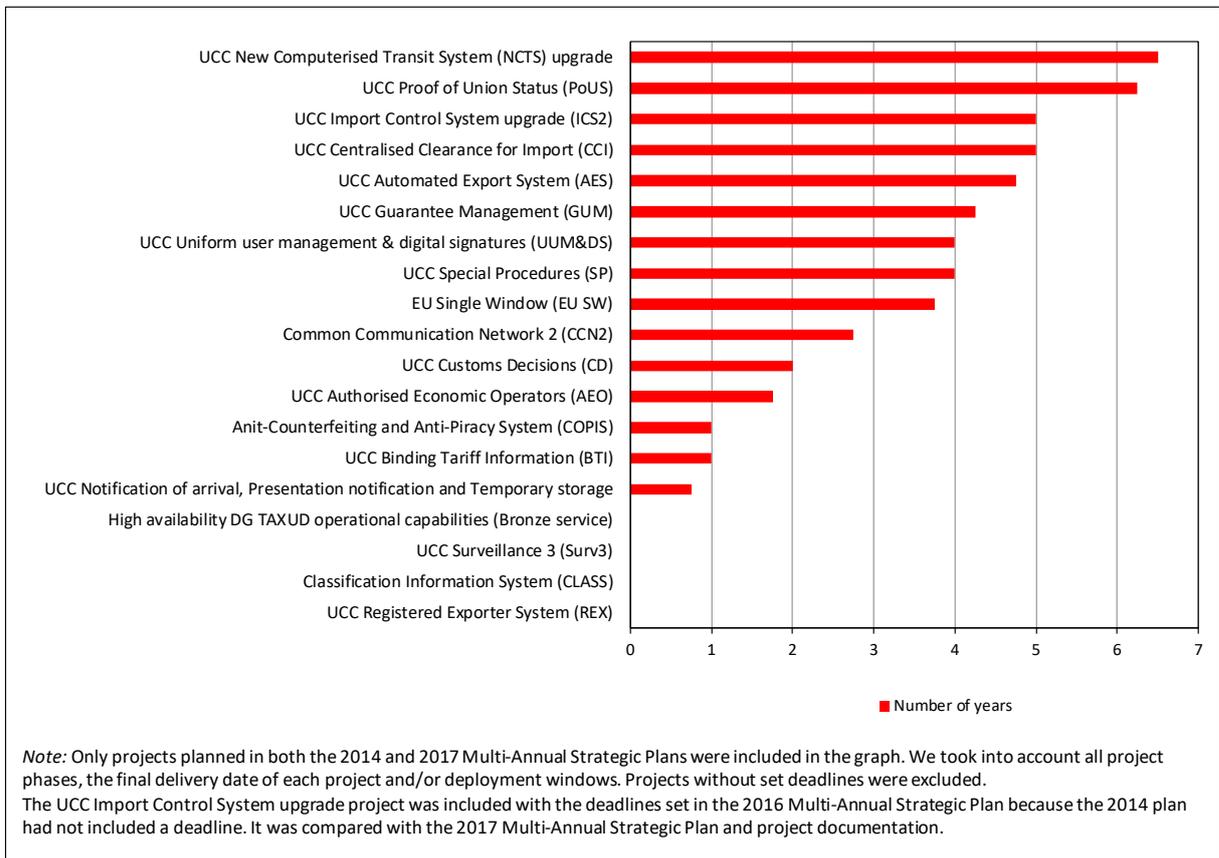
UCC SYSTEMS	
UCC Customs Decisions	The project aims at harmonising the processes related to the application for a customs decision, the decision taking and the decision management across the EU.
UCC Binding Tariff Information (BTI)	The goal of the project is to upgrade the existing trans-European EBTI-3 system and Surveillance 2 system in line with the UCC and its provisions (e.g. changes of validity period). The project is closely linked to the Surveillance 3.
UCC Authorised Economic Operators (AEO) upgrade	The project aims at improving the business processes related to AEO applications and authorisations, taking into account the changes to the legal provisions of the UCC.
UCC Automated Export System (AES)	This project implements the UCC requirements for export and exit and is composed of two components: trans-European (AES) and national (National Export Systems upgrade).
UCC New Computerised Transit system (NCTS) upgrade	The aim of the trans-European project is to upgrade the existing system, which automates the transit procedures and control of the movements covered under the TIR procedure within the EU.
UCC Registered Exporter System (REX)	The REX project aims at implementing a system that will provide up-to-date and complete information on registered exporters established in non-EU countries exporting goods to the EU under preferential trade arrangements.
UCC Economic Operators Registration and Identification subsystem 2 (EOR12)	This project aims at upgrading the existing trans-European EORI system, which registers and identifies EU and third country economic operators.
UCC Notification of Arrival, Presentation Notification and Temporary Storage	The goal of this project is to define the processes for Notification of Arrival of the means of transport, Presentation of the goods and Declaration for Temporary Storage and to support harmonisation across the Member States.
UCC Guarantee Management (GUM)	This project aims at assuring the effective and efficient management of the different types of guarantees. The project has both a trans-European and a national component.

UCC Information Sheets (INF) for Special Procedures	The aim of this project is to develop a new trans-European system for administrative cooperation and the standardised exchange of information between customs authorities across Member States.
UCC Special Procedures	This project aims at accelerating, facilitating and harmonising Special Procedures across the Union by means of providing common business process models.
UCC Surveillance 3	This project aims at providing an upgrade of the Surveillance 2+ system to allow processing of additional data elements from the declarations for improved customs risk analysis, the fight against fraud, market analysis, post-clearance controls and statistical purposes.
UCC Import Control System upgrade (ICS2) for strengthening the Security of the Supply Chain at Entry	The project aims at creating a new trans-European system replacing the existing ICS. The main objective is to strengthen the security of the supply chain by optimising the exchange of advanced cargo information and by addressing the weaknesses of safety and security processes and/or data quality in order to improve risk analysis.
UCC National Import Systems (NIS) upgrade	The project aims at implementing all UCC requirements related to the national import domain. It covers the national customs declarations processing systems as well as other related systems.
UCC Centralised Clearance for Import (CCI)	The project aims at creating a trans-European system to allow traders to centralise lodging of their customs declarations for imports within one customs administration whilst goods will be physically presented in other Member State(s).
UCC Proof of Union Status (PoUS)	The project aims at the creation of a new trans-European system to store, manage and retrieve the electronic Proof of Union Status documents.
UCC Uniform user management & digital signatures – UUM&DS (Direct Trader Access to EIS)	The UUM&DS Project aims at implementing a system that provides traders with direct and harmonised access to new EU-wide services, including the central services.
Non - UCC SYSTEMS (mentioned in the report)	
EU Single Window environment for customs	The objective of the EU Single Window environment for customs is to enable economic operators to electronically lodge all the information required by customs and non-customs legislation for the EU cross-border movements of goods at the same time.

<p>COPIS (Anti-Counterfeiting and Piracy System)</p>	<p>COPIS is intended to enhance intellectual property rights protection by improving the cooperation and sharing of information between right-holders and Member States' customs administrations and between all the customs offices of the Member States.</p>
<p>Classification Information System (CLASS)</p>	<p>The project aims at developing a tariff classification information system which would provide a single platform where all the classification information is made available and easy accessible.</p>
<p>Common Communication Network 2 (CCN2)</p>	<p>CCN2 is an evolution of the current CCN, which is a closed, secured network infrastructure provided by the Commission to facilitate the exchange of information between the national authorities of the customs and taxation area.</p>
<p>High availability DG TAXUD operational capabilities</p>	<p>Under this project, the Commission intends to provide high availability infrastructure capabilities for the hosting of EU customs systems components and IT services.</p>

ANNEX II

**ADDITIONAL NUMBER OF YEARS NEEDED TO DELIVER EACH IT PROJECT AS COMPARED TO
THE INITIAL PLANNING**



Source: ECA, based on the Multi-Annual Strategic Plans 2017, 2016 and 2014; and UCC Import Control System upgrade project documentation (for a detailed description of the IT projects, please see [Annex I](#)).

REPLIES OF THE COMMISSION TO THE SPECIAL REPORT OF THE EUROPEAN COURT OF AUDITORS

“A SERIES OF DELAYS IN CUSTOMS IT SYSTEMS: WHAT WENT WRONG?”

EXECUTIVE SUMMARY

V. In relation to the recommendations taken up in the executive summary, the Commission refers to its replies concerning each recommendation at the end of the report.

INTRODUCTION

5. The Commission wishes to highlight other reasons than the ones specified by the ECA, such as the need for an alignment to the Lisbon Treaty.

10. The Commission would like to clarify that the audit is focused on the development of new customs IT systems, which represents 10-30 % (depending on the year) of the programme's IT expenditure. The rest of the IT expenditure finances the already existing European Information System (EIS) (operations, infrastructure, maintenance and support services).

OBSERVATIONS

23. IT projects, such as the ones connected to the Centralized Clearance and EU Single Window, are characterised by a particularly high level of complexity. In relation to the EU Single Window environment for customs, it should furthermore be noted that it is part of a possible future initiative, to be adopted by 2020 (subject to confirmation by the next Commission).

25. The Commission would like to stress that there was a need for discussions and further definition of the scope of the IT systems between the Commission and the Member States. These additional efforts to define the scope contributed to delays, because the implementation of the projects could not start immediately after the adoption of the UCC decision. For some systems, the decision was to agree that additional developments should be carried out at the EU level. The changes of scope, coupled with the constraints of sequencing of systems' development due to their interdependencies, as well as Member States' constraints expressed during the survey performed in 2016, made the timeline as set originally in the UCC unattainable.

28. In order to mitigate the problem of insufficient budget, the Commission decided also to review the organisation and reinforce the human resources allocated to the projects.

As an example, since the different mitigating measures were put in place in 2016-17, all the milestones set for the Import Control System upgrade (ICS2) project in the current Multi-Annual Strategic Plan (MASP) have been successfully met.

29. It should be underlined that based on the current forecast and the requested IT developments, the Commission proposed a global amount of € 950 million for the 2021-2027 programming period, in comparison with the amount of € 522.9 million for the 2014-2020 period.

36. It should be noted that, as recognised by the ECA in footnote 26, the reported delays only concern the initial project steps and not the legally binding milestones of the availability of the technical specifications and of the start of the IT system deployment. It is worth mentioning that it was decided to approach the EU Single Window environment for customs as part of a possible future legal initiative, to be adopted by 2020 (subject to confirmation by the next Commission). For this reason, it cannot be planned for the time being and its full delivery is not yet known. From this starting point, it is currently not an activity subject to a legally binding timeframe.

37. The Commission would like to highlight that, since the adoption of the UCC, the discussions on the planning of the IT projects, the interdependencies, the prioritisation and the feasibility have been part of an open and constructive dialogue between the representatives of the Commission, the

Member States and the EU trade associations. This information exchange occurred within the established governance scheme for e-Customs. Recital (10) of the Implementing Decision establishing the UCC Work Programme of 11 April 2016 refers explicitly to the need of paying attention to the progress achieved in meeting the agreed targets, given the ambitious and challenging nature of the electronic systems to be finalised in 2019 and 2020. As a follow-up to this, in mid-2016 the Commission launched a survey to collect the views of the Member States and trade representatives on the feasibility and prioritisation. This was the basis for further agreements on a revised planning, as established and agreed within the MASP 2017. Once the detailed planning was agreed, the Commission issued its proposal to amend Article 278 of the UCC.

38. The Commission created an internal resource-based plan to establish the implications of delays and to study the options to tackle them.

Although the UCC deadlines remained unchanged, the Commission discussed them with the Member States and trade representatives while preparing the second version of the UCC Work Programme (starting mid-2015, COM decision April 2016, within the context of the legal deadline in the UCC of the end of 2020). The Commission considers that it remained fully transparent in this regard towards the Member States and trade representatives.

40. The Commission remains in full transparency with the Member States. Since the first planning stages, the administrations of the Member States concerned and the Commission have been openly discussing the risk of delays. It is in this context that an understanding was reached with them to maintain the planning for the first systems and to closely monitor, by both the Commission and the Member States, the planning for the other systems.

43. With regard to the ECA's comment on the suitability of the Customs 2020 programme objectives and reporting arrangements, the Commission refers to its reply concerning recommendation 1.

46. The Commission would like to clarify that regarding the reporting on the operating and development of customs IT systems, the Customs 2020 progress reports contain limited information in order to avoid duplication, as they are complemented by the e-Customs progress reports. Both the Customs 2020 progress reports and the e-Customs progress reports are available on the Europa website.

CONCLUSIONS AND RECOMMENDATIONS

49.

First bullet point:

In order to minimise the impact of the delays, the Commission and the Member States agreed on the priorities to be set and the deliveries to be sequenced. This was performed in 2016 by means of a survey and resulted in the new MASP 2017.

Ninth bullet point:

Please see the Commission's reply to paragraph 46.

Recommendation 1 - Gear programme design towards IT implementation

The Commission accepts the recommendation.

In the context of its proposal for the next Multiannual Financial Framework, the Commission has applied the Better Regulation principle to set precise and measurable, both general and specific, objectives of the programmes. These proposals are now being negotiated by the co-legislators.

Recommendation 2 - Improving IT project time, resource and scope estimates

The Commission accepts the recommendation.

The Commission wishes also to highlight that it evaluates its programmes at the interim and final stage, making sure that lessons learnt from evaluations feed into the policy preparation of new programmes. This has been the case for the current programme and resulted notably in setting up a performance measurement framework for Customs 2020 as well as developing specific and measurable goals. All the recommendations resulting from the final evaluation of the Customs 2014 programme have been addressed. The ECA should also note that the Customs 2020 objectives are the result of thorough legislative negotiations.

Recommendation 3 - Facilitate cooperative IT development

The Commission accepts the recommendation.

Recommendation 4 - Streamlining governance by enhancing communication

The Commission accepts the recommendation.

Recommendation 5 - Transparent reporting on IT implementation

The Commission accepts the recommendation.

Regarding point (a), the Commission would like to point out that it can only inform stakeholders about spending on national components insofar as the Member States provide such information to the Commission.

In relation to point (b), the Commission wishes to stress that it is already working on an update of the current Customs 2020 Performance Measurement Framework, following the conclusions of the Mid-Term Evaluation, with a view to simplify the current set of indicators and to give more emphasis to IT indicators. For the future post-2020 Customs programme, the core indicators have been established in Annex 2 of the Commission proposal. Four out of eight core indicators relate to IT systems, including a new indicator "UCC completion rate", which measures the percentage of milestones reached for implementing the UCC electronic systems. In relation to the reporting arrangements, the Customs 2020 progress report for 2017 contains clear cross-references to the complementary e-Customs progress report and a more extensive coverage of the state of play of the EIS implementation.

Event	Date
Adoption of Audit Planning Memorandum (APM) / Start of audit	29.11.2017
Official sending of draft report to Commission (or other auditee)	12.7.2018
Adoption of the final report after the adversarial procedure	26.9.2018
Commission's (or other auditee's) official replies received in all languages	English: 5.10.2018 Other languages: 7.11.2018

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In this audit we looked at whether the Customs 2020 programme, together with the related customs legislation, are likely to deliver the IT systems necessary for improving customs operations in the EU. We found that the implementation of these systems suffered a series of delays so that some of them will not be available at the 2020 deadline set in the Union Customs Code. The delays were due to several factors, in particular: changing project scope, insufficient resources allocated by the EU and Member States, and a lengthy decision-making process due to the multi-layered governance structure.



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