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## 0 Cover

<b>ORIGINATOR:</b> TAXUD/R5	<b>ISSUE DATE:</b> 01.06.2012	<b>VERSION:</b> 1.00
<p><b>ANNEX II.B - TECHNICAL ANNEX</b></p> <p><b>Invitation to tender TAXUD/2011/AO-013</b></p> <p><b>Specification, development, maintenance and 3<sup>rd</sup> level support of CCN and CCN2</b></p> <p><b>(CCN2-DEV)</b></p>		

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## Typographic conventions

The following typographic conventions are used in this document:



Draws attention to important conditions



Indicates definitions or reference information



Indicates that this requirement must be clearly addressed in the tender

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## 0.4 Introduction

### 0.4.1 Purpose

This document provides the scope and the specifications of the work packages linked to the framework contract resulting from the present Call for Tenders including the related services and deliverables. It also provides a description of the requirements (e.g. quality requirements and general requirements) and details about the pricing model of this framework contract.

### 0.4.2 Overview

This document (Annex II.B - Technical Annex) has the following structure:

Chapter 0	Introduction – this chapter
Chapter 1	Provides details about the scope of this Call for Tenders.
Chapter 2	Provides the specifications about the work packages of this Call for Tenders. It also provides an overview of all services and deliverables linked to this Call for Tenders
Chapter 3	Provides a general description of the quality requirements
Chapter 4	Provides a general description of the general requirements.
Chapter 5	Provides a general description of the pricing model.
Chapter 6	Provides the CCN2 Platform requirements and specifications
Chapter 7	Provides details on the TAXUD Data Centres consolidation
Chapter 8	Provides details on the supporting tools used by the incumbent contractor and the ones to be used by the new contractor

## 0.5 Acronyms and definitions



Please refer to Annex II.E - List of abbreviations and definitions for a list of all abbreviations and definitions used in this Call for Tenders.

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## 0.6 Reference Documents



Please refer to Annex II.F - List of Reference Documents for a list of all reference documents applicable to this Call for Tenders and that can be consulted from Annex XI – Baseline.

## 0.7 References



Please refer to Annex II.A - Terms of Reference, section 0.5.1 for information concerning the following references used in this Technical Annex:

- The Terms of Reference of this Call for Tenders (Annex II.A - Terms of Reference),
- The Baseline of this Call for Tenders (Annex XI - Baseline).
- TEMPO,
- ITIL,
- ISO Standards,



The CCN2-DEV contractor needs to take into account that the Baseline reflects the situation applicable at the time of publication this Call for Tenders and that it will evolve.

The baseline contains CCN/TC related documents as well as source code. The source code covers all CCN related code except from some security sensitive modules which have been removed for security reasons. (this covers about 15% of the total amount of the CCN related code).

In case of a conflict between the applicable documents and/or source code, the following order of decreasing precedence shall prevail, unless otherwise stated:

- The CCN2-DEV Call for Tenders (of which this document is part);
- TEMPO;
- International standard and best practices;
- All documents in the Call for Tenders Baseline.

The latest Release of TEMPO is to be used by the CCN2-DEV bidder. The list of TEMPO documents referred to in this document is only added in order to make the reading easier. They are neither exhaustive nor legally binding; they are only provided as additional information.

References to DG TAXUD are based on its organisational structure at the time of writing the Call for Tenders that will evolve.

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# 1 Scope of this invitation to tender

The scope of the existing CCN/TC contract (see section 1.1) and the future CCN2-DEV contract (see section 1.2) are further described in the following paragraphs.

## 1.1 Existing CCN/TC contract scope

- **Development:**
  - Provide technical and functional specifications
  - Build and test new versions of the CCN gateway software
  - Build and test new versions of the CSI stack (API)
  - Build and test new value-added services
  - Design and implement network architecture evolutions
  - Provide documentation
- **Support:**
  - Operate a central Service Desk
  - Maintain a database of all service calls
  - Provide 1<sup>st</sup> and 2<sup>nd</sup> level support
  - Manage 3<sup>rd</sup> level support
  - Provide on-site support where required
  - Notify service interruptions
  - Participate in workshops and seminars
  - Provide training for CCN application development
  - Provide training for CCN gateway administration
  - Provide documentation
- **Operations:**
  - Deploy and configure new CCN gateways and other hardware
  - Repatriate obsolete hardware
  - Install new versions of software
  - Monitor CCN gateways, mail servers and security devices in real-time
  - Respond to alerts
  - Monitor and report on traffic
- **Maintenance:**
  - Maintain and upgrade hardware
  - Maintain and upgrade software and software licenses
  - Maintain versions of the CSI stack (API) across all application platforms
  - Maintain documentation up to date

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- **Management:**
  - Project Management (contractual and operational)
  - Project Management (development activities)
  - Coordinate with CCN/WAN and DG TAXUD
  - Service Level Management
  - Infrastructure Availability Management
  - Trend analysis and Capacity Management
  - Contingency Planning

The Configuration Items (CIs) covered by the existing CCN/TC contract are listed in the CCN/TC Inventory (See [R098]).

## 1.2 Scope of CCN2-DEV

The current Call for Tenders is for one Framework Contract of a duration of three (3) years, with option for maximum two consecutive extensions of one (1) year each, to cover the provision of services to DG TAXUD in the field of specification, development, maintenance and 3<sup>rd</sup> level support of CCN/CSI related systems and their bespoke software and the setup, build and 3<sup>rd</sup> level support of the CCN2 Platform and its bespoke software.

This paragraph provides a general description of the services to be delivered by the CCN2-DEV contractor.

The main **services blocks** are:

- The provision of services ensuring **maintenance** (corrective, evolutive) initially of the **CCN/CSI and associated systems** (See details in [R098] - CCN/TC Inventory) developed mainly by incumbent CCN/TC contractor and at, a second stage, provision of the same services for the **CCN2 Platform**;
  - Take-over of the existing situation (infrastructure, documentation, software) from the CCN/TC contractor;
  - Technical management of the services provided;
  - Support for the deployment and operation of the CCN/CSI network providing third level Help Desk including support, consultancy and testing activities, to the ITSM2 contractor;
  - On-site participation in the PSAT activity and in other testing activities performed by the ITSM2 contractor;
  - Development and maintenance (corrective, evolutive) of the software basis composing the CCN/CSI infrastructure (operation by ITSM2 Lot1);
  - Provide trainings, workshops, demonstrations, missions and consultancy support for CCN application development and CCN gateway administration;
  - Hand-over of the services to DG TAXUD or to any specified third parties on its behalf.

**The continuity of operations (especially for the corrective and evolutive maintenance of the CCN/CSI and associated systems) is the highest priority objective of this contract.**

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- The provision of informatics services ensuring specification, build and maintenance (corrective, evolutive) of the **CCN2 Platform** (software and hardware), interfaces with associated systems and additional CCN2 Platform services/ components:
  - Detailed design of the CCN2 Platform;
  - Detailed specification of the CCN2 Platform;
  - Build of the CCN2 Platform;
  - Testing (up to FAT) of the CCN2 Platform;
  - Support for the deployment of the CCN2 Platform, (deployment by ITSM2 Lot1) and the phase-out of the CCN/CSI;
  - Support for the operation of the CCN2 Platform providing third level Help Desk including support, consultancy and testing activities, to the ITSM2 contractor (operation by ITSM2 Lot 1);
  - On-site participation in the PSAT activity and in other testing activities performed by the ITSM2 contractor;
  - Acquisition and maintenance of the hardware and COTS software related to all environments<sup>1</sup> of the CCN2 Platform (deployment, operations and further maintenance of hardware and software for the production and testing environments will be assured by ITSM2 which will be provided direct access for CCN2-DEV software and hardware to their suppliers);
  - Provide trainings, workshops, demonstrations, missions and consultancy support to the applications development teams for the CCN2 Platform;
  - Hand-over of the services to DG TAXUD or to any specified third parties on its behalf.
- Developing and supporting the execution of the **migration strategy**<sup>2</sup> for the transition of the services and users from the CCN/CSI to the CCN2 Platform.
- The provision of informatics services ensuring specification and build of **bespoke software development** (evolutions of CCN2 after its initial deployment, extension to new types of external users and services, adaptation to new TAXUD security policies, etc.):
  - Feasibility studies and Business Case;
  - Detailed design and specification;
  - Build and test (up to FAT);
  - Support for the deployment of the software;
  - Support for the operation of the developed bespoke software, providing third level Help Desk including support, consultancy and testing activities, to the ITSM2 contractor, evolutive maintenance of the software (operation by ITSM2 Lot 1);
  - Acquisition and maintenance of the hardware and COTS software related to bespoke software development activities;
  - Technical management of the services provided;
  - Provide trainings, workshops, demonstrations, missions and consultancy for developed bespoke software / services;
  - Hand-over of the services to DG TAXUD or to any specified third parties on its behalf.

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<sup>1</sup> Please refer to section 4.11 for more details on the environments

<sup>2</sup> The execution of the migration strategy will be performed by ITSM2 Lot1 contractor

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- The provision of the **strategic advice** for the evolution of the CCN and CCN2 and related services.
- The provision, maintenance and management of the **infrastructure** required for the contractor's internal needs for CCN/CSI, CCN2 and any other component under its responsibility (e.g. development environment and related tools for testing - unit tests, integration tests, FAT, etc.);
- **Management:**
  - Project, quality and contract Management (contractual and operational);
  - Project Management (development activities);
  - Coordination of activities with the Commission and other CCN2-DEV stakeholders;
  - Running of continuous risk management process in order to eliminate risks that endanger the testing and deployment of CCN related systems/applications/components;
  - Service Level Management;
  - Infrastructure Availability Management linked to the development environment;
  - Trend analysis and Capacity Management linked to the development environment;
  - Contingency Planning linked to the development environment;
  - Participate in meetings, missions, workshops and seminars.

**The above services could be extended if required to meet and serve the operational needs for other European policies, the associated National Administrations and the Commission.**



Security is a vital part of all CCN-related activities and projects and must be taken into account during the development lifecycle of all CCN related projects. CCN/CSI (and, in the future, CCN2 as well) must provide the CCN related applications with a coherent set of generic security mechanisms that will help those applications to meet their own security objectives. Please see also section 4.12 and WP.8.5 for more details on security.

### **1.3 Overview of the ITSM2 activities linked to the CCN2-DEV framework contract**



This paragraph provides a non exhaustive overview of tasks that will be performed by the ITSM2 contractor, but that are linked to the CCN2-DEV contract. This overview is neither exhaustive nor legally binding, it is just provided as additional information and to allow candidates to better understand the services to be delivered. Please also refer to the documents:

- [R371] (ITSM2 Lot1: Technical Specifications – As Is description) and [R372] (ITSM2 Lot1: Technical Specifications – To Be definition) for the complete list of services that will be provided by the ITSM2 Lot1 contractor and

- [R856] (ITSM2 Lot2: Terms of Reference) and [R857] (ITSM2 Lot2: Technical Annex) for the complete list of services that will be performed by the ITSM2 Lot2 contractor

- The ITSM2 Lot1 contractor shall ensure the **validation, testing, deployment and operations of CCN/CSI and its related bespoke software** (and later the CCN2 Platform). Corrective and evolutive maintenance of CCN/CSI and its related bespoke software will be performed by the CCN2-DEV contractor. In this context, the ITSM2 Lot1 contractor will take over the following main services from the incumbent CCN/TC contractor:
  - Maintain and operate all existing and future CCN sites;

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- Continue the ongoing BCP improvement cycle (i.e. regular BCP tests including real life tests with Member States) and improve it so as to ensure a continued and improved IT continuity and BCP preparedness;
- Continue and improve the monitoring of the CCN infrastructure;
- Continue and improve the production and delivery of statistics and audit files;
- Reduce the CCN gateway footprint (not only the physical footprint but above all the administrative burden, the administration duties, etc.) in National Administrations and propose alternative techniques/tools/services to evolve the current CCN gateway into a true zero-administration black-box solution to the National Administrations;
- Operate and to manage the Tivoli management tool. This tool will replace the current "Big Brother" management and monitoring tool. The development and roll-out of the Tivoli management tool is taking place at the time of writing;
- Operate and manage the ACT web oriented application, which is under development at the time of writing. This tool will allow the application owners to easily set up the configuration environment required prior any deployment activities;
- Operate and manage the CCN-MAIL infrastructure which is being redeveloped at the time of writing. The current CCN-MAIL2 distributed infrastructure (i.e. one LCMS mail servers at CCN sites) will be replaced by a central (i.e. at the future ITSM2 Lot1 data centre or Commission data centre) CCN-MAIL3 (See [R356] – CCN Mail 3 Feasibility Study) Microsoft Exchange 2010 mail server;
- Maintain, operate and manage the Service Management Tools (See section 4.10 for more details on the supporting tools).
- The ITSM2 Lot1 contractor will take over the following service from the incumbent ITSM and CCN/TC contract:
  - The CCN/TC specific **Service Management related tools** and, from then on, maintain them under corrective and evolutive maintenance. This excludes the CCN tools related to the development and maintenance of CCN/CSI described (i.e. the IBM Rational Suite and the tools used in the scope of the requirements management and development). (See section 4.10 for more details on the supporting tools);
  - The ITSM2 Lot1 contractor will merge the ITSM and CCN **portal**<sup>3</sup> into a single service portal;
  - The ITSM2 Lot1 contractor will continue the **Synergia** Programme as is and will develop the programme roadmap and vision further over the time. This will result in better ITSM2 services, harmonisation of tools used by the incumbent ITSM and CCN/TC contractors and alignment proposals aimed at achieving the vision (See section 4.9 for more details on the Synergia Programme);
  - The ITSM2 Lot1 contractor will develop and maintain a vision and a **roadmap for ITSM2 Service Management** related tool improvements supporting the evolution of the legacy ITSM tools portfolio towards modern Service Management related tools, providing APIs and plug-ins for automated test tools. Once replaced, the Legacy ITSM and/or CCN/TC Service Management related tools will be decommissioned.
  - The ITSM2 Lot1 contractor will set up and maintain a **Definitive Media Library**<sup>4</sup> with at least the two last versions of all applications - as well as their scripts,

<sup>3</sup> See WP.B.1 and section 4.10 for more details on the project portal and the Work Package descriptions (See section 2.2) for details on which information is to be published in this portal.

<sup>4</sup> At the time of writing this Call for Tenders the Commission is in the migration from ITIL V2 to ITIL V3, we therefore already refer to the term DML although in multiple baseline documents we still use the term DSL.



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installation/operational procedures and documentation, and so on – running in production. CCN/CSI is to be regarded as an application in this case. The 2 last versions of all CCN/CSI components – and all related tools – shall thus be maintained in the Definitive Media Library.

## 1.4 Take Over (WP.2)

The take over activity is normally part of the first Specific Contract to be signed. The CCN2-DEV contractor will take over all specifications, development, maintenance and support activities and their associated artefacts from the Commission or a party nominated by the Commission.

The take over has to be synchronised with the ending of the services of the current CCN/TC contract. The activities that are currently performed by the incumbent CCN/TC contractor will be split into "support and operations" related activities to be taken over by ITSM2 Lot 1 (planned early 2013) and "development and integration" related activities to be taken over by CCN2-DEV (planned during the 2<sup>nd</sup> half of 2014). The CCN2-DEV contractor will thus take over only the development related activities from the incumbent CCN/TC contractor. The take over period is estimated to be 12 months.



In the context of the preparation of the take-over, the incumbent contractor and DG TAXUD will split during the 2<sup>nd</sup> half of 2012 the activities currently performed by the CCN/TC contractor into "support and operations" related activities to be taken over by ITSM2 Lot 1 and "development and integration" related activities to be taken over by CCN2-DEV. These activities will cover mainly the following aspects:

- Split of the **infrastructure** currently used by CCN/TC into 2 separate infrastructure environments one linked to the activities of the ITSM2 Lot1 contractor and one linked to the future activities of the CCN2-DEV contractor;
- Split of the CCN/TC current **organisation** into a "CCN/TC support and operations" organisation and the "CCN-DEV build, maintenance and integration" organisation;
- Feasibility study linked to the take over the CCN/TC SMT and CMDB data into Synergia;
- Setup a **playground system (PGS)** for the ITSM2 Lot1 and CCN2-DEV contractors to enable them to exercise on nearly real-life scenarios;
- The split of the CCN/TC **FQP** (See [R002] - CCN/CSI Framework Quality Plan) and organisation into an operations and a development part;
- Prepare an extensive **hand-over package** for the CCN2-DEV contractor;

The hand-over packages and the playgrounds must be available by the CCN2-DEV take-over period at the latest.

Furthermore, during 2012, DG TAXUD will also execute the **DG TAXUD's Data Centre consolidations project** (See section 7 for more details). The split of the infrastructure of the incumbent CCN/TC contractor and the eventual move of it to the new contractors Data Centres or the new DG TAXUD Data Centre will thus have to be carefully coordinated with DG TAXUD.



The **design and build of the CCN2 platform** is not part of the activities to be taken over from the incumbent contractor. This activity will be launched during the Take Over activities and will be based on the offer and planning provided by the tenderer in his bid.



**SPEED** has been constructed and deployed by the incumbent CCN/TC contractor, and is still monitored and maintained by it. By end 2012 parts of SPEED should be replaced by **SPEED2**, constructed by the **CUSTDEV2** contractor. Please refer to Annex II.A - Terms of Reference, section

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1.1.2 for more details on SPEED2. The take-over cost must thus not take into account the take over of any of the SPEED/SPEED2 components.



At the time of writing of this call for tenders, **CCN Mail3** (See [R356] – CCN Mail 3 Feasibility Study) is being developed by the incumbent contractor. CCN Mail3 will replace **CCN Mail2** and will be deployed directly into the new DG TAXUD Data Centres. In case **CCN Mail3** is in production by the start of the take over of CCN2-DEV, then CCN Mail2 will not have to be handed over to CCN2-DEV. In case **CCN Mail3** would not yet be in production, **CCN Mail2** will be part of the hand-over package for CCN2-DEV.





The contractor must ensure that, by the end of the takeover period at the latest, he will make full use of **Synergia SM and RTC** being part of the Take Over objectives (See section 4.9 for details on Synergia).



The CCN2-DEV contractor is reminded to propose the approach in the bid in order to plan, manage and perform the necessary actions to achieve this objective at his sole responsibility. This will require interaction with the ITSM2 Lot1 contractor.

In view of ensuring the service continuity, absolute priority will be given to start providing the taken-over services on the imposed date and maintaining at least the same quality levels as the incumbent contractor.

The following **strategy** has been set by DG TAXUD as a framework for the Take-over:

-  The tenderer is reminded to describe the take over strategy and high level plan in his bid.
- The move of the CCN/TC development environment into the 2 DG TAXUD data centres, located in Luxembourg, will have to be coordinated with DG TAXUD (if not yet performed before the take over). Please refer to Section 7 for more details on the DG TAXUD Data Centres;
- The CCN2-DEV contractor will have to take-over the CCN-DEV related Framework Quality Plan (FQP) from the incumbent contractor as no initial production of an own FQP is foreseen during the Take-over. Please refer to WP.0.1 for more details on the FQP of the CCN2-DEV framework contract. No CQPs will be used in this Framework Contract;
-  The contractor's team in charge of the CCN2-DEV framework contract must be staffed with the personnel as proposed in the CCN2-DEV tender (see Annex IA – Questionnaire, section 5.1.1 and 5.3.2), **they must be allocated to the activity and remain allocated as of the signature of the first Specific Contract**. Personnel linked to key profiles<sup>5</sup> – when leaving the project - will hand over the acquired knowledge according to the knowledge management strategy outlined in the Take-over Plan;
- The CCN2-DEV contractor Take-over team has to be sufficiently sized and of the highest professional standards to be able to absorb the highly complex TAXUD IT landscape and structure. The Take-over team must be able to start its duties as of the date of signature of the Specific Contract that will include the Take-over duties. Any delay in composing/staffing the team will jeopardise the complete Take-over phase;

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<sup>5</sup> Key profiles mean Strategy Consultant, Project Manager, Service Manager, Security Architect, Quality Manager, Senior System Architect, Senior Infrastructure Architect, as defined in section 4.3.

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- DG TAXUD, via the incumbent contractor, will provide training on the applications, the global architecture, CCN/CSI, and so on. The CCN2-DEV Framework Contract shall ensure that a maximum number of staff (preferably all, but in any case all staff linked to key profiles without exception) will be available to attend these training sessions. The training will be provided with the purpose to "**train the trainer**", so that the persons who followed the trainings can later provide internally the same training sessions within the contractors team;
- The contractor's team will cooperate with DG TAXUD, the incumbent CCN/TC contractor, the ITSM2 contractor, and other third parties nominated by DG TAXUD.

Please also refer to section 2.2, description of WP.2 for more details on the take over.

## 1.5 Hand Over (WP.5)

At the end of the contractual period, the CCN2-DEV contractor will provide the appropriate training and make available the totality of the knowledge acquired during the contract to DG TAXUD, or to any specified third parties on its behalf, in accordance with instructions to be given by DG TAXUD, the whole of the CCN2-DEV services/deliverables, the whole of the live and historical data and information supporting the services provided, the hardware and COTS (including the related maintenance contracts) used by CCN2-DEV but for which the Commission is the owner, the up-to-date version of any software/specifications developed/maintained by CCN2-DEV contractor and for which the Commission is the owner, free of any rights, unless otherwise agreed with the Commission.

Please also refer to section 2.2, description of WP.5 for more details on the hand over.

## 1.6 CCN2-DEV Services and Deliverables

As from the take-over, the CCN2-DEV contractor must be in a position to ensure the continuous provision of the services as defined in section 2.2. More specifically, the CCN2-DEV contractor has to:

- operate and maintain the **CCN/CSI development environment** (including testing: unit, integration and FAT testing etc.) infrastructure (i.e. Hardware, COTS and related maintenance contracts) taken over by the incumbent CCN/TC contractor hosted in TAXUD DC managed by ITSM2 Lot 1 contractor,
- host, operate and maintain the **CCN2 Platform development environment** (including testing: unit, integration and FAT testing etc.). At the later stage of the CCN2 Platform development this infrastructure may be hosted in DG TAXUD DC managed by ITSM2 Lot 1 contractor.
- provide the **COTS ICT infrastructure** products (including the related maintenance contracts) and services required to set up and maintain the hosted infrastructure and telecom connections for the execution of the Framework Contract. The provided assets will be the property of the Commission.
- provide the **COTS ICT infrastructure** products (including the related maintenance contracts) linked to the **production and testing environment** of the CCN2 platform and the related bespoke software.
- handle the **specifications**, development, maintenance and deployment of all systems according to the time-scales set by DG TAXUD, and in line with the Trans-European Reference Manual (See Annex II.A - Terms of reference, section 1.1.2 – figure 1).
- perform **3<sup>rd</sup> line service desk** activities and associated **IT Service Management** activities (incident, problem, change, configuration and release management) including security management related to the CCN2-DEV ICT infrastructure and applications.

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- provide **technical support and consultancy** services to Commission, National Administrations of the Member States, candidate and acceding countries and to the National Administrations of other neighbouring and/or third countries such as, but not limited to, Ukraine, China and Russia.

The CCN2-DEV contractor will place the whole of its service provision under an **internal QC and QA programme, and run a Continuous Service Improvement Programme (CSIP)**. This document provides the detailed specification of the services and deliverables to be provided by the CCN2-DEV contractor.

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## 2 Work Packages, deliverables and planning required

### 2.1 Overview of the Work Packages

The following table describes the work packages covered by the Framework Contract (FWC).

	Work Package
<b>6WP.0</b>	<b>Project Management</b>
WP.0.1	Produce and Maintain the FQP
WP.0.2	N/A
WP.0.3	N/A
WP.0.4	Produce Proposals for Specific Contracts (SC) and Request for Actions (RfA)
WP.0.5	Internal activities: Quality Assurance (QA), Quality Control (QC), Risk Management (RM), Self-Assessment (SA), Internal Audit (IA), Team Organisation and Management
WP.0.5.1	Internal Quality Assurance (QA): Promote Compliance
WP.0.5.2	Internal Quality Control (QC)
WP.0.5.3	Risk Management (RM)
WP.0.5.4	Self Assessment (SA) and Internal Audit (IA): Control Compliance
WP.0.5.5	Internal Team Organisation and Management
WP.0.6	Interaction and Co-ordination with the Commission
WP.0.7	Contract Reporting
WP.0.8	Contract Planning
WP.0.9	Co-operate with the Commission during Quality, Process and Security Audits
WP.0.10	Baselines
WP.0.10.1	Quarterly Batch re-delivery of all deliverables
WP.0.10.2	Yearly delivery of the full baseline
WP.0.11	Benchmarking and Pricing Update Mechanism
WP.0.12	CSIP
WP.0.13	Manage the procurement of necessary products and Services
<b>WP.1</b>	<b>N/A</b>
<b>WP.2</b>	<b>Take Over</b>
WP.2.1	Define the Detailed Take Over Plan
WP.2.2	Take Over Activities and Take Over Report
<b>WP.3</b>	<b>N/A</b>

<sup>6</sup> Any gap in the numbering sequence of WP or DLV is intentional.

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	Work Package
<b>WP.4</b>	N/A
<b>WP.5</b>	<b>Hand Over</b>
WP.5.1	Define the Detailed Hand Over Plan
WP.5.2	Hand Over of All Documentation, Source Code, Processes, Infrastructure and Reports
WP.5.3	Training and Support
WP.5.4	Production of the Hand Over report
WP.5.5	"After handover" support
<b>WP.6</b>	<b>Specifications</b>
WP.6.1	Feasibility Studies or any deliverable linked to inception work
WP.6.2	System Modelling
WP.6.3	Requirements
WP.6.4	Functional Specifications
WP.6.5	Design
WP.6.6	Solution Component Scope Management
WP.6.6.1	Migration Strategy Document (MSD)
WP.6.6.2	Deployment Plan (DP)
WP.6.7	N/A
WP.6.8	Evolutionary Maintenance of all specification related deliverables
WP.6.9	Corrective Maintenance of all specification related deliverables
WP.6.9.1	Corrective Maintenance of the Specifications Which Have Been Taken Over
WP.6.9.2	Corrective Maintenance of the New Specifications
<b>WP.7</b>	<b>Build and Test</b>
WP.7.1	Solution Component Production
WP.7.2	Produce Documentation and Manuals
WP.7.3	Produce Test Specifications
WP.7.3.1	Produce the Master Test Plan (MTP)
WP.7.3.2	Produce the Test Design Specifications (TDS) for FAT, PSAT and SAT
WP.7.3.3	Produce the Test Design Specifications (TDS) for Conformance Testing
WP.7.3.4	Produce the Acceptance Test Plan (ATP) for the Factory Acceptance Testing (FAT)
WP.7.3.5	Produce the Acceptance Test Plan (ATP) for the (Pre-) Site Acceptance Testing (PSAT, SAT)
WP.7.3.6	Produce the Acceptance Test Plan (ATP) for the Qualification Testing (QT)
WP.7.3.7	Produce the Conformance Test Acceptance Test Plan (CTATP) for the Conformance Testing (CT)
WP.7.4	Execute Test Plan
WP.7.4.1	Unit Testing

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	Work Package
WP.7.4.2	Integration Testing
WP.7.4.3	Factory Acceptance Testing (FAT)
WP.7.4.4	Qualification Testing (QT)
WP.7.5	Delivery
WP.7.6	N/A
WP.7.7	N/A
WP.7.8	Evolutionary Maintenance of the Build and Test Software and Documents
WP.7.9	Corrective Maintenance of the Build and Test Software and Documents
WP.7.9.1	Corrective Maintenance of the Build and Test Software and Documents Which Have Been Taken Over (scope WP.2)
WP.7.9.2	Corrective Maintenance of the New Deliverables
<b>WP.8</b>	<b>IT Service Management</b>
WP.8.1	Service Support
WP.8.1.1	N/A
WP.8.1.2	Incident Management
WP.8.1.2.1	Specifications and Software Incidents
WP.8.1.2.2	Service Requests
WP.8.1.3	Problem Management
WP.8.1.4	Configuration Management
WP.8.1.4.1	Produce and maintain of the Specification and Planning of the Evolution of the CCN/CSI and CCN2 Platform Configuration Baseline
WP.8.1.5	Change Management
WP.8.1.5.1	Change Management Process
WP.8.1.5.2	Change Advisory Board (CAB) Meetings
WP.8.1.6	Release Management
WP.8.2	Service Delivery
WP.8.2.1	Service Level Management
WP.8.3	The Business Perspective: Liaison with the NAs, the Contractors and the Commission Services
WP.8.3.1	National Administrations Working Group Meetings and their Related Sub-groups
WP.8.3.1.1	Performance
WP.8.3.1.2	Attendance
WP.8.3.2	Training, Workshop, Demonstration
WP.8.3.2.1	Performance
WP.8.3.2.2	Attendance
WP.8.3.2.3	Hosting Facilities and Infrastructure

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	Work Package
WP.8.3.2.4	Reporting
WP.8.3.3	Missions
WP.8.3.4	Support to the National Administrations and the Commission Services
WP.8.3.5	Technical Meetings with the Commission and/or other 3 <sup>rd</sup> Parties Involved in the Programme or Related Projects
WP.8.3.6	Service Meetings
WP.8.3.7	Delivery and Management of Translations
WP.8.4	Solution Component Management
WP.8.4.1	Deployment of Solution Component
WP.8.4.1.1	Support to PSAT, SAT, Qualification Testing and Running-in Activities
WP.8.4.2	Support to Conformance Testing Activities
WP.8.4.3	Support to Operation of Solution Component
WP.8.4.4	Technical Review of the Deliverables of Other Contractors
WP.8.5	Security Management
WP.8.5.1	Produce and maintain a Security Plan
WP.8.5.2	Integrate Security Requirements
WP.8.6	N/A
WP.8.7	N/A
WP.8.8	Support Outside Working Hours
WP.8.8.1	Extended time coverage – "on call" services for blocking issues
WP.8.8.2	Extended time coverage – ad hoc
<b>WP.9</b>	<b>N/A</b>
<b>WP.10</b>	<b>Other deliverables and services in the scope of the framework contract</b>
<b>WP.A</b>	<b>Hardware and COTS software acquisitions: CCN/CSI and CCN2 Platform and bespoke software - Production and Testing environment</b>
<b>WP.B</b>	<b>ICT Infrastructure Management</b>
WP.B.1	Set up and Maintain the Office Infrastructure
WP.B.2	Set up, Install, Operate and Maintain the IT and Telecom Infrastructure
WP.B.3	Hardware and COTS software acquisitions: CCN2-DEV development environment

Table 1 : WP Overview



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## 2.2 Specifications of the Work Packages

The following table gives a description of the work packages covered by the Framework Contract (FWC).


	Work Package
<sup>7</sup> WP.0	<p><b>Project Management</b></p> <p><i>This work package covers all the activities needed to ensure the project management.</i></p> <p>This work package covers all activities needed to ensure the management of the Framework Contract and of the related Specific Contracts. It mainly relates to the management of the CCN2-DEV contractor's activities, its internal team organisation and the co-ordination with the Commission. This work package also covers the management of all administrative procedures related procurement, accounting and invoicing of all services covered by the Framework Contract.</p>
WP.0.1	<p>Produce and Maintain the FQP</p> <p><i>To produce, deliver and maintain the Framework Quality Plan (FQP), ensuring that activities described in this Technical Annex comply with the TEMPO methodology, the Programme Quality Plans (PQP) of the Customs, EMCS Computerised Project (ECP) and Taxation programmes valid at the FQP construction time.</i></p> <p>The FQP will contain among other topics:</p> <ul style="list-style-type: none"> <li>• a Work Breakdown Structure (WBS) of the activities,</li> <li>• the structure of the overall Monthly Progress Report (MPR) and the Monthly Service Report (MSR); (see section 4.14 for an MPR model),</li> <li>• a description of a Deliverable Tracking Matrix (DTM),</li> <li>• a description of the planning schedule in Gantt presentation,</li> <li>• the overall CCN2-DEV process model (application development management, service support management, infrastructure management, security management, etc.), the internal processes in application for the contract, including team organisation and composition, Quality Assurance and Control procedures, the communication plan, the escalation process and rules,</li> <li>• the CCN2-DEV contact list and organisational chart,</li> <li>• the “interaction model” between Commission and contractor (see section 4.2 for information on the interaction model),</li> <li>• the Continuous Service Improvement Programme (CSIP) including incident, change and risk management on the contractual services,</li> <li>• the generic Operational Level Agreement (OLA) which defines service quality requirements, quality of services, quality targets, objective metrics to measure performance achieved and monitoring means for all services to be provided during the course of the Framework Contract. It includes the generic definition of the SQIs/KPIs which will be commonly re-used across all Specific Contracts (SCs). It can refer to the SLAs of DG TAXUD towards its customers, OLAs between the Commission and its partners and ToC between the National Administrations (NAs) and the Commission. The specific Contractual OLA applicable to</li> </ul>

<sup>7</sup> Any gap in the numbering sequence of WP or DLV is intentional.

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Work Package
<p>each of the Specific Contracts shall be part of the Framework Quality Plan (FQP),</p> <ul style="list-style-type: none"> <li>• the rules and procedures that the contractor will apply to ensure the confidentiality and the security of all the information relevant to the creation and the maintenance of the Framework Contract,</li> <li>• the external processes (aligned with the ITSM2 external processes document and based on all specific interfaces) and including the external reporting measures (e.g. reporting deliverables, meetings schedule, etc. ),</li> </ul> <p>An overall project glossary. This project glossary must also be continuously updated and available on the project portal (See WP.B.1 and section 4.10 for more details on the project portal and the Work Package descriptions (See section 2.2) for details on which information is to be published in this portal.).</p> <p>Some IT Service Management processes can be supported by corresponding policies if relevant. Furthermore the contractor will have to define any specific operations, administration and technical support policies needed in relation to the CCN2 Platform.</p> <p> During take over, the CCN2-DEV contractor will use the <b>FQP of the incumbent contractor</b> and only documents how it will be implemented (including the Contractual OLA) and list the major deviations. This information will be included as annex to the Take-over FAT report. By Q4/2012 the FQP of the incumbent contractor will be split into a CCN/TC-OPS FQP and CCN/TC-DEV FQP. The CCN/TC-OPS FQP will be applicable in the context of the ITSM2 Lot 1 Framework Contract while the CCN/TC-DEV FQP will be applicable to the CCN2-DEV Framework Contract.</p> <p>The CCN2-DEV contractor will need to deliver the Sent for Review version of the FQP 3 months after the take over. No CQPs will be requested during the CCN2-DEV framework contract.</p> <p>The FQP will need revisions, reflecting the evolution of the programme, the quality procedures, the CSIP and the OLA. All changes to the FQP and its related documents must be managed via Change management by the contractor. <b>At each major event, but at least once per year</b>, the FQP will be revised and updated by the CCN2-DEV contractor. FQP and its related documents are subject to a document review involving DG TAXUD and stakeholders nominated by DG TAXUD.</p> <p> At the time of writing of this Call for Tenders, the following internal working procedures exist for the incumbent <b>CCN/TC</b> contractor:</p> <ul style="list-style-type: none"> <li>• Service desk (including Incident and Problem Management) (See [R840] - Working Procedure For Central Service Desk )</li> <li>• Change management (See [R801] - Working Procedure For Change Management )</li> <li>• Configuration management (See [R616] - Working Procedure For Configuration Management )</li> <li>• Release management (See [R617] - Working Procedure For Release Management)</li> <li>• Trainings procedure (See [R802] - Working Procedure For Training Management)</li> <li>• Testing procedure (See [R619] - CCN Working Procedure for Test Management)</li> <li>• Security management (See [R841] - Working Procedure For Security Management )</li> </ul> <p>It must be noted that this list will probably change in the context of the hand over activities ongoing at DG TAXUD to prepare the split of the activities currently performed by the incumbent contractor into "support and operations" related activities to be taken over by ITSM2 Lot 1 and "development and integration" related activities to be taken over by CCN2-DEV.</p> <p><b>Missing documentation</b> related to processes, policies and procedures for all CCN2-DEV processes will be identified, produced and completed during the first year of the Framework Contract and from</p>

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	Work Package
	<p>the first update of the FQP onwards they will be part of the document set to support. From the first update of the FQP, it will also contain all <b>internal working procedures</b>.</p> <p>The FQP and OLA template is available from TEMPO.</p>
WP.0.2	N/A
WP.0.3	N/A
WP.0.4	<p>Produce Proposals for Specific Contracts (SC) and Request for Actions (RfA)</p> <p><i>In the context of demand management<sup>8</sup>, the contractor has to produce proposals on request from the Commission for Specific Contracts (SC) and for Requests for Action (RfA) to provide services and deliverables in the context of this Framework Contract.</i></p> <p>The Commission will request proposals for SCs via the Request for Offer (RFO) form, and proposals for triggers and RfAs via the Evaluation Request (ER) and Request for Estimation (RfE) forms respectively.</p> <p>The quotes must be expressed in quantities of service units, and associated unit prices, with reference to the price schedule of the framework contract and the budget provision.</p> <p>The quality of the SC and RfA proposal process will be monitored by means of the time required to receive an acceptable offer/estimate.</p> <p>Each proposal/offer will go through an internal review cycle (T1/T2/T3) which will be defined by DG TAXUD in the RFO, ER or RfE. The timely reception of an accepted proposal/offer will be measured by a Specific Quality Indicator (SQI09 in particular). This SQI value will contribute to the calculation of the Global Quality Indicator (GQI) value applied on the level of the RfA or SC (refer to section 3.7.1.3 for more information on the definition of SQIs).</p> <p>Once per year, the contractor has to forecast activities in the frame of the preparation of new SC. The timing and level of details to be provided has to be agreed with DG TAXUD.</p> <p> This work package also covers the management of all demands/requests (strategic, operational or day-to-day). All demands/requests needs to be recorded, communicated, analysed, executed, reported and followed up. Moreover demand management matches the requests to available quantities of the Specific Contract and reports on regular basis on the consumption of those quantities. Additional quantities must be ordered by means of the RfE/RfA mechanism allowing an uninterrupted handling of service request.</p>
WP.0.5	<p>Internal activities: Quality Assurance (QA), Quality Control (QC), Risk Management (RM), Self-Assessment (SA), Internal Audit (IA), Team Organisation and Management</p> <p><i>To manage internal activities of the project.</i></p>
WP.0.5.1	<p>Internal Quality Assurance (QA): Promote Compliance</p> <p><i>To check the compliance of the activities and deliverables with the quality objectives, and with the contract standards and procedures.</i></p> <p>Quality inspections will be performed by the contractor’s quality officer(s). The main goal is to check and to promote the compliance of the activities and deliverables with the quality objectives, and with the Contract Standards and Procedures. The contractor also has to ensure the enforcement of the SLA and has to trigger corrective actions in case of deviations.</p> <p>The contractor must ensure that the quality rules and guidelines are fully documented in the FQP and that adequate training is provided to the whole team as to implement the QA</p>

<sup>8</sup> Demand management covers the follow-up of available quantities versus future needs, and the monitoring of orders (from Request for Estimation down to execution and closure of a Request for Action).


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	<p>process within the project.</p> <p>The contractor must also ensure that if quality issues are detected that the necessary corrective measures are taken. The quality officer(s) must provide supervision and guidance to the contractor for the implementation of the quality throughout the whole project.</p> <p>The contractor must keep in mind that TEMPO is the mandatory methodology for all projects of DG TAXUD.</p> <p>The contractor is requested to maintain a list of internal quality assurance meetings and minutes of those internal meetings. This information must be kept available on site and must be provided to the Commission upon request (see WP.0.9).</p>
WP.0.5.2	<p>Internal Quality Control (QC)</p> <p><i>To ensure internal quality review of ALL deliverables and services prior to delivery to the Commission, ensuring that all quality criteria are complied with consistently across all deliverables and services.</i></p> <p>Quality Inspections will be performed by the Internal Quality Control staff of the contractor. The main goal is to check the compliance of all activities and deliverables with the Quality Objectives and with the Contract Standards and Procedures. Furthermore the contractor has to ensure that this Technical Annex (Annex II.B - Technical Annex), the Terms of Reference (Annex II.A - Terms of Reference) and all quality plans are adhered to and consistently applied across all activities.</p> <p>Furthermore, this Work Package covers the effort required too complete the review cycle of deliverables:</p> <ul style="list-style-type: none"> <li>• provide the author's position on technical and quality review comments, given by the Commission and/or any other party involved in the project, on deliverables submitted for review to the Commission,</li> <li>• participate in the review meeting(s) to clarify the author's position on review comments and reach agreement on implementation of the review comments (either in the Commission's premises or by conference call), and implement the review meeting decisions in the relevant deliverable.</li> </ul> <p>All the deliverables outcoming from the QA and QC activities will be stored in the CCN2-DEV document repository and available for DG TAXUD upon request.</p> <p>The contractor is requested to keep all the internal quality inspections on site and to provide them to the Commission upon request (see WP.0.9).</p>
WP.0.5.3	<p>Risk Management (RM)</p> <p>The contractor has to perform the Risk Management for the OLA and report on this to the Commission via the Monthly Progress Report (MPR), including continuous risk analysis and mitigation. Risk management must be integrated into all main project management related activities and meetings and escalated when needed. .</p> <p>The contractor must keep its internal risk analysis records available on request of the Commission.</p> <p>The risk management activities must adhere to the TEMPO Risk Management Technique</p> <p> The risk register must be available to DG TAXUD via a restricted area of a project portal.</p>
WP.0.5.4	<p>Self Assessment (SA) and Internal Audit (IA): Control Compliance</p> <p><i>The contractor has to perform self assessment and internal audits periodically, as a minimum once a year, for all service processes of the contract, report outcome/findings to the Commission and introduce the necessary improvements in line with the proposed Continuous Service Improvement Programme (CSIP) (as described in the FQP) and /or corrective actions.</i></p>



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	<p>The contractor must follow up the implementation of the actions agreed with the Commission and/or those resulting from the quality audit process. Reporting of the progress must be done via the MPR.</p> <p>The self assessment and internal audit activities must ensure that</p> <ul style="list-style-type: none"> <li>• this Technical Annex (Annex II.B - Technical Annex), the FQP and related contractual OLA are adhered to and implemented consistently across all activities,</li> <li>• any corrective measures are taken in case of deviation.</li> </ul> <p>Self assessment will be conducted by the contractor's staff responsible for delivering the activities.</p> <p>Internal audits will be performed by an authorised contractor's Quality Officer, external to the team, to ensure independence and objectivity.</p> <p>The contractor is requested to keep all self assessment and internal audit reports available on site and to provide them to the Commission upon request.</p>
WP.0.5.5	Internal Team Organisation and Management
	<p>The contractor must take all necessary steps so that the internal team needed to provide all required services is organised in such a way that:</p> <ul style="list-style-type: none"> <li>• it functions as one team internally,</li> <li>• layers are created from an hierarchical viewpoint in function of the size of the overall team and the different activities in order to create a correct balance of concentration and distribution of the acquired knowledge. This means that the overall knowledge must be shared, on the one hand, by several persons responsible for sub-domains of the project in order to reduce the risk of dependency on particular staff members but, on the other hand, not too fragmented amongst too many staff members so that the overall picture is lost,</li> <li>• uniformity in terms of methodology and technical implementation is guaranteed.</li> </ul> <p>Please also refer to section 4.3 for more details on the staff profiles.</p> <p> The contractor must recommend and develop a team and project organisation structure based on industry best practices and previous experience which will ensure the successful execution of all services linked to the Framework Contract.</p> <p> The contractor must ensure that the staff will be fully aware of the quality system, the TEMPO quality methodology, the security requirements and the goal, the context, the planning and the political importance of the contract.</p> <p> The contractor must ensure that all team members have the experience requested for their job and that they get the necessary induction and training as needed as soon as they join the team. In order to ensure a correct transfer of knowledge, a handover and takeover period must be organized with the staff leaving and the people replacing them without additional costs for the Commission.</p>
WP.0.6	Interaction and Co-ordination with the Commission
	<p><i>The contractor must put into place an <b>organisational structure</b> that matches the one set up by the Commission, and specify and put into place an “<b>interaction model</b>” as specified in section 4.2. The contractor must nominate a number of Single Points of Contact (SPOCs) for coordinating effort and activities with the SPOCs nominated by the Commission.</i></p> <p>Furthermore, the contractor will assume <b>project management and integration responsibility</b> for the</p>


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	<p>overall design and implementation of new CCN related systems/applications/components (e.g. CCN2 Platform).</p> <p>The contractor has to co-ordinate efforts with the Commission on a monthly and on an ad hoc basis. Also, the contractor must prepare, hold and minute monthly and ad hoc meetings with the Commission in the Commission premises.</p> <p>The availability of the contractor for this co-ordination must be as follows:</p> <ul style="list-style-type: none"> <li>• bilateral monthly meetings (BMM) are planned in advance,</li> <li>• BMM follow-up meeting usually the day after the BMM with the R5/HoU to handle all escalations raised during the BMM,</li> <li>• Multilateral meeting (e.g. all sectors of TAXUD/R4 and TAXUD/R5 and all TAXUD contractors) usually planned monthly in advance but could be called upon request at a mutual agreed date and time;</li> <li>• Steering Committee meetings, typically on a quarterly basis, chaired by the Commission and focusing on the strategic aspects of the contract and risk management,</li> <li>• Ad hoc meetings, called on request, at a mutually agreed date and time.</li> </ul> <p>It must be noted that the abovementioned list of meetings is mainly linked to the overall governance of the Framework Contract but also more operational oriented meetings and ad hoc meetings can take place, which steer the provision of the services. Examples of ad hoc meetings are (non exhaustive list): regular meetings with R5/ISD in the context of contract and supply management, regular meetings with R4/LISO related to security aspects, regular meetings with R5/ISD related to the hosting of some systems/applications/components in the TAXUD DC, etc.</p> <p>The multilateral monthly meeting is organised to synchronise planning and to address any crosscutting activities linked to CCN/CSI (and in the future the CCN2 Platform) with all stakeholders.</p> <p>The contractor will produce the <b>agenda, briefing material and the minutes</b> of these meetings. In case of conflict between the minutes and the contractual documents, the latter takes precedence.</p> <p>On request of DG TAXUD, ad hoc coordination can also be organised with a minimum of 4 working hours notice (See section 4.5). The attendees from CCN2-DEV side depend on the objectives of these meetings.</p> <p>As for the organisation of the meetings, ad hoc meetings could be held not only at DG TAXUD premises, but as well via (Video) Conference calls upon DG TAXUD's agreement.</p> <p> The contractor produces and maintains <b>action lists</b> tracking at least the actions assigned to the CCN2-DEV contractor during meetings. The action lists must reflect the status of the action implementation at any time. The action lists must be available to DG TAXUD via a restricted area of a project portal.</p>
WP.0.7	Contract Reporting
	<p><i>To report to the Commission on a monthly basis via the Monthly Progress Report (MPR), this also includes the Monthly Service Report (MSR).</i></p> <p>The contractor has to report to the Commission on a monthly basis via the <b>Monthly Progress Report (MPR)</b> about:</p> <ul style="list-style-type: none"> <li>• the contractual situation, including the status of the activities (RFAs) and the consumption</li> </ul>

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	<p>status of the ordered services/quantities,</p> <ul style="list-style-type: none"> <li>• progress realised for each Work Package (WP),</li> <li>• deliverables progress, status and deadlines,</li> <li>• issues , problems and risks identified/updated during the reporting period,</li> <li>• resource allocation,</li> <li>• future plans,</li> <li>• list of actions with deadline, status and responsible actor(s),</li> <li>• list of all deliverables to be accepted through the MPR</li> <li>• list and status of change requests and related releases and</li> <li>• quality management achievements, findings and concerns.</li> </ul> <p>Moreover, a series of <b>annexes</b> with detailed information are also delivered with the MPR like (non exhaustive list): Asset inventory, SQI and GQI related data, Quantity and budget status report, DTM, Master Project Plan, Risk register, action lists, etc..</p> <p>Furthermore, the monthly progress report will include the <b>Monthly Service Report (MSR)</b>.</p> <p> The contractor must propose an efficient structure of the MSR so that different blocks can easily be reviewed by the responsible TAXUD teams.</p> <p>The monthly report will also include a Service Level Report which describes all the Service Quality Indicators (SQI) and Key Performance Indicators (KPI) for the month, and the raw data for their computations.</p> <p>In cases where more than one SC run in parallel, the contractor may be requested to provide a bundle of MPRs, that is, one per SC.</p> <p>The FQP will define the structure of the Monthly Progress Report, as well as the content of the overall Monthly Progress Report based on the indicative model given in section 4.14 of this Technical Annex (Annex II.B - Technical Annex).</p> <p>The contractor has also to report to Commission on a <b>weekly basis</b> on the ordered and used quantities of the on-going Specific Contracts (SCs).</p> <p>The DTM linked to the ongoing SCs will be annexed to the MPR and will be delivered to DG TAXUD on a <b>weekly basis</b>.</p> <p>The contractor has also to produce <b>daily, weekly and quarterly</b> reports. The content of these reports will be agreed with TAXUD and documented in the FQP. Main topics can be: blocking issues, call, problem and change reports, CMDB status report, release status report, DTM, quantity consumption reports, CCN(2) Application/Components status reports, etc. ...</p> <p> All contractual information (incl. MPR, MSR, daily/weekly/monthly reports) must be available to DG TAXUD via a restricted area of a project portal.</p>
WP.0.8	Contract Planning
	<p><i>To maintain the planning schedules for ordered and/or forecasted activities in the scope of the contract.</i></p> <p>The contractor is responsible for maintaining the planning schedules for ordered and/or forecasted activities in the scope of the contract. All tasks listed under the detailed WBS of the FQP, the milestones, as well as the task duration are defined and maintained. The planning schedules will be maintained, on the one hand, with the support of a project management tool compatible with that used at the Commission (currently MS Project) and, on the other hand, with the support of a Deliverables Tracking Matrix (DTM) tool as described in the FQP.</p> <p>This planning must also contain</p>

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	<ul style="list-style-type: none"> <li>all <b>planned updates/releases</b> in the scope of WP.6, WP.7, WP8 (e.g. including the deployment support related activities), WP.A and WP.B;</li> <li>the important dates from the <b>other project contributors</b> which are relevant for the CCN2-DEV activities;</li> <li>the planning resulting from the WP.8.1.4.1 service (<b>Production and maintenance of the Specification and Planning of the Evolution of the CCN/CSI and CCN2 Platform Configuration Baseline</b>);</li> <li>the <b>procurement schedule in terms of hardware and software</b> resulting from WP.0.13;</li> <li>the <b>training schedule</b> as defined with TAXUD resulting from WP.8.3.2.</li> </ul> <p>In cases where more than one SC runs in parallel, the contractor may be requested to provide a consolidated <b>Master and Management Plan</b> covering the merged plans of each SC (including actions, deliverables). This planning has a detailed view for the next 12 months ahead and a more high level view for the rest of the Framework Contract. This planning is delivered as annex of the MPR.</p> <p>The contractor has to regularly analyse the above contractual plans including comparisons to the baseline planning. Any deviation, risks and eventual resulting from these analysis activities must be reported to DG TAXUD.</p> <p> The planning schedules will be annexed to the MPR (WP.0.7) and will be delivered to DG TAXUD on a <b>weekly basis</b>. The contractor must also keep the planning available for the Commission via a restricted area of a project portal.</p>
WP.0.9	Co-operate with the Commission during Quality, Process and Security Audits
	<p><i>To co-operate with the Commission or any specified third parties on its behalf on requests for one audit per year (on average) in the contractor's premises.</i></p> <p>It is expected that the Commission will conduct on average one quality process and one security audit per year in the contractor's premises but reserves its right to conduct more. The audit will be conducted by the Commission and/or a third party nominated by the Commission. The number and timing of these audits are determined by the Commission. The Commission will notify the contractor in advance of the timing for the audit.</p> <p>The contractor has to cooperate with and support the audit team during its entire mission.</p> <p>After the audit report is released, the contractor will issue his position regarding the points raised in the audit report. These will be discussed between the Commission and the contractor. Follow-up of the decisions, agreed between both parties, will be implemented via the MPRs, or if necessary, by conducting another verification audit in the contractors' premises.</p> <p>Note that audit reports are kept confidential.</p>
WP.0.10	Baselines
	<i>To re-deliver to Commission all artefacts to an electronic repository of the Commission in general infrastructure.</i>
WP.0.10.1	<i>Quarterly Batch re-delivery of all deliverables</i>
	<p><i>To re-deliver to Commission, at the end of each quarter, all artefacts from the past quarter to an electronic repository of the Commission in general infrastructure.</i></p> <p>Apart from the scheduled delivery of artefacts, the contractor has to re-deliver to DG TAXUD at the end of the quarter a DVD-ROM with the latest version of all deliverables produced during the past quarter.</p>
WP.0.10.2	<i>Yearly delivery of the full baseline</i>
	<i>To re-deliver to Commission, yearly, all artefacts linked to the Framework Contract to an</i>



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	<p><i>electronic repository of the Commission in general infrastructure.</i></p> <p>Apart from the scheduled delivery of artefacts, the contractor has to re-deliver to DG TAXUD once a year also a full baseline, I.e. DVD-ROM with the latest version of all deliverable since the beginning of the framework contract (even if they were not changed yet during the framework contract) as well as all the files that would be needed for a handover (e.g. export of all operational data, list of all contacts, etc.).</p> <p> Besides this yearly delivery of the full baseline DG TAXUD could also request that the same content is once more delivered after it has been anonymized and all security sensitive information is removed.</p>
WP.0.11	<p><b>Benchmarking and Pricing Update Mechanism</b></p> <p><i>To co-operate with the Commission or any specified third parties on its behalf on requests for one benchmark per year (on average) related to the costs of effort quoted by the contractor for its activities.</i></p> <p>The Commission may undertaken a <i>Benchmarking</i> of the levels and the charges of the services and supplies provided under this Framework Contract by comparison with similar services and supplies provided by outsourcing vendors and/or in-house IT service providers and suppliers.</p> <p>The Commission will notify the contractor in advance of the timing for the audit.</p> <p> The tenderers have to be aware of the obligation to provide the possibility of regular benchmarking according to Article 1.1 and 2.10 of Annex X.A - Part III – General Terms and Conditions for Information Technologies Contracts.</p>
WP.0.12	<p><b>CSIP</b></p> <p><i>To define and run a Continuous Service Improvement Process (CSIP) linked to all services of the Framework Contract.</i></p> <p>The contractor has to define and run a Continuous Service Improvement Process (CSIP) so that findings resulting from either WP 0.5.4, WP.0.9 or collected via any other means (e.g. via incidents raised by DG TAXUD on the quality issues linked to the services provided by the contractor, etc. ) are taken into account and improvements are identified, agreed with the Commission, implemented, applied and followed-up.</p> <p>In this context, the contractor must perform yearly a global risk analysis exercise resulting in proposals of improvements to be validated by DG TAXUD. Furthermore, the contractor must propose minimum once a year improvements linked to the coordination with other contractors and/or involved stakeholders. These proposals must be duly documented with a business case and integrated in DLV-0.4-3.</p> <p>These improvements can be linked to the processes as well as the tools used to provide all services linked to the framework contract.</p> <p>The CSIP process covers :</p> <ul style="list-style-type: none"> <li>• The overall CSIP process follow up,</li> <li>• Improvement identification and selection,</li> <li>• The management of the major transformation projects,</li> <li>• The change management of Service Improvement Projects.</li> </ul> <p>CSIP is considered as an inherent function performed by the management of the CCN2-DEV contractor. Implementation is measured by outputs that are directly linked to the improvement of the</p>

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	<p>services.</p> <p>Reporting on CSIP related activities is provided to DG TAXUD on regular intervals (included via WP.0.7).</p> <p>CSIP proposals will be submitted to DG TAXUD for further analysis and comments. DG TAXUD reserves the right to reject implementation proposals. CSIP progress and new proposals need to be documented in the MPR.</p>  <p>The tenderer is reminded to describe the approach to assess and to improve the maturity level of the tasks and services to be provided. The tenderer must propose organisation, staffing, methodology, inputs and outputs for CSIP.</p>
<b>WP.0.13</b>	<b>Manage the procurement of necessary products and services</b>
	<p><i>To manage the administrative process of procurement and maintenance of the necessary products and services related to the specification, build, test, production and support of the CCN/CSI, the CCN2 Platform and related bespoke software.</i></p> <p>This work package covers the following activities:</p> <ul style="list-style-type: none"> <li>• Management of the <b>administrative process</b> of procurement and maintenance of the necessary products and services (mainly IT infrastructure (hardware and software) and telecom services related) for all environments (See section 4.11 for details on the environments),</li> <li>• Maintenance of a detailed <b>inventory</b> of all hardware and software material under contract, with contractual maintenance and insurance status specified delivered to DG TAXUD upon request,</li> <li>• Definition of a <b>schedule</b> with planned needs and procurement progress in terms of hardware and software. This schedule must have a detailed view for the next 12 months and a more high level view for the next 3 years.</li> <li>• The take over of the <b>ongoing maintenance and support agreements</b> for all hardware/software products under maintenance via the incumbent contractor and to ensure transparency and continuity of services.</li> </ul> <p>Assets purchased for different purpose have to fulfil different criteria. These criteria are described in the relevant Work Packages (WP.A, WP.B3). The procurement under this Work Package has to be carried out in a way that ensures that these criteria are met.</p> <p> The contractor manages the process of selecting of the suppliers, the purchasing and maintenance of the required ICT products and licences needed during the Framework Contract. DG TAXUD can however decide to order via the other European Commission contracts instead (if available).</p> <p> All the contractual documents describing the services conditions and the equipment operations and guarantee must be available to DG TAXUD via a restricted area of a project portal. This covers amongst other things (non exhaustive list):</p> <ul style="list-style-type: none"> <li>• On-line product catalogue(s) and licence pricing information ;</li> <li>• Order tracking tool;</li> <li>• Licence inventory information.</li> </ul> <p>The contractor has to build and maintain the <b>procurement schedule</b> relative to the acquisition of new</p>


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	<p>equipment or services and is keeping track of the contractual renewals (maintenance renewal, etc.).</p> <p>This information must be integrated in the overall planning activities of WP.0.8.</p> <p>This work package also covers the <b>hardware decommissioning</b>. Hardware decommissioning must be entrusted to specialised companies in physical destruction of sensitive hardware that deliver trustworthy certificates about the work performed.</p> <p>The detailed inventory and procurement schedule will be annexed to the MPR (see WP.0.7) and must be on-line available to DG TAXUD via a restricted area of a project portal.</p> <p>This work package will have to support <b>all</b> the different environments that will have to be provided for the CCN related IT infrastructure being: Development, Test (all test environments), Training and Production. See section 4.11 for the description of the different environments.</p> <p>The contractor is also in charge of managing the <b>shipping</b> of the necessary equipment/software to the various CCN sites which are located in the Member States and third countries (refer to [R171] - CCN Sites information for the list of CCN sites), the Commission's premises (Brussels/Luxembourg) or TAXUD's contractors premises.</p>
<b>WP.1</b>	<b>N/A</b>
<b>WP.2</b>	<b>Take Over</b>
	<p><i>To take over all infrastructure items (HW and SW), source code, documentation, processes and reports specified under WP 2.1 from the Commission or a party nominated by the Commission.</i></p> <p>The contractor will take over all activities, infrastructure, source code, documentations, processes and reports specified under WP 2.1 from the Commission or a party nominated by the Commission.</p> <p>The take-over has to be synchronised with the ending of the services of the incumbent contractor. <b>Please refer to section 1.4 for more details on the take over.</b></p> <p>The <b>key objectives</b> of the take-over are to:</p> <ul style="list-style-type: none"> <li>• achieve a smooth migration without risk of services/business disruption while controlling duration regardless of the situation in which the service, systems or applications will be at the time of Take-over,</li> <li>• establish communication channels working efficiently between the contractor's team and the Commission teams for all involved systems and applications,</li> <li>• ensure that proper coordination and collaboration are put into place with the other involved stakeholders (e.g. other contractors, other Commission internal services). If needed, meetings will be organised to meet the key actors of other entities and to confirm the coordination processes,</li> <li>• formalise the transfer of responsibility from the previous contractor/organisation to the new contractor and define a clear and up to date reference baseline on the status of the specifications, software, related documentation and infrastructure,</li> <li>• be ready to deliver all required services in a smooth and transparent way with the guarantee of at least the same quality level,</li> <li>• take over the security procedures and enforce them within the team,</li> <li>• ensure that by the end of the takeover period at the latest, the contractor will make full use of Synergia SM and RTC (See section 4.9 for details on Synergia).</li> </ul> <p>The contractor will <b>take over</b>:</p> <ul style="list-style-type: none"> <li>• the IT equipment (hardware and software) linked to the "development and integration" activities from the incumbent contractor. This equipment is the property of the Commission and is put at the disposal of the new contractor at no procurement cost. The moving of this</li> </ul>

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<p>equipment to the CCN2-DEV's data centre or to the Commission's Data Centres located in Luxembourg (See Chapter 7 on the DG TAXUD Data Centre for details).</p> <ul style="list-style-type: none"> <li>• all CCN/CSI systems and applications and the related bespoke software. Note that this includes as well products like Tivoli phase III, CCN Mail III, SIAP, etc. as defined in the CCN Inventory [R098],</li> <li>• all CCN2 Platform related documentation,</li> <li>• all tools ("executable" with source code) and components related to applications and electronically provided services, including development, test environment and maintenance of the test data sets as described in the bid,</li> <li>• all items of the specifications and documentation (including e.g. existing training material),</li> <li>• all processes, working procedures, policies and reports available in the baseline delivered as Annex XI - Baseline to the Tendering Specifications,</li> <li>• items to report on, that document or describe the services, including the related data repository (history, master data, etc.).</li> <li>• items that were produced throughout the hand-over by the incumbent contractor,</li> <li>• list of known defects (on documents or software (See [R859] for an overview of defects at the time of writing this CfT)) at the time of the take-over; the CCN2-DEV contractor will have to fix these known defects as part of WP.6.9 or WP.7.9 - "corrective maintenance".</li> </ul> <p>The contractor will have the <b>responsibility</b> to.</p> <ul style="list-style-type: none"> <li>• re-assess the status of the baseline to be taken over at the time of the take over to ensure that all deviations between the baseline at the time of the preparation of the Call for Tenders and the start of the take over are taken into account,</li> <li>• produce and deliver the detailed take-over plan (including the related test plan) in line with the situation in which the systems and applications will be at that time,</li> <li>• assess and acquire the knowledge of specifications, software and related documentation for all involved systems and applications,</li> <li>• proceed to the take-over according to the agreed plan,</li> <li>• setup all the internal processes and tools to deliver all services of the contract,</li> <li>• produce and deliver the take-over report.</li> </ul> <p>The take-over activities must contribute to optimising the definition of the quality framework of the contract.</p> <p>The take-over must not affect the quality of service delivered, regardless of the situation in which the system or application will be at the time. The contractor is responsible for taking all the steps required to achieve a rapid induction and a seamless take-over of the activities in order to meet the planning requirements of the Commission.</p> <p>During the take-over period, the Commission will <b>provide</b> the following, at no cost to the CCN2-DEV contractor:</p> <ul style="list-style-type: none"> <li>• access to all relevant deliverables,</li> <li>• access to the playground environment (see "PGS" in section 1.4),</li> <li>• whenever deemed necessary for the objective of the take-over, invitations to participate in Member State committee meetings and relevant technical meetings with other contractors</li> </ul>



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	<p>who may be involved,</p> <ul style="list-style-type: none"> <li>• training on all aspects of CCN/CSI and introductions to the CCN2 Platform, and</li> <li>• support to the “shadowing” of the contractor’s activities.</li> </ul> <p> The training will be provided with the purpose to "<b>train the trainer</b>", so that the persons who followed the trainings can later provide internally the same training sessions within the contractors team. I.e. TAXUD finances the take-over training only <u>once</u> and it is then up to the contractor to keep the knowledge internally.</p> <p>The following (non exhaustive) list of <b>take over success criteria</b> will be used to measure the readiness of the CCN-DEV2 contractor to start the services linked to this Framework Contract:</p> <ol style="list-style-type: none"> <li>1. The contractors team is available, organised, trained and knowledge is kept and shared;</li> <li>2. The contract organization (cfr. All WP.0 sub activities) is in place and functioning including all reporting, the project portal, the SQI/GQI reporting, etc.;</li> <li>3. The development environment of CCN/CSI is available including all supporting tools needed;</li> <li>4. The contractor has gained profound knowledge of all services, specifications and software to be taken over;</li> <li>5. Supporting and service management tools are available and have been adapted (when needed) to provide automated services and the contractors team is ready to use them (e.g. automated test tools, SMT, DML etc.);</li> <li>6. The contractor can demonstrate that he is ready to take over the services e.g.: <ul style="list-style-type: none"> <li>• Ready to provide corrective and evolutive maintenance activities for the taken-over CCN/CSI systems and applications and related bespoke software,</li> <li>• Ready to deliver 3<sup>rd</sup> level support on all specifications, software and related documentation which have been taken over,</li> </ul> </li> </ol> <p>The following <b>tests</b> (non exhaustive list) will be performed to <b>validate these success criteria</b>:</p> <ul style="list-style-type: none"> <li>• Produce all contractual reporting and make it available via the project portal;</li> <li>• Correct handling of demands from DG TAXUD;</li> <li>• Correct handling of 3<sup>rd</sup> level calls assigned by ITSM2 Lot 1;</li> <li>• Correct handling of Service calls directly assigned to CCN2-DEV by DG TAXUD;</li> <li>• Correct handling of RFI/RFS calls;</li> <li>• Correct coordination and performance of Root Cause Analysis;</li> <li>• Correct handling of change requests (evolutive maintenance);</li> <li>• Perform corrective maintenance (e.g. bug fixing) for the taken over applications/components within the agreed timeframe;</li> <li>• Successful installation of the application/component on the development environment hosted by CCN2-DEV;</li> <li>• Performance of testing up to FAT of new releases using available CCN/CSI test tools;</li> <li>• Correct packaging of new releases including it's related operational documentation and deliver to DG TAXUD as per procedure and upload the updated version in the DML;</li> <li>• Produce an updated version of the specification document and deliver to DG TAXUD as per</li> </ul>

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	<p>procedure and upload the updated version in the DML;</p> <ul style="list-style-type: none"> <li>• Provide on-site testing (e.g. SAT and CT) support to ITSM2;</li> <li>• Provide off-site deployment support ITSM2 Lot1;</li> <li>• Provide consultancy service to DG TAXUD;</li> <li>• Upload new release in DML;</li> <li>• Provide service delivery services for build and integration environment;</li> <li>• Show correlation between all service support services and new release linked to corrective maintenance;</li> </ul>
WP.2.1	<p>Define the Detailed Take Over Plan</p> <p><i>To define the detailed Take Over plan which will be precise in terms of resources, schedule, deliverables and acceptance.</i></p> <p>In accordance with his offer, the contractor will have to propose the detailed take-over plan which will be precise in terms of resources, schedule, deliverables and acceptance.</p> <p>The <b>Take-over Plan</b> ( See DLV-2.1-1) must be aligned with the Hand-over plan of the incumbent contractors and must include at least the following points:</p> <ul style="list-style-type: none"> <li>• Take-over methodology, including a change management approach;</li> <li>• Inventory of items in the scope of the Take-over;</li> <li>• Identification of all activities in the scope of the Take-over;</li> <li>• Detailed planning of the activities;</li> <li>• FAT details including test plan, test scenarios and take-over success criteria;</li> <li>• Knowledge transfer and management approach, activities, artefacts and planning;</li> <li>• Risk management approach, activities, artefacts and planning. Minimum required are a risk analysis with mitigation and a fallback plan;</li> <li>• Detailed planning of activities towards the stakeholders of the project (DG TAXUD, National Administrations, other partners, contractors, etc.).</li> </ul> <p>The take-over plan has to be based on the following information:</p> <ul style="list-style-type: none"> <li>• The split of the activities, infrastructure, organisation and documentation of the incumbent contractor into a "support and operations"-related part and a "development and integration"-related part, will be ready before the take over.</li> <li>• The current contractor will supply the required services until the end of his contract, using the existing infrastructure.</li> <li>• The take-over activities have to be planned in steps allowing a phased validation of the readiness of the contractor in order to reduce the risk of interruptions.</li> </ul> <p>The take-over plan must guarantee the smooth transition of all development, maintenance and 3<sup>rd</sup> level support activities without any discontinuity of services.</p> <p>The take-over will be planned according to the end-date of the existing contract. The take over plan must be aligned with the hand over plan of the incumbent contractor.</p> <p>At the end of the take-over phase, all responsibility will have completely switched to the new contractor.</p>
WP.2.2	Take Over Activities and Take Over Report

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	<p><i>To take over all the activities and reporting related to the Framework Contract, either in production or in development.</i></p> <p>The take over will be accepted by a FAT comprising amongst others, on-site interviews and checks by the Commission and its QA Contractor to check that he contractor can provide all the required services. The test plan linked to this FAT will have to be provided by the contractor and approved by DG TAXUD before the FAT is performed.</p> <p> During take over, the CCN2-DEV contractor will use the FQP of the incumbent contractor and only documents how it will be implemented and list the major deviations. This information will be included as annex to the Take over FAT report. Please also refer to WP.0.1 for more details on the FQP.</p> <p>The outcome of the take over and its related FAT will be documented in a FAT report in order to show that the new contractor is ready to take over the services from the incumbent contractor.</p>
<b>WP.3</b>	<b>N/A</b>
<b>WP.4</b>	<b>N/A</b>
<b>WP.5</b>	<b>Hand Over</b>
	<p><i>To hand over part or whole of its activities to the Commission, or any specified third parties on its behalf, at the end of the contractor’s framework contract, or earlier on request from the Commission.</i></p> <p>The Commission may request the contractor to take specific steps to hand over part or whole of its activities to the Commission, or to a third party, at the end of the contractors’ framework contract, or earlier on request from the Commission.</p> <p>If requested by DG TAXUD, CCN2-DEV will be responsible for the physical move of the IT infrastructure to the DG TAXUD Data Centres, the new contractor, or to any third party nominated by the Commission.</p> <p><b>Please refer to section 1.5 for more details on the hand over.</b></p>
WP.5.1	Define the Detailed Hand Over Plan
	<p><i>To define the detailed Hand Over plan which will be precise in terms of resources, schedule, deliverables and acceptance.</i></p> <p>The contractor has to prepare the plan for Hand Over.</p>
WP.5.2	Hand Over of All Documentation, Source Code, Processes, Infrastructure and Reports
	<p><i>To hand over of all documentation, source code, processes, reports and infrastructure procured under the contract, and produced during the lifecycle of the project to the Commission or a party nominated by it.</i></p> <p>Hand-over of all documentation, source code, reports and infrastructure procured under the contract, to the Commission (or a party nominated by it.).</p> <p> The contractor will have to ensure (besides the deliverables via WP.0.10) that all security sensible information (like logins, pwds, IP addresses, etc.) and personal data (like personal names, phones, company names, etc.) is removed from all deliverables and source code before the hand-over.</p>
WP.5.3	Training and Support
	<p><i>To provide training and support to the “shadowing” of the contractor’s activities by the third party (nominated by the Commission).</i></p> <p>Provision of training and support to a third party. Support includes support to the “shadowing” of the</p>

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	contractor's activities by the third party, on request and for the duration of the applicable phase.
WP.5.4	<p>Production of the Hand Over report</p> <p><i>To produce the detailed Hand Over report which will document all aspects linked to the Hand over activities. The structure must be in line with the one of the hand over plan.</i></p> <p>The contractor has to prepare the report for Hand-Over.</p>
WP.5.5	<p>"After handover" support</p> <p><i>Following the agreed handover plan the contractor must provide an "after care" support service as from the successful handover/takeover. The scope of that activity will be defined as part of the Handover plan.</i></p>
<b>WP.6</b>	<p><b>Specifications</b></p> <p><i>To cover the activities undertaken to produce and maintain the specifications for CCN/CSI, the CCN2 Platform and related bespoke software, its services and supporting tools.</i></p> <p>This work package covers the activities undertaken to produce and maintain the specifications for CCN/CSI, the CCN2 Platform and related bespoke software, its services and supporting tools.</p> <p>The work package covers in general terms:</p> <ul style="list-style-type: none"> <li>• the production of Feasibility Studies or any deliverable linked to inception work,</li> <li>• the production of CCN related IT architecture Models,</li> <li>• the production of CCN related system/application/component requirements (covering as well functional as non functional requirements like availability, security, ...),</li> <li>• the production of CCN related system/application/component functional specifications,</li> <li>• the production of CCN related system/application/component technical/design specifications,</li> <li>• the maintenance of all CCN related specifications,</li> <li>• the provision of support linked to the specifications to the National Administrations and CCs IT responsible persons,.</li> </ul> <p>The production and maintenance of specifications can be supported by a specification quality system and a dedicated specification infrastructure (e.g. BPM suite).</p> <p>The specifications must be placed under strict Change and Configuration Management in order to support their iterative, incremental production and their further maintenance.</p> <p>Maintenance can be of the following nature:</p> <ul style="list-style-type: none"> <li>• <b>Evolutive maintenance</b> will always be triggered on request by the Commission,</li> <li>• <b>Corrective maintenance</b> is triggered by incidents resulting in error recording and subsequent correction. The incident can be initiated by the service desk (managed by the IT Service Management contract) or the Central Project Team. The contractor is encouraged within this task to apply preventive maintenance in order to limit the possibility of further errors.</li> </ul> <p>All new specifications are produced and maintained in EN. Some of them might need to be translated using WP.8.3.7.</p> <p>It is the contractor's responsibility to ensure consistency throughout all specifications related documents. All specifications related deliverables have to comply with TEMPO.</p> <p>Security is a vital part of the project and must be taken into account during the production of all specifications. Similarly, the specifications must also take into account the business continuity (contingency) and disaster recovery.</p>



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	All meetings held by the CCN2-DEV contractor with the Commission for the purpose of delivering WP.6 deliverables are considered as part of the delivery work.
WP.6.1	<p>Feasibility Studies or any deliverable linked to inception work</p> <p><i>To produce feasibility studies which cover various requests by the Commission such as proof of concepts, technical business cases, impact assessments, technical solutions, prototypes, etc.</i></p> <p>This work package covers the production of feasibility studies or any deliverable linked to inception work. This results in the provision of strategic advice for the technology direction and long term vision of CCN/CSI, the CCN2 Platform and related bespoke software and related services.</p> <p>The purpose of these studies is to perform technical exploration (research &amp; development) activity that will, validate architectural and technology solution, changes that could, eventually, be integrated into CCN/CSI or the CCN2 Platform or be-spoke services, to improve the overall functionalities ad quality of services offered. These studies will mainly propose high-level solutions and evaluate the technical feasibility of these solutions.</p> <p>The feasibility study document can cover various items following the request of the Commission. Some examples of these are (non exhaustive list)::</p> <ul style="list-style-type: none"> <li>• a problem statement, high-level requirements,</li> <li>• impact assessment covering impact analysis on other related systems/components,</li> <li>• description of technical solutions,</li> <li>• prototypes,</li> <li>• Advise on the implementation of new value added applications running on top of the CCN/CSI and/or CCN2 Platform,</li> <li>• Advise on the suitability of implementing additional software components as part of the CCN/CSI and/or CCN2 Platform,</li> <li>• Assess the advantages and disadvantages of each option so they can be ranked,</li> <li>• cost and cost/benefit analysis,</li> <li>• resources and planning aspects.</li> </ul> <p>A feasibility study aims at giving enough information to decision-makers to enable them to decide on the activation of subsequent development phases for a given system or application.</p>
WP.6.2	<p>System Modelling</p> <p><i>To conceptualise and construct solution components.</i></p> <p>This work package covers the production of <b>architectural solutions</b> of CCN related systems/applications/components. The solutions could be presented in different types of architecture models: structural view, logical view, physical view, conceptual/development view, process view, execution view, etc.</p> <p>These IT systems models (architecture) must also include the interfaces with the other systems (internal as well as external) and must be compliant with DG TAXUD's enterprise architecture. This system modelling phase consists in:</p> <ul style="list-style-type: none"> <li>• Defining the functions/processes that are implemented in the solution components,</li> <li>• Defining the data exchanges and/or data conversions with other sub-systems,</li> <li>• Decomposing the sub-systems into independent modules,</li> <li>• Defining the sub-system integrations test strategy.</li> </ul> <p>This work package covers also the detailed <b>integration strategies</b> between new CCN components</p>

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WP.6.3	<p>and the legacy ones, e.g.: integration strategy between the CCN2 Platform and the CCN/CSI Platform.</p> <p>Currently DG TAXUD uses Business Process Modelling Notation (<b>BPMN</b>) as the graphical syntax notation. The main tool supporting this is <b>ARIS</b>.</p> <p>The model can be complemented with an animation implementation in order to clarify the timing and condition elements of the model. This animation will be driven by scenarios and can be used for validation and training purposes.</p> <p>Requirements</p>
WP.6.4	<p><i>To determine in detail the expectations in terms of the user or stakeholder, functional and non-functional requirements.</i></p> <p>This work package covers the production and support of requirements.</p> <p>Requirement specifications determine in detail the expectations in terms of:</p> <ul style="list-style-type: none"> <li>• The user or stakeholder,</li> <li>• Functional requirements,</li> <li>• Non-functional requirements such as operational requirements (maintainability, capacity, monitoring, availability, statistics, etc.), technical requirements (architecture, performance, reliability, etc.), testing requirements, training requirements, security requirements, infrastructure requirements, etc.</li> </ul> <p>Functional Specifications</p>
WP.6.5	<p><i>This work package covers the production of functional specifications.</i></p> <p>The functional specifications express <b>what</b> a system, application or component has to implement to satisfy the requirements for a given system or application in compliance with the System Model.</p> <p>The specifications must take into account the functional and non-functional requirements and if requested also the management tools (like monitoring, reporting, statistics, etc.).</p> <p>Functional specifications contain also the benefits linked to the introduction of the new CCN system/application/component including the cost reduction from retiring the equivalent legacy system/application/component.</p> <p>Design</p>
WP.6.6	<p><i>This work package covers the various activities related to the technical design of a solution component.</i></p> <p>This work package covers the various activities related to the technical design of a system, application or component. Design specifications define in detail <b>how</b> the functional specifications will be implemented and consist in general terms of technical documents defining all implementation specifications.</p> <p>Note that all documents linked to the specifications of a system, application or component need to be consolidated into a single set of documents and across this set consistency must be guaranteed in terms of design, architecture and products.</p> <p>The design must also take into account the non-functional requirements such as availability, capacity, continuity, infrastructure, security, etc.</p> <p>The <b>Infrastructure Requirements Document</b> covers the Hardware and COTS requirements for all environments needed to build, test and deploy into production of any CCN related systems/application/component.</p> <p>Solution Component Scope Management</p>

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	<i>To manage the functional and technical scope of the concerned solution component and its deployment.</i>
WP.6.6.1	Migration Strategy Document (MSD)
	<p>This work package covers the production of the migration strategy document, based on the applicable specifications documents.</p> <p>The Migration Strategy document defines the strategy, approach and related migration scenarios and the planning linked to the system and data migration of any CCN related system/application/component. It covers as well all local as centrally involved components and/or data for all involved parties, along with any restriction.</p> <p>One of the primary goals to consider during a migration is to minimize the impact on the involved stakeholders.</p> <p>The migration strategy must clearly indicate:</p> <ul style="list-style-type: none"> <li>How the proposed strategy will facilitate a smooth transition (e.g. from CCN/CSI to the CCN2 Platform);</li> <li>How risk will be minimized;</li> <li>How the impact on the member states and the Commission and the current applications will be minimized;</li> <li>How the data migration will be executed (if applicable) and its related checks to ensure the correct execution;</li> </ul> <p>The detailed timeline for the migration and to eliminate the use of the corresponding legacy CCN related systems/applications/components (and the cost reduction that this will entail).</p>
WP.6.6.2	Deployment Plan (DP)
	<p><i>This work package covers the production of the Solution Component Deployment Plan document.</i></p> <p>The purpose of the Solution Component Deployment Plan is to specify and plan the deployment of a specific component (central as well as local) and the joining of participating National Administrations of Member States or Candidate or Acceding Countries, in line with the applicable design specifications and in alignment with the applicable functional specifications. To achieve this, the DP provides all Milestones<sup>9</sup> that need to be met, as well as their underlying tasks.</p>
WP.6.7	N/A
WP.6.8	Evolutionary Maintenance of all specification related deliverables
	<p><i>To cover the maintenance of the specification related deliverables of the solution components.</i></p> <p>The evolutionary maintenance covers the treatment of change requests made by the Commission related to all specification deliverables of the solution components.</p> <p>It could also result in updates needed to the CCN related security documents like security policy, Disaster Recovery Plan, Contingency plans, which are maintained by the ITSM2 Lot1 contractor. If requested by DG TAXUD, the contractor will have to contribute in these activities.</p> <p>The versioning of the specifications/documentation must be linked to the related source code in such a way that the specifications/documentation is always updated whenever the source code is.</p>

<sup>9</sup> The dates agreed in common with DG TAXUD, the Member States or Candidate or Acceding Countries concerning start of operations of a specific system phase.

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WP.6.9	Corrective Maintenance of all specification related deliverables
	<p><i>To ensure the integrity of the specification related deliverables in its whole, and reflect consistently the change brought by the corrections to impacted specifications.</i></p> <p>This WP includes specific activities covering pre-emptive monitoring of the quality of the specifications performed by the CCN2-DEV contractor on a regular basis as documented in the FQP.</p> <p>It could also result in updates needed to the CCN related security documents like security policy, Disaster Recovery Plan, Contingency plans, which are maintained by the ITSM2 Lot1 contractor. If requested by DG TAXUD, the contractor will have to contribute in these activities.</p> <p>The versioning of the specifications/documentation must be linked to the related source code in such a way that the specifications/documentation is always updated whenever the source code is.</p>
WP.6.9.1	Corrective Maintenance of the Specifications Which Have Been Taken Over
	<p><i>The corrective maintenance covers the correction and resolution of the recorded errors of all specifications which have been taken over.</i></p> <p>The corrective maintenance covers the correction of all specifications necessary for the resolution of calls. It must ensure the integrity of the specification in its whole, and reflect consistently the change brought by the corrections to impacted specifications. It will also reflect consistently the change brought by corrections to solution components.</p> <p>The Quality of Service to be maintained for corrective maintenance will be specified in the OLA.</p>
WP.6.9.2	Corrective Maintenance of the New Specifications
	<p><i>The corrective maintenance covers the correction and resolution of the recorded errors of all new specifications.</i></p> <p>The corrective maintenance covers the correction of all specifications necessary for the resolution of calls. It must ensure the integrity of the specification in its whole, and reflect consistently the change brought by the corrections to impacted specifications. It will also reflect consistently the change brought by corrections to solution components.</p> <p>The quality of service to be maintained for corrective maintenance of the new specifications will be specified in the OLA.</p>
<b>WP.7</b>	<b>Build and Test</b>
	<p><i>To provide, test, maintain and deliver solution components (prototypes / applications / services / software components, etc.).</i></p> <p>The contractor will provide deliverables and services to build CCN/CSI systems/applications/components, the CCN2 Platform and related bespoke software, its services and supporting tools in compliance with the TEMPO methodology. Furthermore it will have to provide deliverables and services to support the testing lifecycle these CCN related applications.</p> <p>The main objectives of this work package are:</p> <ul style="list-style-type: none"> <li>• Develop the solution components,</li> <li>• Perform testing (up to FAT testing including performance and stress tests),</li> <li>• Develop all necessary supporting material (ex. installation manuals, administration manuals, etc),</li> <li>• Bring the solution component to a state of readiness in which the development contractor has confidence that the system meets all requirements and that it can be handed over to the operations contractor for deployment,</li> <li>• The assembling and packaging of a software release together with the corresponding release</li> </ul>

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	<p>note and operations documentation, and</p> <p>One of the contractor's main responsibilities will be to ensure consistency, security and interoperability throughout all CCN/CSI and CCN2 related systems/applications/components and related bespoke software and supporting tools and in particular ensuring technical architecture and design harmonisation.</p> <p>The acceptance of the software consists of FAT, PSAT and SAT activities as described in TEMPO, the PQP or FQP. The development activities are considered to reach an end with the successful completion of the corresponding SAT.</p> <p>As for the specifications, all items produced under this work package must be placed under strict change and configuration management in order to support their iterative, incremental production and their future maintenance.</p> <p>Maintenance can be of the following nature:</p> <ul style="list-style-type: none"> <li>• <b>Evolutionary maintenance</b> will always be triggered by request from the Commission. Note that evolutionary changes can be triggered as well by business as technological changes.</li> <li>• <b>Corrective maintenance</b> is triggered by incidents resulting in error recording and subsequent correction. The incident can be initiated by the service desk (managed by the IT service management contractor) or DG TAXUD.</li> </ul> <p>The evolution management service also includes the following activities:</p> <ul style="list-style-type: none"> <li>• To evaluate the identified business needs and propose corresponding functional and technical requirement in the form of a change request;</li> <li>• To analyse the evolution request and its impact on the system;</li> <li>• To implement the solution following the agreement by the Programme Committees.</li> </ul> <p>Minutes of the meetings held in the context of testing activities will be added as annex for the corresponding test reports.</p> <p>The document deliverables and software parts which have linguistic dependencies are produced and maintained in English language.</p> <p>Security is a vital part of the project and must be taken into account during the development and maintenance of all CCN related systems, applications and components. Similarly the development and testing must also take into account the business continuity (contingency) and disaster recovery.</p> <p>All meetings held by the CCN2-DEV contractor with the Commission for the purpose of delivering WP.7 deliverables are considered as part of the delivery work.</p>
WP.7.1	Solution Component Production
	<p><i>To produce and document the solution</i></p> <p>This work package covers production and documentation of components linked to CCN/CSI, the CCN2 Platform or any related bespoke software. Note that the production of components will not always only imply traditional development, but may often mainly be composed of the assembling and configuration of different COTS components and/or some customization of extensions.</p> <p>Development of CCN systems/applications/components must also take into account the development of interfaces to legacy CCN components using best practices tools and techniques that are consistent with TAXUD architecture and development standards.</p> <p>The development team must also support the testing team in analyzing the test results, tracking and resolving issues detected during the tests.</p>
WP.7.2	Produce Documentation and Manuals
	<i>To produce the necessary documentation, training material and operation and supporting manuals of</i>

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	<p><i>the solution component.</i></p> <p>This work package consists in producing material facilitating the use of the software from the viewpoint of (without being exhaustive):</p> <ul style="list-style-type: none"> <li>• the user: user guides and on-line help text facilities,</li> <li>• developer,</li> <li>• operations: administrator and operator guidelines, installation manual, etc..</li> </ul>
WP.7.3	Produce Test Specifications
	<p>To produce the <b>testing strategy, test specifications</b> including <b>the test scenarios</b> in order to come to the best possible result in terms of software quality.</p> <p>It must be noted that the test plans must cover as well functional as non functional tests (such as security/vulnerability testing, load/performance testing, stress testing, etc.). Special attention must be given to performance and stress tests that must be documented in all applicable test plans and executed on an environment as close as possible to the production environment.</p> <p>Whenever applicable end to end tests and integration tests to confirm smooth integration with legacy systems must be defined as well.</p>
WP.7.3.1	Produce the Master Test Plan (MTP)
	<p>The MTP precedes all other test plans and it provides a global overview of the test approach that has to be used for the entire application. It provides an understanding of the overall test coverage/scope, approach/strategy, planning, environments and resourcing for all phases of testing the application.</p> <p>This is applicable to major changes, updates or upgrades to existing system/application/component or to new system/application/component and is to be produced before the design phase.</p>
WP.7.3.2	Produce the Test Design Specifications (TDS) for FAT, PSAT and SAT
	<p><i>To produce the test scenario, test case, test conditions, expected results as well as test pass criteria for the FAT, PSAT and SAT.</i></p> <p>Depending on the system/application/component the content of the TDS can vary. In all cases its first iteration must be created during the functional specifications and further completed during the design phase.</p> <p>The TDS must enable the test team to test the functional and non-functional aspects of the application. The contractor can be asked to use <b>test tools</b> which can automate the execution part of the TDS.</p> <p>The TDS is composed of:</p> <ul style="list-style-type: none"> <li>• Functional / Non-functional Test Scenarios</li> <li>• Performance Test Scenarios</li> <li>• System-to-System Test Description</li> <li>• User Interface Test Description</li> <li>• Performance/ Load /Stress Test Plan</li> <li>• Security / Vulnerability Test Scenarios</li> </ul>
WP.7.3.3	Produce the Test Design Specifications (TDS) for Conformance Testing
	<p><i>To produce the test conditions, expected results as well as test pass criteria for the conformance testing.</i></p> <p>Depending on the system and application the contents of the TDS can vary. In all cases its</p>

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	<p>first iteration must be created during the functional specifications and further completed during the design phase.</p> <p>The TDS must enable the Commission, the Member States and/or Candidate/Acceding Countries and 3<sup>rd</sup> countries to test the functional and non-functional aspects of a trans-European system or of interfaces to a trans-European system.</p> <p>A specific test application must be used if possible be to automate the execution part of the TDS.</p>
WP.7.3.4	<p>Produce the Acceptance Test Plan (ATP) for the Factory Acceptance Testing (FAT)</p> <p><i>To produce the procedural manual to be used for testing (organisational aspects of the testing, test scenario description, etc.).</i></p> <p>The Acceptance Test Plan is the procedural manual to be used for testing; it details the specific approach and scope per test phase. It focuses on the practical steps to be taken by all parties involved. It describes the organisational aspects of the testing and includes a description of the test scenarios to be executed during the FAT.</p>
WP.7.3.5	<p>Produce the Acceptance Test Plan (ATP) for the (Pre-)Site Acceptance Testing (PSAT, SAT)</p> <p><i>To produce the procedural manual to be used for testing (organisational aspects of the testing, test scenario description, etc.).</i></p> <p>The Acceptance Test Plan is the procedural manual to be used for testing; it details the specific approach and scope per test phase. It focuses on the practical steps to be taken by all parties involved. It describes the organisational aspects of the testing and includes a description of the test scenarios to be executed during the (P)SAT.</p>
WP.7.3.6	<p>Produce the Acceptance Test Plan (ATP) for the Qualification Testing (QT)</p> <p><i>To produce the procedural manual to be used for testing (organisational aspects of the testing, test scenario description, etc.).</i></p> <p>The Acceptance Test Plan is the procedural manual to be used for testing; it details the specific approach and scope per test phase. It focuses on the practical steps to be taken by all parties involved. It describes the organisational aspects of the testing and includes a description of the test scenarios to be executed during the Qualification.</p>
WP.7.3.7	<p>Produce the Conformance Test Acceptance Test Plan (CTATP) for the Conformance Testing (CT)</p> <p><i>To produce the procedural manual to be used for conformance testing (organisational aspects of the testing, test scenario description, etc.).</i></p> <p>The Acceptance Test Plan is the procedural manual to be used for conformance testing; it details the specific approach and scope per test phase. It focuses on the practical steps to be taken by all parties involved. It describes the organisational aspects of the testing and includes a description of the test scenarios to be executed during the Conformance Testing.</p>
WP.7.4	<p>Execute Test Plan</p> <p><i>To execute the tests as defined in test specifications.</i></p> <p>When possible testing must be automated as much as possible by test tools. Log files generated by these test tools can then be included as annexes to the test reports.</p> <p>This work package covers also the configuration of the test tools needed to execute the testing, the production and maintenance of all test data and test scripts, the analysis of the test results including exceptions and errors detected during the execution of the tests, the coordination of the correction of all bugs detected during the tests with the development team. The outcome of the test must be reporting in the test reports applicable to the test phase concerned.</p>

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	<p>The contractor is reminded that all tests will be re-executed until they meet the Key Performance Indicator (“KPI”) defined to move to next stage with all test results recorded.</p> <p>During the tests performance tuning enhancements (e.g. parameterization and configuration aspects) will be implemented to optimise the eventual performance before deployment into the production environment.</p>
WP.7.4.1	<p style="text-align: center;">Unit Testing</p> <p><i>This work package covers unit testing of the solution components.</i></p> <p>This work package covers unit testing of the programmes or software components.</p> <p>The contractor must keep a record of the unit testing. These records must be available on-site and provided to the Commission within 3 working days upon request.</p>
WP.7.4.2	<p><i>To give confidence that all components work together as designed.</i></p> <p>Integration testing is the final step before FAT testing and must give confidence that all application components work together as designed.</p> <p>The contractor must keep a record of integration testing. These records must be available on-site and provided to the Commission within 3 working days upon request.</p>
WP.7.4.3	<p style="text-align: center;">Factory Acceptance Testing (FAT)</p> <p><i>To ensure the quality of the deliverables.</i></p> <p>This work package covers the activities to:</p> <ul style="list-style-type: none"> <li>• produce an Acceptance Test Plan (ATP),</li> <li>• execute the required tests,</li> <li>• collect and process the test results,</li> <li>• produce the FAT report.</li> </ul> <p>The FAT is executed at the premises of the contractor.</p> <p>The contractor has to assure independence between the FAT team and the development team.</p> <p>Performance and stress tests must be executed also during the FAT and the outcome of the tests must be included in the FAT report. The Commission could also request to perform the performance and stress tests on a different environment (e.g. specific test environment at DIGIT Data Centre) that should be provided by the Commission or the CCN2-DEV contractor.</p> <p>The Commission and/or a party nominated by the Commission will validate on-site the FAT execution. The contractor must consider the correct result of the FAT as a pre-requisite for the delivery of the software to the Commission and/or the ITSM2 contractor for (P)SAT.</p> <p>The Commission could request the contractor to combine the FAT with a training/demo of the new solution component. In this context the participation of the operational contractor ITSM2 could be requested as well to the FAT.</p>
WP.7.4.4	<p style="text-align: center;">Qualification Testing (QT)</p> <p><i>To ensure quality before delivering a patch or a service-pack to the Commission.</i></p> <p>Qualification Testing is applied before delivering a patch or a service pack to the Commission. This work package covers the activities to</p> <ul style="list-style-type: none"> <li>• produce an Acceptance Test Plan,</li> </ul>






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	<ul style="list-style-type: none"> <li>• execute the required tests,</li> <li>• collect and process the test results,</li> <li>• produce the Delivery Qualification Report (DQR).</li> </ul> <p>The QT is executed at the premises of the contractor.</p>
WP.7.5	Delivery
	<p><i>To assemble and package a software release.</i></p> <p>This work package covers the activities to be undertaken to</p> <ul style="list-style-type: none"> <li>• assemble a software release in order to be able to deploy and test it (e.g. testing or in production environment), and</li> <li>• package the software release along with its related documentation necessary for delivery, deployments and test.</li> </ul> <p>The documentation does not cover only all specifications (produced under WP.6 and WP.7.3) linked to the software release but as well all operational documentation produced under WP.7.2.</p> <p>Each release must also contain it's related <b>release note</b> describing all problems fixed and/or changes and enhancements covered in this new release.</p> <p>It must be reminded that all deliverables produced under WP.6 and WP.7 must be placed under strict change and configuration management in order to support their iterative, incremental production and their future maintenance. To this purpose the contractor must ensure that the CMDB, DML, Infrastructure baseline and document repositories used in the context of the framework contract are continuously kept up to date.</p>
WP.7.6	N/A
WP.7.7	N/A
WP.7.8	Evolutionary Maintenance of the Build and Test Software and Documents
	<p><i>The evolutionary maintenance covers the change requests made by the Commission.</i></p> <p>The CCN2-DEV contractor will ensure the evolutionary maintenance of all CCN related systems, applications and components.</p> <p> It is not envisaged that there will be a lot of major software upgrades to the CCN/CSI platform (See also Annex II.A, section 3.5) as key goal of DG TAXUD is to move as quickly as possible to the CCN2 Platform and to retire the CCN/CSI platform as soon as possible.</p>
WP.7.9	Corrective Maintenance of the Build and Test Software and Documents
	<p><i>The corrective maintenance covers the correction of all build and test solution component and documents necessary for the correction of defects.</i></p> <p>This WP includes specific activities performed by the contractor on a regular basis covering pre-emptive testing/improvement/fixing of the quality of the software.</p> <p>The corrective maintenance must ensure the integrity of the application as a whole, and reflect consistently the change brought by the corrections to impacted applications (i.e. “ripple effect”). If impacted, the related specifications and other artefacts must also be updated accordingly.</p> <p>The corrective maintenance is a 3<sup>rd</sup> level support activity: it covers the correction of all build and test components and documents necessary for the resolution of calls. It will also reflect consistently the change brought by corrections to specifications.</p> <p>The quality of service to be maintained for corrective maintenance will be specified in the OLA.</p>
WP.7.9.1	Corrective Maintenance of the Build and Test Software and Documents Which Have Been Taken Over (scope WP.2)

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	<p><i>This work package covers the corrective maintenance activities of the build and test components and documents which have been taken over.</i></p> <p>This work package covers the corrective maintenance activities of the build and test software and documents which have been taken over.</p>
WP.7.9.2	Corrective Maintenance of the New Deliverables
	<i>This work package covers the corrective maintenance activities of the build and test components and documents which have produced under WP.7.</i>
<b>WP.8</b>	<b>IT Service Management</b>
	<p><i>To cover the services and deliverables required to support the CCN/CSI and CCN2 Platform, any related bespoke software and its services and supporting tools.</i></p> <p>This work package covers all activities oriented towards all the parties involved in the programme (among which National Administrations, trader federations, economic operators), the contractors and the Commission services.</p> <p>The contractor will have to summarize the activities performed under this work package in the MPR.</p>
WP.8.1	Service Support
	<p><i>To provide support for the CCN/CSI and CCN2 Platform, any related bespoke software and its services and supporting tools to ITSM2 or other stakeholders.</i></p> <p> Please refer to section 4.9 for details on the Synergia Programme and section 4.10 and section 8 for details on the supporting tools to be used in the context of this Framework Contract.</p> <p> The tenderer is reminded to specify in his bid which tools will be used for all service support related processes and how he will ensure the link between all service support processes and their related tools. The link with the Synergia SMT and the CMBD must also be described.</p>
WP.8.1.1	Service Desk
	<p>N/A</p> <p> Please also refer to section 4.9 for more details on the Synergia Programme and the ITSM2 Lot1 Service Desk.</p>
WP.8.1.2	Incident Management
	<p><i>To set up an incident management process that handles the lifecycle of incidents, requests for information and service requests.</i></p> <p>The incident management process will handle the lifecycle of incidents, request for information (RfI) and request for services (RfS) assigned to the contractor by the ITSM2 Lot1 service desk or directly opened by the Commission. This will mainly cover 3<sup>rd</sup> level support incidents/requests (RfI) linked to all CIs (including their integration) covered by this framework contract.</p> <p>Incident management covers as well</p> <ul style="list-style-type: none"> <li>• dispatching within CCN2-DEV of incidents/requests (RfI-RfS) assigned to CCN2-DEV;</li> <li>• investigation and updating of incidents/requests (RfI-RfS) ;</li> <li>• monitoring internal progress resolution;</li> <li>• resolution of incidents/requests (RfI-RfS) according to the defined SLAs;</li> <li>• management of users authorised to open/assign incidents/requests (RfI-RfS) to</li> </ul>




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	<p style="text-align: center;">CCN2-DEV;</p> <p>The following <b>CCN users</b> could be authorised to launch requests (RfI-RfS) directly to the CCN2-DEV contractor:</p> <ul style="list-style-type: none"> <li>• The ITSM2 Contractor, in charge of the support and operations of the Trans European systems (incl. the European Commission applications) running over the CCN/CSI infrastructure;</li> <li>• The European Commission, as owner of the system and DG TAXUD as its representative;</li> <li>• The other entities involved in the project and entitled by DG TAXUD to contact the CCN2-DEV contractor directly (QA2 contractor, Other Directorates General from the Commission, namely DG AGRI, OLAF, DIGIT/DC, Application development contractors in charge of the development of applications using the CCN/CSI infrastructure).</li> </ul> <p> 1<sup>st</sup> and 2<sup>nd</sup> level incident/requests handling will be provided by the ITSM2 contractor therefore NAs should not directly open incidents to the CCN2-DEV contractor. Such incidents can only be escalated by the ITSM2 Lot1 contractor in case of 3<sup>rd</sup> level support.</p> <p>All incidents/requests linked to the <b>operations</b> (meaning linked to the <b>production environment and/or Conformance testing activities on the testing environment</b>) will be managed through the <b>Synergia SMT</b> to which the CCN2-DEV contractor will have access to manage the incidents assigned to him. All incidents/requests will be assigned to the corresponding CI as defined in the CMDB (part of the Synergia SMT). Reporting and SQI calculation for incidents/requests handled by CCN2-DEV will be configured and provided by ITSM2 Lot1. See section 4.10 for more details on the supporting tools and section 4.11 for more details on the environments.</p> <p>The handling of incidents/requests managed during the <b>development and testing lifecycle</b> must be handled by the CCN2-DEV contractor.</p> <p> All incidents/requests (and their related data) must be visible via the CCN portal or SMT Web interface to all stakeholders involved.</p> <p> The contractor will deliver to the Commission on a <b>daily/weekly/monthly</b> basis <b>reports</b> on incidents/requests management. Additionally, the Commission may request the contractor to produce additional ad-hoc reports on specific systems and for a specific period. The contractor must provide these reports on-line via the project portal (see section 4.10).</p> <p>Its service quality will comply with the FQP OLA.</p> <p>The Incident Management team will operate during CCN2-DEV working hours on working days (see section 4.4 for details). Please also see WP.8.8 for the extended time coverage.</p>
WP.8.1.2.1	Specifications and Software Incidents
	<p><i>Management of the lifecycle of the incident from its opening to its closure.</i></p> <p>Management of the lifecycle of the incident from its opening to its closure (most usually back to the IT Service Management contractor). When the incident is identified as a functional or software defect a work-around must be proposed when feasible. The correction of the defect is not part of this work package but part of WP.6.9 or WP.7.9.</p> <p>Its service quality will comply with the FQP OLA.</p>


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WP.8.1.2.2	<p style="text-align: center;">Service Requests</p> <p><i>To handle/answer the service requests such as Requests for Information (RfI) or Requests for Service (RfS).</i></p> <p>This work package covers support activities to handle/ answer the service requests such as Requests for Information (RfI), Requests for Service (RfS), or other requests in the scope of this framework contract.</p> <p>The handling of Requests for Information (RfI) is part of the continuous 3<sup>rd</sup> level support which has as objective the answering of all RFI's in the scope of this framework contract for calls assigned by the ITSM2 contractor to CCN2-DEV and/or directly opened by DG TAXUD.</p>
WP.8.1.3	<p style="text-align: center;">Problem Management</p> <p><i>To set up a problem management process.</i></p> <p>A problem can be identified as a result of an incident, a root cause analysis (a.k.a. Request for Diagnosis) or any other activity such as preventive maintenance.</p> <p>Distinction must be made between <b>problems</b> and <b>known errors</b> for which workarounds are available and must be documented and put at the disposal of the operations contractor as well as the Commission.</p> <p>Problem management will address and track problems and defects during testing, deployment and operational activities.</p> <p>Defects should be an outcome of problem management. There could be more than one defect linked to a problem. Defects will be fixed by corrective changes handled via corrective maintenance (See WP.6.9 and WP.7.9).</p> <p>The contractor must set up a problem management process with the following objectives:</p> <ul style="list-style-type: none"> <li>• To facilitate discussions at team and overall project level regarding the problem tracking, the root cause analysis and problem resolution,</li> <li>• to create coherency with the configuration and release management processes. This must allow the contractor, the Commission and other involved parties to create the link 'incident' - 'problem' – 'configuration item' – 'change' – 'release in which the problem has been resolved', and</li> <li>• to be able to produce for each and every configuration item the list of recorded incidents, problems, known errors and changes with their status and related (expected) release.</li> </ul> <p>All problems linked to the <b>operations</b> (meaning linked to the <b>production environment and/or Conformance testing activities on the testing environment</b>) will be managed through the <b>Synergia SMT</b> to which the CCN2-DEV contractor will have access to manage the calls assigned to him or opened directly by him. All calls will be assigned to the corresponding CI as defined in the CMDB (part of the Synergia SMT). Reporting and SQI calculation for problems handled by CCN2-DEV will be configured and provided by ITSM2 Lot1. See also section 4.10 for more details on the supporting tools and section 4.11 for more details on the environments.</p> <p>The handling of problems managed during the <b>development and testing lifecycle</b> must be handled by the CCN2-DEV contractor.</p> <p>Its service quality will comply with the FQP OLA.</p>




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	<p> All problems and known errors must be visible via the CCN portal or SMT Web interface to all stakeholders involved</p> <p> Problems and known error related reports must be made available to the Commission via the <b>project portal</b>. On a weekly basis, this would require a consolidated list of all problems, categorization (e.g., product / module / feature), priorities, responsibility, suggested action, and due date along with problem status.</p>
WP.8.1.4	Configuration Management
	<p><i>To set up a configuration management process that maintains and plans evolutions of the configuration baseline.</i></p> <p>The contractor must set up a configuration management process for all CCN/CSI software, the CCN2 Platform and bespoke software and related services, Infrastructure and Architecture with the following objectives:</p> <ul style="list-style-type: none"> <li>• provide accurate information on configuration items and their documentation to support all Service Management processes,</li> <li>• create coherency with the incident, problem, change and release processes</li> <li>• update the CMDB and the Definitive Media Library (DML) according to the change of the configuration items (CIs)</li> <li>• look-up the CMDB for a specific CI and provide inventory lists and reports on the status of CIs and the status of planned changes.</li> </ul> <p>The contractor must setup a <b>Definitive Media Library (DML)</b> containing all definitive and authorised versions of all software components (WP.7) and documentation created under this Framework Contract is securely stored. Access to this information to the stakeholders involved must be managed via the project portal. The content is to be provided by the contractor and approved by DG TAXUD before dissemination.</p> <p>The contractor must ensure that the <b>documentation repository</b> is easily accessible and usable for all stakeholders involved in the project. Furthermore all documentation and specifications must (if applicable) be linked to their corresponding software component.</p> <p>See also section 4.10 for more details on the supporting tools.</p> <p> All CCN related infrastructure (COTS as well as hardware – W.A as well as WP.B3) including the infrastructure needed to build and test (scope WP.6 &amp; WP.7) must also be maintained in the CMDB under this work package. This also covers the maintenance contracts and the scheduled procurements.</p>
WP.8.1.4.1	Produce and maintain the Specification and Planning of the Evolution of the CCN related Configuration Baseline
	<p><i>Produce and maintain the Specification and Planning of the Evolution of the CCN related Configuration Baseline</i></p> <p>The CCN/CSI and CCN2 Platform configuration Baseline is an instrument that provides visibility on the infrastructure needed for the development environment, in a line of sight of minimum 3 years. This Baseline needs to be produced and maintained in close relationship with the technical architecture defined in the specifications.</p> <p>The contractor will have to ensure the consistency in terms of compatibility between the COTS. This schedule will have to be maintained by the contractor and will be annexed to the MPR (see WP.0.7).</p>


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	<p>This activity will also encompass porting, migration, phasing out of software/COTS/hardware and will guarantee that the CCN related applications fall never under lack of support from software/COTS/hardware suppliers. A typical activity in this context is the alignment of the applications/components to a newer version of a COTS for which de-support has been notified. These activities will have to be carefully analysed and planned in order to be the least disruptive on operations as possible.</p> <p>Consistency must be ensured with the inventory maintained under WP.0.13.</p> <p>It will contain:</p> <ul style="list-style-type: none"> <li>• the requirements in terms of software, hardware and COTS needs,</li> <li>• a strategic plan, pointing at planned needs (and their evolution) for the project in terms of IT infrastructure,</li> <li>• the commercial planning of COTS releases, and their planned support or end of support,</li> <li>• phase-out of older version of COTS to be replaced by new ones, with as little disruptive effect on operation as possible,</li> <li>• the recommendations of the Directorate General for Informatics (DIGIT) of the Commission regarding the COTS and their support,</li> <li>• the impact of the above on the CCN related components and associated planning of actions.</li> </ul> <p>This baseline will continuously be maintained and kept up to date.</p> <p> This baseline must be made available to the Commission via the project portal.</p>
WP.8.1.5	Change Management
	<p><i>This work package consists of activities to support a change management process and participate in Change Advisory Board (CAB) meetings.</i></p> <p>All CCN related components or bespoke software components are subject to functional and/or technical changes. This work package consists of activities to support a change management process.</p>
WP.8.1.5.1	Change Management Process
	<p><i>To set up a change management process.</i></p> <p>The contractor must set up a change management process with the following objectives:</p> <ul style="list-style-type: none"> <li>• to define the formal and documented change management procedures and the related approval levels necessary to manage, document and authorize changes according to best practices,</li> <li>• to perform the impact assessment and cost estimates linked to changes of CI's managed under this framework contract. This activity must cover all aspects e.g. documentation, specification, software components, hardware, COST, etc.</li> <li>• to create coherency with the configuration and release management processes. This must allow the contractor, the Commission and other involved parties to create the link 'change request' – 'configuration item' –</li> </ul>

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	<p>‘release in which the change request is implemented’.</p> <ul style="list-style-type: none"> <li>to be able to produce for each and every configuration item the list of recorded change requests with their status and related (expected) release.</li> </ul> <p> Change control management also includes services required to appropriately manage and document the changes to the CCN related components. These include:</p> <ul style="list-style-type: none"> <li>Library management – the classification, control and storage of the physical CCN related components;</li> <li>Version Control – the maintenance, tracking and auditing of modifications to a CCN related component over time, facilitating the restoration of a component to priori development stages</li> <li>Turnover management – the formal and structured promotion of software changes across the different phases of the lifecycle including the management of the approval process, production turnover and software migration control.</li> </ul> <p>See also section 4.10 for more details on the supporting tools.</p> <p> All RFC related information (incl. impact assessments and reports) must be visible via the project portal or SMT Web interface to all stakeholders involved.</p>
WP.8.1.5.2	Change Advisory Board (CAB) Meetings
	<p><i>To participate in CAB meetings.</i></p> <p>The contractor can be asked to participate in CAB meetings. In the context of its participation, the contractor has to produce/document the Requests for Changes (RfC) subject to discussion in the CAB, provide its position with regard to change/impact, and record the CAB decisions on the concerned RfCs).</p> <p>The participants in these meetings are the different stakeholders for one or a group of configuration items.</p> <p>These meetings can be organised on an ad-hoc basis or on a more regular, periodic basis.</p>
WP.8.1.6	Release Management
	<p><i>To set up a release management process.</i></p> <p>The contractor must set up a release management process with the following objectives:</p> <ul style="list-style-type: none"> <li>to create coherency with the problem, configuration and change management process</li> <li>to deliver high-quality software releases which are updated in the CMDDB and stored in the Definitive Media Library which is available via the project portal,</li> <li>group changes in releases as much as possible to improve efficiency and stability of the environment.</li> </ul> <p> The contractor must ensure that all releases (scope WP.6 and WP.7) are published on the project portal accessible to all stakeholders involved. The contractor is responsible to continuously maintain the content of the portal up to date. The exact content of items to be published will have to be agreed with DG TAXUD.</p> <p>See also section 4.10 for more details on the supporting tools.</p>
WP.8.2	Service Delivery


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	<i>Only Service level Management is applicable in this Framework contract. The other Service Delivery<sup>10</sup> processes linked to the testing and production environment are performed by the ITSM2 contractor.</i>
WP.8.2.1	Service Level Management
	<p><i>Maintain, monitor and report on the contractual OLA</i></p> <p>Besides the SQIs that are contractually binding a set of Key Performance Indicators (KPIs) will be defined in the Framework Contract/Specific Contract(s). The KPIs will be used to continuously monitor the successful execution of the Framework Contract. During the lifecycle of the Framework Contract, the Commission can update the list of KPIs linked to the Framework Contract. These changes will be applicable from the next Specific Contract onwards. The CCN2-DEV contractor will have to report on all the SQI's and KPIs in the MSR/MPR (WP.0.7).</p> <p> The contractor must ensure that the agreed contractual OLA plus the process and tools linked to the Service Level Management are implemented before he starts the actual provision of the taken over services.</p> <p>The CCN2-DEV contractor will produce and maintain its <b>service catalogue</b>. The service catalogue must be on-line available either via the project portal or as part of the Synergia programme. Users must be offered with a service catalogue tailored to the services (e.g. one view could target the DG TAXUD audience while another view could target the National Administrations) they are entitled to obtain. DG TAXUD must be able to extract the full Service Catalogue. Extended search and navigation features must be available in the on-line access to the service catalogue. Evolutive maintenance of the Service Catalogue to reflect all changes that occurred is to be performed once per Specific Contract linked to the continuous Services.</p> <p>The contractor will have to perform minimum once a year a <b>user satisfaction survey</b>. The list of questions and the user population will have to be agreed with DG TAXUD (By default all registered users). The outcome of this survey must be documented in a report and follow up actions must be managed by CSIP (See WP.0.12).</p>
WP.8.3	The Business Perspective: Liaison with the NAs, the Contractors and the Commission Services
	<p><i>To liaise with the NAs, Contractors and the Commission.</i></p> <p>Considering the large number of parties involved, there is a continuous need for working group meetings, training, workshops, demonstrations, missions, support activities, service meetings, technical meetings, and review and translation activities.</p>
WP.8.3.1	National Administrations Working Group Meetings and their Related Sub-groups
	<i>To contribute in meetings and attend working groups.</i>
WP.8.3.1.1	Performance
	<p><i>To actively contribute technically in meetings.</i></p> <p>Active technical contribution to the meetings, each of 1 to 2 days duration in the Commission's premises (Brussels and Luxembourg) and/or any other contractor's</p>

<sup>10</sup> Except for the development environment for which the contractor is responsible for all service support and service delivery processes.



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	<p>premises.</p> <p>The contribution covers:</p> <ul style="list-style-type: none"> <li>• preparation of performance material,</li> <li>• performance during the meeting: presentation, answer to question from the participants.</li> </ul>
WP.8.3.1.2	Attendance
	<p><i>To passively attend working group meetings and their sub-groups.</i></p> <p>Passive attendance at the working group meetings and their sub-groups.</p>
WP.8.3.2	Training, Workshop, Demonstration
	<p><i>Training, workshop and demonstration covers the activities oriented towards the parties involved in the project such as DG TAXUD, National Administrations and stakeholders providing support via organisation of trainings, workshops and demonstrations.</i></p> <p>The main objective of this work package is to work out courses, workshops and demonstrations and to perform knowledge transfer sessions related to technical aspect of CCN/CSI, the CCN2 Platform and related bespoke software.</p> <p>Training session can cover any topics related to the CCN/CSI, CCN2 platform or bespoke development.</p> <p> Note that with the introduction of the CCN2 Platform, a lot of new courses will have to be prepared and provided to all involved stakeholders.</p> <p>Today the CCN/CSI related training sessions are held usually in the premises of the contractor twice a year in 2 sessions (spring and autumn training session). The average duration of a CCN/CSI related training is 2 days. Please refer to [R098], section 5.4 for the list of existing CCN relating training session</p> <p>This work package covers as well the preparation of the material, the performance, the attendance as the hosting facilities and infrastructure.</p> <p>The training material can be composed of all kinds of items, from classical documents to multi-media facilities imbedded in an e-learning module.</p> <p><b>Planning</b> of the training sessions are usually defined with DG TAXUD at the beginning of each SC. This planning must be maintained and followed up by the contractor and integrated in the overall planning of the SC (cfr WP.0.8).</p>
WP.8.3.2.1	Performance
	<p><i>To actively contribute in training/workshops/demonstrations (preparation and performance) in the Commission's premises (Brussels and Luxembourg), in National Administrations of Member States and Candidate/Acceding Countries, or at the contractor's premises, upon request from the Commission.</i></p> <p>Active contribution to training/workshops/demonstration (preparation and performance) in the Commission's premises (Brussels and Luxembourg), in National Administrations of Member States and Candidate/Acceding Countries, or at the contractor's premises, upon request from the Commission.</p> <p>The contractor is requested to cover:</p> <ul style="list-style-type: none"> <li>• Preparation of training/workshop/demonstration <b>material</b>.</li> <li>• <b>Performance</b> during the training/workshop/demonstration.</li> </ul> <p>The preparation of a training/demonstration includes:</p>

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	<ul style="list-style-type: none"> <li>• content specification of the training/demonstration,</li> <li>• ad-hoc material, software development, if needed.</li> </ul> <p>The training/workshops/demonstrations will be held in English or French.</p>
WP.8.3.2.2	<p>Attendance</p> <p><i>To passively attend at training sessions, workshops, demonstrations in the Commission's premises (Brussels and Luxembourg) or in National Administrations of Member States and Candidate/Acceding Countries.</i></p> <p>Passive attendance at training sessions, workshops, demonstrations in the Commission's premises (Brussels and Luxembourg) or in NAs and CC.</p> <p>A short report will be produced (see WP.8.3.2.4 for details).</p>
WP.8.3.2.3	<p>Hosting Facilities and Infrastructure</p> <p><i>To cover infrastructure and associated operational needs for hosting demonstrations, trainings and workshops.</i></p> <p>Covers infrastructure and associated operational needs (like material move, set up) for hosting demonstration, training and workshops, and providing facilities required. This includes, amongst others, meeting rooms (up to 40 persons), training rooms, PCs (minimum one per two participants when applicable), and beamer.</p> <p>A training session could have duration from 1 to 5 working days.</p> <p>It also includes the copies of training/workshop/demonstration material for the participants.</p>
WP.8.3.2.4	<p>Reporting</p> <p><i>To provide minutes of the training/workshop/demonstrations reports.</i></p> <p>The contractor has to provide:</p> <ul style="list-style-type: none"> <li>• briefing with agenda,</li> <li>• detailed minutes of the training/workshop/demonstration reports including the evaluation forms filled in by the participants to the training sessions.</li> </ul> <p>Two levels of reporting may be requested by DG TAXUD, according to the needs: <b>short reporting</b> or <b>enhanced reporting</b>. Short reporting will be usually used for training and technical workshops while enhanced reporting will be usually used for formal workshops and demonstrations.</p>
WP.8.3.3	<p>Missions</p> <p><i>To participate in official co-ordination and/or technical missions to National Administrations and to any third party as required by the Commission.</i></p> <p>The Commission can invite the contractor to participate in official co-ordination and/or technical missions to national administrations and to any 3<sup>rd</sup> party as required. Such missions will only be launched if remote support is not feasible. The scope of the mission can consist of the following activities (not exhaustive):</p> <ul style="list-style-type: none"> <li>• general information on CCN/CSI, the CCN2 Platform and related bespoke software,</li> <li>• setup and start up of new of CCN/CSI or CCN2 related national applications,</li> <li>• support of existing of CCN/CSI or CCN2 related national applications,</li> <li>• 3<sup>rd</sup> level support to National Administrations linked to CCN related issues,</li> <li>• on-site training.</li> </ul>

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	<p>It covers:</p> <ul style="list-style-type: none"> <li>• preparation of agenda, briefing,</li> <li>• preparation of mission material,</li> <li>• performance during the mission,</li> <li>• production of mission report.</li> </ul> <p>The contractor will produce a mission report that the Commission will submit for the review and the approval of the visited party.</p>
WP.8.3.4	<p>Support to the National Administrations (NAs) and the Commission Services</p> <p>To cover consultancy services targeted at supporting the Commission services and the NAs in their respective activities.</p> <p>This work package covers consultancy services targeted at supporting the Commission IT services (See Terms of Reference (Annex II.A - Terms of reference), section 1.3 for details), and the NAs in their respective activities. However, the provision of the consultancy services can also be extended to the EU candidate/acceding countries, to the EFTA countries, to the EU neighbouring countries (ex. Ukraine), and to other 3<sup>rd</sup> countries such as Russia and China.</p> <p>This consultancy service consists in putting at the disposal of NAs the assistance of a team of technical experts with in depth knowledge of all CCN/SI systems, the CCN2 Platform and all related bespoke software.</p> <p>The contractor will produce a <b>report</b> for each and every support activity.</p> <p>Consultancy services can be requested within the following fields (amongst others – not exhaustive list):</p> <ul style="list-style-type: none"> <li>• setup of new of CCN/CSI, CCN2 Platform or other CCN2-DEV bespoke development related to national applications,</li> <li>• support of existing of CCN/CSI or CCN2 related national applications,</li> <li>• 3<sup>rd</sup> level support to NAs linked to CCN related issues,</li> <li>• any national CCN related architectural, infrastructure, capacity or security aspects.</li> </ul> <p>Note that this WP does not cover on-site support for the Member States, for the EU candidate/acceding countries, for the EFTA countries, for the EU neighbouring countries and for the other 3<sup>rd</sup> countries (see WP.8.3.3).</p> <p>The scope of the support services can consist of the following activities (not exhaustive):</p> <ul style="list-style-type: none"> <li>• participation in Visio and/or teleconference meetings,</li> <li>• telephone and email support (not linked to 3<sup>rd</sup> level incidents/requests),</li> <li>• provision of support material via mail to the Commission or via the project portal for other stakeholders. Support material can be (non exhaustive list): technical notes, guidelines, recommendations on system use and configurations, FAQs, inputs for Newsletters, news alerts, etc..</li> </ul> <p>The support to the Commission services can be performed on-site and/or off-site.</p>
WP.8.3.5	<p>Technical Meetings with the Commission and/or other 3<sup>rd</sup> Parties involved in the Programme or any CCN related Projects</p>
	<p><i>To participate in technical meetings with the Commission and/or other 3<sup>rd</sup> party involved in</i></p>


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	<p><i>any CCN related projects.</i></p> <p>These meetings are called by the Commission, unless otherwise agreed. Such technical meetings can be organised with a <b>minimum of 4 working hours notice</b>. The attendees from CCN2-DEV side depend on the objectives of these meetings.</p> <p>This type of meeting cannot be called for activities under WP.6 or WP.7 once these have been ordered by the Commission.</p> <p>The scope of the technical meetings covers technical issues:</p> <ul style="list-style-type: none"> <li>• information exchange, knowledge transfer,</li> <li>• major technical problem issue and resolution,</li> <li>• co-ordination of activities.</li> </ul> <p>The meetings last for ½ to <b>1 day</b> and are held in the premises of one of the participating parties.</p> <p>In addition, the contractor must take the necessary management steps to ensure that the actions that he has committed to undertake are performed according to expectations.</p> <p>The contractor produces and maintains <b>action lists</b> tracking at least the actions assigned to the CCN2-DEV contractor during meetings. The action lists must reflect the status of the action implementation at any time. The action lists must be available to DG TAXUD via a restricted area of a project portal.</p> <p>The contractor will have to produce the <b>minutes</b> of the meeting.</p>
WP.8.3.6	Service Meetings
	<p><i>To participate in service meetings to ensure periodic synchronisation amongst all the involved contractors and the Commission.</i></p> <p>The Commission calls service meetings, typically on a monthly basis, to ensure periodic synchronisation amongst all the involved contractors and the Commission. The Commission can call more than one meeting during a given period depending on the grouping of the various systems and applications from an organisational viewpoint. A typical example of such monthly service meeting is a coordination meeting between CCN2-DEV and ITSM2 in order to prevent conflicting situations affecting entities involved in the project. Through these meetings, optimum collaboration will be established and sharing of technical information during deployment activities.</p> <p>The DG TAXUD sector responsible for the CCN2-DEV contractor will be leading this meeting.</p> <p>Multilateral meetings with all DG TAXUD sectors and all contractors are handled under WP 0.6.</p> <p>The meetings are held in the Commission premises in Brussels. The meetings last ½ <b>day</b>.</p> <p>The contractor will have to produce a <b>summary report</b> of the meeting focusing on the action points he will be responsible for or for which he has a role to play.</p> <p>In addition, the contractor must take the necessary management steps to ensure that the actions that he has committed to undertake are performed according to expectations.</p> <p>The contractor produces and maintains <b>action lists</b>, tracking at least the actions assigned to the CCN2-DEV contractor during meetings. The action lists must reflect the status of the action implementation at any time. The action lists must be available to DG TAXUD via a restricted area of a project portal.</p>
WP.8.3.7	Delivery and Management of Translations
	<i>To manage and deliver translations upon request by the Commission.</i>

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	The Commission can ask the contractor to manage and deliver translation from/to DE, EN or FR or from DE, EN or FR to any of the 23 official languages of the Commission. The source can be plain text or more technical items such as screen labels, error messages, review comments received from National Administrations etc.
WP.8.4	Solution Component Management
	<i>Solution component management covers activities which may have to be executed by the contractor in support of the IT service management contractor.</i>
WP.8.4.1	Deployment of Solution Component
	<i>Deployment solution component management covers activities which may have to be executed by the contractor in support of the IT service management contractor linked to the testing and deployment of solution components.</i>
WP.8.4.1.1	Support to PSAT, SAT, Qualification Testing and Running-in Activities
	<p><i>This Work Package covers mainly the supporting the (P)SAT testing and deployment.</i></p> <p>This Work Package covers mainly the activities to be undertaken in order to execute the (P)SAT successfully.</p> <p>The (P)SAT is executed on the Commission environment which may be located (accessible) in a third party premises or at the Commission premises. The following is a list of the main <b>objectives</b> of the (P)SAT phases:</p> <ul style="list-style-type: none"> <li>• to integrate the parties involved in the Site Acceptance Test and the tested application,</li> <li>• to identify and raise issues regarding the test infrastructure and the technical installation,</li> <li>• to identify and raise issues regarding functional part of the testing,</li> <li>• to identify and raise issues regarding the accompanying technical and user documentation,</li> <li>• to analyse and correct all raised issues before formal Site Acceptance Tests may begin,</li> <li>• to guarantee that the operational contractor (mainly the deployment team) have the required knowledge in the specific technical procedures and techniques, required to perform the deployment and operate the application afterwards,</li> <li>• to integrate all the resources needed: human and material.</li> </ul> <p>The distribution of the PSAT/SAT activities will have to be agreed with DG TAXUD on a case by case basis.</p> <p>During the PSAT, the CCN2-DEV contractor could be requested to go <b>on site</b> to the operational contractor to support him during the PSAT activities. The PSAT also provides the opportunity to <b>train</b> the operational staff. The goal is that the CCN2-DEV contractor collaborates to complete the integration of their respective CI's until all PSAT tests are completed satisfactorily. These parties have the right and obligation to adjust the configuration items for which they are responsible during the PSAT, in order to achieve full readiness for SAT.</p> <p>Dedicated support for the SAT, Qualification Testing and running-in activities will only be required on an <b>ad-hoc basis</b>. This type of support can be remote or on-site.</p>

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	The usual support via mail and calls must of course also be provided.
WP.8.4.2	<p>Support to Conformance Testing Activities</p> <p><i>This work package covers activities supporting the conformance testing.</i></p> <p>This work package covers the following support activities of the CCN2-DEV CI's, like:</p> <ul style="list-style-type: none"> <li>• installing software releases in the testing environment (conformance) or assisting the installation,</li> <li>• supporting the conformance testing activities.</li> </ul> <p>This WP includes close support to the contractor in charge of the IT Service Management.</p> <p>This type of support can be remote or on-site.</p>
WP.8.4.3	<p>Support to Operation of Solution Component</p> <p><i>To support the operational activities performed by the operational contractor.</i></p> <p>This work package covers the following support activities for the CCN related solution components:</p> <ul style="list-style-type: none"> <li>• assistance in monitoring the production environment in case of major issues such as long duration bad performance situations, bad functioning of one or several system components, etc, and</li> <li>• installation of software releases in the production environment or assisting the installation.</li> </ul> <p>This WP includes close support to the contractor in charge of the IT Service Management.</p> <p>This type of support can be remote or on-site (See details section 4.5 place of work and section 4.6 Missions).</p> <p> All deployments in the production environment are done outside working hours, except when it is otherwise requested or authorised by DG TAXUD.</p>
WP.8.4.4	<p>Technical Review of the Deliverables of Other Contractors</p> <p><i>To review deliverables of other contractors following the review process defined by the Commission.</i></p> <p>The Commission can ask the contractor to contribute to the verification of the technical conformance<sup>11</sup> of the deliverables of the other contractors with the specifications. This encompasses the following activities:</p> <ul style="list-style-type: none"> <li>• list and log of all comments related to a deliverable under review,</li> <li>• attendance at meetings or conference calls with all reviewers and authors, for clarification of the issues and author positions,</li> </ul>

<sup>11</sup> To avoid any confusion on the activities covered by the expression “Quality Control”, the description text uses the wording “technical conformance”, which means that the reviewer is asked to comment on the quality of the deliverable at the level of the “technical conformance”, as opposed to the “Quality Control” comments, which concentrate on problems of conformance with the Quality Procedures or Quality Assurance systems put in place. The latter will be performed by the QA contractor. In practice though, the comments concerning “technical conformance” and those concerning “quality control” will be gathered in a single database of comments, for the sake of author’s facility.

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	<ul style="list-style-type: none"> <li>warnings to the Commission in case of severe defect in the technical conformance of the deliverable.</li> </ul> <p>The review cycle will be described in TEMPO, the PQP or FQP.</p> <p>In addition, the Commission can ask the contractor to review and comment on <b>plans</b> such as the Monthly Consolidated Plan (MCP) and the ITSM Operations Plan (ITOP) produced and maintained by other contractors such as ITSM2.</p> <p>The Commission reserves its right to decide which of the review comments will be implemented amongst those submitted. The contractor has no right to limit its overall responsibility in the project on the grounds that the Commission would have implemented only a subset of the comments issued.</p>
WP.8.5	Security Management
	<p><i>To guarantee secure execution of the contractual activities.</i></p> <p>The contractor will perform the activities required to guarantee secure execution of the contractual activities. Also, the contractor will ensure the security of the development environment and for each of its subsystems and components. Therefore the contractor will integrate into CCN/CSI and the CCN2 Platform the security requirements required by the TAXUD security policies.</p> <p><i>The contractor must ensure that the Application lifecycle development is compatible with TEMPO Security Management guidelines – Security Software Development Lifecycle Reference Manual (See [R361]).</i></p> <p>Please also refer to TEMPO for Security Policies of DG TAXUD.</p> <p> The setup and maintenance of the CCN/CSI and CCN2 Platform security policy, contingency plans, disaster recovery plans and associated documentation and related testing will be done by the operational contractor ITSM2 Lot1. If requested by DG TAXUD, the contractor will have to contribute in these activities.</p>
WP.8.5.1	Produce and maintain a Security Plan
	<p><i>To produce and maintain a security plan covering all Specific Contracts (SCs) in effect, which describes the infrastructure of the contractor and the security measures the contractor will take to secure this infrastructure from unauthorised access.</i></p> <p>The contractor must produce and maintain a security plan covering all SCs in effect, which describes the infrastructure of the contractor and the security measures the contractor will take to secure this infrastructure from access from outside the CCN2-DEV zone.</p> <p>Regarding <b>organisational security control</b>, the contractor must at least, without prejudice to the implementation of other security controls as required by TAXUD:</p> <ul style="list-style-type: none"> <li>nominate a security manager who will coordinate security management activities and directly liaise with TAXUD LISO for all these security related activities,</li> <li>define an internal security organisation appropriate to the contractual activities,</li> <li>provide security training and awareness sessions to its personnel,</li> <li>manage and report security incidents and</li> <li>implement security controls to monitor its compliance with its security obligations.</li> </ul> <p>For infrastructure and information systems belonging to the Commission and hosted at the contractors' premises, the contractor shall comply with C(2066)3602 and DG TAXUD's information security management systems.</p>

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	The contractor has to report his security-related activities and recommendations to the Commission through the Monthly Progress Report (See WP.0.7).
WP.8.5.2	Integrate Security Requirements
	<p>The contractor must integrate the security requirements of the TAXUD security policies in the execution of the WP.6 and WP.7. TAXUD policies may be supplemented by good practice, e.g. from ISO standards in areas where no TAXUD policy is available. The baseline for security requirements must cover at least:</p> <ul style="list-style-type: none"> <li>• requirements for security controls, to be identified during specification phase,</li> <li>• input data validation against threats (e.g. SQL injection, cross site scripting, oversized input),</li> <li>• internal processing control (e.g. protection against buffer overflow, appropriate logging),</li> <li>• cryptographic control (e.g. proper key management, traffic encryption requirements),</li> <li>• least privilege principle for installation (e.g. application should not require root privilege to be installed), execution (application should not be run using root privilege or with privilege that allows modification of the installed application: application should run on a hardened system) or data access (access to database should not be given to a user that allows full control or full view of the information),</li> <li>• protection of source code,</li> <li>• compatibility with reference configuration (e.g. TAXUD desktop standard configuration, DIGIT servers configuration),</li> <li>• protection of test data (e.g. sanitisation, protection in a similar way to production systems, protection of data during exchange)</li> <li>• antivirus protection for all files exchanged through the system,</li> <li>• documented patch process, including application patch procedures, procedures for patching of underlying OS or middleware,</li> <li>• documented logging functions of the application, that ensure full user traceability of all actions, error logging, security logging,</li> <li>• integration of security best practices (e.g. OWASP) or common security functions (e.g. such as logging, virus checking, input validation) into the CCN related systems/applications/components,</li> <li>• vulnerability assessment of the application and its supporting architecture (OS, middleware, application) must be part of the design, build and testing activities to ensure that no security traps are left unattended in the code,</li> <li>• depending on the criticality, a penetration test on the CCN related systems/applications/components, to provide additional assurance that the software will be resistant to identified threats.</li> </ul> <p>The contractor will in full apply all mandatory security activities during the project lifecycle as well as during the infrastructure lifecycle and ongoing security activities (See [R361], fig 2-1 Security SDLC activities).</p>
WP.8.6	N/A
WP.8.7	N/A
WP.8.8	Support Outside Working Hours
	<p><i>To provide, at the request of the Commission, services outside the normal working hours.</i></p> <p>Upon a request from the Commission, the contractor has to be capable of extending the time coverage</p>



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	for the provision of an agreed set of services.
WP.8.8.1	Extended time coverage – "on call" services for blocking issues
	<p>The contractor must be able at the request of the Commission to provide an extended time coverage via "on call" services. The extended time coverage will cover 7 days per week and 24 hours per day on all calendar days (see section 4.4 for details on working hours and working days).</p> <p>During this extended time coverage (outside CCN2-DEV "normal" working hours), the contractor will provide all necessary services to manage blocking issues. This will mainly cover 3<sup>rd</sup> level support, build, test and package patches for defect fixes, support to the operational teams for deploying the patches and cooperating with other involved DG TAXUD contractors.</p> <p>These services can be provided remotely (provided all required security constraints are managed) or on-site at the contractors premises. For this service, the contractor will be triggered by the operational contractor or DG TAXUD outside working hours to manage blocking issues. Or he will continue working outside working hours, if he was triggered during working hours to manage a blocking issue. Support will then have to be managed remotely (or on site if needed) to fix as soon as possible this blocking issue.</p> <p>This requires operating the necessary processes (and related sub-processes) which are involved:</p> <ul style="list-style-type: none"> <li>• WP.8.1.2 : Incident management;</li> <li>• WP.8.1.3 : Problem management, including providing the required technical support for unavailability resolution and corrective maintenance;</li> <li>• WP.6 : Specifications update for defect fixes;</li> <li>• WP.7 : Build and test for the defect fixes;</li> <li>• WP.8.4.1 : Deployment of Solution Component;</li> <li>• WP.8.4.2 : Support to Conformance Testing Activities;</li> <li>• WP.8.4.3 : Support to Operation of Solution Component by providing the system/application/infrastructure operation services to restore service when applicable;</li> <li>• WP.8.5 : Security management;</li> </ul> <p>During this extended time coverage, the contractor may need to escalate to DG TAXUD, third parties and/or NAs.</p> <p>The contractor will have to report in the MPR (see WP.0.7) on the activities performed under this "on call" extended time coverage support activity.</p>
WP.8.8.2	Extended time coverage – ad hoc
	<p>The contractor will provide at the request of the Commission ad hoc services outside the CCN2-DEV "normal" working hours (see section 4.4 for details on working hours &amp; working days) e.g. perform an on-site activity, such as a test or deployment. These activities are to be performed on request from the Commission according to an agreed scope and time schedule.</p> <p>On site presence can be as well at the contractor's premises, DG TAXUD or any other party involved in CCN related projects assigned by DG TAXUD. Such "ad hoc" activities are mainly needed for urgent and operational needs often linked to the deployment of new systems/components on non working days, etc. These activities can cover any activity linked to this Framework Contract.</p> <p>The contractor will have to produce a <b>report</b> for each and every "ad-hoc" extended time coverage support activity.</p>
<b>WP.9</b>	<b>N/A</b>
<b>WP.10</b>	<b>Other deliverables and services in the scope of the framework contract</b>
	This work package is intended to cover all unforeseen activities in the scope of the Framework

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	Contract. The ordering method is On-Demand and the price may be based on any of the man-day profile prices or deliverable/unit prices.
<b>WP.A</b>	<b>Hardware and COTS software acquisitions: CCN/CSI and CCN2 Platform and bespoke software - Production and Testing environment</b>
	<p>Please refer to section 4.11 for details on the environments including the mapping between the environments and the WPs and the mapping between the environments and the corresponding price elements.</p> <p>This work package covers the provision for the <b>acquisition and 4 years of maintenance</b><sup>12</sup> of the necessary hardware and COTS for the <b>production and testing environment of the CCN2 Platform services and related bespoke software.</b></p> <p>The <b>maintenance</b> of the hardware and COTS linked to the CCN2 Platform and its related bespoke software will be covered by the CCN2-DEV framework contract.</p> <p>This work package covers as well the provision for the <b>acquisition</b> of the necessary hardware and COTS for eventual extensions of the current CCN/CSI operational infrastructure related to the <b>production and testing environment.</b></p> <p> The <b>maintenance</b> of the hardware and COTS linked to the CCN/CSI operational infrastructure will be covered by the ITSM2 Framework Contract.</p> <p> The contractor will <b>deliver</b> anywhere in any NA<sup>13</sup> involved in the CCN related activities (delivery is managed via WP.013 and paid as indicated in OD 11 (See section 5.2.1.3.11 for details)). The contractor will provide to DG TAXUD the delivery and shipment notices for all IT (HW &amp; COTS) &amp; telecom infrastructure and services procured/rented/leased from a third party.</p> <p> As the <b>deployment and operations</b> of hardware and COTS for the production and testing environment will be assured by the ITSM2 Lot 1 contractor, the ITSM2 Lot1 contractor will have to have direct access to the hardware and COTS suppliers for the support and maintenance contract.</p> <p> All activities linked to the acquisition, maintenance, deployment and operations (including all service support and service delivery services) of the CCN related <b>development environment</b><sup>14</sup> will be done by the CCN2-DEV contractor (see WP.B.2).</p> <p>Please note that:</p> <ul style="list-style-type: none"> <li>• No installation is needed by the CCN2-DEV contractor, it will be carried out by the ITSM2 Lot 1 contractor.</li> <li>• The contractor has to deliver the assets:</li> </ul>

<sup>12</sup> Tenderers are reminded of the **guarantee period** as indicated in Annex X.A – Part III, article III.4.2




<sup>13</sup> Being National Administrations of the Member States, candidate and acceding countries, countries involved in the NCTS conventions (like NO, CH, AD, SM) and to the national administrations of other neighbouring and/or third countries.

<sup>14</sup> needed to build, test and provide training (WP.6, WP.7 and WP.8.3.2 of this FWC)


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	<ul style="list-style-type: none"> <li>○ either at the price indicated in the bid, Annex III - Price table, sheets FP CCN 5 to FP CCN 7 (See section 5.2.1 for details on those price elements),</li> <li>○ or for items not covered in the bid, at the vendor's list price minus the agreed discount rate (according to the supplier policy as described in the bid as reply to Annex I.A - Questionnaire, section 5.2) if the contractor has such an agreement with the vendor,</li> <li>○ or, in the absence of discount agreement, at the best price available for it on the market. In this case, the acquisitions will be reimbursed to the CCN2-DEV contractor against the vendor's invoice.</li> </ul> <p>The Commission or its benchmarking contractor will, in any case, <b>verify the acquisition and maintenance prices</b>.</p> <p>The management of the acquisition and maintenance will be performed as defined under <b>WP.0.13</b>.</p>  <p>The tenderer is reminded to propose the governance model for all hardware and software aspects in the bid. The tenderer must pay special attention to the fact that hardware and software is bought under this FWC but deployed and operated by the ITSM2 Lot 1 contractor. The tenderer must commit that ITSM2 Lot 1 will have direct access to the HW and COTS suppliers for the maintenance and support activities.</p>
<b>WP.B</b>	<b>ICT Infrastructure Management</b>
	<p><i>To set-up, operate and maintain all the resources required by the contractor to perform its contractual obligations</i></p> <p>This work package encompasses the set-up, operation and maintenance of all the resources required by the contractor to perform its contractual obligations:</p> <ul style="list-style-type: none"> <li>• Setup and maintain the office infrastructure,</li> <li>• Setup, operate and maintain the IT and telecom resources needed for the specification, development, test and support environment.</li> </ul>
<b>WP.B.1</b>	<b>Set up and Maintain the Office Infrastructure</b>
	<p><i>To set up the necessary office infrastructure in the contractor's premises for the successful execution of the work packages.</i></p> <p>To set up the office infrastructure: PCs (incl. office automation tools), printers, printer and e-mail servers, all modern connectivity facilities (internet, e-mail, phone, fax), etc.</p> <p>The contractor must set up the necessary office infrastructure in his premises for the successful execution of the work packages. This infrastructure must comply with the office automation in use within the Commission but also be considered "<b>state-of-the art</b>" infrastructure from security and operational excellence point of view. The contractor is responsible for defining and estimating this infrastructure. The basic office infrastructure must cover at least:</p> <ul style="list-style-type: none"> <li>• Secured room(s) for hosting the staff, including phone, fax and photocopying facilities,</li> <li>• Secured meeting room(s) that are dedicated to CCN2-DEV activities (capacity up to 20 people) with phone/internet access available for meetings with DG TAXUD and/or other contractors;</li> <li>• An adequate office environment, including all modern connectivity facilities (internet, phone, fax), scanner, CD-ROM/DVD production, laser colour printing, secure document shredder and colour photocopying facilities and email server(s);</li> <li>• An adequate phone/virtual conferencing facility accessible from the internet;</li> <li>• One industry standard PC (personal computer) per staff member with office automation tools which must be compatible and inter-operable with those currently used in the at</li> </ul>



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	<p>DG TAXUD;</p> <ul style="list-style-type: none"> <li>• Suitable printing, file and Web server facilities;</li> <li>• Laptop PCs;</li> <li>• Individual e-mail addresses and web accesses for each person;</li> <li>• Functional e-mail addresses as appropriate;</li> <li>• facilities for Internet meetings/conferencing/learning/collaborative environment.</li> </ul> <p> This Work Package also covers the setup, provision and maintenance of the <b>project portal</b> to share an agreed set of information between the contractor and DG TAXUD. Please refer to section 4.10 and the work package descriptions (See section 2.2) for details on which information is to be published in this portal. It must be noted that this project portal is not the official document delivery site (see [R009]).</p> <p> <b>Access</b> to the office infrastructure must be restricted to pre-defined authorised persons (contractor's team members, the Commission's representatives and occasional accompanied visitors, such as staff members of the other contractors).</p>
WP.B.2	Set up, Install, Operate and Maintain the IT and Telecom Infrastructure
	<p><i>To set up, install, configure, stage in, fine tune, operate and maintain the necessary infrastructure related to specification, build, test and support.</i></p> <p> DG TAXUD has launched a Project aiming at consolidating their Contractors' infrastructures in two redundant <b>Data Centres</b> located in Luxembourg. This activity and the split of the infrastructure of the incumbent CCN/TC contractor into CCN/TC-OPS infrastructure to be taken over under the ITSM2 Framework Contract and CCN2-DEV infrastructure to be taken over by the CCN2-DEV contractor will be prepared during 2012 and 2013. Please refer to Section 7 for more detailed information related to the setup of the DG TAXUD related data centres and to section 4.10 for more details on the supporting tools linked to this Framework Contract.</p> <p>The contractor will have to setup and maintain a dedicated Data Centre (<b>CCN2-DEV DC</b>) with the necessary infrastructure related to specification, build, test and support activities. This Data Centre could be either hosted in the DG TAXUD Data Centre or in the Contractor's premises.</p> <p>The contractor must specify, size, provide, set up, install, configure, stage in, fine tune, operate, monitor and administer and maintain the necessary infrastructure related for the successful execution of all work packages, amongst which material, computer rooms, COTS, tools, telecom, servers, bandwidth, security devices, conference call services, Internet access, Internet VPN connection to the service management tool, e-mail, connectivity to CCN gateways hosted in the DC managed by the Commission. (e.g. VPN).</p> <p>The infrastructure hosted in the DG TAXUD Data Centres or by the CCN2-DEV contractor will have to be segmented in such a way that <b>all needed environments</b> (see section 4.11 form more details on the environments) will be created.</p> <p>The CCN2-DEV contractor will take over as well the IT equipment used by the incumbent contractor in the context of its development and support activities (e.g. test GWs, servers, etc.). Note that the IT equipment to be taken over from the former contractor is property of the Commission and is put at the disposal of the new contractor at no cost.</p> <p>The Commission reserves the right either to order the set-up of the required infrastructure in the contractors' premises, or to grant the contractor access to the TAXUD data centres for the setup of the CCN2-DEV Data Centre via a remote connection, or to request transition during the life of the contract from one configuration to the other, or any alternative.</p>

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<p>The contractor must be careful to use and respect commonly used standards (including for the office automation environment) and guidelines according to the chosen technology. The standards used within the Commission are set by the Directorate General for Informatics of the Commission (DIGIT).</p> <p>The contractor will propose any <b>additional tools</b> considered necessary to improve the efficiency, the effectiveness and the quality of the services. These tools must remain compatible with the current infrastructure.</p> <p>The contractor must have access from his premises to all necessary telecom services for the successful execution of all work packages.</p> <p> DG TAXUD and other parties identified by DG TAXUD must have minimum read-only <b>access</b> to all servers of the development environment especially the related tools, COTS and related data. In case this access would not be feasible, DG TAXUD must be provided with all the information in the form of extracts and/or get access to the CCN2-DEV Data Centre whenever requested.</p> <p>All these activities cover specification, planning, installation, configuration, acceptance, running-in, maintenance and phasing out when applicable.</p> <p>The contractor must also setup <b>availability management</b> (including monitoring services for the HW, SW and COTS), <b>capacity management and IT service continuity management</b> (including backup &amp; restore services, etc.) for CCN2-DEV Data Centre. In this context, the contractor must set up contingency services aiming at restoring a normal or acceptable situation within a minimum amount of time in case of partial or complete dysfunction or destruction of the for the CCN2-DEV development Data Centre infrastructure. In this context, a BCP/DRP will be set-up, implemented and tested periodically (at least once a year).</p> <p>The contractor must also perform <b>excellent ICT housekeeping</b> for its development data centre. Patch management for all IT assets is integral part of ICT housekeeping. Keeping up with standard market technology evolutions (i.e. deploying new versions of operating systems, new versions of COTS software, new versions of CSI stacks, etc.) and tuning of operating systems and COTS is also an integral part of ICT housekeeping. Job management and decommissioning and phasing out of legacy environments are equally an integral part of ICT housekeeping activities.</p> <p>The contractor must maintain in this context the <b>capacity planning</b> of the infrastructure needed all services covered by the FWC. The contractor will have to define a <b>schedule</b> with planned needs and procurement progress in terms of hardware and software for the development environment (See also WP.0.8 and WP.8.1.4.1). This planning must be integrated in the overall planning activities of WP.0.8.</p> <p>This work package covers :</p> <ul style="list-style-type: none"> <li>• provision of the dedicated and secured hosting space for the CCN related development Data Centre (<b>CCN2-DEV DC</b>);</li> <li>• provision of the CCN servers and software products (OS, COTS) supporting the specification, build and test activities of all CCN related systems/applications and components;</li> <li>• provision of telecom services for access to internet, conference calls, etc;</li> <li>• the setup of eventual new infrastructure (servers as well as COTS) as defined by the tenderer;</li> <li>• the setup of a secured connection between the CCN2-DEV data centre and the secured CCN2-DEV office space;</li> <li>• the secured connection between the CCN2-DEV data centre and the CCN network to support</li> </ul>

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	<p>remote access to all CCN sites and equipment in the CCN community domain;</p> <ul style="list-style-type: none"> <li>• provision of the development environment (see section 4.11 form more details on the environments) within the CCN infrastructure deployed; the service support, service delivery and ICT management services linked to the IT infrastructure hosted in the CCN2-DEV Data Centre;</li> <li>• the maintenance and move-in/move-out costs (including those required for the shipping/destruction of the phased-out Commission-owned equipment, which is part of the infrastructure)</li> </ul> <p> The tender is reminded to include a graphical representation and a detailed description of how he proposes to set up the CCN related development data centre facilities. The tenderer may suggest reusing and optimising the existing assets currently present at the incumbent contractor's data centres and/or propose alternative infrastructure architectures. Any proposed infrastructure that is deviating from the DIGITs product list [R226] and/or CCN product list [R098] must be duly justified. This CCN related development Data Centre must minimum be composed of:</p> <ul style="list-style-type: none"> <li>• the corresponding infrastructure recuperated from the incumbent contractor,</li> <li>• new infrastructure needed for the development and testing of the CCN2 Platform and related tools and services,</li> <li>• new infrastructure needed (if not yet available) for maintaining and testing new CCN related systems/applications/components that are being build at the time of writing this Call for Tenders, like CCN Mail III , etc.</li> <li>• eventual new infrastructure to replace old infrastructure not taken over from the incumbent contractor,</li> <li>• etc.</li> </ul> <p> The tenderer is reminded to describe the additional <b>BCP/DRP plans &amp; services</b>, which are envisaged to ensure the overall system resilience and continuity for the CCN related "development and integration" infrastructure</p> <p>The contractor will produce <b>FAT reports</b> for all IT and telecom infrastructure and services procured/rented/leased from a third party. This FAT report will contain the test strategy, reference configuration and test scenarios to be executed to ensure that all equipment have been correctly installed and configured.</p> <p>If located in his premises, the contractor must take the necessary insurance to cover the needed infrastructure, which would possibly be procured/rented/leased in the name of the Commission, against usual risks, security issues (fire, flood, theft, etc).</p> <p>The contractor provides the necessary ICT commodity products (HW, COTS and telecom commodity products) which are required to meet its contractual obligations, except for the products that the Commission decides to make available free of charge to the contractor.</p> <p>The contractor provides the <b>maintenance and support services</b> for all ICT products that it provided to the Commission. The contractor must transfer all maintenance and support services rights to the Commission or to a third party nominated by the Commission at handover time. The Commission covers the maintenance and support services for all ICT products that it decides to make available to the contractor.</p> <p>The contractor maintains a <b>detailed asset inventory</b> (see WP.0.13) of all ICT products (HW, COTS, Telecom products), including the taken-over items and/or those delivered by the Commission, with item identification, location, price, date of delivery, start and end date of maintenance and support. The contractor will keep this asset inventory available to the Commission.</p>
WP.B.3	Hardware and COTS software acquisitions: CCN2-DEV development environment

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<p><i>This work package covers the provision for <b>the acquisition and 4 year of maintenance</b><sup>15</sup> of the necessary hardware and COTS for the CCN2-DEV development environment.</i></p> <p> All activities linked to the <b>deployment, operations and the maintenance</b> of the development IT environment needed to build, test and provide training (WP.6, WP.7 and WP.8.3.2 of this FWC) are covered by WP.B.2.</p> <p> The <b>delivery</b> of this IT equipment (hardware and COTS) will be performed at the CCN2-DEV Data Centre premises <u>or</u> at DG TAXUD Data Centre located in Luxembourg. No additional shipping costs will be foreseen in this context.</p> <p>Please note that:</p> <ul style="list-style-type: none"> <li>• The installation will be carried out by the CCN2-DEV contractor.</li> <li>• Equipment delivered to CCN2-DEV data centre is expected to be moved later to TAXUD data centre during this Framework Contract</li> <li>• The contractor has to deliver the assets: <ul style="list-style-type: none"> <li>○ either at the price indicated in the bid, Annex III - Price table, sheets FP CCN 5 to FP CCN 7 (See section 5.2.1 for details on those price elements)</li> <li>○ or for items not covered in the bid, at the vendor's list price minus the agreed discount rate (according to the supplier policy as described in the bid as reply to Annex I.A - Questionnaire, section 5.2) if the contractor has such an agreement with the vendor,</li> <li>○ or, in the absence of discount agreement, at the best price available for it on the market. In this case, the acquisitions will be reimbursed to the CCN2-DEV contractor against the vendor's invoice.</li> </ul> </li> </ul> <p>The Commission or its benchmarking contractor will, in any case, <b>verify the acquisition and maintenance prices</b>.</p> <p>The management of the acquisition and maintenance will be performed as defined under <b>WP.0.13</b>.</p>

Table 2 : WP Specifications

## 2.3 Catalogue of services and deliverables

The Commission may request other parties to **review** deliverables submitted by the CCN2-DEV contractor. The comments from the Commission will include the comments from these 3<sup>rd</sup> parties. If comments are delivered in batches, the date of the last batch of comments is considered as the start of the T2 period.

DG TAXUD reserves the right to mutually agree (and record in the DTM) with the CCN2-DEV contractor a **review cycle** different from the one originally agreed upon in the Specific Contract.

### 2.3.1 Planning Mechanism

The planning information will relate:

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<sup>15</sup> Tenderers are reminded of the **guarantee period** as indicated in Annex X.A – Part III, article III.4.2.

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- **for a service:** to start, end or change of the service, as a service is considered as continuous by nature;
- **for a deliverable:** to its submission for review and/or for acceptance.

The planning of the services and activities will be agreed in the Specific Contract (SC), in compliance with this Technical Annex (Annex II.B - Technical Annex), using the following mechanisms, **in order of decreasing precedence**:

- In the **SC**, with a planning schedule specified in reference to T0, the starting date of the activity of the SC, and/or possibly to other internal/external dependencies. When applicable, the planning specifies for a deliverable if the date is for submission for review or for acceptance;
- In a Request for Action (**RfA**) within an SC;
- Mutual agreement (**MA**) between the Commission and the contractor during the course of the SC, each planning agreement being recorded in the MPR of the month when the agreement took place;
- In a **Trigger**: operational way to indicate to the contractor to start an activity which has already been ordered and for which the quantities to be consumed are well-defined (trigger has no financial impact). The trigger may be sent to the contractor either by paper mail or by a registered e-mail to the contractor;
- Up to the CCN2-DEV contractor to take the initiative to provide the deliverable/service whenever an external event triggers the **need** for it (usually call/action driven).

*No higher planning mechanism may be over-ruled by a lower one.* However, a lower one may include provisions not considered in the higher one, which do not contradict its text.

All the agreed planned dates, foreseen date, actual date of delivery are reported in the Monthly Progress Report (MPR).

## 2.3.2 Acceptance mechanism

### 2.3.2.1 Acceptance of deliverables

The acceptance procedures applicable to the deliverables and services are specified hereafter. The Quality plans (PQP and FQP) may specify further the acceptance process details of the deliverables but in case of conflict between these documents, the Specific Contract and this Technical Annex (Annex II.B - Technical Annex), the following decreasing precedence will prevail: SC, Technical Annex (Annex II.B - Technical Annex), FQP, and PQP.

No formal acceptance applies for deliverables for which neither this Technical Annex (Annex II.B - Technical Annex) nor does the SC define an acceptance procedure.

All deliverables will be subject to a formal **T1/T2/T3 review cycle** (also referred to as SfR/SfA cycle):

#### **T1 period:**

- The contractor Submits for Review (SfR) its deliverable to the Commission, and any nominated party<sup>16</sup>, at the agreed date, starting T1;

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<sup>16</sup> The Commission may use the support of the QA contractor for the management of the review cycles of submitted deliverables.



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- The Commission reviews the SfR deliverable and returns its comments to the contractor at the end of T1;
- The Commission reserves its right to reject the review in case the deliverable SfR is not fit for review, ending T1;

#### **T2 period:**

- T2 starts with the reception by the contractor of the review comments from Commission<sup>17</sup>;
- the contractor submits his author positions for each of the comments submitted by the Commission;
- the Commission may call a review meeting with the contractor to resolve outstanding review issues;
- the review meeting decisions are submitted by:
  - the contractor in case of minor or medium size review;
  - the Commission (or any other 3<sup>rd</sup> party designated by it, such as the **QA2** contractor) in case of major size review;
- the contractor Submits for Acceptance (SfA) his deliverable before the end of the T2 delay, closing temporarily the T2 period, the final closure of T2 being subject to the approval of the deliverable (the time stamp of the delivery of the accepted version constitutes the final closure of T2);

#### **T3 period:**

- T3 starts with the reception of the SfA deliverable by the Commission;
- The Commission will then verify the SfA deliverable and inform the contractor of any deviation of the SfA deliverable from the author positions and meeting decisions, within a pre-agreed period T3;
- In case of deviation, the T2 period is re-opened, up to the time that the contractor submits the version of the deliverable that the Commission will accept.

Once accepted, all deliverables become the property of the Commission, which is then the only party that can authorise their further use and distribution.

The FQP defines some of those pre-agreed periods (review cycles), while the Specific Contracts and the Requests for Action will define additional periods if required and will set the pre-agreed dates for delivery.

The Commission draws the attention of the contractor to the fact that the T1/T2/T3 review cycle is tightly related to the contractual planning. Indeed, a contractual date qualified for acceptance implies that the T1/T2 part of the cycle must be completed for the deliverable by that date, while a date qualified for review implies that the T1/T2/T3 cycle for the deliverable starts at that date.

#### **Individual acceptance**

The deliverables marked for Individual Acceptance (**IA**) in the SC or RfA will be subject to an individual acceptance letter by the Commission.

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<sup>17</sup> The Commission may request other parties involved in the business threads (like the development contractors, the QA contractor) to review deliverables submitted by the ITSM contractor. The comments from the Commission will include the comments of these 3<sup>rd</sup> parties.

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### **Deliverables accepted via the Monthly or Quarterly progress report**

The deliverables specified with an acceptance mechanism **MPR** (“to be accepted via the Monthly Progress Report”) are formally accepted through the formal acceptance of the MPR in which they are proposed for acceptance. The MPR must contain a list of all deliverables presented for acceptance through it. Refer to section 4.14 for the proposed MPR structure.

#### **2.3.2.2 Services**

The definition and the targets for the Quality of Services are set in the contractual documents, in the FQP and/or in the contractual OLA, which itself may refer to other applicable SLAs/OLAs.

The Monthly Service Report must report the actual QoS of all the provided services and justify any deviation from target. The SQI is compiled from the target and actual QoS to quantify the deviation of reality from target and is also recorded in the Monthly Service Report.

The correctness of the reported QoS and SQI is accepted by the acceptance of the Monthly Service Report.

Note that it is the factual correctness (alias integrity) of the reported QoS and associated SQI which are subject to acceptance via the MSR and not the service itself. The accepted QoS and SQI become then the indisputable bases for computing the liquidated damages where applicable.

#### **2.3.2.3 Monthly Progress report (MPR) and the Bilateral Monthly Meeting (BMM) minutes**

The Commission will formally accept on a monthly basis the bundle made of the Monthly Progress Report (MPR), which includes the various Monthly Service Reports (MSR) and the minutes of the Bilateral Monthly Meeting (BMM). The Commission will not issue a separate acceptance for these deliverables.

The acceptance of the bundle will trigger the acceptance by default of the deliverables presented for acceptance in the accepted MPR.

In case of conflict between the MPR and the BMM minutes (even when accepted by the Commission) on the one hand, and the contractual documents, PQP and FQP, on the other hand, the latter will always take precedence.

#### **2.3.2.4 FQP, Takeover and Handover**

The acceptance of the FQP<sup>18</sup> and the Takeover will be subject to a FAT the aim of which is to verify the integrity between the FQP and Takeover reports with the set up of the contractor.

The acceptance of the Handover will be subject to a FAT performed in the premises of the contractor.

#### **2.3.2.5 Software**

Acceptance of new applications or extensions of existing applications is performed according to a FAT/PSAT/SAT scheme, as detailed in the project FQP, unless the Commission decides to go through a simple qualification.

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<sup>18</sup> Please refer to WP.0.1 for more details on the FQP used during the take over and the first months of service and the final FQP (to be delivered for SFR 3 months after the take over).

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### 2.3.2.6 COTS ICT infrastructure Products and services

The products will be accepted after reception of the delivery notification and by the formal acceptance of the Factory Acceptance Test report delivered by the contractor following an on site verification of the report quality.

### 2.3.2.7 Specifications Life cycle Involving National Administrations

The life cycle of a specification involving the National Administrations of the Member States and/or Candidate Countries or the administrations of other 3<sup>rd</sup> countries comprises three consecutive steps:

- production of the specification in order to have it accepted by the Commission,
- review for subsequent acceptance by the involved NAs,
- maintenance and support.

In the context of deliverables which issue recommendations to and/or place obligations on the NAs, the NAs are invited to submit their comments in an agreed format (in EN, FR or DE) within a given period (from 2 to 10 weeks according to the volumes of the deliverables and their importance).

The contractor will have to translate the comments received in FR or DE into EN, consolidate the comments, and for each of them propose an “author position” to the Commission according to a Sfr/SfA cycle.

The Commission will call a review workshop with the NAs, the outcome of which is a “workshop decision” on each of the received comments.

The contractor will deliver the minutes of the workshop also according to an Sfr/SfA cycle.

The Commission will then submit the bundle made of the documents as accepted by the Commission, and of the “workshop decision” for the approval of the NAs.

Once the NAs accept the bundle, the contractor will consolidate the “workshop decision” into the deliverables and deliver the final version of the specification, again according to an Sfr/SfA cycle. This final version becomes part of the documentation baseline of the project.

All deliverables produced by the contractor under this step will be in EN only.

The timing of the consecutive Sfr/SfA cycles can be defined in the PQP for further refined in the FQP, Specific Contracts and the associated Requests for Action.

### 2.3.3 Definition of SQIs/KPIs

Refer to section 3.7 for the formal definition of the KPI/SQI and GQI models and the way to calculate them from the QoS measurements, along with general indications on their use. Please also refer to WP.8.2.1 for the monitoring and reporting on the KPI/SQIs.

The table below in this section defines the default KPI/SQIs which may be used to measure the service quality. Some could be included in the GQI of future Specific Contracts or directly in the RFAs. Further KPIs may be defined by the Commission in the course of the contract as deemed adequate for reporting purpose.

The choice of the SQI contributing to the GQI and their respective weights will be defined in the Specific Contracts (SC). The Commission reserves its right to change the SQI combination and weights in the GQI for each SC or in an RFA, as an instrument to enforce the non-regression and continuous improvement of the quality of service.

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In order to emphasise the importance the Commission attaches to a successful delivery **Take-Over** and later delivery of the **FQP**, an important weight will be given to the following SQIs during the first Specific Contracts: SQI02a/b – SQI34 – SQI35.

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KPI#	SQI#	Name	Target	Limit	Min nb of events
	SQI01a	Measure the respect of the deadline of a deliverable whose delay would have a <b>major</b> impact (SfA)	“0 delay” for acceptance	1 working day	1
	SQI01b	Measure the respect of the deadline of a deliverable whose delay would have a <b>major</b> impact (SfR)	“0 delay” for review	1 working day	1
	SQI02a	Measure the respect of the deadline of a deliverable whose delay would have a <b>high</b> impact (SfA)	“0 delay” for acceptance	5 working days	1
	SQI02b	Measure the respect of the deadline of a deliverable whose delay would have a <b>high</b> impact (SfR)	“0 delay” for review	5 working days	1
	SQI03a	Measure the respect of the deadline of a deliverable whose delay would have a <b>medium</b> impact (SfA)	“0 delay” for acceptance	10 working days	1
	SQI03b	Measure the respect of the deadline of a deliverable whose delay would have a <b>medium</b> impact (SfR)	“0 delay” for review	10 working days	1
	SQI04a	Measure the respect of the deadline of a deliverable whose delay would have a <b>low</b> impact (SfA)	“0 delay” for acceptance	15 working days	1
	SQI04b	Measure the respect of the deadline of a deliverable whose delay would have a <b>low</b> impact (SfR)	“0 delay” for review	15 working days	1
	SQI05a	Measure the Incident Resolution Time	95% "0 delay"	90%	20
	SQI05b	Measure the problem Resolution Time	95% "0 delay"	90%	20
	SQI06	Measure the resolution time for RfI/RfS	95% "0 delay"	90%	10
	SQI07	Measure the number of (P)SAT iterations per software release	1 test iteration	3 test iterations	1

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	SQI08	Measure the time to escalate to the Commission for critical incidents/major service risks	95% less than 2 hours during CCN2-DEV contract working hours	90% less than 2 hours	5 events to escalate
	SQI09	Measure the delay to deliver a technically acceptable offer/proposal	"0 delay" for getting technically acceptable offer/proposal	2 working days	1
	SQI22	Measure the process Compliance as assessed by self assessment, internal and external audits, audit by the Commission	Maximum 2 critical and/or significant audit recommendations open per assessment or audit	Number of critical and significant recommendations open less than 15	1
	SQI23	Measure the conformance to security controls (number of critical findings during security audit)	Maximum 1 critical audit finding open per security audit	Maximum 3 critical audit finding open per security audit	1
	SQI24	Measure the corrective problem resolution	98% "0 delay"	93% "0 delay"	1 problem
	SQI25	Measure the number of complaints <sup>19</sup> received	0	2	1
	SQI26	Measure that actions agreed with DG TAXUD have been implemented within the given timeframe	0 delay	3 working days	5 actions
	SQI27	Delay to deliver a patch during a PSAT session	0 working day	1 working day	1
	SQI28	Measure training/workshop appraisal	100%	79%	1 training/workshop
	SQI30	Measure the satisfaction of the users with the services provided by the CCN2-DEV contractor	Very Satisfied	Somewhat satisfied	5 answers
	SQI31	Effectiveness of comments in relation to technical documents review	90 % of the comments to be implemented	85 % of the comments to be implemented	100 comments

<sup>19</sup> E-mail or letter entitled 'Official Complaint' from a Commission official with copies to those fulfilling the roles at the next escalation level in the Escalation Procedure defined in the FQP. The exact procedure, in line with the escalation process is to be detailed in the FQP.

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	SQI32 <b>Direct Liquidated damages<sup>20</sup></b>	Measure if the initial value of "Total number of months experience in managerial roles of the management team that will be assigned full time to the project" remains at an acceptable level	95%	85%	-
	SQI33 <b>Direct Liquidated damages</b>	Measure the number of DG TAXUD staff allocated to services that should be provided by the CCN2-DEV contract, but that are not.	0 days	5 days	-
	SQI34 <b>Direct Liquidated damages</b>	Measure that the team in charge of the fixed price CCN2-DEV contractor is staffed with the key personnel as proposed in the CCN2-DEV tender and that they are allocated and remain staffed to the activity as of the signature of the first Specific Contract.	0	0	NA
	SQI35 <b>Direct Liquidated damages</b>	Measure the delay in completing the Take over within the foreseen Take-over period.	0	0	1
KPI51		Measure the quality of a deliverable (SfR) - this will be the number of documents rejected at SfR and having to be resubmitted for review	-	-	-
KPI52		Measure the quality of a deliverable (SfA) - this will be the number of documents rejected at SfA and having to be resubmitted for acceptance	-	-	-
KPI53		Measure the time to notify the Commission delays of deliverables categorized with major or high impact for the Commission	-	-	-
KPI54	-	Measure the number of retrospective changes performed on the CMDB & DML	-	-	-

<sup>20</sup> See section 3.7.4 for details on liquidated damages.

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KPI55	-	Measure the number of assigned calls remaining open	-	-	-
KPI56	-	Measure the number of calls assigned during the reporting period	-	-	-
KPI57	-	Measure the number of unassigned calls during the reporting period	-	-	-
KPI58		Measure the number of defects reported during PSAT	-	-	-
KPI59		Measure the number of defects reported during SAT	-	-	-
KPI60		Measure the number of comments in relation to technical documents review	-	-	-
KPI61		Measure the number of defects reported per CI (systems/application/component) per reporting period	-	-	-
KPI62		Measure the number of defects/features incorrectly implemented	-	-	-
KPI63		Measure the number of changes reported per CI (systems/application/component) per reporting period	-	-	-
KPI64		Measure the number of patches delivered per CI (systems/application/component) per reporting period	-	-	-
KPI65		Measure the number of releases delivered per CI (systems/application/component) per reporting period	-	-	-
KPI66		Measure the unavailability times due to deployments of CCN related CIs	-	-	-
KPI67		Measure the number of maintenance licences for which the expiry reporting (not later than 90 days before the end of the contract) was late per reporting period	-	-	-



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KPI68		Measure the number of CCN2-DEV documents for which more than 50/100/200 comments were raised	-	-	-
KPI69		Measure the number of documents for which more than 15 / 30 / 50 comments are to be discussed during the Review Meeting	-	-	-

Table 3 : SQI List

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### 2.3.4 Service & Deliverables catalogue

The table lists all the services and deliverables linked to the Work Packages identified in sections 2.1 and 2.2 and contains the following information for each service & deliverable, where applicable:

- **Identification of the work package:** WP.w.x.y.z;
- **Identification of the service or deliverable:** DLV/SE-w.x.y.z;
  - **DLV:** a deliverable to be delivered to the Commission at a given date for review or acceptance;
  - **SE:** a service to be rendered to the Commission, the QoS of which must be reported in the monthly service report included in the Monthly Progress Report.
- **Plain text description** of the deliverable or of the service;
- **Planning, coded as follows:**
  - Planning specified in reference to **T0**, the starting date of the activity of the SC, and/or possibly in reference to other internal/external dependencies. When applicable, the planning specifies if the date is for submission for review or for acceptance;
  - **SC:** Planning defined in the Specific Contract
  - **FQP:** Planning to be defined in the FQP,
  - **RfA:** Planning defined in the RfA,
  - **Trigger:** Planning will be defined in the Trigger,
  - **MA:** Planning mutually agreed and recorded in the MPR,
  - **AN:** As Needed meaning that the contractor must take the initiative to produce the deliverable whenever an external event triggers the need for it (mainly an incident/request),
  - **Continuous:** self explanatory, applicable for service,
  - Reference to another service or deliverable, which means it follows the same planning,
  - Plain text.

All references made under this section to “month” and “quarter” periods, to “monthly” and “quarterly” periodicity are relative to T0, the starting date of an SC, unless explicitly stated otherwise.

- **Requesting Mechanism:**
  - Specific Contract (SC),
  - Request for Action (RfA),
  - Request for Estimate (RfE),
  - Request for Offer (RfO),
  - On Request (OR),
  - Trigger (TR)
  - Evaluation Request (ER).

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The request mechanism involving the use of a "Trigger" with or without an Evaluation Request (ER) and in relation to various budget provisions<sup>21</sup> applicable in this contract is summarised in the table below:

<b>Triggers (TR)</b>		
<i>The trigger is used only to "trigger" the start of an activity</i>		
<b>Budget Type</b>	<b>Trigger + Evaluation Request (TR + ER)</b>	<b>Trigger Only</b>
Fixed price	X	X
Provision for On-Demand		X <sup>22</sup>
Provision for QTM		
Provision for IT Equipment		
Travel and Subsistence		X

• **Ordering Mechanism:**

A service and/or a deliverable can be ordered through one of the following:

- Specific Contract (SC),
- Request for Action (RfA).

The indicative ordering mechanism involving the use of a "RfA" with or without a Request for Estimation (RfE) and in relation to various budget provisions<sup>23</sup> and services applicable in this contract is summarised in the table below:

Please also refer to section 5.1 for more details on the budget provisions.

<b>Requests For Action (RfA)</b>		<b>Services Covered by Budget Type</b>				
<i>The RfA is used to order additional quantities.</i>						
<b>Budget Type</b>	<b>RfA + RfE</b> <i>(with Estimate)</i>	<b>RfA only</b>	<b>With Unit</b>	<b>As Man-days</b>	<b>IT equipment</b>	<b>Travel and Subsistence</b>

<sup>21</sup> The budget provisions applicable in the context of this contract are: Fixed Price (FP), On-Demand (OD), Quoted Time & Means (QTM), Travel and Subsistence (T&S) and provisions for IT equipment.(P&I) – Please refer to section 5.1 for more details on those provisions.

<sup>22</sup> Once an RFA has been issued and quantities ordered, a trigger may be used to consume some of these quantities

<sup>23</sup> The budget provisions applicable in the context of this contract are: Fixed Price (FP), On-Demand (OD), Quoted Time & Means (QTM), Travel and Subsistence (T&S) and provisions for IT equipment.(P&I) – Please refer to section 5.1 for more details on those provisions.

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			Price			
Fixed price			X	X	X	
Provision for On-Demand	X	X	X			
Provision for QTM	X			X		
Provision for IT Equipment	X	X			X	
Travel and Subsistence		X				X

- **Delivery mechanism:**

Not shown for services, as the service reporting is systematically made in the Monthly Service Report to report the QoS metrics of the service.

In case of a deliverable,

- **ID:** code used to specify that the deliverable is delivered on its own (Individual Delivery),
- a **DLV- w.x.y.z** refers to the “hosting” deliverable which must include the deliverable to be delivered. In most cases both are very closely linked, but in the case of the service reports, these are all delivered via the monthly progress report,
- **SC, RfA, Trigger:** as defined in the Specific Contract, Request for Action or Trigger.

- **Acceptance mechanism:**

"MPR" shown for service, as the correctness of the reported QoS and SQI is accepted via the acceptance of the MSR, as a part of the MPR. Note that it is the factual correctness (alias integrity) of the reported Quality of Service (QoS) which is subject to acceptance in the monthly progress report and not the service itself.

In case of a deliverable:

- **No:** No formal acceptance required,
- **IA:** The Commission will issue a dedicated acceptance letter for the deliverable (Individual Acceptance);
- **SC, RfA:** as defined in the Specific Contract, Request for Action;
- **DLV.0.7 (MPR):** the acceptance by default of the deliverable by the acceptance of the Monthly progress report in which the deliverable is proposed for acceptance. The non-acceptance of the deliverable would need to be notified as a specific qualification in the letter of (non) acceptance of the MPR;
- Reference to another deliverable, which means it has the same acceptance mechanism;
- **SQI:**
  - Either a reference to an applicable SQI defined in section 3.7.1,

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- Or a reference to another deliverable/service, the SQI of which is applicable;
- Or "SC", "RfA" or "Trigger", which means that the SQIs will be defined in the Specific Contracts, Requests for Action.



If a reference is made to an SQI which is composed of multiple sub SQIs (e.g. SQI1 can be SQI1a or SQI1b) then all sub SQIs related to this SQI can be used.



Please note that **SQI25** (complaints related) is applicable to all services and/or deliverables of the contractor and is for readability reasons not added in all entries of the table below.

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The following list is provided for information only, it is neither exhaustive nor binding as it constantly evolves and does not take into account the future transformations that will occur during the lifetime of the CCN2-DEV contract. The present list is provided to give an indication to the Tenderer of the level of deliverables expected. This list may be updated by DG TAXUD at each Specific Contract.

For all deliverables mentioned below, the following information will be completed in the first delivery of the FQP: review cycle, publication (CIRCA, email, online), etc. The structure of the main deliverables will be in line with the one provided by the incumbent contractors and if needed will be updated in the first delivery of the FQP.

The **delivery format** of all deliverables mentioned below will have to be agreed with DG TAXUD and described in the first delivery of the FQP. By default, it will be a MS-Office (or compatible) deliverable uploaded on CIRCA but DG TAXUD may agree to change to format of some deliverables e.g. extracts from the SMT or CMDDB data available on the portal or log files of test tools,. Furthermore, some deliverables will have to be continuously updated and on-line available on the project portal (see deliverables table for details).

Also, the contractor has to re-deliver the artefacts at the end of each quarter/year (see WP.10) to an electronic repository of the Commission (CIRCA for example). However, the Commission may request the contractor to redeliver them on a DVD-ROM media instead.

All written artefacts are to be produced in **English**, unless stated otherwise. Some documents may need translation into EN, DE or FR (see WP8.3.7).

Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.0.1	DLV-0.1-1	FQP, including its annexes	SC	SC	SFR 3 months after the take over	ID	IA	SQI02a/b
WP.0.1	DLV-0.1-2	Evolutionary version of FQP, including its annexes and the internal working procedures	SC, RfA	SC, RfA	as per SC or RfA	ID	IA	SQI02a/b
WP.0.4	DLV-0.4-1	SC offer in response to RFO	SC	RfO	As specified in the RFO – default response time for RfO is 10 working days.	ID	As specified in the RFO	SQI09

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WP.0.4	DLV-0.4-2	Proposal/Offer in response to ER or in response to RfE.	RfA	ER, RfE	The response time along with the T1/T2/T3 review cycle for a proposal/offer will be defined by the Commission in the ER or RfE – default response time for RfE is 5 Working Days for activities taking less than 20 working days or 10 working days for activities taking more than 20 working days.	ID	Order (RfA or trigger) made on the basis of the offer/proposal	SQI09
WP.0.4	DLV-0.4-3	Forecast of activities in the frame of new SC's	SC	SC	MA usually 3 months before the end of the SC	ID	MPR	
WP.0.5.1	SE-0.5.1-1	Internal QA	SC	SC	Continuous	-	MPR	
WP.0.5.1	DLV-0.5.1-2	Quality records and/or minutes of internal meetings, filed in contractor's premises	SC	OR	Max. 3 working days upon request from the Commission	ID	no	
WP.0.5.2	SE-0.5.2-1	Internal QC	SC	SC	Continuous	-	MPR	
WP.0.5.2	DLV-0.5.2-2	Author's position on technical and quality review comments, given by the Commission and/or any other party involved in the project, on deliverables submitted for review to the Commission.	SC, RfA	SC, RfA	+ z working days after receipt of the review comments, according PQP, FQP, RfA (with z usually = 1)	ID	no	SQI03a/b
WP.0.5.2	SE-0.5.2-3	Participation in the review meeting(s) to clarify the author's position on review comments and reach agreement on implementation of the review comments (either in the Commission's premises or by conference call).	SC, RfA	SC, RfA	MA within the limit imposed by PQP, FQP or RfA and the review cycle (usually after 1 to 3 working days after submission of DLV-0.5.3-3)	-	MPR	

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WP.0.5.2	DLV-0.5.2-4	Production of meeting decisions	SC, RfA	SC, RfA	MA within the limit imposed by PQP, FQP or RfA and the review cycle (usually the day after the review meeting)	-	MPR	
WP.0.5.3	SE-0.5.3-1	Risk Management	SC	SC	Continuous	-	MPR	
WP.0.5.3	DLV-0.5.3-2	Risk analysis records	SC	OR	Continuously updated and on-line available via project portal	ID	MPR	
WP.0.5.4	DLV-0.5.4-1	Self Assessments reports	SC	OR	at least once per year plus continuous follow up of resulting improvement actions.	ID	no	SQI22 SQI23
WP.0.5.4	DLV-0.5.4-2	Internal Audit reports	SC	OR		ID	no	
WP.0.5.5	SE-0.5.5-1	Internal team organisation and management	SC	SC	Continuous	-	MPR	SQI32 SQI33 SQI34
WP.0.6	SE-0.6-1	Attendance at monthly meetings (BMM, multilateral, ...)	SC	SC	as per FQP and in exceptional case, MA	-	MPR	
WP.0.6	SE-0.6-2	Attendance at Ad hoc meetings	SC	OR	on 4 hours notice	-	MPR	
WP.0.6	DLV-0.6-3	Agenda and preparatory material of Monthly Meetings (BMM, multilateral, ...)	SC	SC	1 working day before the meeting	ID	MPR	SQI01a/b
WP.0.6	DLV-0.6-4	Minutes of the Bilateral Monthly Meeting bundled with MPR	SC	SC	Date of BMM + 10 working days for acceptance	ID	IA bundled with MPR	SQI02a/b
WP.0.6	DLV-0.6-5	Minutes of the steering committee, other monthly meetings and ad hoc meetings	SC	SC	Date of the meeting +5 working days for acceptance	ID	MPR	SQI03a/b



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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.0.6	SE.0-6-6	Attendance at the Steering Committee meetings	SC	SC	MA, on average once per quarter	On time and prepared to discuss strategic reports, plans and risks.		
WP.0.6	SE-0.6-7	Action List : consolidated for all meetings to which CCN2-DEV attended	SC	SC	Continuously updated (max. day after each meeting) and on line available via the project portal	-	NO	SQI26
WP.0.7	DLV-0.7-1	Monthly Progress Reports, which includes Monthly Service Reports and all annexes as agreed per FQP	SC	SC	Max (end of the reporting period + 5 working days)) for review Max (Date of BMM +5 working days) for acceptance	ID	IA	SQI02a/b
WP.0.7	DLV-0.7-2	Report on daily basis.	SC	SC	The working day following the reported day	-	NO	SQI01a/b
WP.0.7	DLV-0.7-3	Report on weekly basis.	SC	SC	The first working day following the end of the reported week	-	NO	SQI02a/b
WP.0.7	DLV-0.7-4	Report on quarterly basis.	SC	SC	5 working days after the reported quarter	-	NO	SQI03a/b
WP.0.8	DLV-0.8-1	Monthly update of the planning of contractors' activities, services and deliverables	SC	SC	as per MPR and continuously updated and on line available via the project portal	MPR	MPR	
WP.0.8	DLV-0.8-2	Master and Management Plan with detailed view on the next 12 months	SC	SC	MPR and continuously updated and on line available via the project portal	MPR	MPR	

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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.0.9	SE.0-9-1	Co-operate with the Commission (and any third party nominated by it) during quality, process and security audit	SC	SC	Average duration of 5 working days, date as per request if requested date is more than 2 weeks from date of request, otherwise MA;	Positive feedback from the auditors regarding the co-operation of the contractor during audit.		SQI22 SQI23
WP.0.9	DLV-0.-9-2	Position of the audited contractor on the audit report	SC	SC	20 working days after reception of the audit report, for acceptance	ID	No	SQI03a/b
WP.0.9	DLV-0.-9-3	Management of the implementation of actions agreed by the contractor at the outcome of the audit.	SC	SC	MA	All actions performed by the contractor according to expectations		SQI26
WP.0.10	DLV-0.10-1	Re-delivery of all artefacts from the past quarter to an electronic repository of the Commission (Commission may also request re-delivery on DVD-ROM, if necessary)	SC	SC	5 Working days after the end of the quarter	ID	MPR	SQI04a/b
WP.0.10	DLV-0.10-2	Re-delivery of all artefacts to an electronic repository of the Commission (Commission may also request re-delivery on DVD-ROM, if necessary)	SC	SC	MA	ID	MPR	SQI04a/b
WP.0.11	SE-0.-11-1	Co-operate with the Commission (and any third party nominated by it) during yearly price benchmarking exercise	SC	SC	Average duration of 10 working days, date as per request if requested date is more than 2 weeks from date of request, otherwise MA;	Positive feedback from the auditors regarding the cooperation of the contractor during price benchmarking.		SQI30
WP.0.12	SE-0.-12-1	CSIP Management	SC	SC	Continuous	-	MPR	

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WP.0.13	SE-0.13-1	Manage procurement of necessary products and services (HW and COTS)	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	
WP.0.13	DLV-0.13 -2	Detailed inventory of all HW and COTS under contract, with contractual maintenance and insurance status specified	SC, RfA	SC, RfA	2 Working days after the request and on-line available on the project portal	MPR	MPR	SQI03a/b
WP.0.13	DLV-0.13 -3	Schedule with the planned needs and procurement progress in terms of HW an COTS	SC, RfA	SC, RfA	MPR	MPR	MPR	SQI02a/b
WP.0.13	DLV-0.13 -4	Proof of disposal of destruction of HW assets	SC, RfA	SC, RfA	As per SC or RfA	SC, RfA	SC, RfA	SC, RfA
WP.2.0	SE-2.0	Take over activities	SC	SC	Continuous during the takeover period	No regression/no incident after takeover, no complaint from 3 <sup>rd</sup> parties during takeover, no deviation according to plan		SQI34 SQI35
WP.2.1	DLV-2.1-1	Detailed take over plan including the updated baseline of all CIs to be taken over	SC	SC	Submitted for acceptance as per SC	ID	IA	SQI02a/b
WP.2.2	DLV-2.2-1	Take over FAT report	SC	SC	Submitted for acceptance as per SC	ID	IA	SQI02a/b
WP.5.1	DLV-5.1-1	Detailed hand over plan including the list of CIs to hand over	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	As per SC or RfA	As per SC or RfA	As per SC or RfA

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WP.5.2	SE-5.2-1	Hand over	SC, RfA	SC, RfA	Continuous during the handover period	No complaint from “taking over” parties, no deviation from plan, no missing assets, information & knowledge in the handover.		As per SC or RfA
WP.5.3	SE-5.3-1	Support/training to the new contractor during the hand over process	SC, RfA	SC, RfA	For an elapsed time of 3 months	As per SC or RfA	As per SC or RfA	As per SC or RfA
WP.5.3	DLV-5.3-2	Hand over training material	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	as per request	as per request	As per SC or RfA
WP.5.4	DLV-5.4-1	Hand over report	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	as per request	as per request	As per SC or RfA
WP.5.5	SE-5.5-1	"After handover" report	SC, RfA	SC, RfA	For an elapsed time of 3 months	As per SC or RfA	As per SC or RfA	As per SC or RfA
WP.6.1	DLV-6.1-1	Feasibility Study (FS) and strategical studies	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.1	DLV-6.1. 2	Business Case (BC)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.1	DLV-6.1-3	Vision Document	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.1	DLV-6.1-4	Impact assessment	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b

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WP.6.1	DLV-6.1-5	Proof of Concepts	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.2	DLV-6.2-1	IT System Model (architecture) including interfaces with other systems	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.2	DLV-6.2-2	Business & System Process Model	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.6.3	DLV-6.3-1	Requirements Document	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.3	DLV-6.3-2	System/Application/Component Functional Requirements	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.3	DLV-6.3-3	System/Application/Component Non Functional Requirements (e.g. technical, security, DRP, operations, ...)	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.4	DLV-6.4-1	System/Application/Component Functional Specifications	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.4	DLV-6.4-2	System/Application/Component User Interface Specifications	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.5	DLV-6.5-1	System/Application/Component Technical/design Specifications	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b

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WP.6.5	DLV-6.5-2	Infrastructure Requirements Document	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a/b
WP.6.5	DLV-6.5-1	System/Application/Component Technical/design Specifications	SC, RfA	SC, RfA, Trigger	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.6.6.1	DLV-6.6.1-1	Migration Strategy Document (MSD)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.6.6.2	DLV-6.6.2-1	Deployment Plan (DP) for a System/Application/Component	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.6.8	SE-6.8 -z -1	Evolutionary maintenance of specifications (z= all the specifications)	SC, RfA	SC, RfA	as per SC or RfA	as per SC or RfA	as per SC or RfA	as per SC or RfA
WP.6.8	DLV-6.8- z-2	Reporting on the evolutionary maintenance of specifications (z= all the specifications)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-
WP.6.9.1	SE-6.9.1-z-1	Corrective maintenance of the specifications which have been taken over (z= all the components)	SC, RfA	SC, RfA	Continuous	Compliance with the rules defined in FQP and contractual OLA regarding the incident & problem management and with agreed planning in Change and Release management.		SQI24 SQI02a/b
WP.6.9.1	DLV-6.9.1-z-2	Reporting on the corrective maintenance of the specifications which have been taken over (z= all the specifications)	SC, RfA	SC, RfA	Submitted for review and acceptance as per request or SC	MPR	MPR	-

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WP.6.9.2	SE-6.9.2-z-1	Corrective maintenance of the new specifications (z= all the specifications)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	Compliance with the rules defined in FQP and contractual OLA regarding the incident & problem management and with agreed planning in Change and Release management.		SQI24 SQI02a/b
WP.6.9.2	DLV-6.9.2-z-2	Reporting on the corrective maintenance of the new specifications (z= all the specifications)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-
WP.7.1	DLV-7.1-1	Documentation of Programmes and Software components	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.7.1	DLV-7.1-2	Programmes and Software Components (subject to FAT and (P)SAT)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b SQI07
WP.7.2	DLV-7.2-1	User Manual and on-line help text facilities	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.2	DLV-7.2-2	Installation Manual	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.7.2	DLV-7.2-3	Administration Manual	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.7.3.1	DLV-7.3.1-1	Master Test Plan (MTP)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b

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WP.7.3.2	DLV-7.3.2-1	Test Design Specifications (TDS) for FAT, PSAT and SAT	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.3.3	DLV-7.3.3-1	Test Design Specifications (TDS) for Conformance Testing (CT)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.3.4	DLV-7.3.4-1	Acceptance Test Plan (ATP) for FAT	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.3.5	DLV-7.3.5-1	Acceptance Test Plan (ATP) for (P)SAT	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.3.6	DLV-7.3.6-1	Acceptance Test Plan (ATP) for Qualification Testing (QT)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.3.7	DLV-7.3.7-1	Acceptance Test Plan (ATP) for Conformance Testing (CT)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a/b
WP.7.4.1	SE-7.4.1-1	Execute Unit Testing	SC, RfA	SC, RfA	For each new software component	-	MPR	-
WP.7.4.1	DLV-7.4.1-2	Unit Testing records	SC, RfA	SC, RfA	For each new software component	ID	no	-
WP.7.4.2	SE-7.4.2-1	Execute Integration Testing	SC, RfA	SC, RfA	For each new software component	-	MPR	-
WP.7.4.2	DLV-7.4.2-2	Integration Testing records	SC, RfA	SC, RfA	For each new software component	ID	no	-



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WP.7.4.3	SE-7.4.3-1	Execute FAT including security/ vulnerability as well as performance and stress testing	SC, RfA	SC, RfA	For each new software component	As per SC or RfA	As per SC or RfA	As per SC or RfA
WP.7.4.3	DLV-7.4.3-2	FAT Report including security/ vulnerability as well as performance and stress testing results and the minutes of the kick off and FAT mission meetings	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b
WP.7.4.4	SE-7.4.4-1	Execute Qualification Testing	SC, RfA	SC, RfA	For each new software component	-	MPR	-
WP.7.4.4	DLV-7.4.4-2	Delivery Qualification Report (DQR)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI01a/b
WP.7.5	SE-7.5-1	Release assembling and packaging	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	-	MPR	
WP.7.5	DLV-7.5-2	Release package <sup>1</sup>	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a/b SQI07
WP.7.8	SE-7.8-z-1	Evolutionary maintenance of the build and test software and documents (z= all the components)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	as per SC or RfA	as per SC or RfA	as per SC or RfA

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<sup>1</sup> Content of Release package as per WP.7.5 description

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WP.7.8	DLV-7.8- z-2	Reporting on the evolutive maintenance of the build and test software and documents (z= all the build and test software and documents)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-
WP.7.9.1	SE-7.9.1-z-1	Corrective maintenance of the build and test software and documents which have been taken over (z= all the components)	SC, RfA	SC, RfA	Continuous	Compliance with the rules defined in FQP and contractual OLA regarding the incident & problem management and with agreed planning in Change and Release management.		SQI07 SQI24
WP.7.9.1	DLV-7.9.1-z-2	Reporting on corrective maintenance of the build and test software and documents which have been taken over (z= all the components)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-
WP.7.9.2	SE-7.9.2-z-1	Corrective maintenance of the new software and documents (z = all the components in the scope WP.6 and WP.7)	SC, RfA	SC, RfA	Continuous	Compliance with the rules defined in FQP and contractual OLA regarding the incident & problem management and with agreed planning in Change and Release management.		SQI07 SQI24
WP.7.9.2	DLV-7.9.2-z-2	Reporting on corrective maintenance of the new build and test software and documents (z = all the components in the scope WP.6 and WP.7)	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-

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WP.8.1.2.1	SE-.8.1.2.1-1	Incidents Management including the related administrations (e.g. user management, contact management, ...)	SC, RfA	SC, RfA	Continuous as from the allocation of the call – on-line available on the project portal	According to expectations set in the contractual OLA. No time closure overrun accountable to the contractor, or because of slack time in third party intervention, no “ping pong” between involved parties, no error in classification, allocation and escalation.		SQI05a SQI08
WP.8.1.2.1	DLV-.8.1.2.1-2	Incident Report in MSR	SC, RfA	SC, RfA	AN – on-line available on the project portal	MPR	MPR	-
WP.8.1.2.1	DLV-.8.1.2.1-3	Ad hoc Incident Report	SC, RfA	SC, RfA	AN – on-line available on the project portal	ID	MPR	SQI02a/b
WP.8.1.2.2	SE-.8.1.2.2-1	Service Requests	SC, RfA	SC, RfA	AN, upon allocation of an action (resulting from an RfI & RfS), according OLA in FQP	-	MPR	SQI06 SQI08
WP.8.1.2.2	DLV-.8.1.2.2-2	Responses to RFI and RfS	SC, RfA	SC, RfA	AN, upon allocation of an action (resulting from an RfI & RfS), according OLA in FQP	-	MPR	SQI06 SQI08
WP.8.1.2.2	DLV-.8.1.2.2-3	Service Requests Report in MSR	SC, RfA	SC, RfA	Submitted for review and acceptance as per SC or RfA	MPR	MPR	-

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WP.8.1.3	SE-.8.1.3 -1	Problems including KELs and related workarounds	SC, RfA	SC, RfA	AN, upon allocation of the problem (resulting from incident analysis), according OLA in FQP – on-line available on the project portal	According to expectations set in the contractual OLA. No time closure overrun accountable to the contractor, or because of slack time in third party intervention, no “ping pong” between involved parties, no error in classification, allocation and escalation.		SQI05b SQI08 SQI24
WP.8.1.3	DLV-.8.1.3-2	Problem Report in MSR	SC, RfA	SC, RfA	AN– on-line available on the project portal	MPR	MPR	SQI05b
WP.8.1.3	DLV-.8.1.3-3	Ad hoc Problem Report	SC, RfA	SC, RfA	AN – on-line available on the project portal	ID	MPR	SQI05b
WP.8.1.4	SE.8.1.4-1	Perform Configuration Management and maintenance of CMDB and DML	SC, RfA	SC, RfA	Continuous	-	MPR	
WP.8.1.4.1	DLV-8.1.4.1-1	Production and maintenance of the planning of the Configuration Baseline	SC	SC	Initial Delivery with FQP Continuously updated – on-line available on the project portal	FQP	FQP	--
WP.8.1.4.1	SE-8.1.4.1-2	Ensure coherence of the configuration and planning of the evolution of the Configuration Baseline	SC	SC	Continuous	-	MPR	-
WP.8.1.5.1	SE.8.1.5-1	Change Management (creation, update, follow-up of the RFCs)	SC	SC	Continuous– all RFC related information (incl. impact assessments) must be on-line available on the project portal	-	MPR	

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WP.8.1.5.2	SE-8.1.5.2-1	CAB meetings (participation, documentation of RfC, change analysis, recording CAB decisions on discussed RfCs, RFC reporting).	SC, RfA	SC, RfA	AN	-	MPR	-
WP.8.1.5.2	DLV-8.1.5.2-2	CAB meeting minutes	SC, RfA	SC, RfA	SfR : 2 working days after the CAB meeting	-	MPR	-
WP.8.1.5.1	DLV-.8.1.5.1-2	Change Report in MSR	SC, RfA	SC, RfA	AN – on-line available on the project portal	MPR	MPR	-
WP.8.1.5.1	DLV-.8.1.5.1-3	Ad hoc Change Report	SC, RfA	SC, RfA	AN – on-line available on the project portal	ID	MPR	SQI02a/b
WP.8.1.6	SE.8.1.6-1	Release Management and maintenance of DML	SC, RfA	SC, RfA	Continuous	-	MPR	-
WP.8.1.6.	DLV-8.1.6-2	Creation/update of release records	SC, RfA	SC, RfA	SC, RfA	ID	MPR	-
WP.8.1.6.	DLV-.8.1.6-3	Release Report in MSR	SC, RfA	SC, RfA	AN – on-line available on the project portal	MPR	MPR	-
WP.8.1.6.	DLV-.8.1.6-4	Ad hoc Release Report	SC, RfA	SC, RfA	AN – on-line available on the project portal	ID	MPR	SQI02a/b
WP.8.2.1	SE.8.2.1-1	Service Level Management	SC, RfA	SC, RfA	Continuous	-	MPR	
WP.8.2.1	DLV.8.2.1-2	Service Catalogue	SC	OR	Initial delivery with FQP - Continuously updated and on-line available via project portal	FQP	FQP	--
WP.8.3.1.1	DLV-8.3.1.1-1	Working Group Meeting - Preparation of material	SC, RfA	RfA, Trigger	meeting date – 10 working days for review, - 5 working days for acceptance	ID	MPR	SQI02a/b

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WP. 8.3.1.1	SE-8.3.1.1-2	Working Group Meeting- Performance	SC, RfA	RfA, Trigger	average duration of 2 working days, date as per request	-	MPR	SQI30
WP.8.3.1.2	SE-8.3.1.2-1	Working Group Meeting - Attendance	SC, RfA	RfA, Trigger	average duration of 2 working days, date as per request	-	MPR	
WP.8.3.2.1	DLV-8.3.2.1-1	Training/workshop/demo - Preparation material	SC, RfA	RfA, Trigger	Date of the Training/Workshop/Demo – 5 working days, for review Date of the Training/Workshop/Demo – 2 working days, for acceptance	ID	IA	SQI02a/b
WP. 8.3.2.1	SE-8.3.2.1-2	Training/workshop/demo - Performance	SC, RfA	RfA, Trigger	Average duration of 3 working days, date as per request if requested date is more than 3 weeks from date of request, otherwise MA	-	MPR	SQI28
WP. 8.3.2.2	SE-8.3.2.2-1	Training/workshop/demo - Attendance	SC, RfA	RfA, Trigger	Average duration of 2 working days, date as per request if requested date is more than 3 weeks from date of request, otherwise MA	-	MPR	
WP. 8.3.2.2	DLV-8.3.2.2-2	Training/workshop/demo – Attendance Report	SC, RfA	RfA, Trigger	Date of Training/workshop/demo + 5 working days for review Date of Training/workshop/demo + 10 working days for acceptance	ID	MPR	SQI02a/b
WP. 8.3.2.3	SE-8.3.2.3-1	Training/workshop/demo - Hosting Facilities and infrastructure: Meeting room up to 40 persons in contractor's premises	SC, RfA	RfA, Trigger	Average duration of 3 working days, date as per request if requested date is more than 3 weeks from date of request otherwise MA	-	MPR	SQI28

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WP. 8.3.2.4	DLV-8.3.2.4-1	Training/workshop/demo – Agenda	SC, RfA	RfA, Trigger	Date of the Training/workshop/demo – 8 working days, for review	ID	MPR	SQI02a/b
WP. .8.3.2.4	DLV-8.3.2.4-2	Training/workshop/demo – Briefing	SC, RfA	RfA, Trigger	Date of the Training/workshop/demo – 5 working days, for review	ID	MPR	SQI02a/b
WP. 8.3.2.4	DLV-8.3.2.4-3	Training/workshop/demo - Detailed minutes and evaluation	SC, RfA	RfA, Trigger	Date of the Training/workshop/demo + 10 working days, for acceptance	ID	MPR	SQI02a/b
WP. 8.3.2.4	DLV-8.3.2.4-4	Training/workshop/demo - Planning	SC	SC	Continuous	MPR	MPR	-
WP.8.3.3	DLV-8.3.3.-1	Mission - Preparation of agenda	SC, RfA	RfA, RfA, Trigger	Date of the mission – 15 working days, for review, if mission date is more than 3 weeks from date of request, otherwise MA	ID	MPR	SQI02a/b
WP.8.3.3	DLV-8.3.3.-2	Mission – Briefing	SC, RfA	RfA, RfA, Trigger	Date of the mission – 5 working days, for review	ID	MPR	SQI02a/b
WP.8.3.3	DLV-8.3.3.-3	Mission - Preparation of material	SC, RfA	RfA, RfA, Trigger	Date of the mission – 5 working days, for review Date of the mission – 2 working days, for acceptance	ID	MPR	SQI02a/b
WP. 8.3.3	SE-8.3.3-4	Mission - Performance	SC, RfA	RfA, RfA, Trigger	Average duration of 2 working days, date as per request if requested date is more than 2 weeks from date of request ,otherwise MA	-	MPR	SQI30

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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP. 8.3.3	DLV-8.3.3-5	Mission - Report	SC, RfA	RfA, RfA, Trigger	Date of the mission + 10 working days, for acceptance	ID	MPR	SQI02a/b
WP.8.3.4	SE-8.3.4 -1	Support to the NAs	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	As per SC or RfA
WP.8.3.4	SE-8.3.4 -2	Support to the Commission services	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	As per SC or RfA
WP.8.3.4	DLV-8.3.4 -3	Deliverables of the consulting services for SE-8.3.4 -1 and SE-8.3.4 -2 like: - support documentation, - FAQ, - inputs for newsletters and news alerts, - ...	SC, RfA	RfA, OR	As per SC or RfA	As per SC or RfA	As per SC or RfA	As per SC or RfA
WP.8.3.5	SE-8.3.5-1	Technical meetings with the Commission or other contractors – Attendance	SC, RfA	RfA, Trigger	as per request	-	MPR	
WP. 8.3.5	DLV-8.3.5-2	Technical meetings – Minutes	SC, RfA	RfA, Trigger	Date of meeting + 5 working days for review Date of meeting + 10 working days for acceptance	ID	MPR	SQI03a/b
WP.8.3.6	SE-8.3.6-1	Service Meeting - Attendance	SC	RfA, Trigger	as per FQP and in exceptional case MA	-	MPR	
WP.8.3.6	DLV-8.3.6-2	Service Meeting – Summary report focusing on its actions points	SC	RfA, Trigger	Date of service meeting + 5 working days for review Date of Training/workshop/demo + 10 working days for acceptance	ID	MPR	SQI02a/b



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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.8.3.7	DLV-8.3.7 -1	Translation from one source language to another language amongst DE, FR, EN	RfA	RfA	as per SC or RfA	ID	IA	SQI03a/b
WP.8.3.7	DLV-8.3.7 -2	Translation from one source language to another language amongst EU official languages	RfA	RfA	as per SC or RfA	ID	IA	SQI03a/b
WP.8.4.1.1	SE-8.4.1.1-1	Support to PSAT	SC, RfA	SC, RfA, Trigger	As per SC or RfA	As SC, RfA	As per SC, RfA	As per SC, RfA, SQI27
WP.8.4.1.1	SE-8.4.1.1-2	Support to SAT, Qualifications Testing and Running-in activities	SC, RfA	SC, RfA, Trigger A	As per SC or RfA	As SC, RfA	As per SC, RfA	As per SC, RfA
WP.8.4.1.1	DLV-8.4.1.1-3	Report concerning the support services to PSAT, SAT, Qualifications Testing and Running-in activities	SC, RfA	SC, RfA, Trigger	Date of end support services + 5 working days for review Date of end support services + 10 working days for acceptance	As SC, RfA	As per SC, RfA	As per SC, RfA
WP.8.4.2.1	SE-8.4.2.1-1	Support to Conformance Testing activities	SC, RfA	SC, RfA, Trigger	As per SC or RfA	As SC, RfA	As per SC, RfA	As per SC, RfA
WP.8.4.2.1	DLV-8.4.2.1-2	Report concerning the support to Conformance Testing activities	SC, RfA	SC, RfA, Trigger	Date of end support services + 5 working days for review Date of end support services + 10 working days for acceptance	As SC, RfA	As per SC, RfA	As per SC, RfA
WP.8.4.3	SE-8.4.3-1	Support to operation of applications	SC, RfA	SC, RfA, Trigger	As per SC or RfA	As SC, RfA	As per SC, RfA	As per SC, RfA

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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.8.4.3	DLV-8.4.3-2	Report concerning the support to operation of applications	SC, RfA	SC, RfA, Trigger	Date of end support services + 5 working days for review Date of end support services + 10 working days for acceptance	As SC, RfA	As per SC, RfA	As per SC, RfA
WP.8.4.4	SE-8.4.4 -1	Technical review of deliverables from other contractors	SC, RfA	SC, RfA, Trigger	From date of reception of the deliverables for review till x working days after, according the review cycle applicable, typically x = 3 to 10 working days	-	MPR	-
WP. 8.4.4	DLV-8.4.4 -2	Technical review reports of deliverable submitted for review, containing the list of review comments	SC, RfA	SC, RfA, Trigger	x working days after the reception of the deliverables for review, according to the review cycle applicable, typically x = 5 to 8 working days	ID	No	SQI02a/b SQI31
WP. 8.4.4	SE-8.4.4 -3	Attendance at review meetings to clarify review comments issued	SC, RfA	SC, RfA, Trigger	y days after the submission of the DLV-8.4.4-2, typically y= 2 to 5 working days	-	MPR	
WP.8.5.1	DLV-8.5.1-1	Security Plan	SC, RfA	SC, RfA	Initial Delivery with FQP	FQP	FQP	-
WP.8.5.1	DLV-8.5.1-2	Evolutionary version of Security Plan	SC, RfA	SC, RfA	as per SC or RfA - - Updates aligned with FQP updates	FQP	FQP	-
WP.8.5.1	SE-8.5.1-3	Implementation of security controls	SC	SC	Continuous	-	MPR	SQI23
WP.8.5.2	SE-8.5.2-1	Integrate Security Requirements	SC	SC	Continuous	-	MPR	-

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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.8.5.2	DLV-8.5.2-2	Monthly Security report	SC	SC	MPR	MPR	MPR	-
WP.8.8.1	SE-8.8.1-1	Extended time coverage – "on call"	SC, RfA	SC, RfA, Trigger	As per RfA	As per RfA	As per RfA	As per RfA
WP.8.8.1	DLV-8.8.1-2	Report concerning provision of Extended time coverage – "on call"	SC, RfA	SC, RfA, Trigger	As per RfA	As per RfA	As per RfA	As per RfA
WP.8.8.2	SE-8.8.2-1	Extended time coverage – "ad hoc"	SC, RfA	SC, RfA, Trigger	As per RfA	As per RfA	As per RfA	As per RfA
WP.8.8.2	DLV-8.8.2-2	Report concerning provision of Extended time coverage – "ad hoc"	SC, RfA	SC, RfA, Trigger	As per RfA	As per RfA	As per RfA	As per RfA
WP.10	DLV/SE.10.x	Other services and deliverables in the scope of the contract.	SC, RfA	SC, RfA	As per SC or RfA	SC, RfA	SC, RfA	SC, RfA
WPA	SE-A-1	Acquisition and maintenance of HW & COTS for production and testing environment	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	
WP.A	DLV-A-2	Delivery and shipment notices related to SE-A-1	SC, RfA	SC, RfA	As per SC or RfA	ID	IA	SQI03a/b
WP.B.1	SE-B-1-1	Set up and Maintain the Office Infrastructure	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	
WP.B.2	SE-B-2-1	Set up, Install, Operate and Maintain the IT and Telecom Infrastructure	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	
WP.B.2	DLV-B-2-2	FAT report related to SE-B-1-1 and SE-B-2-1 and SE-B-3-1	SC, RfA	SC, RfA	As per SC or RfA	ID	IA	SQI03a/b

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Work Package	Deliverable/ Service	Deliverable Title	Order mechanism	Request mechanism	Planning	Delivery Mechanism	Acceptance Mechanism	SQI (indicative)
WP.B.3	SE-B-3-1	Acquisition and maintenance of HW & COTS related to specification, build, test and support.	SC, RfA	SC, RfA	As per SC or RfA	-	MPR	

Table 4 : Services & Deliverables

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### 3 Quality Requirements

#### 3.1 Methodology

TEMPO is the applicable methodology for the CCN2-DEV contractor and other contractors which will interact with the CCN2-DEV contractor. The contractor will need to adapt to the evolution of TEMPO which is subject to a continuous improvement programme leading to 1 or 2 TEMPO releases per year.

#### 3.2 Standards and best practices

The contractor has to deliver the requested services in line with the ITIL best practices, ISO Standards and TEMPO methodology as defined in the Annex II.A - Terms of Reference, Section 0.5.1.

#### 3.3 Quality plans (PQP, FQP)

The set of quality plans:

- defines the roles of the different parties involved or interacting with the service delivered by the CCN2-DEV contractor;
- describes the communication and collaboration framework between the CCN2-DEV contractor and the third parties involved;
- describes the overall planning, the key services and deliverables;
- describes the specific plans to be produced, implemented and revised;
- determines the procedures and business processes to apply;
- determines the quality framework, the implementation of quality requirements, and the instruments to specify and monitor them (SLA, OLA, ToC).

Refer to TEMPO for more detailed information concerning the required contents of quality plans.

The hierarchy and the applicability order among the different quality plans within the quality framework of DG TAXUD is the following:

- Level 1: **TEMPO** acts on the level applicable to all systems and projects managed by DG TAXUD.
- Level 2: The Commission has produced the Programme Quality Plans (**PQP**) for Customs systems, Excise Systems and Taxation systems which apply to all contractors involved in that area of work. Each PQP defines among other procedures the details of the working relationships between all the stakeholders.
- Level 3: The Framework Quality Plan (**FQP**) is applicable at the level of the Framework Contract. It defines the details of the working relationship between the contractor and the Commission as well as the quality expectations for the scope and duration of the Framework Contract. The contractor will take over the FQP from the incumbent CCN/TC contractor (See also section 1.4 and section 2.2 - WP.0.1 for more details). During the take-over activity, the contractor will only document how the FQP will be implemented and list the major deviations. After the take-over activities, the contractor will prepare his own FQP. This FQP will be delivered, for review, 3 months after the end of the Take-over. Updates of the FQP will have to be provided as described under WP.0.1.

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### 3.4 Service Level Agreement (SLA)

The Service Level Agreement (SLA) is between the Commission and the customers of its services. It defines the minimum level of service expected from the Commission. It provides a mutual understanding of service level expectation, their measurement methods. This level of service addresses the services provided by the Commission to users of the CCN Network. These users are currently identified as:

- The NAs using the CCN Network;
- The users within the Commission, including also the other Directorates General;
- The contractors of the Commission.

The CCN related SLAs (See [R041] – SLA between TAXUD and National Administrations, [R042] – SLA between TAXUD and OLAF) are maintained by the ITSM2 contractor. The ITSM2 contractor also ensures the reporting on these SLAs.

### 3.5 Operation level agreement (OLA)

The contractor will produce the contractual OLA using the SQI definitions defined in section 3.7 and the GQI defined in the applicable Specific Contract. The OLA will evolve during the duration of the Framework Contract under the control of the CSIP (Please refer to WP.0.12).

Please refer to [R040] for the current applicable contractual OLA of the incumbent contractor.

### 3.6 Audits by the Commission

The Commission reserves the right to perform quality and security audits in the contractor's premises for assessing the performance and the quality of the delivered services. The Commission may elect to contract with a third party to perform these audits, and the contractor commits himself to co-operate fully with the Commission during these audits (refer to WP.0.9).

### 3.7 The SQI / GQI approach

Quality indicators, called SQI (Specific Quality Indicators) are defined in the framework of the Contractual OLA. Aggregated, these SQIs allow defining a General Quality Indicator (GQI) for a period of time which measures the quality of the delivered service (in most cases the duration of an SC). These indicators also point out whether liquidated damages are applicable and, if so, their amounts.

This approach provides:

- A normalised way to quantify the quality of service and a weighted approach in combining all the service quality indicators into a single general quality indicator (GQI);
- A mechanism to determine the liquidated damages;
- A grace window in case the quality of service is below target but within a certain limit.

The following sections describe the method of computation of all the SQIs and the GQI.

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### 3.7.1 The Specific Quality Indicators (SQI)

#### 3.7.1.1 Definition of the SQI

Some or all of the following parameters define a Specific Quality Indicator.

SQI Attribute	SQI Attribute description
SQI Name	A name, which allows to fully identify the SQI.
SQI Description	A complete description of the SQI.
Measurement of the QoS (M)	Specifies the <i>measurement</i> of the QoS (or combination of set of measurements) for the SQI.
Unit of Measurement of the QoS	Defines the Unit of Measurement of the QoS. For example, a SQI aiming to evaluate duration or delays can be expressed in hours or days.
Application period	Specifies the overall period over which the SQI is calculated;
Target	Target, which sets the level of the measurement that, if reached, would demonstrate good QoS.
Limit	Together with the Target, the Limit defines the "grace window" ", within which although the QoS is below target, the SQI is still immunised from negative impact.
Normalised Measurement ( $M_{norm}$ )	A normalised Measurement is the result of the transformation of a measure (see formula below), which renders a number independent of the unit of measure of the QoS.
SQI Profiled ( $SQI_{prof}$ )	A profiled SQI is the result of a profiling function applied to a normalised SQI (see function f below).
Applicable services/deliverables	Defines the set of services and deliverables, to which the SQI will apply.
Minimum number of Measurements	Minimum number of measurements or set of measurements necessary for an SQI to be computable.

#### 3.7.1.2 Calculation of the SQI

SQIs are calculated using the following steps in sequence:

##### Collect Measurement of QoS (M)

The Measurement M (or set of measurements) of QoS has to be collected and possibly combined according to the definition of the Measurement of the QoS.

If the minimum number of measurements required over the Application period to make the SQI computable is not attained, then the Measurement (hence SQI) has no applicable value for that application period.

##### Normalise the Measurement ( $M_{norm}$ )

For a given Measurement M, the related normalised Measurement  $M_{Norm}$  is obtained by applying the following formula:

$$\underline{M}_{Norm} = \frac{M - Target}{Target - Limit}$$

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Where the M, Target and Limit are values expressed in the same unit and are part of the SQI definition.

SQI<sub>prof</sub> as a result of the Profiling function

Once the Measurement has been normalised to  $M_{Norm}$ , it is *profiled* (using the  $f$  function) to a  $SQI_{prof}$ , which has the following effects:

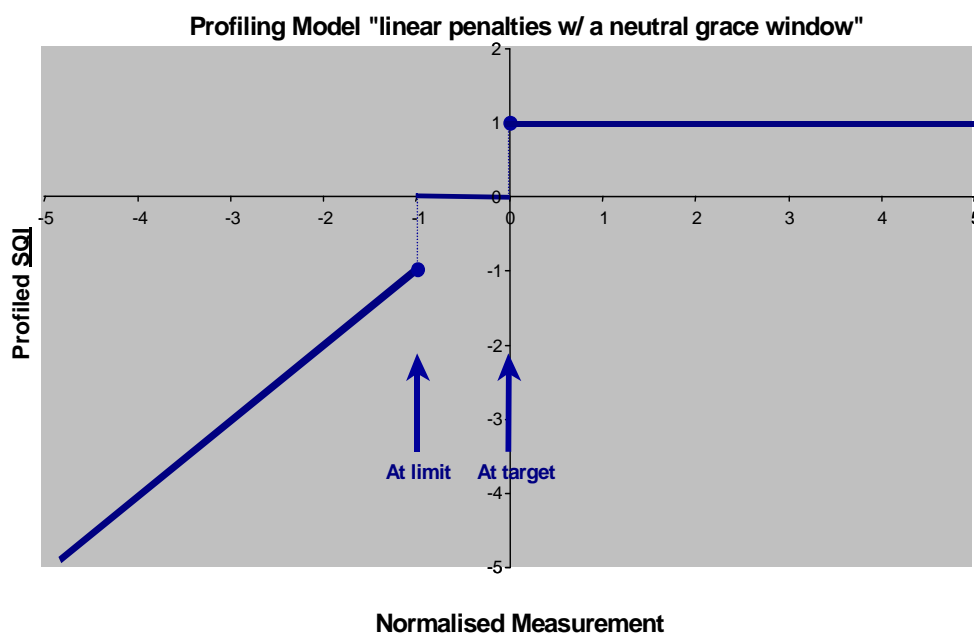
- It limits the  $SQI_{prof}$  upwards, versus irrelevant over-performance of QoS above target;
- It defines linear proportionality between the  $SQI_{prof}$  and the under-performance of QoS below Limit;
- It sets a grace period (interval defined by the Target and the Limit) which is setting the  $SQI_{prof}$  to a neutral level, immunising the SQI from any positive or negative factor.

The profiling function ( $f$ ) is applied on all occurrences of the normalised Measurements. Those calculations are provided in detail in the SQI report attached to the Monthly Project Report.

The profiling function  $f$  is defined as follows:

- If  $M_{Norm} \geq 0 \Rightarrow SQI_{prof} = f(M_{Norm}) = 1$  i.e. the QoS leads to a Measurement above or on *Target*
- If  $-1 < M_{Norm} < 0 \Rightarrow SQI_{prof} = f(M_{Norm}) = 0$  i.e. the QoS leads to a Measurement between *Target* and *Limit* – neutral grace window
- If  $M_{Norm} = -1 \Rightarrow SQI_{prof} = f(M_{Norm}) = -1$  i.e. the QoS leads to a Measurement on *Limit*
- If  $M_{norm} < -1 \Rightarrow SQI_{prof} = f(M_{norm}) = M_{norm}$  i.e. the QoS leads to a Measurement below the *Limit*

This profiling function is plotted in the figure below.





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Figure 1 **Profiled SQI**prof

Averaged profiled SQI

When a single SQI<sub>prof</sub> is used to measure the QoS of multiple occurrences of services/delivery of the same nature, it is called an "averaged SQI", which is made of the average of all multiple-SQI<sub>i</sub> according to the following formula:

$$SQI_{prof} = \frac{\sum_i^n SQI_{prof_i}}{n} = \frac{\sum_i^n f(M_{norm_i})}{n}$$

Where n is the number of occurrences of the given SQI<sub>prof</sub> during the application period.

**3.7.1.3 Detailed information on SQIs**

All "SQI Target", "SQI Limit" and "SQI Minimum number of Measurements" are monthly values unless explicitly specified otherwise.

**3.7.1.3.1 SQI01a**

SQI Attribute	SQI Attribute description
SQI Name	SQI01a
SQI Description	Measure the respect of the deadline of a deliverable whose delay would have a major impact (SfA)
Unit of Measurement of the SQI	working days
SQI Target	"0 delay" for acceptance
SQI Limit	1 working day
SQI Calculation	<p>The actual delivery date is the date the deliverable is uploaded on CIRCABC.</p> <p>If the deliverable must be uploaded several times on CIRCABC for acceptance:</p> <ul style="list-style-type: none"> <li>• The actual delivery date is the date of the last upload for acceptance.</li> <li>• For each re-SfA, the number of days to be considered in the calculation of this SQI will be the number of days between the moment the contractor received the IVE_NOK (or the request for re-SfA from DG TAXUD) and the moment the new version of the document has been uploaded on CIRCABC.</li> </ul> <p>The planned delivery date is defined in the last approved version of the DTM for all deliverables.</p> <p>The SQI will be calculated for every reporting period.</p> <p>The SQI equals to the average of the normalised and profiled value of the individual values of (A<sub>D</sub>-P<sub>D</sub>), where:</p>

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SQI Attribute	SQI Attribute description
	<p><math>A_D</math> is the actual delivery date of each deliverable, which has been tagged as having a delay impact defined in the SQI Description above, which was actually delivered for Final acceptance during the reporting period</p> <p>And</p> <p><math>P_D</math> is the planned delivery date of the deliverable</p> <p><i>Note: if <math>A_D &lt; P_D</math> then the delay is to be considered as zero.</i></p> <p>The average of each occurrence of this SQI will constitute the value to be used in the GQI calculation.</p>
Applicable services/deliverables	Please refer to "Table 4: Services & Deliverables"
Minimum number of Measurements	1 deliverable

### 3.7.1.3.2 SQI01b

SQI Attribute	SQI Attribute description
SQI Name	SQI01b
SQI Description	Measure the respect of the deadline of a deliverable whose delay would have a major impact (SfR)
Unit of Measurement of the SQI	working days
SQI Target	"0 delay" for review
SQI Limit	1 working day
SQI Calculation	<p>The actual delivery date is the date the deliverable is uploaded on CIRCABC.</p> <p>If the deliverable must be uploaded several times on CIRCABC for Review (SQI01b):</p> <ul style="list-style-type: none"> <li>The actual delivery date is the date of the last upload for Review.</li> <li>For each re-SfR, the number of days to be considered in the calculation of this SQI will be the number of days between the moment the contractor received the rejection mail for the SfR and the moment the new SfR version of the document is uploaded on CIRCABC</li> </ul> <p>The planned delivery date is defined in the last approved version of the DTM for all deliverables.</p> <p>The SQI will be calculated for every reporting period.</p> <p>The SQI equals to the average of the normalised and profiled value of the individual values of <math>(A_D - P_D)</math>.</p> <p>where:</p> <p><math>A_D</math> is the actual delivery date of each deliverable, which has been tagged as having a delay impact defined in the SQI Description above, which was actually delivered for Final Review during the reporting period</p> <p>And</p>

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SQI Attribute	SQI Attribute description
	<p><math>P_D</math> is the planned delivery date of the deliverable</p> <p><i>Note: if <math>A_D &lt; P_D</math> then the delay is to be considered as zero.</i></p> <p>The average of each occurrence of this SQI will constitute the value to be used in the GQI calculation.</p>
Applicable services/deliverables	Please refer to "Table 4: Services & Deliverables"
Minimum number of Measurements	1 deliverable

### 3.7.1.3.3 SQI02a

The information given in section 3.7.1.3.1 applies with the following changes:

SQI name: SQI02a

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a high impact (SfA)

SQI Limit: 5 working days

### 3.7.1.3.4 SQI02b

The information given in section 3.7.1.3.2 applies with the following changes:

SQI name: SQI02b

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a high impact (SfR)

SQI Limit: 5 working days

### 3.7.1.3.5 SQI03a

The information given in section 3.7.1.3.1 applies with the following changes:

SQI name: SQI02a

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a medium impact (SfA)

SQI Limit: 10 working days

### 3.7.1.3.6 SQI03b

The information given in section 3.7.1.3.2 applies with the following changes:

SQI name: SQI02b

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a medium impact (SfR)

SQI Limit: 10 working days

### 3.7.1.3.7 SQI04a

The information given in section 3.7.1.3.1 applies with the following changes:

SQI name: SQI02a

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a low impact (SfA)

SQI Limit: 15 working days

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### 3.7.1.3.8 SQI04b


The information given in section 3.7.1.3.2 applies with the following changes:

SQI name: SQI02b

SQI description: Measure the respect of the deadline of a deliverable whose delay would have a low impact (SfR)

SQI Limit: 15 working days


### 3.7.1.3.9 SQI05a

SQI Attribute	SQI Attribute description																
SQI Name	SQI05a																
SQI Description	Measure the Incident resolution time																
Unit of Measurement of the SQI	%																
SQI Target	95% "0 delay"																
SQI Limit	90%																
SQI Calculation	<p><math>SQI05 = \frac{C_{IT}}{C_{ALL}}</math></p> <p><math>C_{ALL}</math> is the total number of incidents resolved by CCN2-DEV during the reporting period and <math>C_{IT}</math> is the total number of incidents resolved by CCN2-DEV during the reporting period, where the resolution time is lower than or equal to the maximum resolution time as defined below</p> <p>The <b>maximum resolution time</b> is, depending on the priority of the incident:</p> <p style="margin-left: 40px;">           Low (Priority=4): 5 Working-Days            Medium (Priority=3): 3 Working-Days            High (Priority=2): 1 Working-Days            Critical (Priority=1): 4 Working-Hours         </p> <p>An <b>incident is resolved</b> when IT service operation is restored in its normal state (without reduction of quality of service).</p> <p>Incident <b>priority</b> will be set by the ITSM2 Lot 1 contractor for 3<sup>rd</sup> level incidents according to the rules defined in ITSM FQP (Ref: FQP of the incumbent ITSM contractor: [R001] ) or by the CCN2-DEV contractor for calls opened directly by the CCN2-DEV contractor according to the rules defined in its FQP (Ref: FQP of incumbent CCN/TC contractor: [R002]).</p> <p>Incident <b>priority</b> is calculated based on <b>impact and urgency</b> when creating the call according to the following table:</p> <p> DG TAXUD may request to change the impact/urgency values at any time.</p> <table border="1" style="background-color: #e0e0e0; width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Impact</th> <th>Low</th> <th>Medium</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>Urgency Low</td> <td>4</td> <td>3</td> <td>2</td> </tr> <tr> <td>Urgency Medium</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>Urgency High</td> <td>2</td> <td>1</td> <td>1</td> </tr> </tbody> </table>	Impact	Low	Medium	High	Urgency Low	4	3	2	Urgency Medium	3	2	1	Urgency High	2	1	1
Impact	Low	Medium	High														
Urgency Low	4	3	2														
Urgency Medium	3	2	1														
Urgency High	2	1	1														

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TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
	The SQI value for the final GQI will be an average of all profiled SQIs during the SC.
Applicable services/deliverables	SE.8.1.2.1 (Incidents)
Minimum number of Measurements	20

### 3.7.1.3.10 SQI05b

SQI Attribute	SQI Attribute description																
SQI Name	SQI05b																
SQI Description	Measure the Problem resolution time																
Unit of Measurement of the SQI	%																
SQI Target	95% "0 delay"																
SQI Limit	90%																
SQI Calculation	<p><math>SQI05 = C_{IT} / C_{ALL}</math></p> <p><math>C_{ALL}</math> is the total number of problems resolved by CCN2-DEV during the reporting period and <math>C_{IT}</math> = the total number of problems resolved by CCN2-DEV during the reporting period, where the resolution time is lower than or equal to the maximum resolution time as defined below</p> <p>The <b>maximum resolution time</b> is, depending on the priority of the problem:</p> <ul style="list-style-type: none"> <li>Low (Priority=4): 10 Working-Days</li> <li>Medium (Priority=3): 5 Working-Days</li> <li>High (Priority=2): 3 Working-Days</li> <li>Critical (Priority=1): 1 Working-Day</li> </ul> <p>A <b>problem is resolved</b> when Root Cause Analysis is performed and the root causes linked to this problem/event are detected. The Closure Request is triggered by the sending to the SfR of the problem report.</p> <p>Problem <b>priority</b> will be set by the ITSM2 Lot 1 contractor for 3<sup>rd</sup> level calls according to the rules defined in ITSM FQP (Ref: FQP of the incumbent ITSM contractor: [R001]) or by the CCN2-DEV contractor for calls opened directly by the CCN2-DEV contractor according to the rules defined in its FQP (Ref: FQP of incumbent CCN/TC contractor: [R002]).</p> <p>Problem <b>priority</b> is calculated based on <b>impact and urgency</b> when creating the call according to the following table:</p> <p> DG TAXUD may request to change the impact/urgency values at any time</p> <table border="1"> <thead> <tr> <th>Impact Urgency</th> <th>Low</th> <th>Medium</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>Low</td> <td>4</td> <td>3</td> <td>2</td> </tr> <tr> <td>Medium</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>High</td> <td>2</td> <td>1</td> <td>1</td> </tr> </tbody> </table>	Impact Urgency	Low	Medium	High	Low	4	3	2	Medium	3	2	1	High	2	1	1
Impact Urgency	Low	Medium	High														
Low	4	3	2														
Medium	3	2	1														
High	2	1	1														

TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
	The SQI value for the final GQI will be an average of all profiled SQIs during the SC.
Applicable services/deliverables	SE.8.1.3 (Problems)
Minimum number of Measurements	20

### 3.7.1.3.11 SQI06

The information given in section 3.7.1.3.9 applies with the following changes:

SQI name: SQI06

SQI description: Measure the resolution time for RfI/RfS

SQI Calculation: Incident is to be replaced by RfI/RfS

The maximum resolution time is 5 working-days for RfIs and 10 working days for RfSs

Applicable services/deliverables: SE.8.1.2.2 (RFI & RFS)

Minimum number of Measurements: 5

### 3.7.1.3.12 SQI07

SQI Attribute	SQI Attribute description
SQI Name	SQI07
SQI Description	Measure the number of (P)SAT and/or Qualification iterations per software release
Unit of Measurement of the SQI	Number of (P)SAT and/or Qualification iterations
SQI Target	1 (P)SAT and/or Qualification iteration
SQI Limit	3 (P)SAT and/or Qualification iterations
SQI Calculation	Count the number of test iterations of (P)SAT required for the software release.
Applicable services/deliverables	All
Minimum number of Measurements	1

### 3.7.1.3.13 SQI08

SQI Attribute	SQI Attribute description
SQI Name	SQI08
SQI Description	Measure the time to escalate to the Commission for critical incidents/major service risks
Unit of Measurement of the SQI	%
SQI Target	95% less than 2 hours during CCN2-DEV contract working hours
SQI Limit	90% less than 2 hours during CCN2-DEV contract working hours

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TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
SQI Calculation	$SQI08 = IEIT/ITOT \times 100$ <p>Where</p> <p>IEIT is the number of relevant incidents (see below) where the escalation was made in less than 2 hours</p> <p>and</p> <p>ITOT is the total number of relevant incidents (see below) recorded during the reporting period.</p> <p>The relevant incidents are critical incidents and/or incidents introducing risks/prolonged delays on the system security.</p>
Applicable services/deliverables	All
Minimum number of Measurements	5 events to escalate

### 3.7.1.3.14 SQI09

SQI Attribute	SQI Attribute description
SQI Name	SQI09
SQI Description	Measure the delay to deliver an acceptable offer/proposal
Unit of Measurement of the SQI	working days
SQI Target	“0 delay” for review
SQI Limit	2 working days
SQI Calculation	<p>The actual delivery date is the date when the offer/proposal is submitted to the Commission for acceptance via e-mail to the requested address. If the offer/proposal must be submitted several times for acceptance:</p> <ul style="list-style-type: none"> <li>• The actual delivery date is the date of the last submission for acceptance;</li> <li>• For each re-SfA, the number of days to be considered in the calculation of this SQI will be the number of days between the moment the contractor received the rejection of the offer/proposal from the Commission and the moment the new version of the document has been submitted for acceptance.</li> </ul> <p>The planned delivery date is defined in the RFO/FRE;</p> <p>The SQI will be calculated for every reporting period.</p> <p>The SQI equals to the average of the normalised and profiled value of the individual values of <math>(A_D - P_D)</math>.</p> <p>where:</p> <p><math>A_D</math> is the actual delivery date of each offer/proposal, which has been tagged as having a delay impact defined in the SQI Description above, which was actually delivered for Final acceptance during the reporting period.</p> <p>and</p>

TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
	<p><math>P_D</math> is the requested delivery date of the estimate/offer as indicated in the RfE/RfO</p> <p><i>Note: if <math>A_D &lt; P_D</math> then the delay is to be considered as zero.</i></p> <p>The average of each occurrence of this SQI will constitute the value to be used in the GQI calculation.</p>
Applicable services/deliverables	DLV.0.4.1 & DLV.0.4-2
Minimum number of Measurements	1

### 3.7.1.3.15 SQI22

SQI Attribute	SQI Attribute description
SQI Name	SQI22
SQI Description	Measure the process compliance as assessed by self assessment, internal and external audits, audit by the Commission
Unit of Measurement of the SQI	Number of critical and/or significant audit recommendations open per assessment or audit
SQI Target	Maximum 2 critical and/or significant audit recommendations open per assessment or audit
SQI Limit	Number of critical and significant recommendations open less than 15
SQI Calculation	Count the number of critical and significant audit recommendations open per assessment or audit
Applicable services/deliverables	All
Minimum number of Measurements	1

### 3.7.1.3.16 SQI23

SQI Attribute	SQI Attribute description
SQI Name	SQI23
SQI Description	Measure the conformance to security controls (number of critical findings during security audit)
Unit of Measurement of the SQI	Number of critical findings during a security audit
SQI Target	Maximum 1 critical audit finding open per security audit
SQI Limit	Maximum 3 critical audit finding open per security audit
SQI Calculation	Count the number of critical findings during a security audit.
Applicable services/deliverables	All
Minimum number of Measurements	1

### 3.7.1.3.17 SQI24

SQI Attribute	SQI Attribute description
SQI Name	SQI24
SQI Description	Measure the corrective problem resolution
Unit of Measurement of the SQI	working days
SQI Target	0 working day delay



TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
SQI Limit	1 working day delay
SQI Calculation	<p>The SQI measures the sum of delays expressed in days for the reporting period</p> <p>The actual delivery date is the date when the hotfix (fixing the Root Cause of the problem) is delivered to the ITSM2 contractor for deployment (incl. testing).</p> <p>The planned hotfix delivery date is, depending on the priority unless a different date is agreed with DG TAXUD in writing:</p> <p style="padding-left: 40px;">Low: Next release (as agreed with TAXUD) after related problem is resolved  Medium: 5 Working-Days after related problem is resolved  High: 3 Working-Days after related problem is resolved  Critical: 1 Working-Day after related problem is resolved</p> <p>The SQI will be calculated for every reporting period.</p> <p>The SQI for the reporting period equals to the normalised, then profiled value of the sum of the (<math>A_D - P_D</math>) values where:</p> <p><math>A_D</math> is the actual delivery date of each hotfix delivered during the reporting period</p> <p>And</p> <p><math>P_D</math> is the planned delivery date of the hotfix</p> <p><i>Note: if <math>A_D &lt; P_D</math> then the delay is to be considered as zero.</i></p> <p>The SQI value for the final GQI will be an average of all SQIs during the SC.</p>
Applicable services/deliverables	All
Minimum number of Measurements	1 hotfix to be delivered

### 3.7.1.3.18 SQI25

SQI Attribute	SQI Attribute description
SQI Name	SQI025
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD
Unit of Measurement of the SQI	Number of occurrence
SQI Target	0
SQI Limit	2

TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
SQI Calculation	<p>All complaints will be collected via the Commission. All confirmed complaints will be forwarded by the Commission to the contractor for inclusion in the MPR, detailed analysis and follow up. The contractor must record all received complaints in the MPR.</p> <p>The contractor must provided a detailed analysis report linked to each complaint following the agreed and documented procedure. The number of complaints to be counted for this SQI is the number of complaints reported in the MPR.</p>
Applicable services/deliverables	All
Minimum number of Measurements	1

### 3.7.1.3.19 SQI26

SQI Attribute	SQI Attribute description
SQI Name	SQI26
SQI Description	<p>Measure that the actions agreed with DG TAXUD have been implemented within the given timeframe.</p> <p>This is limited to actions tagged as: "SQI26actions"</p>
Unit of Measurement of the SQI	working days
SQI Target	0 delay
SQI Limit	3 working days
SQI Calculation	<p><math>SQI = A_{EA} - P_{EA}</math></p> <p>where:</p> <p><math>A_{EA}</math> is the actual date for the action's end</p> <p>and</p> <p><math>P_{EA}</math> is the planned date for the action's end</p> <p>The actual date for the action's end is the date when the contractor finishes the implementation of the action (i.e. closes it). The decision to close an action is taken during the meeting that follows the one during which the action was raised, or by an e-mail confirmation from DG TAXUD to an e-mail sent by the contractor requesting the closure (typically an End of Action Report). When closing an action, an e-mail will be sent to the action requestor. If the action requestor refuses the closure of the action, the action is re-opened, but the time between the sending of the action closure request and the reply of the action requestor is not taken into account in the calculation of this SQI.</p> <p>The planned date for the action's end (due time) has to be agreed during the meeting, when the action is raised.</p> <p>This date may be readjusted within the next 2 working days by mutual agreement.</p> <p>The SQI will be calculated for each registered action (tagged as: "SQI26actions") closed during the reporting period, and the value will be normalised, then profiled.</p> <p>The SQI reported in the MPR will then be the average of the several</p>

TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
	<p>profiled SQIs for the registered actions closed during the reporting period.</p> <p>The SQI value for the final GQI will be an average of all profiled SQIs during the SC.</p>
Applicable services/deliverables	The actions covered are requested by DG TAXUD, and identified as actions flagged under this SQI.
Minimum number of Measurements	5 actions

### 3.7.1.3.20 SQI27

SQI Attribute	SQI Attribute description
SQI Name	SQI27
SQI Description	Delay in delivering a patch during a PSAT session
Unit of Measurement of the SQI	working days
SQI Target	0 working day delay
SQI Limit	1 working day delay
SQI Calculation	<p>The SQI measures the sum of delays expressed in days for the reporting period.</p> <p>The actual delivery date is the date the patch is delivered to the ITSM2 contractor for installation.</p> <p>The planned delivery date is 1 working day after CCN2-DEV contractor is notified, unless another deadline is agreed with DG TAXUD in writing.</p> <p>The SQI will be calculated for every reporting period.</p> <p>The SQI for the reporting period equals to the normalised, then profiled value of the sum of the <math>(A_D - P_D)</math> values where:</p> <p><math>A_D</math> is the actual delivery date of each patch delivered during the reporting period</p> <p>and</p> <p><math>P_D</math> is the planned delivery date of the patch</p> <p><i>Note: if <math>A_D &lt; P_D</math> then the delay is to be considered as zero.</i></p> <p>The average of each occurrence of this SQI will constitute the value to be used in the GQI calculation.</p>
Applicable services/deliverables	All
Minimum number of Measurements	1 patch to be delivered

### 3.7.1.3.21 SQI28

TAXUD/R5 – INVITATION TO TENDER	REF: TAXUD/2011/AO-13 - CCN2-DEV
TECHNICAL ANNEX	
Quality Requirements	

SQI Attribute	SQI Attribute description
SQI Name	SQI28
SQI Description	Measure the Training/workshop appraisal
Unit of Measurement of the SQI	%
SQI Target	100%
SQI Limit	79%
SQI Calculation	<p>Per event the percentage is formed of the number of participants whose appraisal is higher or equal than 8 points out of 10.</p> <p><math>SQI = \text{Average}(T_1, T_2, T_3, \dots)</math> Where T refers to the training sessions / workshops held in the reporting period</p> <p><math>T_n = ((\text{Number of trainees with an overall course assessment} \geq 8) / \text{total number of trainees}) * 100</math> for the given training session / workshop</p>
Applicable services/deliverables	All trainings / workshops provided by the contractors, except if explicitly excluded by DG TAXUD.
Minimum number of Measurements	1 training/workshop

### 3.7.1.3.22 SQI30


SQI Attribute	SQI Attribute description
SQI Name	SQI30
SQI Description	Measure the satisfaction of the users with the services provided by the CCN2-DEV contractor
Unit of Measurement of the SQI	<p><b>Notation:</b></p> <ul style="list-style-type: none"> <li>• Very satisfied (Value=5)</li> <li>• Somewhat satisfied (Value=4)</li> <li>• Neither satisfied nor dissatisfied (Value=3)</li> <li>• Somewhat dissatisfied (Value=2)</li> <li>• Very dissatisfied (Value=0)</li> </ul>
SQI Target	Very satisfied (Value=5)
SQI Limit	Somewhat satisfied (Value=4)
SQI Calculation	The satisfaction will be measured when requested by DG TAXUD, but at least once a year. It will be measured by a survey based on an agreed set of questions and sent to a user population defined by DG TAXUD. Each answer will be collected and assigned its associated value. One occurrence of the two extreme values of the answer set will be removed and the remaining values averaged.
Applicable services/deliverables	Agreed set of services and deliverables (by default: ALL)
Minimum number of Measurements	5 answers

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TECHNICAL ANNEX	
Quality Requirements	

### 3.7.1.3.23 SQI31

SQI Attribute	SQI Attribute description
SQI Name	SQI31
SQI Description	Effectiveness of comments in relation to technical documents review
Unit of Measurement of the SQI	%
SQI Target	90% of the comments to be implemented
SQI Limit	85% of the comments to be implemented
SQI Calculation	$SQI = C_{IM}/C_{ALL}$ Where: $C_{ALL}$ is the total number of review comments issued by the CCN2-DEV contractor in relation to technical review of documents in the reporting period  and  $C_{IM}$ is the total number of comments out of the above which are considered as "to be implemented" by the author of the reviewed documents. In case of disagreement regarding the relevance of a comment, the Commission decides on the classification.
Applicable services/deliverables	All
Minimum number of Measurements	100 comments

### 3.7.1.3.24 SQI32


SQI Attribute	SQI Attribute description
SQI Name	SQI32 – <b>Direct Liquidated Damages</b>
SQI Description	Measure if the initial value of the "Total number of months experience in each key profile <sup>25</sup> that will be assigned full time to the project" remains at an acceptable level defined by the SQI Limit below.
Unit of Measurement of the SQI	%
SQI Target	95%
SQI Limit	85%
SQI Calculation	Total months of professional experience in key profiles assigned full time to the project. / Total months of professional experience in key profiles proposed in the bid
<b>Direct Liquidated Damages</b>	 Each month where the SQI limit is not reached will induce a direct liquidated damage of <b>10 times the daily rate of each person and profile concerned per month.</b>
Applicable services/deliverables	WP.0.5.5
Minimum number of Measurements	1 <sup>26</sup>

<sup>25</sup> Key profiles mean Strategy Consultant, Project Manager, Service Manager, Security Architect, Quality Manager, Senior System Architect, Senior Infrastructure Architect, as defined in section 4.3.



<sup>26</sup> First calculation 8 weeks after the signature of the first Specific Contract.

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TECHNICAL ANNEX	
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### 3.7.1.3.25 SQI33

SQI Attribute	SQI Attribute description
SQI Name	SQI033 - <b>Direct Liquidated Damages</b>
SQI Description	The number of man-days DG TAXUD staff allocated to services that should be provided by the CCN2-DEV contractor who fails to provide these services.  DG TAXUD should not have to fulfil functions that are to be provided by the contractor. The objective of this SQI is to measure such situations
SQI Target	0 days
SQI Limit	5 days
SQI Calculation	Sum of the number of man-days that DG TAXUD officials or other staff performed work duties to cover the deficiency of the contractor.
<b>Direct Liquidated Damages</b>	 Each day above the SQI limit (5 days), will induce a direct liquidated damage of <b>1.000 €</b> per day person and per day with a maximum of <b>50.000 €</b> per month.
Applicable services/deliverables	All
Minimum number of Measurements	1

### 3.7.1.3.26 SQI34


SQI Attribute	SQI Attribute description
SQI Name	SQI-034 - <b>Direct Liquidated Damages</b>
SQI Description	Measure that the team in charge of the CCN2-DEV contractor providing fixed-price services, is staffed with the key profiles <sup>27</sup> as proposed in the CCN2-DEV tender and that they are allocated and remain staffed to the activity as of the signature of the first Specific Contract
Unit of Measurement of the SQI	This SQI will measure the occurrence of one of the following events: <ul style="list-style-type: none"> <li>(1) The key profiles of the Take-over team are not staffed by full time staff 1 month after the start of the first Specific Contract;</li> <li>(2) The key profiles have a turnover of more than 2 persons over a 12 months sliding window.</li> </ul>
<b>Direct Liquidated Damages</b>	 For situation (1) above (except for "force majeure"), the liquidated damage will represent <b>20%</b> of the total take-over costs per month where the situation occurs.   For situation (2) above (except for "force majeure"), the liquidated damage will represent <b>20%</b> of the total costs of the FP services (Continuous Services) of the applicable Specific Contract for each month where the situation occurs.
SQI Target	0 occurrences
SQI Limit	0 occurrences

<sup>27</sup> Key profiles mean Strategy Consultant, Project Manager, Service Manager, Security Architect, Quality Manager, Senior System Architect, Senior Infrastructure Architect, as defined in section 4.3

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SQI Attribute	SQI Attribute description
SQI Calculation	The full staff sheet will be provided as an annex to the MPR; any movements to key personal will be clearly indicated.
Applicable services/deliverables	ALL
Minimum number of Measurements	NA

### 3.7.1.3.27 SQI35

SQI Attribute	SQI Attribute description
SQI Name	<b>SQI35 - Direct Liquidated Damages</b>
SQI Description	Measure the delay in completing the take-over within the foreseen Take-over period.
Unit of Measurement of the SQI	This SQI will measure the delay in completing the Take-over activities:  Each day of delay within a single month will be considered as a full month delay (e.g. for January, 1 day delay or 31 days delay) will both be considered as a full month delay.
<b>Direct Liquidated Damages</b>	 Each month of delay will induce <b>40.000 €</b> liquidated damage up to a maximum of 6 months (240.000 €) at which time the contract is terminated by DG TAXUD.
SQI Target	0 occurrences
SQI Limit	0 occurrences
SQI Calculation	The planning will be provided as an annex to the MPR; any risks will be clearly indicated.
Applicable services/deliverables	Take-over
Minimum number of Measurements	1 per month during the take-over period

## 3.7.2 The KPIs

### 3.7.2.1.1 KPI51 - Measure the quality of a deliverable (SfR)

The value to be reported is the ratio between the number of documents rejected and not rejected at SfR during the reporting period and having to be resubmitted for review.

### 3.7.2.1.2 KPI52 - Measure the quality of a deliverable (SfA)

The value to be reported is the ratio between the number of documents rejected (meaning to be re-SfAed) and not rejected at SfA during the reporting period and having to be resubmitted for acceptance.

### 3.7.2.1.3 KPI53 - Measure the time to notify the Commission delays of deliverables categorized with major or high impact for the Commission

The value to be reported is the number of hours between the notification about the delay in delivery of deliverables categorized with major or high impact for the Commission and the planned delivery date.

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#### **3.7.2.1.4 KPI54 – Measure the number of retrospective changes performed on the CMDB & DML**

The value to be reported is the ratio between the retrospective changes (correcting or adding data) performed during the reporting period and the total number of updates performed on the CMDB & DML during the same reporting period.

#### **3.7.2.1.5 KPI55 - Measure the number of assigned calls remaining open**

The values to be reported are the number of open calls that are assigned on the last day of the reporting period to CCN2-DEV. The values are to be detailed by Service Call category.

#### **3.7.2.1.6 KPI56 - Measure the number of calls assigned during the reporting period**

The values to be reported are the number of calls that were assigned during the reporting period to CCN2-DEV. The values are to be detailed by Service Call category.

#### **3.7.2.1.7 KPI57 - Measure the number of unassigned calls during the reporting period**

The values to be reported are the number of unassigned calls during the reporting period from CCN2-DEV. The values are to be detailed by Service Call category.

#### **3.7.2.1.8 KPI58 - Measure the number of defects reported during PSAT**

The value to be reported is the number of defects detected and reported by the operational contractor during PSAT activities during the reporting period. The values are to be detailed by CI.

#### **3.7.2.1.9 KPI59 - Measure the number of defects reported during SAT**

The value to be reported is the number of defects detected and reported by the operational contractor during SAT activities during the reporting period. The values are to be detailed by CI.

#### **3.7.2.1.10 KPI60 - Measure the number of comments in relation to technical documents review**

The value to be reported is the number of comments made by the CCN2-DEV contractor during technical document reviews performed during the reporting period.

#### **3.7.2.1.11 KPI61 - Measure the number of bugs reported per CI (systems/application/component) per reporting period**

The values to be reported are the number of defects detected and reported by the operational contractor during the reporting period in the production environment. The values are to be detailed by CI.

#### **3.7.2.1.12 KPI62 - Measure the number of bugs/features incorrectly implemented**

The values to be reported are the number of defects re-opened (as the result of incorrectly implemented changes) during the reporting period. The values are to be detailed per CI.

#### **3.7.2.1.13 KPI63 - Measure the number of changes reported per CI (systems/application/component) per reporting period**

The values to be reported are the number of new changes registered per reporting period. The values are to be detailed by CI and split between corrective/evolutive changes.



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**3.7.2.1.14 KPI64 - Measure the number of patches delivered per CI (systems/application/component) per reporting period**

The value to be reported is the number of new patches delivered during the reporting period. The value is to be detailed by CI.

**3.7.2.1.15 KPI65 - Measure the number of releases delivered per CI (systems/application/component) per reporting period**

The value to be reported is the number of new releases delivered during the reporting period. The value is to be detailed by CI.

**3.7.2.1.16 KPI66 - Measure the unavailability times due to deployments of CCN related CIs**

The value to be reported is the time linked to each deployment in the production environment of a CCN related CI. The value is to be detailed by CI.

**3.7.2.1.17 KPI67 - Measure the number of maintenance licences for which the expiry reporting (not later than 90 days before the end of the contract) was late per reporting period**

The value to be reported is the number of maintenance licences for which the contract expiry date was within 90 days during the reporting period and for which the expiry reporting to DG TAXUD was sent late.

**3.7.2.1.18 KPI68 - Measure the number of CCN2-DEV documents for which more than 50/100/200 comments were raised**

The value to be reported is the number of CCN2-DEV documents for which more than 50 / 100 / 200 comments were raised. The value is to be detailed per 50 / 100 / 200 comments.

**3.7.2.1.19 KPI69 - Measure the number of documents for which more than 15 / 30 / 50 comments are to be discussed during the Review Meeting**

The value to be reported is the number of documents for which more than 15 / 30 / 50 comments are to be discussed during the Review Meeting. The value is to be detailed per 15 / 30 / 50 comments to be discussed.

### **3.7.3 The General Quality Indicator**

In order to measure the general quality of contractual activities, General Quality Indicators (GQI) will be defined during the implementation of the Framework Contract. The GQIs are established as a composition of the (some of the) SQIs listed above.

GQIs can be measured either at Specific Contract level (in the case of Specific Contracts for Continuous Services or Fixed-price Services) or at RfA level (in case of Specific Contracts for On-demand Services).

The GQI is the weighted average of so called contractual SQIs<sup>28</sup> as a subset of all the SQIs. It allows a global assessment of the QoS for all services and deliverables.

To each contractual SQI, a normalised weight factor<sup>29</sup> ( $w$ ) has to be associated.

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<sup>28</sup> For sake of clarity, as of now, profiled SQI will be simply called "SQI".

<sup>29</sup> "Normalised weight" means that the sum of all the weights for all SQI participating in a GQI is equal to 1.

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In formula, the General Quality Indicator is defined as:

$$GQI = \sum_i (SQI_i \times w_i)$$

The weights of the activated SQIs within a GQI will be defined by DG TAXUD at SC or RfA level. In case one or several contractual SQIs can not be calculated because of an insufficient number of measurements to reach the set “minimum number of measurements”, then their contributions to the GQI are removed and the weights of the remaining contractual SQIs are proportionally rescaled to bring their sum (sum of the weights) back to one.

### 3.7.4 Liquidated damages

The liquidated damages related to deficient Quality of Service (QoS) are derived directly from the GQI calculation. The GQI and the liquidated damages will be calculated at the end of the service provision of a Specific Contract. Liquidated damages may be applied to the Service Provider in the framework of the Contractual OLA.



This method is not applicable for the SQIs having the financial consequence of **Direct Liquidated Damages**. Please refer to the description of these SQIs (SQI32 → SQI35) for the mode of calculation of the related direct liquidated damages.

From GQI to liquidated damages calculation:

The amount of liquidated damages at the end of the Specific Contract or RfA is calculated according to the following "P" function:

If $GQI \leq -1$	$\Rightarrow$	Liquidated damages = 20 % * value of the SC or RfA
If $-1 < GQI < 0$	$\Rightarrow$	Liquidated damages = 20 % * value of the SC or RfA * $abs(GQI)$ ;
If $GQI \geq 0$	$\Rightarrow$	Liquidated damages = 0

*abs* means *absolute-value*.

The main idea behind the "P" function is to:

- Have **no** liquidated damages when the GQI is positive, indicating overall positive QoS for the duration of the SC or RfA.
- Have liquidated damages linearly proportional to all amounts that have been ordered in the SC or RfA, when GQI is negative.
- And limit the maximum amount of liquidated damages to 20% of all amounts that have been ordered in the SC or RfA when GQI gets below -1, indicating that the global QoS during the SC or RfA has been very negative.

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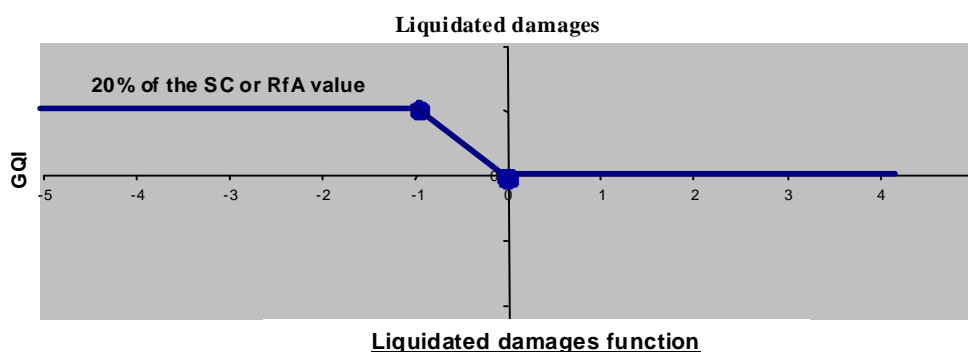


Figure 2 Liquidated damages application

Liquidated damages are calculated at the end of each Specific Contract or RfA and applied on the last payment related to the Specific Contract or RfA, when applicable.

The liquidated damage will take the form of an amount to be deducted from the last invoice for the Specific Contract or RfA.

### 3.8 The internal quality system of the contractor

The contractor must operate an effective internal quality system in order to deliver according to expectations and minimise risks raised around its services and increase the resilience of them. The contractor will run internal QA, QC and risk analysis processes of which it will keep the internal records available to the Commission.

The contractor will proceed periodically to self assessment and internal audit. The internal audit will be conducted by internal auditors of the contractor offering reasonable assurance of segregation of reporting with the delivering team of the contractor.

The contractor must be aware that any defect in its quality system will result in a quality burden shifting to the Commission and in a decrease of quality of service for the users.

### 3.9 Critical quality success factors

The Commission considers the following as critical quality success factors for the delivery of the Framework Contract:

- Successful takeover of the CCN/CSI and efficient corrective maintenance of all taken over CCN/CSI related components as long as needed;
- Design and on time delivery of cost-effective, reliable, scalable CCN2 Platform with minimum level of custom development and as early as possible replacement of the CCN/CSI legacy systems;
- Execution of the contract in compliance the Technical Annex (Annex II.B - Technical Annex), FQP, Specific Contracts and their technical annexes;
- Service performance and achievements in relation to targets set forth in the OLAs, SLAs and ToCs;
- Responsible, proactive, and customer-driven project management;
- High user satisfaction levels;
- High quality level of deliverables submitted for review to the Commission;
- Pro-active behaviour in all situations, in the best interest of the Commission;

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- Continuous improvement by recycling all lessons learned and full implementation of CSIP;
- Predictable behaviour and quality;
- Transparent, accountable and service oriented relationship between all involved parties (NAs, other contractors);
- Functional and technical knowledge of the CCN;
- High quality and on-time 3<sup>rd</sup> level call resolution;
- Highly competent and qualified staff assigned to the project.

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## 4 General requirements

### 4.1 Relationship

The contractor will perform the activities under the authority and the close control of the Commission, in function of the organisation in place at the Commission, and in full compliance with the existing Programme Quality Plans (PQP) and the Framework Quality Plan (FQP). The instruments of this control shall include all the deliverables specified in the WP.0 Project Management Work Package.

In terms of inter-relationship between contractors, the contractor reports to the Commission only. In some specific circumstances, the Commission may authorise the establishment of direct working technical relationships between the contractors in order to improve the overall efficiency of the Central Programme.

However, the Commission will always retain the full control over, and require full traceability of the information exchanged between the contractors. It is important to recognise that delays incurred by one contractor will ripple down to the other parties downstream, implying that all contractors must take adequate steps to address this risk.

In the context of the CCN2-DEV contract, the contractor will interface with the **Quality Assurance and Control contractor (alias QA2 contractor)** in the context of deliverables review/acceptance process and in the context of quality audits.

In the context of the CCN2-DEV contract, the contractor will interact with the **ITSM2 contractor** in the context of the deployment and operational aspects of the CCN/CSI and CCN2 Platform and the bespoke related software (ITSM2 Lot1 & 2) and in the context of benchmarking and assessment, advise and control and integration of the services offered by al DG TAXUD contractors and DG TAXUD (ITSM2 Lot3).

In the context of the CCN2-DEV contract, the contractor will interact with the **FITSDEV2 and CUSTDEV2 contractor** in the context of the development of Fiscalis, Excise and Customs business applications.

In the context of the CCN2-DEV contract, the contractor may have to interact with the **CCNWAN2 contractor** in the context of the CCNWAN network.

In terms of interaction with the **Commission**, the contractor has to set up an organizational structure that can effectively interact with the one in place in the Commission.

### 4.2 Interaction Model

For information on the internal DG TAXUD service organisation and for the contractual aspects of DG TAXUD, refer to Annex II.A - Terms of Reference, sections 1.3 and 1.4.

The specification and implementation of a pragmatic and effective interaction model between the contractor and the Commission is a key activity for the CCN2-DEV contractor to perform following the kick-off of the contract.

The key objective of this interaction model is to establish a structured and effective communication and collaboration framework between the two parties (DG TAXUD and contractor) – which will be supported and driven by Single Points Of Contacts (SPOCs) nominated by each of the two parties at contractual and technical level. Each nominated SPOC will be clearly reflected in the organisational structure and it will be responsible for coordinating activities within its own domain.

In the context of the CCN2-DEV contract, the contractor will interact mainly with **unit R5** of DG TAXUD, and in particular with the sectors.

- the Enterprise IT architecture and Strategy (alias R5/EAS) and

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- Infrastructure and Service Delivery (alias R5/ISD).

For security-related activities and issues, the contractor will need to interact with the "**R4/LISO**" sector as well.

For TEMPO methodology compliance and maintenance, the contractor will need to interact with the "**R4/PS**" sector as well.

For each of the above sectors, SPOCs will be nominated by the Commission for managing and coordinating effort and activities with the SPOCs nominated by the CCN2-DEV contractor.

The CCN2-DEV contractor has to describe in detail the "interaction model" to put in place within the FQP document.

A brief description on the interactions between the contractor and the **Commission's SPOCs** identified above follows below:

- **Interactions between R5/EAS sector and Contractor**  
The contractor will interact with the R5/EAS sector in the context of the operational follow up of all actions (all WPs of the FWC).
- **Interactions between R5/ISD sector and Contractor**  
The contractor will interact with R5/ISD sector in the context of contract and supply management and all TAXUD Data Centre hosting aspects.
- **Interactions between R4/LISO sector and Contractor**  
The R4/LISO sector interacts with the contractor in activities related to security (see WP.8.5 for more information).
- **Interactions between R4/PS sector and Contractor**  
The R4/PS sector interacts with the contractor in activities related to TEMPO methodology.
- **Interactions between R5/CIS and R4/Business sectors**  
The R5/CIS and R4/business sectors will have to interact with the contractor in activities related to development of new CCN related services.

In addition to the interactions with the sectors (as described above), the CCN2-DEV contractor will also interact with the **other DG TAXUD contractors**, as indicated in the section 4.1 above.

The contractor can also have **other contacts** with e.g. other units of DG TAXUD, other DGs of the Commission (e.g. DIGIT/DC since some parts of the CCN components are hosted there), the National Administrations.

The contractor must also set up some coordination with the **Hardware and Software providers** involved in this Framework Contract.

The above is not meant to be exhaustive and can be subject to changes during the contract.

### 4.3 Staff Profiles

It is the CCN2-DEV contractor's responsibility to propose in an adequate team organisation (including team structure, set of profiles, team sizing, responsibility allocation and reporting lines), and staffing in order to perform the activities and deliver the products and services defined in full compliance with the quality requirements in the current Technical Specifications. The contractor is responsible for demonstrating that each member of the staff complies with the profile requirements defined in this Call for Tenders and its offer.

Due to the dimension and complexity of the tasks, the team required will be composed of qualified personnel covering at least the following development profiles:

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#	Profile	Profile Code	Relevant Experience
1	Strategy Consultant	STC	15 years or more
2	Project Manager	PM	8 years or more
3	Service Manager	SM	5 years or more
4	Security Architect	SECA	6 years or more
5	Quality Manager	QM	6 years or more
6	Junior System Architect	JSYSA	4 years or more
7	Senior System Architect	SSYSA	8 years or more
8	Junior Infrastructure Architect	JINFA	4 years or more
9	Senior Infrastructure Architect	SINFA	8 years or more
10	Specifications Analyst	SPEC	6 years or more
11	Developer/Tester	DEV	4 years or more
12	Application Assembler, deployer, administrator	AD	4 years or more
13	Technical Support	TC	3 years or more
14	Quality Controller	QC	3 years or more
15	Senior Product Specialist	SPS	8 years or more

Table 5: List of Staff Profiles

These profiles will also be used in the pricing model of this Call for Tenders. Any additional profiles proposed by the tenderer will have to be mapped to the profiles listed above to support the proposed pricing model.

The CCN2-DEV contractor will have to staff in line with the team organisation that the CCN2-DEV contractor will propose in the tender.

The CCN2-DEV contractor must include sufficient seniority in the team that will ensure the continuous services and the teams that will be associated to the on demand activities. This seniority is not only expressed in (number of years of) experience but also, above all, in terms of skills and capacity to lead the teams and to keep a broad knowledge and overview of all activities undertaken by the CCN2-DEV contractor.

DG TAXUD can –at any point in time– request the CVs of the assigned staff and/or verify minimal expertise requirement defined by profile. DG TAXUD reserves the right to request replacements of staff not in line with the present resource requirements.



By bidding for this tender, the contractor commits to ensure full transparency to DG TAXUD regarding its staffing. The number of staff, names, location, qualifications, etc. must be communicated to DG TAXUD on a regular basis (as part of the MPR) and/or at specific request. DG TAXUD will fully respect the provision regarding data protection.

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The CCN2-DEV contractor shall demonstrate for each person proposed in the team that his/her CV meets the specification(s) of the profile. For every profile for which CVs are submitted, a minimum professional experience<sup>30</sup> is required for the area linked to his profile as indicated in table 5 above.

This means, e.g., that the Project Managers for whom a CV is submitted must have at least 8 years experience as project manager, even if they started their career as developers or in any other function. The same rule applies to the other profiles.

For all profiles, the CCN2-DEV contractor will ensure that all staff holds the relevant technical certification, corresponding to the assignment and to the required level of experience.

All profiles must have (or acquire within the first 8 weeks of their assignment) knowledge of ITIL, TEMPO and RUP.

The CCN2-DEV contractor must ensure that technical expertise that is in line with DG TAXUD's technical development/operations environment is sufficiently available. Expertise with all OS and COTS used by DG TAXUD (see [R098]) and the minimal requirements specified in the profile tables below) is a must and shall be identified clearly in the proposed CVs.



In case of staff replacement in management and quality roles and of key profiles, the contractor will inform the Commission at least two (2) months before hand and communicate the details of the new staff and evidence of his/her compliance with the role profile for which (s)he is proposed.



In case of staff replacement, it must be noted that the tenderer is required to provide a thorough Hand-over, at no extra cost for the Commission. Typically this could be done by providing a 10 working days unpaid overlap between the old and new resource. The contractor will describe the team induction and team management in the FQP.



The contractor must ensure that his staff is fully aware of the Commission's and contractor's quality system, of the quality system of the project, of the contractual OLA in place, of the security requirements of the project as well as of the goal, the context, the planning and the political importance of the service.

## Profile Description

For each of the profiles the following information regarding requirements is provided:

Profile :	<<Profile Name>> (<<Profile Acronym>>)
Overview	Overview description of the profile.
Nature of tasks	These are examples of the tasks that will be expected of a person proposed with the required profile in relation with the corresponding lot(s). This list is <u>not exhaustive</u> and is to be regarded as a good indication.

<sup>30</sup> Professional experience means the number of years of relevant professional experience after the studies (secondary school and professional studies).



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<i>Knowledge and skills</i>	A list of the <u>minimal</u> knowledge and skills that a person with this profile is expected to possess
<i>Experience</i>	This indicates the <u>minimum years</u> of experience that is required for the area of expertise.



The tasks defined in the profile descriptions are applicable to all CCN/CSI components and associated systems developed mainly by the CCN/TC contractor, the CCN2 Platform and the bespoke software components plus all services and deliverables covered by this Framework Contract.

#### 4.3.1 Strategy Consultant:

<b>Profile :</b>	<b>Strategy Consultant (STC)</b>
<i>Overview</i>	<b>Person able to define overall IT strategy, migration strategies and related strategic plans, provide strategic advice on product and service portfolio.</b>
<i>Nature of tasks</i>	<p>Provide overall IT strategies, policies and technical advice.</p> <p>Provide and follow up the migration strategy from CCN/CSI to the CCN2 Platform or any new CCN2 related component.</p> <p>Provide strategic advice on overall architecture solutions, linked to the CCN2 Platform and/or bespoke software components, taking into account the current market trends, client needs and shaping them into project deliverables. This task is done in close collaboration with the System, Infrastructure and Security architects.</p> <p>Provide the expertise and leadership necessary to help the Commission to achieve demonstrable improvements in the development and management of strategies related to the CCN/CSI and/or CCN2 components.</p> <p>Provide IT strategy support to the Commission through Enterprise Architecture and portfolio management and policy and guidance analysis.</p> <p>Provide the Commission with extensive strategic advice, guidance and leadership for the successful selection and deployment of new CCN related components</p> <p>Develop Business Cases (incl. Return on Investment and Cost/Benefit Analyses) to support strategic recommendations.</p> <p>Coordinate with all stakeholders involved in CCN related developments and deployments to plan, document and manage strategic phases of CCN related projects.</p>
<i>Knowledge and skills</i>	<p>Strong experience with developing strategic documents.</p> <p>Experience managing systems and development projects that cover big trans European networks with strict security requirements.</p> <p>Ability to assess and document business needs: including systems; work flows; staffing; and the economic impact of each.</p> <p>Excellent interpersonal, verbal and written communication skills.</p> <p>Fundamental project planning and project management skills.</p>

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	<p>Strong technical, analytical and business skills.</p> <p>Experience with gathering IT requirements for big trans European projects.</p> <p>Strong knowledge of current technology innovations, including SOA, Cloud Computing, ...</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	15 years or more is required for the area of expertise

### 4.3.2 Project Manager

<b>Profile :</b>	<b>Project Manager (PM)</b>
<i>Overview</i>	<b>Person responsible for managing one or more projects. He is responsible for managing the team, budget, work plan, and all the project management procedures.</b>
<i>Nature of tasks</i>	<p>Overall project management and co-ordination with all stakeholders. There is a project manager responsible for the overall Framework contract and its related Specific Contracts and there are Project Managers responsible for specific projects linked to this Framework Contract.</p> <p>Manage the development and implementation (including testing) of information systems related to CCN/CSI, the CCN2 Platform and any bespoke software to meet identified business needs, acquiring and utilising the necessary resources and skills, within agreed parameters of cost, timescales, and quality.</p> <p>Responsible for managing the team and budget, as well as monitor costs, timescales and resources used work plan, and all the project management procedures (team and resource management, contract/supply management, scope management, management of issues, risk management, quality control, etc.).</p> <p>Give proposals for project strategies, planning, definition of tasks and deliverables, review of project deliverables, quality control, risk analysis and management, status reports, problem reporting and management systems, follow up and organisation.</p> <p>Guide the team in charge of project activities and review their deliverables. Provide effective leadership of the development teams, ensuring that the team members are motivated and constantly developing their skills and experience.</p> <p>Participate in functional working groups and progress meetings.</p> <p>Estimate costs, timescales and resource requirements for the successful completion of each project to agreed terms of reference.</p> <p>Prepare and maintain project and quality plans and tracks activities against the plan, provide regular and accurate reports.</p> <p>Monitor costs, timescales and resources used, and take action where these deviate from agreed tolerances. Ensure that delivered systems are implemented within these criteria.</p> <p>Activity tracking against the plan, provide regular and accurate reports.</p> <p>Manage the change control procedure gaining agreement for revisions to the</p>

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	<p>project from project sponsors.</p> <p>Provide effective leadership for the project team ensuring that team members are motivated and constantly developing their skills and experience.</p> <p>Follow-up reporting and management of the contractual Matters.</p>
<i>Knowledge and skills</i>	<p>Good project and contract management knowledge.</p> <p>Good knowledge of project management standards and methodologies</p> <p>Usage of project management tools and methodologies as specified by the Commission.</p> <p>Good technical knowledge on the projects aspects.</p> <p>Good reporting methods.</p> <p>Ability to chair meetings and give presentations.</p> <p>Ability to apply high quality standards to all tasks</p> <p>Ability to participate in multi-lingual meetings, good communication skills.</p> <p>Ability to plan and forecast.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p> <p>Good communicator, good management, delegation and leadership capability.</p> <p>Ability to coach and manage different project management teams in an international multilingual environment.</p>
<i>Experience</i>	8 years or more is required for the area of expertise

### 4.3.3 Service Manager

<b>Profile :</b>	<b>Service Manager (SM)</b>
<i>Overview</i>	<b>Responsible for managing and coordinating all Service Support and Service Delivery related activities according to the agreed quality plans and according to quality levels agreed in the Service Level Agreement (SLA).</b>
<i>Nature of tasks</i>	<p>Person responsible for managing and coordinating the service desk activities, and ensuring that incident, problem, change, configuration and release management is delivered according to quality plans (FQP) and according to quality levels agreed in the contractual Operation Level Agreement (OLA).</p> <p>Responsible for managing and coordinating all Service Support and Service Delivery related activities according to the agreed quality plans and according to quality levels agreed in the Service Level Agreement (SLA).</p> <p>Report on all Service Support and Service Delivery related activities including statistical reporting, alerts, trend analysis, ....</p> <p>Overall quality follow up and escalation towards the Commission of all Service Support and Service Delivery related activities and its related quality indicators.</p> <p>Coordination with all involved stakeholders for all Service support and Service Delivery related activities.</p>

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	<p>Maintenance of the content of the CCN portal.</p> <p>Management of the 3<sup>rd</sup> level support to the operational contractor for all aspects linked to the deployment and operation of CCN/CSI and CCN2 related components and bespoke software and ICT and network related aspects.</p> <p>Coordination with the quality manager for the Service Level Management aspects linked to this Framework contract and reporting.</p> <p>Assistance and coordination with the operational contractor for all Service Delivery related aspects.</p> <p>Responsible for all Service Support and Service Delivery aspects linked to the ICT infrastructure needed to perform the services of this framework contract (WP.B).</p>
<i>Knowledge and skills</i>	<p>Ability to participate in meetings, good communicator.</p> <p>Good leader skills to manage the service support management team.</p> <p>Good knowledge of all applicable quality plans and Service Level agreements.</p> <p>Proven experience in carrying out support services.</p> <p>Proven experience in the usage of Service Management related tools (e.g. HP Service Centre)</p> <p>Proven experience of all ITIL Service Support/Service Delivery related activities (including ITIL V2 or V3 certification)</p> <p>Proven experience with quality procedures.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	5 years or more is required for the area of expertise

#### 4.3.4 Security Architect

<b>Profile :</b>	<b>Security Architect (SECA)</b>
<i>Overview</i>	<b>Person responsible for promoting security within the team with regard to security procedures and methodologies in place, set-up, maintenance and assessment of them through internal audits, and improvement of them through the development and implementation of continuous improvement programmes. The mission is to ensure that products integrate security requirements and that project-related information is managed securely. To comply with this mission it is required an in-depth knowledge of technical topics such as Network security, Identity and Access Management, web application security, web services security, Open Standard security, and an ability to validate the design of the related security components.</b>
<i>Nature of tasks</i>	<p>Provide high level security expertise regarding all security aspects related to CCN/CSI, the CCN2 Platform, all bespoke developments and related services.</p> <p>Co-ordinate all security aspects related to CCN/CSI, the CCN2 Platform, all bespoke developments and related services.</p> <p>Create, implement, maintain and continuously improve the security policies,</p>

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	<p>processes and procedures.</p> <p>Create, implement, maintain and continuously improve all Security related plans including Risk management, DRP and BCP documents.</p> <p>Provision of security studies, security assessments or other security matters associated with information system projects.</p> <p>Provision of advice to all stakeholders in areas such as risk analysis, contingency planning, IT security audit, security log analysis, security development, as well as providing support for setting up security training and security awareness sessions.</p> <p>Manage security: User control, Incident handling, access rights ...</p> <p>Help to set up and deploy security awareness and security training.</p> <p>Co-ordinate and follow up all security aspects of all CCN/CSI and CCN2 Platform components.</p> <p>Ensure that the CCN/CSI, the CCN2 Platform, all bespoke developments integrate all security requirements and that all project-related information is managed securely.</p>
<i>Knowledge and skills</i>	<p>Proven experience in carrying out high-level security studies of ICT Projects.</p> <p>Proven experience with Security standards (ISO/IEC 27001 &amp; and 27005)</p> <p>Proven experience with Identity and Access Management, web application security, web services security and Open Standard security</p> <p>Good knowledge in securing information systems and prevent attacks.</p> <p>Good knowledge of the security aspects of services (authentication, authorization, ...)</p> <p>Good knowledge of Communication protocols, firewalls, network security policies implementation and other security and antivirus tools.</p> <p>Good knowledge of tasks related to national security accreditation and security clearance.</p> <p>Good experience in carrying out high-level security studies of ICT projects.</p> <p>Good knowledge of TEMPO's security related documents</p> <p>Ability to give presentations and security related trainings.</p> <p>Ability to apply high quality standards to all tasks.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	6 years or more is required for the area of expertise

#### 4.3.5 Quality Manager

<b>Profile :</b>	<b>Quality Manager (QM)</b>
<i>Overview</i>	<b>Person responsible for promoting awareness within the team with regard to quality procedures and methodologies in place, set-up, maintenance and assessment of them through internal audits, and improvement of them through the development and implementation of continuous improvement</b>

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	<b>programmes. Overall, his mission is to ensure that the delivery of products and services meets or exceeds customer expectations.</b>
<i>Nature of tasks</i>	<p>Ensure that the delivery of services and/or products meets or exceeds customer expectations and that, whether or not the document and software deliverables are compliant with the quality requirements and standards stipulated in the quality plans.</p> <p>Consultancy studies on quality matters regarding ICT processes.</p> <p>Build and maintain the quality plans for building and maintenance of CCN/CSI, the CCN2 Platform and the bespoke software components plus all services and deliverables covered by this framework contract.</p> <p>Assistance and support on service level agreements or other quality documents associated with CCN2 Platform and related services and components.</p> <p>Responsible for Service Level Management and reporting of the contractual OLA linked to this framework contract.</p> <p>Development and management of the CSIP process related to this Framework Contract.</p> <p>Responsible for the regular internal assessment and internal audits of all services provided by this Framework contract.</p> <p>Responsible for providing 2 service catalogues (one for DG TAXUD and one for the NAs) covering all services of the Framework contract.</p> <p>Manage the review of all services and deliverables linked to the framework Contract.</p> <p>Responsible to ensure alignment of all operational processes linked to this framework contract with the corresponding and related processes of the other contractors.</p>
<i>Knowledge and skills</i>	<p>High-level qualified person(s) with relevant experience responsible for promoting awareness within the team with regard to quality procedures and methodologies in place, set up, maintenance and assessment of them through internal audits, and improvement of them through the development and implementation of continuous improvement programmes as well as the to provide assistance and support on service level agreements or other quality documents associated to the project.</p> <p>Quality assurance of ICT projects and capability of applying formal quality standards (ISO standards, guidelines and references of other organisations such as COBIT...).</p> <p>Proven experience in quality assurance and related methodologies such as PM (PMBOK, Prince2, RUP, ITIL, COBIT).</p> <p>Proven experience with quality procedures.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	6 years or more is required for the area of

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#### 4.3.6 Junior System Architect

<b>Profile :</b>	<b>Junior System Architect (JSYSA)</b>
<i>Overview</i>	<b>High-level qualified person able to perform: high level design, the core design, ensure interoperability, identify potential reuse, perform cost-benefit analyses, design Service Oriented Architecture, design Enterprise Service Bus, design Identity and Access Management and Master Data Management solutions, design WS architectures, some operated on virtualised environments, design required services to monitor and administrate above services, coordinate the technical implementation, perform Business Analysis and contribute to the Functional, Technical, Security and Testing Specifications.</b>
<i>Nature of tasks</i>	<p>Responsible for the architecture and high-level design of (new) information systems/components linked to CCN/CSI, the CCN2 Platform and bespoke software components and the CCN/CSI-to-CCN2 migration components.</p> <p>Review of the architecture of existing systems, design of component architecture and building blocks.</p> <p>Analysis of the integration of different information Systems and ensuring interoperability.</p> <p>Follow up of the data analysis, data modelling and advice on Master Data Management solutions (pivot models).</p> <p>Coordination of the implementation of the technical architecture.</p> <p>Technical interface between the project leaders, the Service manager, the analysts and developers.</p> <p>Production of system and application architecture documents. Contributes to the specifications documents.</p> <p>Participation in technical working groups, progress meetings and meetings with the users.</p> <p>Assistance in the testing, the technical documentation, the deployment, the evaluation and the reporting.</p> <p>Understands and apply security measures, configurations current standards, practices, &amp; technology</p>
<i>Knowledge and skills</i>	<p>Good knowledge of the architectural aspects of all CCN/CSI and CCN2 Platform related components.</p> <p>High-level qualified person with experience in the design of systems linked to all components of the CCN2 Platform.</p> <p>High-level qualified person with a good knowledge of at least one market leading ESB/SOA and tools related to all CCN2 backplane components.</p> <p>Good knowledge of interoperability technology (e.g. web services, message oriented middleware, service oriented bus).</p> <p>Capacity to model the service data and reference models</p> <p>Capacity to define the service interfaces and contracts</p> <p>Good Knowledge of service implementation patterns (sync, async, request/response, ...), distributed system design and messaging layer</p> <p>Ability to cope with fast changing technologies used in application architecture</p>

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	<p>and design.</p> <p>Good knowledge of applications design and modelling tools.</p> <p>Capacity in writing and presenting documents.</p> <p>Ability to apply high quality standards</p> <p>Good communication skills.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	4 years or more is required for the area of expertise

#### 4.3.7 Senior System Architect

<i>Profile :</i>	<b>Senior System Architect (SSYSA)</b>
<i>Overview</i>	<b>High-level qualified person able to perform: high level design, the core design, ensure interoperability, identify potential reuse, perform cost-benefit analyses, design Service Oriented Architecture, design Enterprise Service Bus, design Identity and Access Management and Master Data Management solutions, design WS architectures, some operated on virtualised environments, design required services to monitor and administrate above services, coordinate the technical implementation, perform Business Analysis and contribute to the Functional, Technical, Security and Testing Specifications.</b>
<i>Nature of tasks</i>	<p>Responsible for the architecture and high-level design of (new) information systems/components linked to CCN/CSI, the CCN2 Platform and bespoke software components and the CCN/CSI-to-CCN2 migration components.</p> <p>Review of the architecture of existing systems, design of component architecture and building blocks.</p> <p>Analysis of the integration of different information Systems and ensuring interoperability.</p> <p>Follow up of the data analysis, data modelling and advise on Master Data Management solutions (pivot models).</p> <p>Coordination of the implementation of the technical architecture.</p> <p>Technical interface between the project leaders, the Service manager, the analysts and developers.</p> <p>Production of system and application architecture documents. Contributes to the specifications documents.</p> <p>Participation in technical working groups, progress meetings and meetings with the users.</p> <p>Assistance in the testing, the technical documentation, the deployment, the evaluation and the reporting.</p> <p>Understands and apply security measures, configurations current standards, practices, &amp; technology</p>
<i>Knowledge and skills</i>	Top notch knowledge of the architectural aspects of all CCN/CSI and CCN2



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	<p>Platform related components.</p> <p>High-level qualified person with practical experience in the design of systems linked to all components of the CCN2 Platform.</p> <p>High-level qualified person with an extensive working knowledge of at least one market leading ESB/SOA and tools related to all CCN2 backplane components.</p> <p>In depth knowledge of interoperability technology (e.g. web services, message oriented middleware, service oriented bus).</p> <p>Capacity to model the service data and reference models</p> <p>Capacity to define the service interfaces and contracts</p> <p>In depth Knowledge of service implementation patterns (sync, async, request/response, ...), distributed system design and messaging layer</p> <p>Ability to cope with fast changing technologies used in application architecture and design.</p> <p>In depth knowledge of applications design and modelling tools.</p> <p>Strong capacity in writing and presenting documents.</p> <p>Ability to apply high quality standards</p> <p>Ability to participate in multi-lingual meetings, good communication skills.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	8 years or more is required for the area of expertise

#### 4.3.8 Junior Infrastructure Architect

<b>Profile :</b>	<b>Junior Infrastructure Architect (JINFA)</b>
<i>Overview</i>	<b>High-level qualified person able to: able to carry out architectural design of network communication system, which includes the backbones, routers, switches, access methods and protocols used, design and implement virtualisation solutions based on multiple vendor technology, design the high availability solutions, develop and generate conceptual, logical, and physical network architectures, and deliver documents and drawings, testing analyses, test plans, and risk assessments to ensure sound architecture. Also evaluate cost analysis and vendor comparisons for large scale projects to ensure cost-effective and efficient operations, and measure feasibility of various approaches, evaluate complex data networking technologies to understand their potential and recommend future direction.</b>
<i>Nature of tasks</i>	<p>Understand, design and implement virtualisation solutions based on multiple vendor technology.</p> <p>Develop and generate conceptual, logical, and physical network architectures, server/ storage, complex and virtualized multi-OS environments resulting documents and drawings, testing analyses, test plans, and risk assessments to ensure sound architecture.</p> <p>Evaluate cost analysis and vendor comparisons for large scale projects to</p>

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	<p>ensure cost-effective and efficient operations, and measures feasibility of various approaches.</p> <p>Evaluate complex data networking technologies to understand their potential and recommends future direction.</p> <p>Research technological advancements to ensure that the proposed networking, server/ storage, virtualization, cloud and OS environments solutions are continuously improved, supported, and aligned with industry and company standards.</p> <p>Participate as the lead networking subject matter expert in the development of solutions in support of new business and application expansion.</p> <p>Follow up and coordinate the ordering of IT components (HW &amp; OS &amp; COTS), the maintenance, the inventory management aspects and lead the installation and configuration into the CCN Infrastructure.</p> <p>Advise and cooperate in areas such as availability management, capacity management, contingency planning, IT service continuity management, automation of repetitive tasks, security and related tools.</p> <p>Advising about QoS settings, new product &amp; feature introduction, subscriber &amp; services provisioning, translations &amp; routing, optimization of the server/ storage usage, virtualization technologies, and infrastructure performance.</p> <p>Advising about installation, deployment, integration and configuration of all ICT components.</p> <p>Understands and apply security measures, configurations current standards, practices, &amp; technology</p> <p>Advice for the server procedures manual and the parts of the disaster recovery plans related to ICT and networks.</p>
<i>Knowledge and skills</i>	<p>Good knowledge of large trans European networks and all ICT components linked to the CCN/CSI and CCN2 network.</p> <p>High-level qualified person with experience in ICT (e.g. consultancy in governance and management, WAN communication and telecommunication, software, information systems, security, policies implementation).</p> <p>Good experience in network and internet technologies</p> <p>Good knowledge in network components like load balancers, routers, firewalls, reverse proxies, ...</p> <p>Good experience with storage servers, monitoring, virtualisation, high availability solutions.</p> <p>Good capacity in technical writing and reporting.</p> <p>Capacity to give high level presentations.</p> <p>Good experience in the realisation of feasibility studies and infrastructure related studies.</p> <p>Ability to cope with fast changing technologies used in application architecture and design.</p> <p>Experience with quality procedures.</p> <p>Ability to participate in multi-lingual meetings, excellent communicator.</p>

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	Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.
<i>Experience</i>	4 years or more is required for the area of expertise

#### 4.3.9 Senior Infrastructure Architect

<b>Profile :</b>	<b>Senior Infrastructure Architect (SINFA)</b>
<i>Overview</i>	<b>High-level qualified person able to: able to carry out architectural design of network communication system, which includes the backbones, routers, switches, access methods and protocols used, design and implement virtualisation solutions based on multiple vendor technology, design the high availability solutions, develop and generate conceptual, logical, and physical network architectures, and deliver documents and drawings, testing analyses, test plans, and risk assessments to ensure sound architecture. Also evaluate cost analysis and vendor comparisons for large scale projects to ensure cost-effective and efficient operations, and measure feasibility of various approaches, evaluate complex data networking technologies to understand their potential and recommend future direction.</b>
<i>Nature of tasks</i>	<p>Understand, design and implement virtualisation solutions based on multiple vendor technology.</p> <p>Develop and generate conceptual, logical, and physical network architectures, server/ storage, complex and virtualized multi-OS environments resulting documents and drawings, testing analyses, test plans, and risk assessments to ensure sound architecture.</p> <p>Evaluate cost analysis and vendor comparisons for large scale projects to ensure cost-effective and efficient operations, and measures feasibility of various approaches.</p> <p>Evaluate complex data networking technologies to understand their potential and recommends future direction.</p> <p>Research technological advancements to ensure that the proposed networking, server/ storage, virtualization, cloud and OS environments solutions are continuously improved, supported, and aligned with industry and company standards.</p> <p>Participate as the lead networking subject matter expert in the development of solutions in support of new business and application expansion.</p> <p>Follow up and coordinate the ordering if IT components (HW &amp; OS &amp; COTS), the maintenance, the inventory management aspects and lead the installation and configuration into the CCN Infrastructure.</p> <p>Advise and cooperate in areas such as availability management, capacity management, contingency planning, IT service continuity management, automation of repetitive tasks, security and related tools.</p> <p>Advising about QoS settings, new product &amp; feature introduction, subscriber &amp; services provisioning, translations &amp; routing, optimization of the server/ storage usage, virtualization technologies, and infrastructure performance.</p> <p>Advising about installation, deployment, integration and configuration of all</p>

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	<p>ICT components.</p> <p>Understands and apply security measures, configurations current standards, practices, &amp; technology</p> <p>Advice for the server procedures manual and the parts of the disaster recovery plans related to ICT and networks.</p>
<i>Knowledge and skills</i>	<p>In depth knowledge of large trans European networks and all ICT components linked to the CCN/CSI and CCN2 network.</p> <p>High-level qualified person with experience in ICT (e.g. consultancy in governance and management, WAN communication and telecommunication, software, information systems, security, policies implementation).</p> <p>Strong experience in network and internet technologies</p> <p>Good knowledge in network components like load balancers, routers, firewalls, reverse proxies, ...</p> <p>Good experience with storage servers, monitoring, virtualisation, high availability solutions.</p> <p>Strong capacity in technical writing and reporting.</p> <p>Strong capacity to give high level presentations.</p> <p>Strong experience in the realisation of feasibility studies and infrastructure related studies.</p> <p>Ability to cope with fast changing technologies used in application architecture and design.</p> <p>Proven experience with quality procedures.</p> <p>Ability to participate in multi-lingual meetings, excellent communicator.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	8 years or more is required for the area of expertise

#### 4.3.10 Specifications Analyst

<b>Profile :</b>	<b>Specifications Analyst (SPEC)</b>
<i>Overview</i>	<b>High-level qualified person able to perform: Business Analysis and Functional, Technical, Security and Testing Specifications.</b>
<i>Nature of tasks</i>	<p>Analysis of the requirements and modelling of business process models and architectural models.</p> <p>Translate Business requirements and workflows to system flows and specifications.</p> <p>Writing/maintenance of all specifications linked to CCN related components covering amongst others: functional, technical, test specifications, ....</p> <p>Design user &amp; component interfaces.</p> <p>Design and perform prototyping.</p>

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	<p>Elaboration of test programs specifications: Definition of e of complete test p covering as well functional as non functional tests (e.g. performance, security, reliability, stress tests, ...).</p> <p>Production of use case models, design models, analysis models and implementation models.</p> <p>Analyse &amp; define specifications linked to the integration with other applications and/or technological components.</p> <p>Production of end-user and technical documentation and training material linked to new releases.</p> <p>Assistance with training the administrators and users of the systems.</p> <p>Assist with evaluating and testing products delivered by other teams to ensure that they conform to the Commission requirements and methodology.</p> <p>Participation in meetings with the Commission.</p>
<i>Knowledge and skills</i>	<p>In depth knowledge of application development environments.</p> <p>Good knowledge of the design and development of web and multi-tiers Internet applications and composite applications/composite services.</p> <p>Have familiarity with software design/development processes, and the ability to communicate effectively with development team.</p> <p>Have the ability to apply architectural principles to business solutions.</p> <p>Have business Analysis skills and the ability to translate business requirements.</p> <p>Experience using model-based representations that can be adjusted as required to collect, aggregate or disaggregate complex and conflicting information about the business</p> <p>Working knowledge of Java development techniques and technologies.</p> <p>Expert knowledge of Object-oriented analysis and design, SOA, JMS, and XML Excellent problem solving ability.</p> <p>Good knowledge of modelling tools (e.g. UML)</p> <p>Knowledge of software development methodologies (e.g.RUP).</p> <p>Good knowledge of relational database systems</p> <p>Ability to cope with fast changing technologies used in information systems developments.</p> <p>Ability to participate in multi-lingual meetings, ease of communication.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	6 years or more is required for the area of expertise

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#### 4.3.11 Developer/ Tester

<b>Profile :</b>	<b>Developer/Tester (DEV)</b>
<i>Overview</i>	<p><b>Person who is able to produce and maintain documents (e.g. manuals, ...), software code, technical prototypes, produce test data, test scenarios and execute test plans and perform/support testing activities (ex. unit, integration, FAT, (P)SAT, etc).</b></p> <p><b>Execution of complete test plans covering as well functional as non functional tests (e.g. performance, security, reliability, stress tests, ...).</b></p>
<i>Nature of tasks</i>	<p><b>Developer:</b></p> <p>Development, configuration and maintenance of information systems compliant with the specifications. Please note that this is not only writing code but mainly rather configuration and parameterisation of components/COTS to interact as specified.</p> <p>Follow up of all development, testing and packaging related activities.</p> <p>Development of user and component interfaces.</p> <p>Elaboration of test programs.</p> <p>Integration of technological components and application components.</p> <p>Prepare / maintain Installation and operation manuals.</p> <p>Production of technical documentation for components during their development.</p> <p>Assistance with deployment and configuration of the system.</p> <p>Assistance with training the administrators and users of the system.</p> <p>Assist with evaluating and testing products (delivered by other teams) to ensure that they conform to the Commission requirements and methodology.</p> <p>Participation in meetings with the Commission</p> <p>Assist in maintenance of Definitive Media Library</p> <p><b>Tester:</b></p> <p>Contribute to the definition of test strategies, test plans, test cases</p> <p>Construction of test scenarios, test scripts and test data</p> <p>Configuration and usage of test tools to run all tests</p> <p>Analyze test results and test log files</p> <p>Tests coordination and execution</p> <p>Reporting of test campaigns and test results</p>
<i>Knowledge and skills</i>	<p><b>Developer:</b></p> <p>In depth knowledge of application development environments.</p> <p>Good knowledge of the design and development of web and multi-tiers Internet applications.</p> <p>Good knowledge of the web services stack used in the selected technology</p> <p>Good knowledge of modelling tools (e.g. UML)</p>

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	<p>Knowledge of software development methodologies (e.g. RUP).</p> <p>Good knowledge of all CCN related technologies.</p> <p>Ability to cope with fast changing technologies used in application developments</p> <p>Ability to participate in multi-lingual meetings, ease of communication.</p> <p>Capability of integration in an international/multicultural environment, rapid self-starting capability and experience in team working</p> <p><b>Tester:</b></p> <p>Proven knowledge of testing methodologies, technologies and tools.</p> <p>Good knowledge of the debugging of web and multi-tiers Internet applications.</p> <p>Capability of integration in an international/multicultural environment, rapid self-starting capability and experience in team working.</p> <p>Good knowledge and proven experience of usage of automated test tools (e.g. IBM Rational Functional/performance tester)</p> <p>Good communication and coordination skills.</p> <p>Good reporting skills</p> <p>Ability to cope with fast changing technologies used in application developments.</p> <p>Proven experience with testing technologies and tools.</p>
<i>Experience</i>	4 years or more is required for the area of expertise

#### 4.3.12 Application Assembler, Deployer and Administrator

<b>Profile :</b>	<b>Assembler, Deployer and Administrator (AD)</b>
<i>Overview</i>	<b>Person able to prepare the applications for packaging, support the release management process, perform application deployment related testing (installation, removal, and re-installation) and produce the installation scripts, procedures and guidelines.</b>
<i>Nature of tasks</i>	<p>Prepare the packaging of the CCN related components including the installation scripts, procedures and related installation and operational guides.</p> <p>Prepare, deploy and operate all ICT infrastructure (HW and OS and COTS) required by the contractor to perform its contractual obligations. (Cfr. WP.B)</p> <p>Coordination with Service manager for the management of the releases of the applications.</p> <p>Perform all application deployments related testing in the context of the FAT activities.</p> <p>Support to the ITSM2 contractor for all deployment &amp; administration related activities</p> <p>Technical advise for application deployment and monitoring methods/practices</p> <p>Perform activities related to analysis, design writing and publication of detailed technical documentation (e.g. installation, migration and operations</p>

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	guides, server procedures manual, parts of DRPs, .....)
<i>Knowledge and skills</i>	<p>Good knowledge and proven experience of usage of automated build and deployment tools.</p> <p>Good communication and coordination skills.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	4 years or more is required for the area of expertise

#### 4.3.13 Technical Support

<b>Profile :</b>	<b>Technical Support (TC)</b>
<i>Overview</i>	<b>This profile combines several roles. The tasks can be executed by one or more persons. The profile requires good knowledge of the specification and software development life-cycle, will provide assistance in the deployment related activities and provide 3<sup>rd</sup> level support linked to the deployment and operations of CCN related configuration items. Furthermore good knowledge of security, telecommunication and infrastructure aspects linked to the CCN related network are mandatory.</b>
<i>Nature of tasks</i>	<p>Provide expertise in specific technical domains regarding information and communication systems linked to CCN.</p> <p>Technical support &amp; advice in deployment, configuration, optimisations, operation of the infrastructure, its related components and COTS (e.g. ESB, SOA, MDM, ...) and application components and related monitoring and reporting.</p> <p>3<sup>rd</sup> level call resolution, problem analysis and resolution and technical support in all service support &amp; service delivery processes.</p> <p>Technical advice, problem solving (e.g. performance issues, configuration issues ...), contribute in change impact assessments and optimisation of application and system components.</p> <p>Technical support in monitoring the health of application and system components and performing risk analysis.</p> <p>Production and maintenances of all technical application and system documentation and technical support in the production and maintenance of all deliverables linked to the Framework Contract.</p> <p>Provision of technical advice and assistance in any area associated with the procurement, provision, delivery, maintenance, deployment, hosting, effective use of information systems, communication systems and their environments.</p> <p>Perform activities related to analysis, design writing and publication of detailed technical documentation.</p>
<i>Knowledge and skills</i>	Good knowledge of the CCN related architecture and all technical aspects of it's components.



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	<p>In depth knowledge of information systems, components (including OS, COTS, ...) and network communication matters.</p> <p>Expert knowledge of SOA/ESB platforms and technologies.</p> <p>Strong experience in IT consulting matters.</p> <p>Ability to participate in multi-lingual meetings, excellent communicator.</p> <p>Capability of working in an international/ multicultural environment.</p> <p>Good knowledge of security implementations.</p> <p>Proven knowledge in IT matters.</p> <p>Outstanding reasoning, analytical, design, and troubleshooting skills.</p> <p>Ability to cope with the fast changing technologies.</p>
<i>Experience</i>	3 years or more is required for the area of expertise

#### 4.3.14 Quality Controller

<b>Profile :</b>	<b>Quality Controller (QC)</b>
<i>Overview</i>	<b>Person responsible for checking document and software deliverables' compliance with the quality requirements and standards stipulated in the quality plans.</b>
<i>Nature of tasks</i>	<p>Perform the review of all services and deliverables linked to the framework Contract.</p> <p>Assist quality manager during the regular internal assessment and internal audits of all services provided by this Framework contract.</p>
<i>Knowledge and skills</i>	<p>Quality assurance of ICT projects and capability of applying formal quality standards (ISO standards, guidelines and references of other organisations such as COBIT...).</p> <p>Experience in quality assurance and related methodologies such as PM (PMBOK, Prince2, RUP, ITIL, COBIT).</p> <p>Good knowledge of all quality procedures and quality plans linked to the Framework Contract.</p>
<i>Experience</i>	3 years or more is required for the area of expertise

#### 4.3.15 Senior Product Specialist

<b>Profile :</b>	<b>Senior Product Specialist (SPS)</b>
<i>Overview</i>	<b>High-level qualified person with an extensive working knowledge linked to one of the products/COTS used by the CCN/CSI and/or CCN2 Platform.</b>
<i>Nature of tasks</i>	Deployment, configuration, optimisations, operation and specific technical support of products related to the CCN/CSI, the CCN2 Platform and bespoke Software and supporting products (like monitoring tools, reporting tools ....).

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	<p>Problem solving in the context of the products related to the CCN/CSI, the CCN2 Platform and bespoke Software and supporting products (like monitoring tools, reporting tools ...).</p> <p>Participation in product evaluations (collaboration with DG TAXUD)</p> <p>Contribute in complex change impact assessment.</p> <p>Perform activities related to analysis, design writing and publication of detailed technical documentation.</p>
<i>Knowledge and skills</i>	<p>Top notch knowledge of all technical aspects product(s) linked to CCN/CSI, the CCN2 Platform and related software components and supporting products (like monitoring tools, reporting tools ...).</p> <p>High-level qualified person with expert knowledge of at least one market leading ESB/SOA and tools related to all CCN2 backplane components.</p> <p>Long proven experience in profiling and tuning complex information systems and services</p> <p>Capacity to evaluate technical services issues in architectures</p> <p>Outstanding reasoning, analytical, design, and troubleshooting skills.</p> <p>Excellent problem solving ability.</p> <p>Strong capacity in writing and presenting reports.</p> <p>Understands and apply security measures, configurations current standards, practices, &amp; technology.</p> <p>Capability of working in an international/multicultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions.</p>
<i>Experience</i>	8 years or more is required for the area of expertise

#### 4.4 Availability

CCN2-DEV **working days** are all days from Mondays to Fridays. Thus, all working days including Public and Commission holidays and Commission on-duty days (such as Holy Thursday, Good Friday, the day following Ascension Day and the period between 27 and 31 December). This applies to **all** activities/services/WPs linked to the framework contract **except WP.8.8.1 and WP.8.8.2**.

CCN2-DEV "**normal**" **working hours** are from **7 a.m. to 8 p.m.** on CCN2-DEV working days. These working hours apply to **all** activities/services /WPs linked to the framework contract **except WP.8.8.1 and WP.8.8.2**.

CCN2-DEV "**extended time – "on call"** working hours are linked to all activities/services/WPs described under **WP.8.8.1** (See section 2.2) and cover **7 days per week and 24 hours per day** on all calendar days (outside CCN2-DEV "normal" working hours).

CCN2-DEV "**extended time – ad hoc**" working hours are linked to all activities/services/WPs described under **WP.8.8.2** (See section 2.2) and cover **7 days per week** (thus including WE) days (outside CCN2-DEV "normal" working hours).

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In exceptional cases or on request of the Commission, it may be necessary to deliver services **outside the CCN2-DEV "normal" working hours on CCN2-DEV working days**. Please refer to WP.8.8 for details on the support outside working hours services.

This could be the case for, e.g.:

- Off Site support outside working hours in case of business continuity crisis's for 3<sup>rd</sup> level support, build and test and package patches and support to the operational teams for deploying the patches,
- On site presence if needed for urgent and operational needs mainly linked to the deployment of new systems/components.

## 4.5 Place of Work

The activities and services covered by this Framework Contract will be performed **primarily** at the contractor's premises (*extramuros*) situated in the territory of one or more of the 27 Member States.

Meetings with the Commission services are generally held in the premises of DG TAXUD. Some meetings may also be held at the premises of another contractor involved in the service or at the premises of the National Administrations.

Trainings, workshops and demonstrations with National Administrations are generally held at the Contractor's premises.

However, the Commission can request as well the Contractor to execute some specific activities/services from the Commission's premises (*intramuros*).

The overall ratio intramuros vs. extramuros is evaluated at 10% - 90% respectively.



**"Proximity services/activities"** : the Commission can also request that part of the services/activities that are executed outside the Commission's premises must be performed at a distance from the place of delivery which would allow a **physical presence in the premises of the Commission in a maximum of 4 hours' time (during working hours)**.

Proximity services/activities are applicable to following key profiles:

#	Profile	Profile Code
1	Strategy Consultant	STC
2	Project Manager	PM
3	Service Manager	SM
4	Security Architect	SECA
5	Quality Manager	QM
7	Senior System Architect	SSYSA
9	Senior Infrastructure Architect	SINFA

Table 6 : Key profiles

For the application of this rule, it is foreseen that, if the request to come to the premises of the Commission is made on the same day in which the contractor's executing staff has to be present in one of the buildings of the Commission, the time taken during transport is counted as part of the normal working hours. If the request is

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made at least 24 hours before the expected arrival time, the time taken during transport is excluded from the counting of the normal working hours.

The contractor will have to organize itself to attend to all requested meetings in this context **without any additional Travel and Subsistence costs**.



All meetings/activities at the Commission's premises (Brussels and Luxembourg) and/or at any other contractor's premises within a distance of  $\leq 50$  km of the Commission's premises are to be **included** in the quoted prices for services, including the travel and subsistence costs. The contractor is responsible for including in his offer human resources required to attend meetings in the Commission's premises.

All **“out of premises” activities** of the contractor, other than those addressed in the previous section, travel and subsistence costs will be reimbursed according to the rules specified in the Framework Contract. The Commission will allocate a budget provision to cover the Travel and subsistence costs related to those activities. Therefore, those costs are not included in the quoted prices for services related to these activities.

## 4.6 Missions

Team members involved in the project may be required to undertake missions in the Member States, EU candidate/acceding countries, EFTA countries, neighbouring countries (Ukraine, for example) and in any other third country such as, but not limited to, China and Russia, to assist Commission officials in their tasks, or to attend meetings and workshops abroad.

The contractor must be able to perform a mission or attend ad-hoc meetings with the Commission, other contractor, other suppliers or with any of the countries above at mutually agreed dates and times.

## 4.7 Languages

The required **services** must be provided at least in English. All **deliverables** must be delivered in UK English unless otherwise specified. During **meetings** (bilateral, workshops, steering Committee, etc.), either French or English will be spoken subject to agreement of all participants of the meeting.

At request of DG TAXUD, the contractor may have to translate certain deliverables (in particular the ones destined to the Member States, e.g. some key project deliverables, communication leaflets, newsletters, news alerts etc.). Deliveries in any other language will be handled via translations (See WP.8.3.7).

## 4.8 Office automation Tools

The CCN2-DEV contractor must have an office automation environment which is compatible and inter-operable with that of the Commission. The quoted prices for services include the availability of the office automation environment of the contractor.

## 4.9 Synergia Programme



**By proposing a bid for this Call for Tenders, the tenderer commits to participate to the Synergia programme and Synergia projects (as described below) when requested by DG TAXUD and make available skilled and knowledgeable resources.**

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#### 4.9.1 Participation in the Synergia programme

DG TAXUD has set up the Synergia programme to further build on ever better working relationship between DG TAXUD IT, the Stakeholders, the Suppliers and Users (see also [R373], section 2). The programme strives towards a shared coherent set of processes supported by automated workflows and excellent Service Management Tools. The Synergia programme is a major transformation programme to improve efficiency and achieve operational excellence.

The CCN2-DEV contractor is concerned where he **interfaces** with the operations contractor and delivers services within IT operations (meaning production and conformance), IT service support processes, testing ((P)SAT) and release delivery. Services **not** concerned by the Synergia programme are services linked to:

- IT software development; the CCN2-DEV contractor may use their own software development best practices, tools and factories;
- ICT Infrastructure management linked to the provision of the CCN2-DEV Data Centre services

Examples of future Synergia projects may be e.g. Deployment of IBM® Rational Team Concert® (RTC) or any other tool from the IBM® Rational toolset, Knowledge Management, Event Management, uCMDB, Service Request Management and Service Fulfilment, Service Catalogue, Self Help and Knowledge bases, Automated Deployment, Planning tools and Planning services, etc.

#### 4.9.2 Commitment to use the defined interfaces

DG TAXUD has setup and owns **Synergia Service Manager (SM)**, based on HP® SM® V9.3, which is operated and developed by ITSM2 Lot1 (see also [R373]). The tool is used to manage (distributed) support processes over multiple contractors.

DG TAXUD will setup **IBM® Rational Team Concert® (RTC)** for IT software defect tracking and release package delivery. This tool will be used to manage (distributed) IT development related and defect tracking services. It is foreseen to be operational and fit for use by the start of the CCN2-DEV contract; else the CCN2-DEV contractor may be requested to participate in a common transformation project to finalize the setup.



In case the Synergia RTC project is not finalized, the CCN2-DEV contractor will have to use their own internal tools to support their IT developments activities and to perform defect tracking and will have to deliver release bundles via the ITSM2 DML – at the time of writing an FTP file share server.

Synergia SM and RTC will be hosted in the DG TAXUD owned data centres at Luxembourg. These tools are the interfaces for the contractor(s) for service delivery in the context of IT operations, IT service support and release delivery, including testing process. Synergia SM data is visible to the end-user community through the **ITSM Portal**, whereas RTC data is not.



**By proposing a bid for this Call for Tenders, the tenderer commits to use Synergia Service Manager (SM), IBM Rational Team Concert (RTC), ITIL V2/V3 and other tools (as agreed with DG TAXUD during the duration Framework Contract) and processes as service delivery interfaces, shared/concurrently with other DG TAXUD contractors, or any other parties authorised by DG TAXUD. This no matter by which entity the tools are operated and developed. The CCN2-DEV contractor may use own tools, factories and best practices for software development, but will deliver through the interfaces defined.**

There may be services defined in the Call for Tenders that relate to IT service support processes and IT operations that are executed or triggered by **other tools** (email, CIRCABC, etc...). DG TAXUD may ask the

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CCN2-DEV contractor to participate in projects to transform/improve the service delivery interface. Such activities will then be covered by WP.0.12.



By proposing a bid for this Call for Tenders, the tenderer commits to setup and use the following **interfaces** for Synergia service delivery:

- The CCN2-DEV contractor accepts the **ITSM2 Lot1 Service Desk** as sole/only Service Desk (SPOC); no other Service Desk may be established. All incidents must be registered via the ITSM2 Lot1 Service Desk. DG TAXUD and some DG TAXUD contractors involved in the project will be authorised to launch some requests (e.g. RfI and RfS) directly to the CCN2-DEV contractor (See WP.8.1.2). No direct interaction with end-users shall be established. The ITSM2 Lot1 Service Desk will create interactions/incidents/requests for services/information where necessary for the CCN2-DEV contractor.
- The CCN2-DEV contractor will get **incidents** assigned by ITSM2 Lot1 within Synergia SM in order to provide third level support, solutions, and to identify problem candidates (See WP.8.1.2 – WP.8.1.3).
- The CCN2-DEV contractor will get **requests for service (RFS)** assigned by ITSM2 Lot1 within Synergia SM and handles service requests to plan and fulfil the contractor's (part of the) service. Please also refer to the interface about the ITSM2 Lot1 Service Desk for details about requests from DG TAXUD or other authorized CCN users. (See also WP.8.1.2)
- The CCN2-DEV contractor will get **requests for information (RFI)** assigned by ITSM2 Lot1 within Synergia SM in order to provide information. Please also refer to the interface about the ITSM2 Lot1 Service Desk for details about service requests from DG TAXUD or other authorized CCN users. (See also WP.8.1.2)
- The CCN2-DEV contractor will get **problems** and tasks assigned by ITSM2 Lot1 within Synergia SM in order to provide root cause analysis, to identify and document known errors and in order to provide a workarounds that allow the ITSM2 Lot1 contractor to perform 1<sup>st</sup> call resolution. The CCN2-DEV contractor may create own known errors and workarounds in Synergia SM and link them to problem. Problems and workarounds are visible to the end-user community through the ITSM Portal. (See also WP.8.1.3)
- The CCN2-DEV contractor will register and manage **defects** in Synergia RTC that :
  - have been identified during and before FAT testing;
  - are linked to and derived from operations/production problems registered in Synergia SM.

The CCN2-DEV contractor will take over and manage those defects over the complete lifecycle.
- The ITSM2 Lot1 contractor will register and manage **defects** in Synergia RTC that :
  - derive from the qualification/PSAT/SAT (release) testing process;

The CCN2-DEV contractor will take over and manage those defects over the complete lifecycle.
- The ITSM2 Lot 1 contractor will reopen **defects** that declared solved by a release deployed but turn out not to be solved. The CCN2-DEV contractor will take over and manage those defects over the complete lifecycle.
- The CCN2-DEV contractor will get **changes** and tasks assigned by ITSM2 Lot1 within Synergia SM in order to provide impact assessment for operational changes, installations and deployments and as well in order to contribute to the forward schedule of change. (See also WP.8.1.5)
- ITSM2 Lot1 will open **corrective changes** and tasks in Synergia SM. The CCN2-DEV contractor will pick those up, create them as defects and manage those defects over the complete lifecycle. (See also WP.8.1.3 and WP.8.1.5)
- The CCN2-DEV contractor will use Synergia RTC to register and manage **evolutive changes** over the complete lifecycle. Evolutive changes represent new features or extended functionality (non-operational

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changes), resulting from/accompanying changes approved in CABs with the National Administrations or resulting from new projects. (See also WP.8.1.5)

- ITSM2 Lot1 will open **changes that concern the NAs** in Synergia SM – to perform a first impact assessment with the National Administrations. The CCN2-DEV contractor will provide impact assessment to those changes. The CCN2-DEV contractor will cross-reference changes that concern the NAs within Synergia SM to related changes that represent new features or extended functionality in Synergia RTC. (See also WP.8.1.5)
- The CCN2-DEV contractor will perform regular quality checks of the Synergia SM **CMDB** and log quality issues as an incident to the ITSM2 Lot1 contractor (See also WP.8.1.4 and WP.8.4.4).
- The CCN2-DEV contractor will get **knowledge articles** assigned ITSM2 Lot1 within Synergia SM in order to provide information (See also WP.8.1.2 - RfI) for knowledge articles and to perform knowledge article review (See also WP.8.4.4).
- The CCN2-DEV contractor will use **RTC Definitive Media Library** for release bundle delivery, including patches or configuration instructions (See also WP.8.1.4 and WP.8.1.6).
- The CCN2-DEV contractor will use RTC to perform **release bundle delivery**, release versioning and release management over the lifecycle (See also WP.8.1.4 and WP.8.1.6). The CCN2-DEV contractor will organize release bundles in RTC including:
  - binaries, scripts, configuration instructions, SQL statements,
  - updated documentation (linked to system development and system strategy, design, operation and transition),
  - release note,
  - links to all (declared) fixed defects and all (declared) implemented changes including those ones raised in RTC by ITSM2 Lot 1.
- The CCN2-DEV contractor will use **the release versioning** that the ITSM2 Lot1 contractor defines, but may keep an internal release numbering in the release note. (See also WP.8.1.6)
- The ITSM2 Lot1 contractor will pick up the **release bundle**, and perform installation and deployment activities based on those. ITSM2 Lot1 will close/confirm the release bundle in RTC once the release is in production. Related defects and changes will automatically be closed/set to a near-closure status. ITSM2 Lot1 will close all related objects in Synergia, including those that were assigned to the CCN2-DEV contractor. The ITSM2 Lot1 contractor will create CIs in the Synergia SM based on release bundles.



**By proposing a bid for this Call for Tenders, the tenderer commits to use Synergia SM and RTC by:**

- **using the features provided by Synergia Service Manager and RTC to complete the tasks (e.g. create, view, edit, assign, reassign, link, browse, correct, flag, update, communicate, etc),**
- **updating Synergia Service Manager and RTC to reflect and document progress on the tasks that are performed outside of those tools by the CCN2-DEV contractor or a 3<sup>rd</sup> party with no access to the tool (e.g. Software Vendor support, etc), and**
- **cross-referencing their own internal identifiers and those of other third parties (sub-contractors, software vendor support services, etc...) associated with the CCN2-DEV contractor within Synergia SM and RTC.**

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### 4.9.3 Quality of service



By proposing a bid for this Call for Tenders, the tenderer accepts **calculations and data** provided by Synergia SM and RTC for the **SQIs/KPIs** that can be measured (partly<sup>31</sup>) within the HP SM.

The CCN2-DEV contractor will **facilitate audit and quality check** exercise by providing all necessary elements (interview with personnel, documents, logs, and reply on the audit findings). DG TAXUD may quality check and audit the usage of the tools, data quality, process compliance, etc... These activities may be tasked to a third party, if DG TAXUD decides so. (See also WP.0.9).

Any contractor may set **quality and compliance requirements**, in agreement with DG TAXUD, for a task, an object or a delivery package that will (re-)assigned by other parties. Any contractor has the right to refuse task assignments, if the criteria are not met and this would render the correct service provision unduly difficult. This must be done by assigning the task back to the sender, including a justification. In case of dispute, DG TAXUD will decide based on the justification entered within the tools and may use justification provided directly by the contractor(s) through other channels.

### 4.9.4 Documentation

The CCN2-DEV contractor will document usage of Synergia SM and RTC in shared<sup>32</sup> (working) procedures. The contractor may create a set of (internal) working procedures, if considered necessary (See also WP.0.1).

### 4.9.5 Takeover

At the end of the takeover period at the latest, the CCN2-DEV contractor will make full use of Synergia SM and RTC being part of the Take Over objectives.

ITSM2 Lot1 will provide a standard initial configuration of Synergia SM and RTC at no cost that may be refined during the takeover period. DG TAXUD will ensure that ITSM2 Lot1 will provide a SPOC to the CCN2-DEV contractor for the takeover period (See also [R373], section 3).

Please see also section 1.4 and WP.2 for more details about the take over.

### 4.9.6 Contractor's obligations

The CCN2-DEV contractor must support DG TAXUD to **interface** with the contractor's developed applications and any other third party developed applications or Service Management related tools, if DG TAXUD requests so.

The CCN2-DEV contractor must establish a **SPOC function** for Synergia Service Manager and RTC (for more information see also [R373], section 3.1 and section 4).

The CCN2-DEV contractor must ensure the **office infrastructure** and operator's desktops are setup and configured in order for staff to be able to connect to Synergia SM and RTC and to use it appropriately (See also WP.B.1). The CCN2-DEV contractor will undertake the necessary steps to remain so. This will be done at no cost for DG TAXUD.

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<sup>31</sup> Meaning that in agreement with and after approval from DG TAXUD some manual post processing and/or exception handling would be allowed.

<sup>32</sup> This can be the PQP, the external processes or internal processes. These procedures must be at the correct level of details or be composed of different levels of details depending on the involved.



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The CCN2-DEV contractor must draft the necessary **security conventions/agreements** (e.g. for the WIN client of HP SM) and will implement them once approved.

The CCN2-DEV contractor does not need to foresee excellent technical expertise on HP Service Manager and RTC, however some good level of technical **expertise** may be recommendable. The CCN2-DEV contractor organisation will all time be skilled and knowledgeable in the use of Synergia SM and RTC without degradation of service (See also WP.0.5.5 and section 4.3).

The CCN2-DEV contractor will participate at no cost in any Synergia related **testing** exercise to ensure the tools continue to provide the functionality required.

The CCN2-DEV contractor will perform **user and account management** in line with best practice, TEMPO Security Management (User Account Management) and DG TAXUD processes and procedures (See also [R373], section 5).

#### 4.9.7 Services provided by ITSM2 Lot1

The CCN2-DEV contractor may **use Synergia SM and RTC**, at no cost, and the **related the service support services** of the ITSM2 Lot 1 contractor. ITSM2 Lot1 processes and procedures apply as outlined in the ITSM2 Lot1 FQP (See FQP of the incumbent ITSM contractor: [R001]).

The CCN2-DEV contractor may **request services** around Synergia SM and RTC related to information provision, training, technical support service, etc... (for a non-exhaustive list of services please see [R373], section 7).

Synergia SM is defined with a **7d-24h Service Window** ("**Normal**" Quality of Service availability **target** value of: **99.98%** and a **limit** value of **99.3%**– All days of the year including Public Holidays, 24 hours a day)

It is up to DG TAXUD's decision to change this classification.



By proposing a bid, the CCN2-DEV contractor accepts that Synergia's release deployment and hotfix deployment may affect the availability of the tool and therefore service provision.

The CCN2-DEV contractor will not be penalised for a degradation of service, should this be linked to a failure of the tool for a period of time and that would not allow the CCN2-DEV contractor to provide the service by implementing workarounds. Liquidated damages could occur that are linked to Synergia incidents that stem from problems with the contractor's own infrastructure or that lie within the contractor's responsibility.

The CCN2-DEV contractor may request DG TAXUD to check and verify the installation of the Synergia SM and RTC, the implementation of functions within and the data containers linked to it through (on-site) access or database dumps. DG TAXUD will authorise the request only if DG TAXUD considers the request is well founded and addresses an issue at hand that is affecting negatively the CCN2-DEV contractor.

Other services may be defined, setup and provided if the CCN2-DEV contractor justifies the need and DG TAXUD agrees.

#### 4.9.8 Handover

Synergia Service Manager, RTC and any other tools under the Synergia Programme, as well as any interfaces created are owned by DG TAXUD (See also section 4.13) and in scope of handover. The CCN2-DEV contractor could be requested to provide documentation, procedures, training, coaching, shadowing, etc., for aspects **specific** to the CCN2-DEV usage of the Synergia related tools.

Please see also section 1.5 and WP.5 for more details about the hand over.

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## 4.10 Supporting Tools



The CCN2-DEV contractor is reminded to propose and document in their bid the **tools** that will be used to automate as much as possible all processes and services to be performed in the context of the Framework Contract. These tools also include the tools to support the management of and the reporting on the provision of those services. The tenderer is also reminded that DG TAXUD will provide the CCN2-DEV contractor with some Service Management related Tools which are maintained and operated by DG TAXUD in collaboration with the Operational Contractor ITSM2. The contractor must also take into account in his proposal of tools the **existing tools** used by the incumbent contractor (see section 8 for details) and the tools **provided and/or imposed by DG TAXUD** (See section 4.9 for details on the Synergia Programme).

**If different tools are proposed to manage the CCN/CSI environment and the CCN2 Platform environment, then this must be clearly described and justified in the bid.**

Some tools that must be provided (not an exhaustive list) are for example related to Development and Test management, Definitive Media Library, Service Request Management, Service Level Management, Availability and Capacity Management Tool, knowledge management, e-learning COTS, etc.



All the **interfaces/links/plugin-ins** between the proposed tools will also have to be described including the level of proposed automation. The contractor will also have to support DG TAXUD to interface with third party developed applications or Service Management related tools.

The acquisition, deployment and operation of these tools will either be part of the unit price linked to the provided service or be covered by **WP.0.13 and WP.B**.

On request of DG TAXUD, the contractor could have to organise **trainings** for the CCN Local system administrators, the CCN related application designers or development contractors to support them in using the CCN Service Management related Tools and/or CCN related applications implemented by the contractor and running on the CCN gateways or made available on the national application platforms. Please refer to WP.8.3.2 for more details on trainings.

During the Framework Contract, improvements to the proposed tools or new tools could be introduced via the CSIP programme (see **WP.0.12**) or on DG TAXUD request. DG TAXUD could also provide **new tools** to the contractor which need to replace the ones in place. The migration to these tools will then have to be planned and will be managed through and On Demand activity.

The tools can be **hosted** either in the contractor's Data Centre or in the TAXUD Data Centre if requested by DG TAXUD. Those Tools must be operated in a dedicated environment set-up for DG TAXUD only. Please refer also to WP.B for more details.



Tools that are developed, delivered, maintained, operated, etc... by the CCN2-DEV contractor must be compliant with the DIGIT product list [R226] and/or CCN product list [R098], any deviations from those must be duly justified.



Any tool specific to CCN that is developed, maintained, operated, etc... internally at the CCN2-DEV contractor during the Framework Contract is owned by DG TAXUD as indicated in section 4.13. Examples (non exhaustive list) are test scripts, installation scripts, etc.



DG TAXUD and other parties identified by DG TAXUD must have minimum read-only **access** to all the tools, COTS and their related data that will be set-up and used in the context of the Framework Contract. In case

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access to the tools would not be feasible DG TAXUD must be provided with all the information in the form of extracts and/or get access to the CCN2-DEV Data Centre whenever requested.

Please refer to section 8 Supporting Tools for more details on the supporting tools currently used by the incumbent contractor.

#### **4.10.1 Information on the tools that will be provided by DG TAXUD via the operational contractor ITSM2 and/or the tools that are imposed to the CCN2-DEV contractor:**



Please note that the tools needed to manage the **CCN2 Platform and its related bespoke software**, in the testing and production environment (e.g. monitoring tools, migration tools, testing tools, etc.) are not listed here as they have to be proposed in the bid under the CCN2 Platform specifications.



The section below contains a summary of the tools that are **imposed and/or will be provided** by DG TAXUD. This is **not an exhaustive list** of all tools that will be needed to automate as much as possible all processes and services covered by this Framework Contract.

The tenderer will have to take this information into account when describing the supporting tools in their bid. If any deviations are proposed to the tools imposed by DG TAXUD they must be duly justified. These justifications must cover as well the reason why other tools are proposed and the financial impact of this proposal.

Improvements to the tools and or processes can also be proposed by the tenderer in his bid.

##### **4.10.1.1 Synergia programme**

Please refer to section 4.9 for details on the Synergia Programme.

During the ITSM2 Framework Contract some of the SMT tools currently used by the incumbent ITSM and CCN/TC contractor will be harmonised under the Synergia Programme managed by the ITSM/ITSM2 contractor.

The CCN2-DEV contractor will have to use **Synergia SM** provided by DG TAXUD for all calls (incidents, problems (incl. known errors) and changes) linked to **operations** (Please refer to section 4.9.2).

The CCN2-DEV contractor will have to use **IBM® Rational Team Concert® or any other tool from the IBM® Rational toolset** for calls (incidents, problems (incl. known errors) and changes) managed during the development and testing lifecycle (Please refer to section 4.9.2).

Please refer to [R391], [R392], [R393], [R394], [R395] for more details about the Synergia Programme.

##### **4.10.1.2 Portal**

During the ITSM2 Framework Contract the ITSM2 Lot1 contractor will merge the ITSM and CCN portal into a single service portal, which should also include the future CCN ACT tool.

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The CCN2-DEV contractor will have to setup, maintain and operate a **project portal** (See also section 2.2 - WP.B.1) which must contain all contractual information for DG TAXUD and have restricted access to the DG TAXUD Central Project team. This could be the CCN/TC portal or the ITSM portal once the CCN/TC and ITSM portal will be merged or any other project portal proposed by the tenderer in its bid.



The tenderer is reminded to describe in his bid which project portal will be used during the Framework Contract and how the required security restrictions will be setup.

Please refer to [R396], [R397], [R398] and [R399] for more details about the ITSM Portal.

Please refer to [R075], [R103] and [R260] for more details about the CCN/TC Portal.

#### 4.10.1.3 Development and test related Tools

The CCN2-DEV contractor must setup and use development and test tools to automate the development and test processes as much as possible. The tenderer will have to document in his bid which tools are proposed in this context.

The tenderer will have to align as much as possible on the development and test related tools used by the incumbent contractor, the **IBM® Rational Team Concert® or any other tool from the IBM® Rational toolset, and the Synergia Programme** (Please refer to section 4.9.2). The tenderer will have to document which other tools could be added to improve the quality and efficiency of the services. This may include tools such as Rational Service Tester for SOA quality, Rational requirements composer, Rational quality manager, Rational system architect, etc.

#### 4.10.1.4 Definitive Media Library/Configuration and Release Management:

The CCN2-DEV contractor must setup and operate a DML tool (See also section 2.2 - WP.8.1.4) for managing all releases including the related documentation. This DML should be based on **IBM® Rational Team Concert® or any other tool from the IBM® Rational toolset** (Please refer to section 4.9.2). The same applies for the Configuration and Release Management tools.



The DML maintained by ITSM2 will contain only the releases provided for SAT/QT/PROD to ITSM2.

#### 4.10.1.5 Planning Tools

DG TAXUD uses so far **MS Project** as planning tool (See also section 2.2 - WP.B.1). Attention must be given to ensure that the planning tool can manage at least the planning (see WP.0.8) of the CCN2-DEV contractor, the DTM of CCN2-DEV contractor and any other planning related deliverables linked to this Framework Contract.

#### 4.10.1.6 Monitoring Tools



The ITSM2 contractor will use the same monitoring tools for CCN/CSI as currently used by the incumbent contractor to monitor the CCN/CSI production environment.

The CCN2-DEV contractor is reminded to propose in his bid monitoring tools to monitor and report on the availability and the capacity of the development environment (See also section 2.2 - WP.B.2).

For the CCN2 Platform, the tenderer is reminded to document in his bid which monitoring tools are proposed for the monitoring and reporting on the availability and the capacity of the production, development and testing environment.

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#### 4.10.1.7 Document Repository Tools

Usage and process linked to the documentation reference centre and the related tools used by the incumbent contractor will have to be taken over by the CCN2-DEV contractor. DG TAXUD is currently using either CIRCABC®<sup>33</sup> or the CCN/TC portal as document repository tool. All contractual deliverables are uploaded on CIRCABC® as described in (See [R009] for details on the document delivery process). DG TAXUD could decide to change to the successor of CIRCABC® or another similar tool during the lifecycle of the Framework Contract. This will then be handled via WP.0.12.

#### 4.10.1.8 Knowledge Base

The tenderer is reminded to detail the way that the knowledge base is deployed, fed and maintained up to date.

The tenderer must document in his bid which tools he recommends for this service. At the time of writing a pilot is being launched (under the Synergia Programme) with the ITSM contractor with main objective to provide a close integration with all service management processes (Please refer to section 4.9.2).

### 4.11 Environments

Please find below a table which gives a summary overview of the different environments and the related main WPs.

<b>Environment</b>	<b>Acquisition</b>	<b>Maintenance 4 years</b>	<b>Deployment</b>	<b>Operations</b>
<b>Production</b>	WP.A	WP.A	ITSM2	ITSM2
<b>Development</b>	WP.B3	WP.B3	WP.B2	WP.B2
<b>Testing</b>	WP.A	WP.A	ITSM2	ITSM2

Table 7: mapping environment and WP

Please find below a table which gives a summary overview of the different CCN2 Platform environments and the related main price units.

<b>Environment</b>	<b>Acquisition</b>	<b>Maintenance 4 years</b>	<b>Deployment</b>	<b>Operations</b>
<b>Production</b> –	FP CCN5	FP CCN5	ITSM2	ITSM2

<sup>33</sup> CIRCA®/CIRCABC® is an external tools maintained and operated by the Commission.

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<b>initial setup</b>				
<b>Production - eventual extension</b>	R1 OD11	R1		
<b>Development - initial setup</b>	FP CCN6	FP CCN6	CS9 (and CS10)	CS9 (and CS10)
<b>Development - eventual extension</b>	R1	R1		
<b>Testing – initial setup</b>	FP CCN7 OD11	FP CCN7	ITSM2	ITSM2
<b>Testing - eventual extension</b>	R1 OD11	R1		

Table 8: mapping environment - price element

In this Call for Tenderers the following environments are used for CCN/CSI and the CCN2 Platform:

- The "**production environment**" refers to a set of physical HW machines and related COTS hosting all production components linked to CCN/CSI, the CCN2 Platform and related CCN bespoke software.

This environment is **hosted** in the Commission premises, the National Administrations or DG TAXUD contractors' premises. This production environment is **operated** by the ITSM2 Lot1 contractor.

The requirements linked to the CCN2 Platform are defined in Annex II.C - CCN2 platform specifications and requirements. The detailed requirements linked to functionality of the development and operation tools are described in Annex II.C - CCN2 platform specifications and requirements, section 2.4.3.2 - "End to End Test Tools".

More details about the current CCN/CSI production environment can be found in the CCN inventory [R098], section 4.1.1 and in Annex II.A - Terms of Reference, section 2.8 (CCN/CSI Volumetrics).



It is the CCN2-DEV contractors' responsibility to **size** this CCN2 Platform environment to deliver all functional and non functional CCN2 Platform requirement in particular performance, scalability and availability requirements as specified in Annex II.C - CCN2 platform specifications and requirements.

- The "**development environment**" (a.k.a. "development and integration" related infrastructure) refers to a set of physical HW machines and related COTS used for the CCN related (including the related bespoke Software) development and maintenance activities. This development environment is used by CCN2-DEV contractor for the development, maintenance and testing related activities performed by the contractor. These activities cover: development, maintenance, unit testing, integration testing and FAT Testing.



It is contractors' responsibility to **design** his development environment in the way that the development and maintenance activities do not impact the testing activities including form FAT testing.

This environment is **hosted** at the CCN2-DEV contractors' premises or in the DG TAXUD Data

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Centres and is **operated** by the CCN2-DEV contractor. Please also refer to section 7 for more details on the DG TAXUD Data Centre Consolidation project.



It is the CCN2-DEV contractors' responsibility to **size** this CCN2 Platform development environment to ensure it's development needs are covered for CCN2 Platform and bespoke development.



It must be noted that contractor will takeover existing CCN/CSI development environment of the current CCN/TC contractor.

- The "**testing environment**" (a.k.a. "support and operations" related infrastructure) refers to a set of physical HW machines and related COTS used by the operations' contractor (ITSM2) during the testing activities and training. The testing environment includes the following logical environments:
  - **PSAT environment** where the ITSM2 contractor will test the installation procedure and the core functionality of the new CCN related systems/applications/services and/or test CCN related patches (qualifications).
  - **SAT environment** where the ITSM2 contractor will execute the complete set of test scenarios specified in the CCN related test documentation (MTP/TDS/ATP) and/or test CCN related patches (qualifications).
  - **Conformance (CT) environment** where the CCN2-DEV contract will perform conformance testing of major CCN related releases with all involved stakeholders and where all stakeholder (NA, CUSTDEV2 , FITSDEV2 etc..) may test their new applications/services as part of their internal development lifecycle, this to ensure that they will operate as expected in the production environment.
  - **Performance/stress (PT) environment** where ITSM2 will execute the performance and stress tests
  - **Training environment** that the CCN2-DEV contractor or the ITSM2 contractor will use when giving the CCN related trainings. Please remind that the CCN/CSI related trainings are organized twice a year for a limited duration (see WP.8.3.2 for details).



It is the CCN2-DEV contractors' responsibility to **size** this environment to ensure the delivery of representative results (especially for performance & stress testing).

This environment is **hosted** at the operations contractors' (ITSM2) premises or in the DG TAXUD Data Centres and is **operated** by the operations contractor (ITSM2).



Please note that at the time of writing the **CCN/CSI GWs** used by the business application development contractors (e.g. FITSDEV2, CUSTDEV2) during the build and test of their business applications/services are hosted by the business application development contractors and operated by the incumbent CCN/TC contractor.



It must be noted that the ITSM2 contractor will takeover existing **CCN/CSI testing environment** of the current CCN/TC contractor. This includes the existing CCN/CSI conformance environment that is using the existing CCN/CSI backup gateways.

If requested by DG TAXUD **other dedicated environments** could be setup for CCN/CSI and the CCN2 Platform. This would then be covered via RfE/RfA after the exact functionality and scope has been agreed with DG TAXUD.

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The offer must clearly provide separate prices for **the acquisition and maintenance of the production, the development and testing environments** as specified above.



The tenderer is reminded to describe in his bid his proposal of the model how the business development contractors will use the CCN2 Platform to implement business related services using the generic CCN2 Platform functionality such as BAM, MDM, IAM, etc.



The Commission reserves the right to order all hardware, COTS and/or maintenance linked to the CCN/CSI and CCN2 Platform (independently of the environment) environment through this contract or another Framework Contract of the Commission. In case the acquisition and maintenance is done using this Framework Contract, it will be done in line with WP.0.13, WP.A and WP.B3.

All the above mentioned environments contain the following (non exhaustive list) software components:

- all software licenses for any required middleware,
- software development and testing tools,
- application programming and testing platforms,
- database software,
- application and Web server operating platforms, and
- any other software that is required to establish the necessary build and integration environment appropriate to meet CCN2 Platform requirements.

## 4.12 Security

All the requirements in this section have to be integrated into the Information Security Management System put in place as execution of WP.8.5 Security Management.

As part of its project operation and management, the contractor must ensure that the following generic requirements are met:

- keep the Commission informed of the composition of the contractor's team and provide the CVs for each staff member,
- restrict and control the access by his staff to the service resources on a "**need-to-know/access**" basis,
- take the necessary security protection to avoid divulgation of service resources to external parties, including a strong protection (e.g. by encryption or strong access control) of all project related sensitive information when it leaves the contractor premises. A special attention shall be paid to e-mail exchanges and mobile equipments as e.g. laptops, CDs/DVDs or USB memory keys,
- escalate any security incident to the Commission,
- provide security recommendations (e.g. deployment of security patches, ...) to the Commission when required,
- restrict, monitor and control the access to the development environment,
- restrict, monitor and control the physical access to the servers, firewalls, routers and other physical components used to manage the information flow within the development environment,
- restrict, monitor and control the access to the connection towards the CCN network should it be via the Commission CCN GW or via the CCN IP network, by protecting the CCN connected LAN segment



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using dedicated cabling and equipment and a firewall to isolate it from the other segments of the operational infrastructure;

- ensure compliance with the Confidentiality/ Integrity/ Availability requirements applicable to the information, information systems and processes;
- Protect all workstations and servers used in the frame of the contract by a login/password mechanism, with an anti-virus package, which is updated automatically. This anti-virus solution must control files received from mail, Internet and media or stored locally.
- Ensure logical or physical separation between the IT environments related to development, test, training & demos.

The Commission's information systems security management (ISMS) is defined in C(2006)3602, its implementing rules and corresponding security standards for further implementation. At Directorate General-level, DG TAXUD has issued and continuously updates the TEMPO security management documents which define the DG information systems security policy compliant with the EC ISMS.

The contractor will perform the activities **compliant with TEMPO security management and EC standards**. In particular in the case of information system development (system supplier), **the contractor will apply the TEMPO "Security Software Development Lifecycle" reference manual** (See [R361]), in line with the EC "Standard on Secure Systems Development" (See [R362]). As such, it will deliver a Security Plan to the Commission. Other specific EC standards to consider especially during the development of information systems are the "Standards on Technical Vulnerability Management" (See [R363]), "Standard on Mobile Code" (See [R368]), "Standard on IS Security Incident Management" (See [R364]) and "Standards on Logging and Monitoring" (See [R365]).

The Commission reserve the right to impose additional specific physical and logical security rules in the future, should the need arise.

The Commission reserves the right to perform **security audits** of the service organisation in the contractor's premises. The Commission may elect to contract with a third party to perform these audits. The contractor commits to co-operate fully with the Commission during the audits (refer to work package WP.0.9). In particular, the contractor commits:

- to authorise the access to the whole of the service information located at his premises no later than two weeks after the request of the Commission,
- to answer the questions from the Commission (or its elected third-party contractor)
- and to provide the evidences required during those audits.

Access to the Commission internal network and computer environment is ruled by a **security convention** which be signed by the contractor, IRM, DIGIT and the Security Directorate before a connection may be made. See "*Procedure for the creation and amendment of a Security Convention*" (See [R366]) as well as "*Guidelines for the preparation of Security Convention for remote access*" (See [R367])

Each staff member assigned by the contractor must sign a **declaration of confidentiality** in compliance with article III.2.2. of the general terms and conditions for IT contracts, with art 4 of the Commission decision concerning the security of information systems used by the European Commission [C (2006) 3602] and with art.23 of Regulation (EC) N° 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. The contractual confidentiality clauses apply to all team members of the contractor.

The Commission may require, if the need arises, that key staff get a security clearance from a Member State national security authority.

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Please see also s all security related documents from Annex XI - Baseline like [R101], [R076], [R094], [R096], [R170], [R102], [R269], [R271], [290], etc.

### 4.13 Ownership

All deliverables become the property of the Commission once accepted.

The Commission is then the only party that can authorise their further use and distribution. All deliverables of the contract are free of intellectual property rights from 3<sup>rd</sup> parties (unless otherwise accepted by the Commission), and in particular the processes, the procedures, the tools, the knowledge/information/data repository, the bespoke software, configuration and scripts and other artefacts produced by the contractor to support his service delivery to the Commission.

None of the deliveries may refer to documentation or other artefacts owned by the contractor which would not be publicly and freely available.



The contractor must fully document all internal tools, documents and procedures used during the execution of the Framework Contract. It must be furthermore noted that the intellectual property created by the Service Provider as part of the execution of the Framework Contract belongs to DG TAXUD and must be transferred to DG TAXUD and/or the new Service Provider during the Hand Over.



In this context, please also refer to Annex X.A - Part I & II – Special Conditions & General Conditions, article I.8 and II.17.

### 4.14 Model of Monthly Progress Report

For each Specific Contract (SC) in effect under a Framework Contract (FWC), there is one Monthly Progress Report (MPR) to be generated and delivered to DG TAXUD by the Contractor per month.

If requested by DG TAXUD, 1 consolidated MPR could be delivered covering all ongoing SCs.

The MPR and its related annexes (e.g. MSR, Risk register, Etc.) must be TEMPO compliant.

A model of the Monthly Progress Report (MPR) follows below. The FQP will define precisely the structure of the Monthly Progress Report, based on the following indicative model:

- 1) **Introduction:** Normally, this section defines the period covered by this report.
- 2) **Highlights:** This section describes in brief the key achievements of the reporting period (service and build achievements), the contractual and financial achievements during the reporting period, the key deviations from the plan identified or reported during the reporting period, the project management staff evolution during the reporting period, and lists the deliverables subject to acceptance with this report.
- 3) **Risk Management Summary:** This section describes in brief an overview of the main contractual and project risks. Detailed information on risk management is added in annex.
- 4) **Progress:** This section describes in brief and in a structured manner the progress achieved within the context of the planned tasks linked to all WPs. For each task, a short description of the contribution to the progress is given:

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- description of the activities carried out;
- description of the results achieved;
- comments on ongoing tasks (e.g. risks, etc.), where appropriate;
- Justification of the deviations from Section 1.

Note: The FQP will define the detailed structure of this section of the Monthly Progress Report. All deliverables or software releases (new/corrective/evolutive) generated within each Work Package will also be listed together with their status (ex. under review, accepted, rejected, etc).

- 5) Tasks planned for next month: This section defines all tasks planned for execution for the next month.
- 6) Requests for Actions / Quoted Time& Means Actions: The Requests for Actions / Quoted Times & Mean actions status must be listed with their reference number and title, contractual dates, status and to which a short comment could be added, when useful.
- 7) Evolution of GQI: This section will list the evolution of the Global Quality Indicator (GQI) per each reporting month, at the level of the Specific Contract. Also, it will list the GQI values for each of the Request for Actions / Quoted Times & Mean actions issued by the Commission
- 8) Overview of SC budget consumption: This section will list an overview of the budget provision and consumption per WP for the SC concerned and refers to the corresponding annex containing the detailed budget consumption.
- 9) Action List(s): This section will provide a management summary of the actions performed during this SC and refers to the corresponding annex containing the detailed action lists.
- 10) Annexes:
  - (1) the Deliverable Tracking Matrix showing the:
    - planned delivery dates: contractually agreed, CQP agreed, RfA/QTMS actions agreed or mutually agreed in advance in a previous accepted MPR; It must be noted that DTM is updated weekly by the contractor and delivered to DG for information;
    - foreseen delivery dates;
    - actual delivery dates for review and for acceptance;
    - deliverable delays (for review and acceptance);
    - list of reviewers;
    - etc.
  - (2) Planning: This annex includes the latest planning in place;
  - (3) Consumption: This annex reports on the monthly/foreseen consumption of all effort-based (man-days) quantified services ordered via the Specific Contract or via Request for Actions and/or Quoted Times & Means actions. It must be noted that consumption annex is updated weekly by the contractor and delivered to DG for information;
  - (4) Computation of GQI/SQI/KPIs: This annex includes the detailed calculation of the GQI at the level of the Specific Contract and at the level of the RFAs and/or QTMS. It also reports on all KPIs.
  - (5) Risks: This annex includes a registry of all identified risks together with their status and mitigation actions. The contractor will pay attention to, and report on, the following topics:
    - Risk Identification,
    - Risk Analysis,
    - Risk Mitigation,

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- Risk Planning,
  - Risk Tracking,
  - Risk Control,
  - Risk Communication
- (6) Action List: this annex includes the detailed action list as available on the project portal at the end of the reporting period.
- (7) Team organization: This annex covers the team organization and reports on all changes to the team announced during the reporting period.
- (8) Complaints list.
- (9) Travel Costs: This annex list all travels that took place in the context of the Specific Contract.
- (10) Monthly Service Report (MSR)
- (11) Dedicated reporting on specific WPs: As agreed with DG TAXUD some specific reporting on specific WPs could be added like document reviews, Testing, ....

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## 5 Pricing model details

### 5.1 Types of Budget Provisions

Normally, there are six (6) types of budget provisions that can apply to the various CCN2-DEV Specific Contracts (SCs), namely the:

- Fixed Price (FP),
- On-Demand (OD),
- Quoted Times & Means (QTM),
- IT Equipment,
- Travel and Subsistence Costs (T&S).

#### 5.1.1 Fixed Price (FP)

Activities under Fixed-Price may start as soon as the SC has been signed according to the agreed planning.

There are two particular cases relying on **triggers**, namely:

Case 1: activities for which an overall budget is quoted under FP (maximum quantities defined) but which will need a preliminary evaluation (use of Estimation Request – ER) between the contractor and the Commission to determine how many Units are needed to perform a given activity. A typical example is the quotation in man-days when units are based on man-days. Once agreement is reached, the action is launched by DG the Commission using a trigger.

Case 2: activities for which an overall budget is quoted under FP (maximum quantities defined) but which need an explicit trigger to start (e.g.. attendance at a given training activity, performance of Mission).

Triggers have no financial impact since budget is already committed.

The price elements under the fixed-price services will appear in the Framework Contract as **one-offs** that can be activated by the Commission for the all inclusive fixed price proposed in the tender and/or the for **continuous services** (see section 5.2.1.2 for details on continuous services).

#### 5.1.2 On Demand (OD)

This comprises activities for which a unit price is contractually fixed although the required quantities and execution time is uncertain at the time of the signing of the Specific Contract. The Provision for OD budget is to be committed exclusively via the use of the RfE/RfA procedure. The RfE is used prior to issuing the RfA when an estimate is required from the contractor. By definition, an RfA under "On-Demand" budget has always a financial impact.

Once part of the Provision for OD budget has been committed following the RfA signature, the Commission may use triggers to launch the start of an action whenever applicable. The maximum available budget is defined in the SC as a provision.

In most of the cases, the RfA under the OD budget concerns the ordering of quantified services such as training, meetings, etc. In these cases, no RfE is needed prior to issuing the RfA.

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### **5.1.3 Quoted Times & Means (QTM)**

This comprises activities for which unit price of profiles is contractually fixed although the required quantities and execution time is uncertain at the time of the signing of the Specific Contract. The QTM budget is to be committed exclusively via the use of the RfE/RfA procedure. The RfE is always to be used prior to issuing an RfA, since the QTM sub-tasks have to be defined prior to their ordering. By definition, an RfA under "QTM" budget has always a financial impact. The maximum available budget is defined in the SC as a provision. Normally, the RfA under QTM budget is issued for ordering effort-related services (that is, man-days) such as production of specifications, SW development, etc).

### **5.1.4 IT Equipment**

IT equipment may be purchased directly via the FP budget of the SC and/or a provision for IT equipment (hardware and software) may be included in the SC. In the latter case, the budget is used by issuing RfEs/RfAs (as for Provision for on-demand work).

The CCN2-DEV contractor is obliged to deliver the assets as described under WP.A and WP.B.3.

### **5.1.5 Travel and Subsistence Costs (T&S)**

Missions and meetings take place at the request of the Commission (using an SC/trigger or the RfA mechanism). Authorisation for the reimbursement of travels for missions and meetings is given by means of RfAs for a specific Travel or "Pool" RfAs for 'urgent' and 'recurring' travels. The related travel and subsistence costs are reimbursed against supply of the required proof as described by the standard annex on reimbursement of travel and subsistence expenses to be part of each SC. When the Commission requests a mission, it must communicate to the contractor the location, the number of persons concerned and the duration of the mission.

Both Commission and the contractor must monitor the budget for Travel & Subsistence costs. The consumption of budget allocated for travel expense at the SC level is tracked by means of MPR.

The Specific Contract must mention that the contractor has the responsibility to send a warning (by e-mail) to Commission as soon as 75% of the budget is consumed so that contractual arrangements can be reviewed in the context of the remaining needs to be covered. Please also refer to section 4.5 and 4.6 for more details on the place of work and missions linked to this Framework Contract.

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## 5.2 Price element details

The purpose of this section is to clarify the content of the price elements as detailed in Annex III - Price table.

The table consists of **10 sheets**:

- "**CCN2-DEV services**" is the main sheet listing all the services foreseen in the scope of this Call for Tenders. It contains price fields to be filled in by the tenderer (blue colour), fields that are calculated by a formula based on other price information in the Price Table (yellow colour) and fields for which the values (provisions or quantities) are fixed by the Commission (orange colour).
- The "**Profiles**" sheet has to be filled out by the tenderer with the proposed man-day prices for each profile as defined in this Call for Tenders (See section 4.3 for details on the staff profiles). The man-day prices proposed in this sheet will be used for evaluation of the price calculations on the "CCN2-DEV services" sheet according to the indicated coefficients.
- The 7 sheets titled "**FP CCN 1**" ... "**FP CCN 7**" are to be used for providing the details for the price elements FP CCN 1-7 in a structured way. The fixed price of these price elements on the "CCN2 services" sheet is automatically filled in with the totals of these sheets.
- The "**Shipping costs**" sheet has to be filled out by the tenderer with the proposed prices of shipping of hardware (see details of price element OD 11 in section 5.2.1.3.11).

The pricing model for the CCN2-DEV services sheet is divided into

- Fixed price services – including the fixed price offer for the development of the CCN2 Platform
- Continuous services
- On-demand services
- Reserve set by the Commission.

The tenderer is requested to fill in the pricing model with unit prices. For the **evaluation** of the offers, the unit prices are multiplied with the coefficients indicated in the pricing model. The tenderers' attention is drawn to the fact that these coefficients are applied only and solely during the financial evaluation of the tenders. These figures – however they are based on the estimation of the expected workload – do not constitute any commitment or limitation from the part of the Commission regarding budgeted or ordered quantities of the units of the respective pricing elements. The tenderers may base their offers on the volumetric data that can be found in the Annex II.A - Terms of Reference, section 2.8.



The pricing model follows an **all-inclusive approach** regarding the services included in the price. The proposed prices are to cover all activities that are related to the given (sub) Work Package, unless they are specifically excluded by the Commission.

All price elements are linked to **Work Packages** described in section 2.2. It is to be understood that the price proposed for each pricing element contains not only the price of the activities described in the referenced Work Packages but also the activities described in all sub-Work Packages and the delivery of all the Deliverables and the provision of all Services linked to the given (sub) Work Package, unless it is described differently in the price element descriptions below. These Deliverables and Services are listed in section 2.3.4.

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## 5.2.1 Price table – "CCN2-DEV services" sheet

### 5.2.1.1 Price element block "Fixed price services"

The fixed price services are composed of two blocks of services:

- the price elements related to the Design and build of the CCN2 platform and
- the price elements of the Other fixed-price services



The fixed price for the described services has to be "**all inclusive**", meaning that the contractor has to deliver the complete package as it is proposed in the bid upon the order of the Commission, without any further financial request. However, should there be a change in the scope of the activities compared to what is defined in the Call for Tenders, the price may be subject to change only on the basis of a detailed workload analysis and the application of the man-day prices as indicated in the "Profiles" sheet of the Price Table.

#### 5.2.1.1.1 Price element block "Design & build of the CCN2 platform"

The tenderer has to provide in his bid a **fixed price offer** for the design and setup of the CCN2 Platform. The scope of this offer must cover at least:

- All **project management** related activities and follow up during the design and build of the CCN2 Platform;
- The **detailed analysis, detailed design and specifications** of the CCN2 Platform that follows the defined design principles and meets the functional, non functional and technical requirements as defined in Annex II.C - CCN2 platform specifications and requirements and following the high level design proposed in the offer;
- The **development** of the CCN2 Platform as defined the detailed design;
- Defining the detailed **migration strategy** for the migration from CCN/CSI to the CCN2 Platform including the detailed planning and definition of individual steps to be executed and actors following the strategy proposed in the offer and taking into account detailed analysis and detailed design specified above;
- Defining the **deployment plan** for all CCN2 Platform components;
- The production of the detailed **test specifications and related test data, the setup of the test tools<sup>34</sup> and the testing** of the CCN2 Platform (up to FAT testing & including non functional testing such security, performance, stress testing, etc. );
- **Packaging** the CCN2 Platform delivery including the production of the **operations related documentation**;
- **Acquisition and maintenance** of all hardware and COTS components needed for all the CCN2 Platform environments as specified in the offer;
- **Dedicated support** to the ITSM2 contractor during the deployment and during PSAT, SAT and Conformance testing;

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<sup>34</sup> The test tools for the CCN2 Platform could be COTS based or based of developed bespoke test tool (including related specifications).



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- CCN2 Platform related **training plan** for DG TAXUD, the development (CUSTDEV2, FITSDEV2), operational (ITSM2) and quality assurance contractors (QA2) contractors and the National Administrations;
- Preparation<sup>35</sup> of the integration and usage **training material** for the National Administrations (NAs) and DG TAXUD development contractors (e.g. CUSTDEV2, FITSDEV2);
- Special "**after care**" **support** during the first 6 months of operations of the CCN2 Platform and eventual proposed bespoke software;



The offer must be **structured** as specified on the relevant sheets in the Annex III - Price table. The tenderer has to express the prices per item composed of an amount of profile man-days (split per profile), unit prices of the Framework Contract and/or ICT prices as requested on the 7 sheets "FP CCN 1" – "FP CCN 7" of the Price table. The fixed price of these price elements on the "CCN2 services" sheet is automatically filled in with the totals of these sheets.



The tenderer is reminded to include in the price table (Annex III - Price table) the details and the price for the acquisition and maintenance of all hardware and COTS components<sup>36</sup> needed for the **CCN2 Platform production environment, the CCN2 Platform development environment, the CCN2 Platform testing environment**. Please refer to section 4.11 for details about the environments and FP CCN 5 → FP CCN 7 price elements definitions. The offer must clearly provide separate prices for the above mentioned environments.

The Software components covered in this context are composed of all software licenses for any required middleware, software development tools, application programming and testing platforms, database software, application and Web server operating platforms, and any other software that is required to establish the necessary build and integration environment appropriate to meet CCN2 Platform requirements.



In case the proposed HW and COTS components as specified in the offer are not sufficient to fulfil the functional and non-functional requirements in the production environment, or to execute the development, testing and training related activities (in the development and testing environments) that are linked to the design, build and operations of the CCN2 Platform, all changes and additional HW & COTS components will have to be provided by the tenderer without any additional cost for the Commission. Please refer to section 4.11 for details about the environments.



Tenderers are reminded of the **guarantee period** as indicated in Annex X.A - Part I & II – Special Conditions & General Conditions, article II.1.2 – (b) during which corrective maintenance will be applicable for the specifications (See WP.6.9.2) as well as the development (See WP.7.9.2) linked to the CCN2 Platform.



Furthermore, tenderers are reminded that the following services are **out of scope** of this tender:

- The **execution of the CCN2 migration strategy**, designed by the CCN2 DEV contractor, will be done by the ITSM2 Lot1 contractor.;

<sup>35</sup> Performance and hosting for these trainings will be ordered via the applicable Specific Contract linked to Continuous Services of this framework Contract.

<sup>36</sup> Including the version numbers of the components and the amounts to be ordered of each component.


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- The **deployment and operations of the CCN2 Platform** and its related bespoke software, for the Testing and Production environments, are not within the scope of this tender. They will be performed by the ITSM2 Lot1 contractor. However, the CCN2-DEV contractor will be requested to provide support to the ITSM2 contractor during the deployment of the CCN2 Platform (See WP.8.4.1 & WP.8.4.2) and the operations of the CCN2 Platform (See WP.8.4.3). Please also refer to section 1.3 for other services provided by the ITSM2 Lot1 contractor but linked to the CCN2-DEV contract.
- The **development of central or National Administration (NA) business applications** is not within the scope of this tender, The CCN/CSI and CCN2 Platforms are a support infrastructure which will allow the Commission and National Administration applications to interoperate.




### Project Management:

The contractor will undertake the prime project management and integration responsibility and lead all day-to-day management of all personnel and associated activities and deliverables related to the design and build of the CCN2 Platform as defined in WP.0 and its related sub work packages. The project governance used (including methodologies, standards, tools, communication, decision, escalation and information processes) in this context will be described in the FQP linked to this Framework Contract (See WP.0.1).

All planning and contractual reporting must be merged with the one of the Specific Contracts covering the overall fixed price activities linked to this Framework Contract during the build and setup of the CCN2 Platform. The same applies for activities linked to e.g. WP.0.4, WP.0.9 → WP.0.13, WP.0.5.4, WP.B.1, WP.B.2.

 **Note on planning aspects:** all deliverables are reviewed by TAXUD (and possibly by a few other DGs too, such as DIGIT or OLAF). Moreover, several deliverables are also reviewed by NAs. These review cycles must be taken into account in the plan. The tables in the following subsections indicate the T1/T2/T3 (see TEMPO) duration of the review cycles. The NA review cycle starts only after T2 of DG TAXUD's review cycle is completed. For details on the involvement of the NAs in the review cycle, please refer to section 2.3.2.7 .

Project management covers the activities, services and deliverables linked to the WPs listed below:

Work Package	Deliverable/ Service	Deliverable Title
WP.0.5	ALL except WP.0.5.4	Internal activities: Quality Assurance (QA), Quality Control (QC), Risk Management (RM), Team Organization and Management.
WP.0.6	ALL	Interaction and Co-ordination with the Commission  Taking into account the importance of this activity, dedicated <b>monthly</b> steering committee meetings (See WP.0.6) will have to be organized with the Head of Unit of DG TAXUD/R5 and TAXUD/R5/EAS.
WP.0.7	ALL	Contract Reporting  Besides the usual monthly progress reporting, the contractor will have to provide as well <b>bi-weekly status reviews</b> including issues logs, decision status, to-do status, resource status and progress reports at the project and stream level.
WP.0.8	ALL	Contract Planning  Provide, and maintain a comprehensive and <b>binding project plan</b> for the setup and build of the CCN2 Platform , identifying all tasks, dependencies, critical path and bottlenecks, staffing resources, major milestones and project deliverables.
WP.8.3.5	MEETINGS	Attendance to Technical Meetings in the context of the design and build of the CCN2 Platform
WP.8.3.6	MEETINGS	Attendance to Service Meetings in the context of the design and build of the CCN2 Platform
WP.6	MEETINGS	Attendance to all Meetings linked to the specifications of the CCN2 Platform

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Work Package	Deliverable/ Service	Deliverable Title
WP.7	MEETINGS	Attendance to all Meetings linked to the build and testing of the CCN2 Platform



This activity also covers the preparation of a training plan which the tenderer considers necessary linked to the deployment of the CCN2 Platform. The audience of these training sessions are DG TAXUD, DG TAXUD's Applications development contractors, the operational contractor (ITSM2) and the development teams of the National Administrations (See WP.8.3.2).

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP. 8.3.2.4	DLV- 8.3.2.4-4	Training / workshop / demo - Planning	10/10/10	N/A	Continuous	ID	IA	SQI02a



The pricing model of this Call for Tenders does not include any **separate** price element to cover **the Project Management activities** that are related to the Build and Test of the CCN2 Platform. The price of this Project Management has to be included in the fixed price for the 4 price elements titled FP CCN 1 – FP CCN 4.

#### 5.2.1.1.1 Price element FP CCN 1 - Design of the CCN2 platform

Using as the basis the high level design proposed as part of the offer, the contractor will have to perform the **detailed analysis** of the CCN2 Platform and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) that follows the defined design principles and meets the functional, non functional and technical requirements, as defined in Annex II.C - CCN2 platform specifications and requirements and following the high level design proposed in the offer. The detailed analysis phase will cover all activities associated to the finalization of the CCN2 Platform solution, the related detailed system modelling (See WP.6.2) and the documentation of all requirements (See WP.6.3). This analysis phase has to cover the specification of the functional architecture and the dataflow between the different components. The Software architecture must also identify all the links between the proposed components outlining where such integration is pre-built and where it has to be developed. The proposed solution must meet all business requirements within the agreed project constraints and scope boundaries.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.2	DLV-6.2-1	IT System Model (architecture) including interfaces with other systems	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.6.2	DLV-6.2-2	Business & System Process Model	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.6.3	DLV-6.3-2	System/Application/ Component Functional Requirements	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a

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Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.3	DLV-6.3-3	System/Application/ Component Non Functional Requirements (e.g. technical, security, DRP, operations, ...)	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a
WP.8.5.2	SE-8.5.2-1	Integrate Security Requirements			Continuous	-	MPR	-

The price element has to be expressed by using the FP CCN 1 sheet of the Price table, indicating the number of man days for the activities indicated above.

#### 5.2.1.1.2 Price element FP CCN 2 - Specifications for the CCN2 platform

The detailed **specifications** of the CCN2 Platform and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) that follows the defined design principles and meets the functional, non functional and technical requirements, as defined in Annex II.C - CCN2 platform specifications and requirements and following the high level design proposed in the offer (See WP.6.2 → WP.6.5);

#### Functional Design Phase

The goal of Functional Design phase is to finalize the **detailed functional design** to meet the business requirements (See WP.6.4). This design phase must also include the specifications for any custom development which is to be carried out (E.g. for legacy integration, etc).

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.4	DLV-6.4-1	System/Application/ Component Functional Specifications	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a
WP.6.4	DLV-6.4-2	System/Application/ Component User Interface Specifications	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a

#### Technical Design Phase

The goal of Technical Design phase is to finalize the **detailed technical design** (See WP.6.5). This design phase must also include the specifications for any custom development which is to be carried out (E.g. for legacy integration, etc) plus the parameterization and configuration details of the CCN2 Platform.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.5	DLV-6.5-1	System/Application/ Component Technical/design Specifications	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a
WP.6.5	DLV-6.5-2	Infrastructure Requirements Document	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA or Trigger	ID	IA	SQI02a

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### Migration Strategy Document

This activity covers the preparation of the **detailed migration strategy document** for the CCN2 Platform (See WP.6.6.1) including the detailed planning and definition of individual steps to be executed and actors following the strategy proposed in the offer and taking into account detailed analysis and detailed design specified above. It is to be reminded that the primary goal of the migration to the CCN2 Platform is to replace the current CCN/CSI platform while minimizing the impact on the National Administrations.

Work Package	Deliverable/Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.6.1	DLV-6.6.1-1	Migration Strategy Document (MSD)	10/10/10	20/20/20	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a

The price element has to be expressed by using the FP CCN 2 sheet of the Price table, indicating the number of man days for each sub-activity as indicated above.

#### 5.2.1.1.3 Price element FP CCN 3 - Build and Test of the CCN2 platform

##### Build

This activity covers the **configuration and development** related activities related to the package configuration of CCN2 Platform and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) and the required developments which will allow the CCN2 Platform to interoperate with the CCN platform (See WP.7.1). The documentation linked to the CCN2 Platform Software must include also the configuration and development documents.

Work Package	Deliverable/Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.7.1	DLV-7.1-1	Documentation of Programmes and Software components	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a
WP.7.1	DLV-7.1-2	Programmes and Software Components (subject to FAT and (p)SAT)	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a SQI07

##### Test

This activity covers the **testing** of the CCN2 Platform and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.). It also covers the preparation and production of all detailed test specifications and related test data, the setup of the test tools (See WP.7.3), and the execution of these test plans (See WP.7.4.1 → WP.7.4.3). This activity covers as well the functional as non functional testing (e.g. such as security, performance, stress testing, etc). The acceptance of the FAT testing by the Commission will trigger the handover to the ITSM2 Lot1 contractor for the deployment related activities. This activity covers as well the Production of the Acceptance Test Plans<sup>37</sup> for PSAT, SAT, Qualification and Conformance testing;

The tenderer is reminded that the setup and the maintenance of the development environment linked to the CCN2 Platform used during the development and testing activities is covered by WP.B.2.

<sup>37</sup> Please remind that those test plans (i.e. ATP for (P)SAT & CT) will be executed by ITSM2 Lot1.

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WP.7.3.1	DLV-7.3.1-1	Master Test Plan (MTP)	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.2	DLV-7.3.2-1	Test Design Specifications (TDS) for FAT, PSAT and SAT	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.3	DLV-7.3.3-1	Test Design Specifications (TDS) for Conformance Testing (CT)	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.4	DLV-7.3.4-1	Acceptance Test Plan (ATP) for FAT	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.5	DLV-7.3.5-1	Acceptance Test Plan (ATP) for (p)SAT	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.6	DLV-7.3.6-1	Acceptance Test Plan (ATP) for Qualification Testing (QT)	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.3.7	DLV-7.3.7-1	Acceptance Test Plan (ATP) for Conformance Testing (CT)	10/10/10	10/10/10	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.4.1	SE-7.4.1-1	Execute Unit Testing	-	-	For each new software component	-	MPR	-
WP.7.4.1	DLV-7.4.1-2	Unit Testing records	-	-	For each new software component	ID	no	-
WP.7.4.2	SE-7.4.2-1	Execute Integration Testing	-	-	For each new software component	-	MPR	-
WP.7.4.2	DLV-7.4.2-2	Integration Testing records	-	-	For each new software component	ID	no	-
WP.7.4.3	SE-7.4.3-1	Execute FAT including performance and stress testing	FAT mission	-	For each new software component	-	MPR	-
WP.7.4.3	DLV-7.4.3-2	FAT Report including performance and stress testing results and the minutes of the kick off and FAT mission meetings	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a
WP.7.4.4	SE-7.4.4-1	Execute Qualification Testing	-	-	For each new software component	-	MPR	-
WP.7.4.4	DLV-7.4.4-2	Delivery Qualification Report (DQR)	(5,5,5)	N/A	Submitted for review and acceptance as per SC or RfA	ID	MPR	-

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Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.7.5	DLV-7.5-1	Release assembling and packaging	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a SQI07

### Packaging & Operational Documentation

This activity covers the **packaging** of the CCN2 Platform (See WP.7.5) and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) including the production of the **operations related documentation** for the ITSM2 Lot1 contractor (I.e. Installation Manual and Operation & Administration Manual, etc.) (See WP.7.2).

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.7.2	DLV-7.2-1	CCN2 Platform NA Integration manual	10/10/10	10/10/10	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.2	DLV-7.2-1	CCN2 Platform TAXUD Integration manual	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI03a
WP.7.2	DLV-7.2-2	Installation Manual	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a
WP.7.2	DLV-7.2-3	Administration Manual	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a

The price element has to be expressed by using the FP CCN 3 sheet of the Price Table, indicating the number of man/days for each sub-activity as indicated above.

#### 5.2.1.1.4 Price element FP CCN 4 - CCN2 Platform deployment support

### Deployment Support

This activity covers the dedicated **support** to the ITSM2 Lot 1 contractor during the deployment of the CCN2 Platform (See WP.8.4.1) and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) including the on-site support (including training) during the PSAT testing of the CCN2 Platform (See WP.8.4.1.1), and the off-site support during the SAT, Qualifications and running in activities (See WP.8.4.1.2) and support during the Conformance testing activities (See WP.8.4.2.1) ;

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.8.4.1.1	SE-8.4.1.1-1	Support to PSAT			As per SC or RfA	MPR	MPR	SQI27
WP.8.4.1.1	SE-8.4.1.1-2	Support to SAT, Qualifications Testing and Running-in activities			As per SC or RfA	MPR	MPR	-

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Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.8.4.1.1	DLV-8.4.1.1-3	Report concerning the support services to PSAT, SAT, Qualifications Testing and Running-in activities	10/10/10	N/A	Date of end support services + 5 wdays for review Date of end support services + 10 wdays for acceptance	MPR	MPR	-
WP.8.4.2.1	SE-8.4.2.1-1	Support to Conformance Testing activities	-	-	As per SC or RfA	MPR	MPR	-
WP.8.4.2.1	DLV-8.4.2.1-2	Report concerning the support to Conformance Testing activities	10/10/10	N/A	Date of end support services + 5 wdays for review Date of end support services + 10 wdays for acceptance	MPR	MPR	-

### Deployment Plan

This activity covers the preparation of the **detailed deployment plan** that will be executed by the ITSM2 Lot1 contractor after successful execution of all SAT tests (See WP.6.6.2). The deployment plan must cover as well the CCN2 backplane part as the Access Point part.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.6.6.2	DLV-6.6.2-1	Deployment Plan (DP) for a System/Application/Component	10/10/10	N/A	Submitted for review and acceptance as per SC or RfA	ID	IA	SQI02a

### Training Material

This activity covers the preparation of the CCN2 Platform **integration and usage training material** for DG TAXUD, DG TAXUD's developments contractors (e.g. CUSTDEV2, FITSDEV2) and the National Administrations development teams. These trainings must ensure that all involved development teams are appropriately skilled and knowledgeable on all industry-standard and related best practices components utilized in establishing the CCN2 Platform (See WP.8.3.2) and get concrete guidelines on the adapters to be used for smooth integration of the CCN2 Platform with the other legacy systems.

The training materials will be priced at the price proposed by the tenderer under price element OD 4. The expected quantity of training days has to be indicated on the sheet "FP CCN 4". This number multiplied by the unit price of OD 4 will be included in the fixed price of the price element FP CCN 4. Should more training materials be necessary, those will be ordered via the On-demand mechanism under OD 4.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.8.3.2.1	DLV-8.3.2.1-1	Training / workshop / demo - Preparation material	10/10/10	N/A	Date of the Training / Workshop / Demo – 5 wdays, for review Date of the Training / Workshop / Demo – 2 wdays, for acceptance	ID	IA	SQI02a



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### After Care Support

This activity covers the organisation of an intensive "after care" support during the **first 6 months of operation** of the CCN2 Platform and related tools (including (non exhaustive list) operational/migration/testing/monitoring etc.) and eventual proposed bespoke software.



The tenderer is reminded to describe in his bid his proposal of setup of such "after care" support. This proposal must mainly be based on services and deliverables linked to WP.8.3.4, WP.8.4.3 and WP.8.8.. Minimum the following services must be foreseen in this "after care" support:

- Extended on-site support by CCN2-DEV in the ITSM2 premises
- 3<sup>rd</sup> level support 24H/7D instead of 13H/5D/Week
- Extend Working Hours to ITSM2 for all CCN2 Platform related CIs (24H/7D)

All Service Support (See WP.8.1.\*) related activities during the after care period will be covered by the Specific Contract linked to the Continuous Services of this Framework Contract during the concerned period.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.8.3.4	SE-8.3.4 -1	Support to the NAs			Continuous during the first 6 months of operations of the CCN2 Platform	-	MPR	-
WP.8.3.4	SE-8.3.4 -2	Support to the Commission services			Continuous during the first 6 months of operations of the CCN2 Platform	-	MPR	-
WP.8.3.4	DLV-8.3.4 -3	Deliverables of the consulting services for SE-8.3.4 -1 and SE-8.3.4 -2 like: - support documentation, - FAQ, - Newsletters and news alerts, - ...	5/5/5	N/A	Continuous during the first 6 months of operations of the CCN2 Platform – MA	ID	MPR	-
WP.8.4.3	SE-8.4.3-1	Support to operation of applications			Continuous during the first 6 months of operations of the CCN2 Platform	-	MPR	-
WP.8.4.3	DLV-8.4.3-2	Report concerning the support to operation of applications	5/5/5	N/A	Date of end support services + 5 wdays for review Date of end support services + 10 wdays for acceptance	MPR	MPR	-
WP.8.8	SE-8.8.1-1	Extended time coverage – "on call"			Continuous	-	MPR	-

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Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.8.8	DLV-8.8.1-2	Report concerning provision of Extended time coverage – "on call"	5/5/5	N/A	Via MPR	MPR	MPR	-

The price element has to be expressed by using the FP CCN 4 sheet of the Price Table, indicating the number of man/days for each sub-activity as indicated above and the number of training materials needed. The unit price of the training materials is automatically filled in. This unit price is identical to the unit price of the price element OD 4 as provided by the tenderer.

#### **5.2.1.1.1.5 Price element FP CCN 5 - Acquisition of all hardware and COTS components needed for the CCN2 Platform Production environment as specified in the offer**

This price element covers the acquisition and 4 years of maintenance of all hardware and COTS components needed for the CCN2 Platform **Production environment** as specified in the offer of the tenderer. The 4 years of maintenance are applied for evaluation purposes only, the actual length of the maintenance might be different, depending on the time of the acquisition. The management of this acquisition and maintenance will be done in line with WP.0.13 and WP.A. This covers the central (hardware and COTS) components of the CCN2 Platform (e.g. Main Hubs), the local components (e.g. Access Points,) and eventual other equipment.

The offer must clearly list all hardware and COTS components proposed for the CCN2 platform including the version numbers and a rationale for these components. The offer must include:

- All SOA backplane , SOA governance and SOA related features;
- All database components required;
- All operating system components required;
- All other 3<sup>rd</sup> party software required for the solution (i.e. reporting tools etc);
- Any other required for the production use;
- Any related hardware
- Any network equipment related to the CCN2 Platform design that is not part of the CCN-WAN contract.

Please refer to section 4.11 for details about the environments.

For the COTS components, the number of software licenses needed to implement the design must be specified in the offer.



In case the HW and COTS components specified in the offer are not sufficient to cover all functional and non functional requirements of the CCN2 Platform described in this ITT, all changes and additional HW or COTS components will have to be provided by the tenderer without any additional charges for the Commission.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
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Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WPA	SE-A-1	Acquisition and maintenance of HW & COTS for production environment			As per SC or RfA	-	MPR	-
WP.A	DLV-A-2	Delivery and shipment notices related to SE-A-1	N/A	N/A	As per SC or RfA	ID	IA	SQI03a

The price element has to be expressed by using the FP CCN 5 sheet of the Price Table

The tenderer has to indicate the details of the components based on its technical offer and in line with WP.A in the structure as indicated on the sheet:

- the details for one Access Point of each type,
- the details of one Main Hub and
- the details of the other equipments.

Tenderers are allowed to add as many lines to the sheet under each category, as necessary for the exhaustive description and pricing.

It is also requested that the tenderer indicates the planned **number of Access Points per type** (maximum 3 types), **Main Hubs** and/or **other equipment** under the unit prices of these components, according to the proposed technical solution (as defined in Annex II.C - CCN2 platform specifications and requirements).

The fixed price for the Design & Build of the CCN2 platform will include the indicated number of Access Points, Main HUBs and/or other equipment.



The fixed price for this price element has to contain **42 Access Points** (See Annex II.C - CCN2 platform specifications and requirements, section 3.2.2) **in total** (composed of the 3 types as proposed in the bid) and **2 (for Production) + 1 (for DRP) Main Hubs**. Furthermore, the Commission reserves the right to **order more** Access Points, Main HUBs and/or other equipment under the On-Demand services for the unit price proposed in the price element FP CCN 5.



The contractor is also requested to explicitly declare that the **unit prices** of the components (for acquisition as well as yearly maintenance) of the Access Points, Main Hubs and other equipments are available for any third party contractor or institution selected by the Commission (see section 5.4 of Annex I.A - Questionnaire).

#### **5.2.1.1.1.6 FP CCN6 - Acquisition of all hardware and COTS components needed for the CCN2 Platform Development environment as specified in the offer**

The information given in section 5.2.1.1.1.5 (FP CCN 5) applies with the following changes:

- Production environment is to be read as Development environment
- the applicable Work Packages and Deliverables are the followings: WP.B.3
- the specific configuration including the number of Access Points and Main Hubs must be proposed in the bid.

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The setup, installation, operation and maintenance are covered by CS 9 and eventually CS10.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WP.B.3	SE-B-3-1	Acquisition and maintenance of HW & COTS related to specification, build, test and support.			As per SC or RfA		MPR	
WP.B.2	DLV-B-2-2	FAT report related to SE-B-3-1.			As per SC or RfA		MPR	

Please refer to section 4.11 for details about the environments.

#### **5.2.1.1.1.7 FP CCN7 - Acquisition of all hardware and COTS components needed for the CCN2 Platform Testing environment as specified in the offer**

The information given in section 5.2.1.1.1.5 (FP CCN 5) applies with the following changes:

- Production environment is to be read as Testing environment
- the specific configuration including the number of Access Points and Main Hubs must be proposed in the bid.

Work Package	Deliverable/ Service	Deliverable Title	TAXUD Review	NA Review	Planning	Delivery Mechanism	Acceptance Mechanism	SQI
WPA	SE-A-1	Acquisition and maintenance of HW & COTS for testing environment			As per SC or RfA	-	MPR	-
WP.A	DLV-A-2	Delivery and shipment notices related to SE-A-1	N/A	N/A	As per SC or RfA	ID	IA	SQI03a

Please refer to section 4.11 for details about the environments.

#### **5.2.1.1.2 Price element block "Other fixed price services"**

##### **5.2.1.1.2.1 Price element FP 1 - Production of all the initial deliverables**

The price element covers the price for the production (including the full review cycle) of the FQP (DLV.0.1-1) - including its annexes as the External Processes, the Security plan (DLV.8.5.1-1), the Service catalogue (DLV.8.2.1-2) and the CCN/CSI and CCN2 Platform Configuration Baseline (DLV.8.1.4-1). The contractor will have to take over the existing FQP, adapt it to the new requirements and to generate the CCN2-DEV-specific version from the original all-inclusive version as described in WP.0.1.

The related Work Packages are: WP.0.1; WP.8.5.1; WP.8.2.1; WP.8.1.4.1

##### **5.2.1.1.2.2 Price element FP 2 - Take-over**

The price element covers all services/deliverables as described in the following Work Packages: WP.2; WP.2.1; WP.2.2. Should it become necessary to move HW equipment during the Take-over from its current location to the premises of the CCN2-DEV contractor and/or the DG TAXUD Data Centres, it will be covered under the On-demand services.

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The tenderers are reminded that failure to take over on time is linked to SQI35.

#### **5.2.1.1.2.3 Price element FP 3 - Hand-over**

The price element covers all services/deliverables as described in the following Work Packages: WP.5; WP.5.1; WP.5.2; WP.5.3, WP.5.4.

The tenderers are reminded that failure to pass on the information and knowledge to the new contractor will result in non-payment of the continuous services of the incumbent contractor during the Hand-over period.

#### **5.2.1.1.2.4 Price element FP 4 - Additional infrastructure for the development environment of the taken over CCN related systems / applications / components**

The price element covers additional, new infrastructure needed for the development environment of the taken over CCN related systems/applications/components. The quoted prices must be in line with the description provided in Annex I.A – Questionnaire, section 5.3.1 – question 10 and the supplier policy.

#### **5.2.1.2 Price element block "Continuous Services"**

Price elements under "Continuous services" target to acquire a certain capacity from the contractor to provide the service of the day-to-day activities whilst being able to level out peak activities.

The continuous services will be ordered via Specific Contracts.

The Commission will estimate, at each Specific Contract for continuous services, the volume of price elements CS6 and CS8 (i.e. the number of quantities of the related price elements) to include in the yearly Specific Contracts. The resulting price is the price that is due by the Commission even if the ordered quantities are over-consumed up to 10%. Should however an over-consumption of a price element of more than 10% occur, DG TAXUD will issue an RfA covering the additional anticipated quantity of this price element until the end of the current continuous services' Specific Contract. In this case, only the additional quantity effectively consumed at the end of the related continuous services' Specific Contract, will be paid on top of the initial fixed price amount included in the Specific Contract.

The consumption of price elements is to be monitored by the CCN2-DEV contractor and to be reported on a regular basis (see WP.0.7). The consumption of the continuous services quantities is therefore subject to revision and consequently acceptance or rejection by the Commission. Only the consumption accepted by the Commission is considered as actual consumption. The reporting also allows assessing the volume of continuous services needed for subsequent continuous services Specific Contracts.

#### **5.2.1.2.1 Price element CS 1 - Continuous maintenance of all the initial deliverables**

The price covers all activities needed to keep the initial deliverables (see FP1) up-to-date continuously throughout the whole duration of the Framework Contract from the date when the bundle of these deliverables is accepted by the Commission. Revision and, if necessary, updates are expected to be delivered to the Commission at each major event, but at least once a year, and a final update is requested before the hand-over. The scope of this price element is: DLV.0.1-2, DLV.8.5.1-2, DLV.8.2.1-2, DLV.8.1.4-1. The related Work Packages are: WP.0.1; WP.8.1.4.1; WP.8.5.1; WP.8.2.1.

#### **5.2.1.2.2 Price element CS 2 - Corrective Maintenance of the Specifications Which Have Been Taken Over**

The price element covers all services/deliverables as described in WP.6.9 and WP.6.9.1. The monthly fixed price of the service covers the maintenance of all the Specifications that were taken over and which are still applicable,

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regardless of their actual number. The current number of the specifications to be taken over can be found in the Annex XI - Baseline (baseline documentation) of this Call for Tenders. This number may be different at the time of the actual take-over.

#### **5.2.1.2.3 Price element CS 3 - Corrective Maintenance of the New Specifications**

The price element covers all services/deliverables as described in WP.6.9 and WP.6.9.2. The contractor is expected to maintain the new specifications (produced under WP.6) free of charge for 2 years after their production (including acceptance) (Annex X.A - Part I & II – Special Conditions & General Conditions, article II.1.2 – (b)). The price element covers the maintenance beyond this 2 year long period. The base of the calculation of the maintenance price for a specification is the total production price of it (based on the RfA that contains the delivery of the specification for acceptance).

It will be defined, in each production RfA, what share of its price will be considered as the financial base of this price element.

The total price is automatically calculated as a total price of price elements "FP CCN 1", "FP CCN 2" and "OD 1", assuming 2 years of maintenance in average.

#### **5.2.1.2.4 Price element CS 4 - Corrective Maintenance of the Build and Test Software and Documents Which Have Been Taken Over (scope WP.2)**

The price element covers all services/deliverables as described in WP.7.9 and WP.7.9.1. The monthly fixed price of the service covers the maintenance of all the Build and Test Software and documents that were taken over and which are still supported, regardless of their actual number. The current number of the Build and Test Software and documents to be taken over can be found in Annex XI - Baseline (baseline documentation) of this Call for Tenders. This number may be different at the time of the actual take-over.

#### **5.2.1.2.5 Price element CS 5 - Corrective Maintenance of the new Build and Test Software and Documents**

The price element covers all services/deliverables as described in WP.7.9 and WP.7.9.2. The contractor is expected to maintain the new Build and Test Software and documents (produced under WP.7) free of charge during the 2 year long warranty period after their delivery (see Annex X.A - Part I & II – Special Conditions & General Conditions, section II.1.2 – (b)). The price element covers the maintenance beyond this 2 year long period. The base of the calculation of the maintenance price for a Build or Test Software and documents is the total production price of it (based on the RfA that contains the delivery of the software for deployment).

It will be defined, in each production RfA, what share of its price will be considered as the financial base of this price element.

The total price is automatically calculated as a total price of price elements "FP CCN 3" and "OD 2", assuming 2 years of maintenance in average.

#### **5.2.1.2.6 Price element CS 6 – Incident Management**

The price element covers all services/deliverables as described in the following Work Packages: WP.8.1.2; WP.8.1.2.1; WP.8.1.2.2.

#### **5.2.1.2.7 Price element CS 7 - Continuous services related to IT service management**

The price element covers all services/deliverables as described in the following Work Packages: WP.8.1.3; WP.8.1.4 (except WP.8.1.4.1); WP.8.1.5; WP.8.1.6; WP.8.2.1 (except DLV.8.2.1-2); WP.8.3.4; WP.8.4.3; WP.8.5.

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The services have to be provided either in the contractor's premises or in the Commission's or the ITSM2 contractor's premises (for WP.8.3.4 and WP.8.4.3). In all cases –in line with the requirements for the price elements OD6 and R2, neither mission cost nor travel and subsistence cost can be charged on top of this price element.

#### **5.2.1.2.8 Price element CS 8 - Technical Review of the Deliverables of Other Contractors**

The price element contains the price for the contribution in a review cycle managed by QAC as described in TEMPO (including: issuing comments, verification of author's positions, attending review meetings, implementation verification). If the scope of the review is the update of an existing document (delta review), only the updated pages can be counted. In order to exclude those pages which are typically not relevant for review, 10% but at least 5 pages are deducted from the total number of pages of the reviewed document to get the base of the calculation. The calculation method applies to the total number of pages reviewed in the reporting period. The related Work Package is WP.8.4.4.

#### **5.2.1.2.9 Price element CS 9 - Set up, Install, Operate and Maintain the IT and Telecom Infrastructure**

The price element covers all services/deliverables as described in Work Package WP.B.2, excluding the hosting which is covered by CS10. The activities may be requested to be carried out in the premises of the CCN2-DEV contractor or in the DG TAXUD data centres or any of DG TAXUD's contractors.

#### **5.2.1.2.10 Price element CS 10 - Provide one hosting environment for the development infrastructure (data centre)**

The price element covers the services/deliverables related to the provision of a hosting environment as described in Work Package B.2. This price element is only activated upon request of the Commission for the provision of the data centre for the development environment. In case the contractor hosts the development environment in his own data centre, then this price element will be activated on top of the price element CS 9. The amount is paid per data centre, regardless of the number of environments hosted in them.

#### **5.2.1.2.11 Price element CS 11 - Project Management**

The price element covers all services/deliverables/meetings as described in the following Work Packages: WP.0.4; WP.0.5.1; WP.0.5.2; WP.0.5.3; WP.0.5.4; WP.0.5.5; WP.0.6; WP.0.7; WP.0.8; WP.0.9; WP.0.10.1; WP.0.10.2; WP.0.11; WP.0.12; WP.0.13; WP.8.3.2.2; WP.8.1.5.2; WP.8.3.1; WP.8.3.1.1 (with the exception of DLV.8.3.1.1.-1 which is covered in OD 4); WP.8.3.1.2; WP.8.3.5; WP.8.3.6; WP.B.1.

The following has also to be taken into account for the pricing of these activities:

- **Meetings:**  
See section 4.5 and 4.6 for details on meetings and missions.  
The price element includes the preparation and the performance of presentations that the contractor might be requested to give on meetings except for WP.8.3.1.1 (see OD 4)
- **WP.0.12 (CSIP):**  
The inclusion of WP.0.12 in the Project management is limited to the services and deliverables defined under WP.0.12 and CSIP actions requiring not more than 20 working days implementation effort. All CSIP actions requiring more than 20 working days will be covered by RFE/RFA.
- **WP.0.13 (HW and COTS SW acquisition and maintenance)**  
All activities/deliverables related to the acquisition process of hardware and COTS software under FP CCN 5 → FP CCN 7 and R1 (i.e. WP.A and WP.B.3) are covered in this Work Package.
- **WP.B.1**  
The quoted prices for services include the availability of the office automation environment of the contractor including the provision and management of the project portal.

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**This price element covers all project management costs linked to this Framework Contract (i.e. all Fixed Price Services (excluding FP CCN 1 → FP CCN4), Continuous Services, On Demand Services).**

#### **5.2.1.2.12 Price element CS 12 - Additional price for extended time coverage – "on call" services for blocking issues**

The price element covers all services/deliverables as described in Work Package WP.8.8.1.

#### **5.2.1.3 Price element block "On-demand Services"**

##### **5.2.1.3.1 Price element OD 1 – Specifications (Production and evolutive maintenance of all specification related deliverables)**

The price element covers all services/deliverables as described in the following Work Packages: WP.6.1; WP.6.2; WP.6.3; WP.6.4; WP.6.5; WP.6.6; WP.6.8.

The weighted average of all profile prices is calculated to be taken into account for the evaluation of the tenders.

The activities will be ordered based on the estimate and by using the man-day prices of the "Profiles" sheet of the Price table. The weighting used for the average calculation is only indicative. The actual composition of the profiles ordered during the implementation of the contract may be different.



All meetings held by the CCN2-DEV contractor with the Commission for the purpose of delivering WP.6 deliverables are considered as part of the delivery work (Please also refer to section 4.5).

##### **5.2.1.3.2 Price element OD 2 - Build and test (including delivery and evolutive maintenance of applications)**

The price element covers all services/deliverables as described in the following Work Packages: WP.7.1; WP.7.2; WP.7.3; WP.7.4; WP.7.5; WP.7.8.

The weighted average of all profile prices is calculated to be taken into account for the evaluation of the tenders.

The activities will be ordered based on the estimate and by using the man-day prices of the "Profiles" sheet of the Price table. The weighting used for the average calculation is only indicative. The actual composition of the profiles ordered during the implementation of the contract may be different.



All meetings held by the CCN2-DEV contractor with the Commission for the purpose of delivering WP.7 deliverables are considered as part of the delivery work (Please also refer to section 4.5).

##### **5.2.1.3.3 Price element OD 3 - Training, Workshop, Demonstration - Performance**

Daily price for the complete organisation and performance (excluding the preparation of the training material) of a training, including reporting and related planning. From the viewpoint of this price element, trainings cannot be split to more than one part / day by topic, person of trainer, audience etc. For one given day and location, no more than one training can be charged. The related Work Package is WP.8.3.2.1 and WP.8.3.2.4 with the exception of the deliverable DLV.8.3.2.1-1 as it is covered in the price element OD.4



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#### **5.2.1.3.4 Price element OD 4 - Training, Workshop, Demonstration / National Administrations Working Group Meetings and their Related Sub-groups - Preparation of material**

The price element covers the preparation of presentation material(s) (restricted to DLV.8.3.2.1-1 & DLV.8.3.1.1-1) that is(are) to be used on a one-day long training or working group meeting. Repetitive performance of the same material(s) does not trigger multiple payments. Two training materials are considered to be identical if the difference between the substantial part of the two materials is not more than 20%. The related Work Packages are WP.8.3.1.1 and WP.8.3.2.1, but the scope is restricted to the delivery of the deliverables DLV.8.3.2.1-1 and DLV.8.3.1.1-1.

#### **5.2.1.3.5 Price element OD 5 - Training, Workshop, Demonstration - Hosting facilities**

The price element covers all services/deliverables as described in Work Package WP.8.3.2.3.

#### **5.2.1.3.6 Price element OD 6 - Missions**

The price element covers all services/deliverables as described in Work Package WP.8.3.3. The price is fixed according to the proposal, regardless of the actual profile attending the mission. Missions have to be ordered and approved by the Commission, organised by the CCN2-DEV contractor.

#### **5.2.1.3.7 Price element OD 7 - Translations**

The price element covers all services/deliverables as described in Work Package WP.8.3.7. The unit price is the human translation of 1000 characters without spaces.

#### **5.2.1.3.8 Price element OD 8 - Solution component deployment support**

The price element covers all services/deliverables as described in Work Package WP.8.4.1.1. The price is based on the man-day price of the P12 – "Application Assembler, deployer, administrator" profile (as described in section 4.3.12) as proposed in the "Profiles" sheet of the Price table. The contractor will produce a report for each and every support activity.

#### **5.2.1.3.9 Price element OD 9 - Conformance testing support**

The price element covers all services/deliverables as described in Work Package WP.8.4.2. The price is based on the man-day price of the P12 – "Application Assembler, deployer, administrator" profile (as described in section 4.3.12) as proposed in the "Profiles" sheet of the Price table. The contractor will produce a report for each and every support activity.

#### **5.2.1.3.10 Price element OD 10 - Extended time coverage – Ad hoc**

The price element covers all services/deliverables as described in Work Package WP.8.8.2. The weighted average of all profile prices modified by the multiplication factor is to be taken into account for the evaluation of the tenders. The activities will be ordered by using the man-day prices of the "Profiles" sheet of the Price table, taking into account the proposed multiplication factor for activities outside normal working hours. The weighting used for the average calculation is only indicative. The actual composition of the profiles ordered during the implementation of the contract may be different.

#### **5.2.1.3.11 Price element OD 11 - Shipping of HW equipment**

The price element covers the shipping of hardware purchased under Work Package WP.A. The cost for **shipping** the IT equipment using a specialised IT transporters offering full Insurance to a National Administration within Europe will be covered by RfA and will not be part of the offer for the setup of the CCN2 Platform. The shipping costs are to be expressed by the tenderer as a matrix of prices in sheet "Shipping costs" of the Price table. Prices are to be defined based on insured value and weight for a shipment to the ITSM2 premises or any National Administration within Europe.

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The average of these prices will be used in the evaluation of the tenders. The actual price of ordering the service will be based on the value and the weight of the package as it is indicated in the "Shipping costs" sheet of the Price table.

#### **5.2.1.3.12 Price element OD 12 - After handover support**

The price element covers all services/deliverables as described in Work Package WP.5.5. The average of all profile prices is calculated to be taken into account for the evaluation of the tenders. The activities will be ordered based on the estimate and by using the man-day prices of the "Profiles" sheet of the Price table. The weighting used for the average calculation is only indicative. The actual composition of the profiles ordered during the implementation of the contract may be different.

#### **5.2.1.3.13 Price element OD 13 - Other deliverables and services in the scope of the Framework Contract**

The price element covers all services/deliverables as described in Work Package WP.10. The value is automatically calculated as 10% of the subtotal of all other price elements listed above.

#### **5.2.1.4 Price element block "Reserve"**

The price elements in this block are defined by the Commission as provisions and they are present in the pricing model in order to provide the tenderers with information about the volume of the project. Project management is not to be applied for the price of goods/services ordered from this reserve.

##### **5.2.1.4.1 Price element R1 - Reserve set by the Commission for hardware and COTS software acquisitions**

The price that the Commission will pay for the provision of the ICT products will be as defined in WP.A and WP.B3. All provided ICT products are the property of the Commission.

The management of the acquisition and the maintenance of the hardware and software in this context will be performed as defined under WP.0.13. The conditions and other information regarding the HW and COTS

Software acquisitions and maintenance are described in the Work Packages WP.A and WP.B.3.

Development equipment delivered initially to CCN2-DEV DC (under WP.B.3) is expected to be moved later to TAXUD DC - the price of the moving is not included in this price element.

##### **5.2.1.4.2 Price element R2 - Reserve for Travel and Subsistence cost**

Please refer to section 4.5 and 4.6.

## **5.2.2 Price table – "Profiles" sheet**

The tenderer is requested to provide a **daily rate** for the staff profiles that could be requested to work either within the premises of the European Commission (i.e. **intramuros**) or from the CCN2-DEV contractor's own premises (i.e. **extramuros**).

Work performed during extended working hours as described in WP.8.8.2 will be charged taking into account the **multiplying factor** linked to the daily rate of the profiles concerned as defined in the pricing model.

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### **5.2.3 Price table – "FP CCN 1" - "FP CCN 7" sheets**

Please refer to the description of the related 7 price elements in sections 5.2.1.1.1.1 → 5.2.1.1.1.7.

### **5.2.4 Price table – "FP4" sheet**

Please refer to the description of the related price element in section 5.2.1.1.2.4.

### **5.2.5 Price table – "Shipping cost" sheet**

See the description at price element "OD 11" in section 5.2.1.3.11.

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## 6 CCN2 Platform specifications and requirements

### 6.1 General description of the CCN2 Platform

The CCN/CSI network is an interoperability backbone supporting the implementation of all trans-European IT systems and applications enabling the customs union and fiscal policies. CCN Participants (DG TAXUD, National Administrations, OLAF, economic operators and users of applications) are enjoying a range of highly effective solutions that are enabled by this infrastructure.

However, the CCN solution (designed in the 90's) needs improvements and innovations in order to remain at the forefront of effective and efficient operations. The CCN was designed in the early 1990s where Wide Area Network (WAN) bandwidth was extremely limited, and the Internet was still in its infancy. Since then, information technology has made enormous strides forward and the CCN has been overtaken by technology and the market. Its head start in the 1990s has become a handicap, slowing down innovation and increasing complexity (outdated custom made middleware solution, adherence to complex proprietary specifications and interfaces, etc.). Consequently, CCN Participants experience low flexibility, long lead times for implementations (low agility), high annual maintenance costs, and high costs due to 30+ different specifications' implementations. Continuing with the current infrastructure would affect DG TAXUD's business delivery capability in the areas of the Union Customs Code (UCC), eCustoms and fiscal policies due to high complexity, high development costs for new applications, possible degradation of services due to the obsolescence of 15 year old infrastructure or high maintenance costs.

Therefore, understanding the implications of the current situation for the CCN Participants' business, DG TAXUD initiated the CCN2 Study whose scope was to identify improvements, additional services and transformations that could enable the evolution of CCN.

The CCN2 Study clearly pointed out that today CCN has to evolve to a new platform (CCN2 Platform) that offers innovative, value added business functionality and services and improve in the areas of cost effectiveness and agility (see also details in the CCN2 Vision document [R190]).

The study pointed that, in order to achieve the objectives stated above, it is required to implement a Commercial Off-The-Shelf (COTS) Enterprise Service Bus (ESB) infrastructure to replace today's proprietary solution and a standardised so-called CCN appliance to host the ESB and possible other shared components. The CCN2 Platform was defined as a Service Oriented Platform where shared components will be provided as services. This platform will address the needs of different actors (see figure below), and will allow sharing of information between different actors, applications and services.

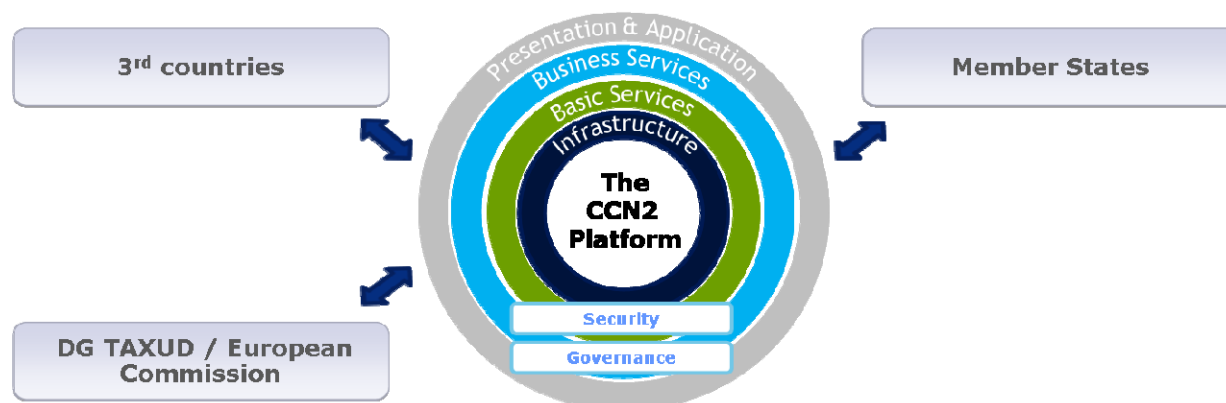


Figure 3: CCN2 Vision Overview

The CCN2 Study concluded that **Service Oriented Architecture** is the key concept for the CCN2 Platform and is in line with the European Interoperability Framework (EIF). And this implies that there is a need for:

- **A new interoperability backbone** (see figure below), materialised by the new CCN2 Platform (supporting the SOA model with dedicated components such as service registry or orchestration capabilities),
- which in turn has an impact on the architecture of applications in DG TAXUD and the National Administrations

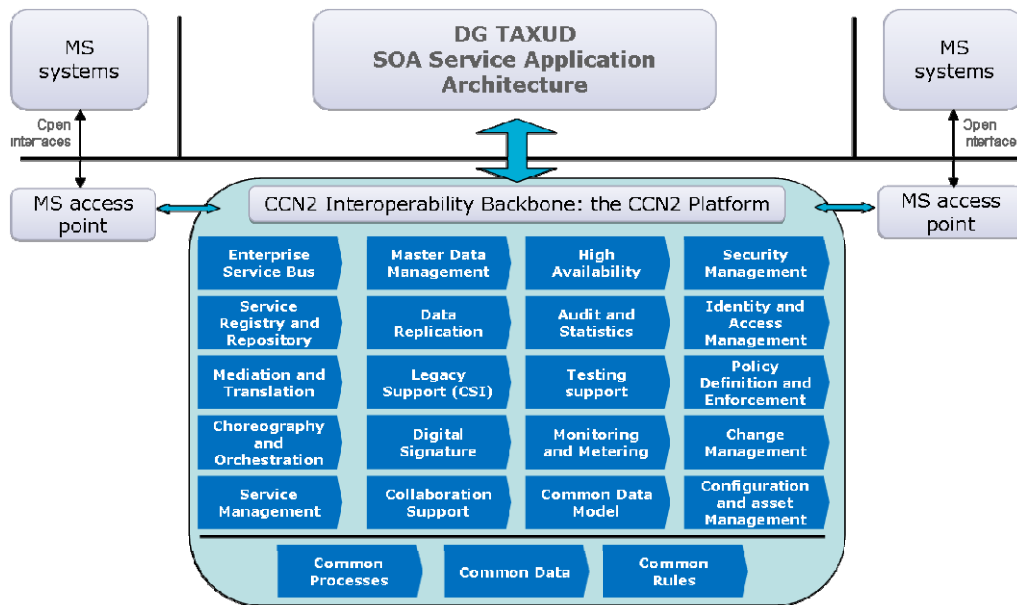


Figure 4: CCN2 Deployment Architecture Overview

Finally the feasibility of CCN2 Platform was confirmed by 2 independent studies which proposed a specific architectures and products set that may deliver required functionality (See details in [R191] & [R324] & [R369] & [R370]). The information in both documents is purely indicative. Tenderers are free to propose the design and products set that will deliver specific requirements define in Annex II.C - CCN2 platform specifications and requirements

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Data Centre consolidation	

## 7 Data Centre consolidation

At the time of writing, the infrastructure, on which the central Information Systems (IS) of DG TAXUD are running, is provided by three different entities: **DIGIT's Data Centre**, located in Luxembourg (Kirchberg), the **incumbent ITSM contractor** and the **incumbent CCN/TC contractor**.

- DG **DIGIT** is operating its data centre activities from Luxembourg, where it hosts several computer rooms distributed over multiple locations for contingency. It interconnects all buildings of the Commission via its private network (Snet) and provides controlled and secured access to external networks via its Telecom centres (one in Belgium, the other in Luxembourg).
- The **ITSM** contractor is hosting part of DG TAXUD central systems in one data centre near Brussels. It is also using a Telecom centre to interconnect the Internet access used by the different teams located in several countries of the Union.
- The **CCN/TC** contractor hosts part of the SPEED infrastructure as well as central CCN services. The data centre is located in Haasrode, Belgium while the staff and Service Desk are in Zaventem, Belgium.

All data centres have an interconnection with the CCN/CSI private network and the three providers host CCN gateways managed by the CCN/TC contractor.

The figure below represents the global picture of the distribution and locations of the infrastructure.

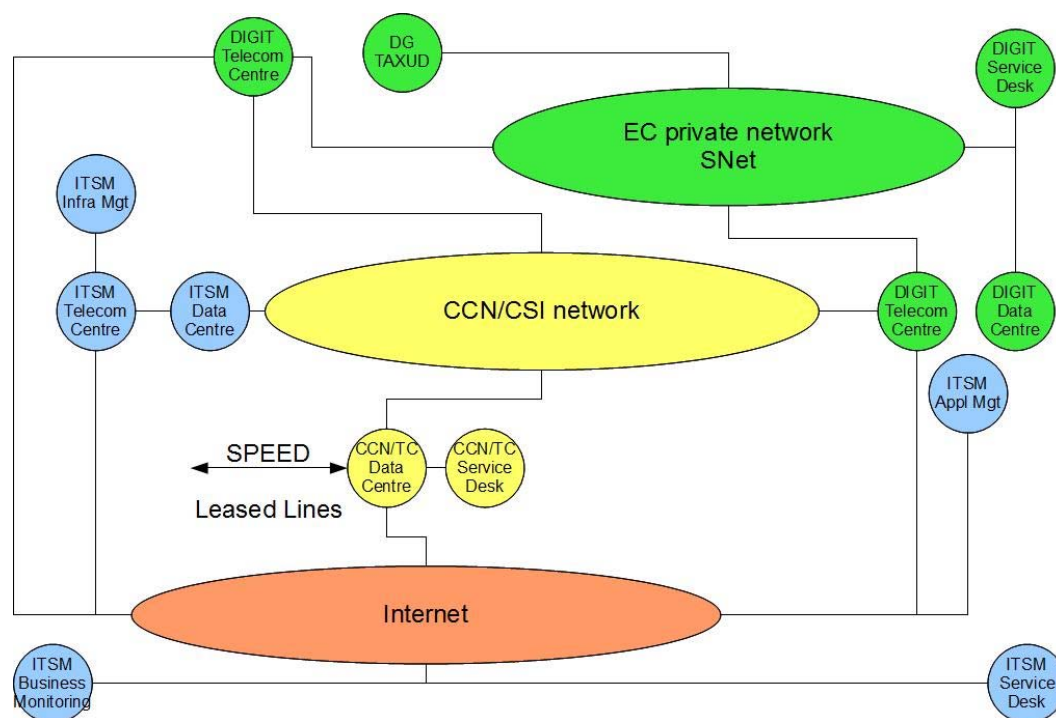


Figure 5 : Distribution and location of the current ICT infrastructure

In 2012, DG TAXUD has launched a project aiming at consolidating their Contractors' infrastructures in **two redundant Tier IV level data centres** located in **Luxembourg** (Kirchberg) (See also [R086], [R333] for more details). The connectivity between the two data centres located in Luxembourg and the incumbent data centres (ITSM and CCN/TC) will be provided by DG TAXUD.

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In a **first phase**, the infrastructure of both incumbent contractors (i.e. ITSM and CCN/TC) will be moved to those new data centres. There will be no major transformations during this phase. Phase 1 is planned during 2012 and will be initiated by DG TAXUD and the CCN/TC and ITSM incumbent contractors. It is planned that the infrastructure linked to CCN Mail 3 and SPEED2 will be deployed in the new DG TAXUD Data Centres in Luxembourg in 2012.

In a **second phase**, the ITSM2 Lot1 contractor will redesign and transform these new data centres and infrastructures as needed to be able to guarantee high availability and resilience to the Member States and other IT stakeholders. Those new Data Centres will be operated by the ITSM2 Lot1 contractor.

The incumbent CCN/TC contractor operates a data centre hosting the totality of network and system infrastructure to develop, maintain, support and operate the CCN/CSI Platform and related bespoke software. During 2012, activities will be performed by the incumbent CCN/TC contractor and DG TAXUD to split the infrastructure currently used by the incumbent CCN/TC contractor into "support and operations" related infrastructure (a.k.a. CCN/TC testing environment) to be taken over by ITSM2 Lot 1 (Provisional planning S1/2013) and "development and integration" related infrastructure (a.k.a. CCN/TC development environment) to be taken over by CCN2-DEV. The incumbent CCN/TC contractor will keep on providing the full hosting services for the CCN/TC related development environment/data centre until the end of its Framework Contract (I.e. maximum 08/2014). There is currently no fail-over site for the CCN/TC data centre.

The CCN2-DEV contractor will be responsible of setting up, operating and maintaining the CCN2-DEV related development environment (See WP.B.2). The CCN2-DEV **related development environment** is composed of 2 parts:

- Development environment related to CCN/CSI and related bespoke Software;
- Development environment related to the CCN2 Platform and related bespoke Software;

DG TAXUD intends to move the **CCN/TC** related development environment to the DG TAXUD data centres in Luxembourg. If this move is not yet performed before the start of this Framework Contract, then this move will have to be organised by the CCN2-DEV contractor in the context of the take over. This **CCN/TC** related development environment will then have to be taken over by the CCN2-DEV contractor as basis for the CCN/CSI related development environment.



The contractor is reminded to describe in his bid the changes/new acquisitions including related maintenance he proposes to this infrastructure to ensure that it supports all activities linked to the maintenance and testing of CCN/CSI and its related software components.

The DG TAXUD data Centres will be operated by the ITSM2 Lot1 contractor and the CCN2-DEV contractor will get unlimited access to his development environment material.

The ITSM2 Lot1 contractor will provide the following services to the CCN2-DEV contractor in the context of the CCN2-DEV development Data Centre:

- Housing covering the unpacking of infrastructure delivery at arrival, installation of infrastructure in TAXUD DC's racks, providing electricity and network connectivity, etc. ;
- Availability monitoring;
- Backup and restore functions;
- Etc.

The CCN2-DEV must provide all other services as defined WP.B.2.

Furthermore, the CCN2-DEV contractor will have to set up the development environment linked to the CCN2 Platform as soon as the build and design activities of the CCN2 Platform will be launched by DG TAXUD.

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The contractor is reminded to describe in his bid if he intends to host this environment in his premises or in the DG TAXUD data Centre at Luxembourg.

During the CCN2-DEV framework lifecycle, DG TAXUD could at any time (but at the latest before the end of the Framework Contract or the move to production date of the CCN2 Platform) request the contractor to move the CCN2 Platform related development data centre to the TAXUD data centres in Luxembourg. Such a migration would then have to be planned and would be managed through an On Demand activity.

Furthermore, the CCN2-DEV contractor will have to provide the ICT infrastructure management for the CCN2-DEV related development data centres during the Framework Contract.

The ITSM2 Lot1 contractor will be responsible for managing and operating all production CCN/CSI and future CCN2 Platform infrastructure deployed in all current and future CCN sites.



DG TAXUD will provide to the CCN2-DEV contractor at the latest by the take over a **Play Ground Systems (PGS)** where the CCN2-DEV Contractor's trainees could exercise themselves during Take-over.



At the time of writing this ITT, **SPEED2** is being developed by the **CUSTDEV2** contractor (responsible for the development and maintenance of all Customs related systems and applications). The corresponding development and test infrastructure will thus be hosted in the **CUSTDEV2** Data Centre and not in the CCN/CSI related development data centre.



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## 8 Supporting Tools

### 8.1 Information on the supporting tools currently used by the incumbent contractor:

The following table provides details on the tools that are available or under development at the time of writing to support the incumbent contractor:

CCN Tool	Description
SMT (Jira®)	used to register all service requests, incidents, etc.
CMDB (Assyst CMDB based on Oracle 10g)	Used as CMDB for the CCN development and Integration environment related components. This CMDB also contains the CCN/CSI assets in operations, i.e. CCN equipment in NA & TAXUD (gateways, routers, SSG, UPS, etc.).
Definitive Media Library (File server)	based on a file server, containing the software releases provided to the CCN/TC contractor for deployment;
System management and monitoring (Big Brother®, Tivoli®)	<p>Open source Linux-based on Big brother to monitor the CCN gateway infrastructure, applications, and CCN queues. This tool will gradually be replaced by the ongoing rollout of the IBM® Tivoli Monitoring (Tivoli Monitoring) and IBM Tivoli Composite Application Manager (ITCAM) product family;</p> <p>The LCMS Monitoring System installed on each LCMS as part of the LCMS Software.</p>
Planning tools (MS Project)	based on MS Project files, containing a monthly rolling plan on project, deployment and release activities;
Document Reference Centre (CIRCA®/CIRCABC®)	<p>the Commission's extranet collaboration platform. It enables a given community (e.g. committee, working group, project group etc.) geographically spread across Europe (and beyond) to maintain a private space on the Internet where they can share information, collect documents, participate in discussion forums and benefit from various other functionalities. The CCN/TC contractor is responsible to upload the relevant CCN related information on the CCN Circa Interest Group such as the planning, the technical documentation, the CCN presentations, the minutes of meetings, etc. The CCN/TC also uploads all of its deliverables onto a CIRCABC hosted interest group accessible to the CCN TAXUD management team and QA2 contractor.</p> <p>At the time of writing the tender, CCN/TC migrated to CIRCABC®.</p>
Knowledge Management (via CCN Portal)	Currently limited to FAQs (Frequently Asked Questions): available on the CCN/TC intranet. The CCN/TC contractor developed some internal scripts enabling the Operation and Support Team to quickly find answers to questions or solutions to problems.

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CCN Tool	Description
Requirement, Design and development tools (Rational Suite®)	<ul style="list-style-type: none"> <li>• Rational RequisitePro® for the requirement management;</li> <li>• Rational Software Architect® , Visio Professional® and Office tools (specifically MS-Word®) for specification and design activities;</li> <li>• Eclipse®, ANSI C compilers, Rational FunctionalTester®, Rational Performance Tester®, Rational TestManager® and Rational PurifyPlus® for development and test activities;</li> </ul> <p>Please refer to [R098], section 5.1 for complete list of tools</p>
CCN collaboration tool (CCN Portal)	<p>developed by the CCN/TC contractor (bespoke software based on Microsoft IIS 5.0 on Windows NT 2000 Server with Oracle 8i database), provides the CCN/CSI Community via the CCN intranet (no internet access is currently provided) access to comprehensive project information, offering among others, a knowledge base, monitoring and statistics features. CCN users can access the web site through the CCN Intranet. The CCN portal offers the following features:</p> <ul style="list-style-type: none"> <li>• Distribution/download of project topics (FAQ, configuration baseline for systems in National Administrations, e-collaboration);</li> <li>• Service baseline, planned upgrades;</li> <li>• Business/monitoring statistics, un-availabilities of NAs;</li> <li>• Content administration (administration tool, change &amp; update features);</li> <li>• Technical notes in the context of remote support to National Administrations;</li> <li>• Provision of reports (SLA, CCN bulletin report, etc.) among the involved parties (Commission, contractors, National Administrations and in some case 3<sup>rd</sup> parties) through web portal;</li> <li>• Software download and upload facilities;</li> <li>• Service call submission and tracking.</li> </ul>

Table 9: Tools supporting the CCN services

End of Annex II.B
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