ANNEX 2

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TECHNICAL ANNEX

CALL FOR TENDERS TAXUD/2016/AO-02

INTEGRATION

Operations, integration and control of IT Service Management for IT systems (ITSM3)

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TYPOGRAPHIC CONVENTIONS

The following typographic conventions are used in this document:
The following convention indicates a link
The following indicates one of these keywords: **TES, Operations, or Integration**

	Indicates reference information
	Draws attention to important information
	Indicates deviations or out of norm information
	Indicates Specific Quality Indicator (SQI) related information
	Indicates meeting frequency
	Indicates the participants to the meeting
	Indicates who chairs the meeting
	Indicates the meeting duration
	Indicates who will minute the meeting

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1. Acronyms and definitions

In this document, the Directorate-General Taxation and Customs Union of the European Commission, which is the contracting authority, will be further referred to as "the Commission" or "DG TAXUD".

The definitions of the acronyms related to the different applications (e.g. TARIC3, ART2, TTA, CM/MIS, and CS/RD) are not listed.

Acronyms and definitions	
Acronym	**Definition**
ACD	Automated Call Distribution
ACT	Application Configuration Tool
AEO	Authorized Economic Operators
AMDB	Availability Management Database
AN	As Needed
APM	Application Portfolio Management
ART	Activity Reporting Tool
ATS	Acceptance Test Specifications
BC	Beneficiary Countries
BCP	Business Continuity Plan
BL	Baseline
BMM	Bilateral Monthly Meeting
BPM	Business Process Modelling
BT	Business Thread
BTI	Binding Tariff Information
BTM	Business Thread Manager
CAB	Change Advisory Board
CAP	Capacity Management
CAPS	Customs Applications
CCC	Community Customs Code
CCN	Common Communications Network
CCN2	Common Communications Network 2
CCN2-DEV	Common Communications Network 2/Specifications, development, maintenance and 3rd level support
CCN/TC	Common Communications Network / Technical Centre
CCN/CSI	Common Communications Network / Common System Interface

Acronyms and definitions	
Acronym	**Definition**
CCN/WAN	Common Communications Network / Wide Area Network provider
CDB	Capacity Management Database
Cfsu	COSMIC FFP functional size unit (ISO 19.761:2003)
CI	Configuration Item
CIA	Classification of Information Assets
CIRCA	Communication and Information Resource Centre Administrator
CIRCABC	Communication and Information Resource Centre for Administrations, Businesses and Citizens
CIS	Customs IT Systems sector
CMDB	Configuration Management Database
CMMI	Capability Maturity Model Integration
CN	Combined Nomenclature
CO^2	Carbon Dioxide
COBIT	Control Objectives for Information and related Technology
COM	European Commission
CONF	Conformance test environment
COPIS	anti-Counterfeit and anti-Piracy system
COTS	Commercial Off-The-Self (software packages)
CPCA	Common Priority Control Area
CPT	Central Project Team
CRC	Common Risk Criteria
CS	Central Services
CSF	Critical Success Factor
CSIP	Continuous Service Improvement Programme
CSIPM	Continuous Service Improvement Programme Manager
CSISC	Continuous Service Improvement Steering Committee
CS/RD	Central Services/Reference Data
CT	Conformance test
CUSTDEV2	Development contractor for customs systems 2
DC	Datacentre
DDS	Data Dissemination System
DE	German
DEV	Development
DG	Directorate-General
DG AGRI	European Commission DG Agriculture
DIGIT	Directorate-General for Informatics
DIGIT/DC	Data Centre of the European Commission
DLV	Deliverable

Acronyms and definitions	
Acronym	**Definition**
DM	Demand Management
DML	Definitive Media Library
DMZ	Demilitarized Zone
DRP	Disaster Recovery Plan
DSL	Definitive Software Library
DTM	Deliverable Tracking Matrix
EAS	Enterprise IT architecture and Strategy
EBTI	European Binding Tariff Information
EC	European Commission
ECG	Electronic Customs Group
ECICS	European Customs Inventory of Chemical Substances
ECS	Export Control System
EfA	Estimate for Action
EMCS	Excise Movement and Control System
EMCS-DEV	Development contractor for Excise systems
EN	English
EoF	Exchange of Forms
EORI	Economic Operators' Registration and Identification System
EOS	Economic Operators Systems
EU	European Union
EUROFISC	Network between MSAs supporting administrative cooperation in the field of tax evasion and tax fraud
EWSE	Early Warning System for Excise
FAQ	Frequently Asked Questions
FAT	Factory Acceptance Test
FC	Framework Contract
FIN	Finance
FISCO	Fiscal Compliance Experts' Group
FITSDEV	Development contractor for Fiscalis1 systems
FITSDEV3	Development contractor for Fiscalis systems 3 (Replacing FITSDEV2)
FITS-TC	Fiscalis Technical Centre
FP	Fixed Price
FQP	Framework Quality Plan
FR	French
FS	Functional Specifications

[1] Covering Taxation and Excise

Acronyms and definitions	
Acronym	**Definition**
FTE	Full Time Equivalent
GANTT	A chart that depicts progress in relation to time
GLT	Glossary of Terms
GQI	Global Quality Indicator
GSP	Generalized Scheme of Preference
GTT	Generic Test Tool
GW	Gateway
HO	Hand-Over
HoS	Head of Sector
HoU	Head of Unit
HR	Human Resources
HTTP	HyperText Transfer Protocol
HTTPS	HyperText Transfer Protocol Secure
HW	Hardware
IA	Individual Acceptance
IA/DA	Implementing and Delegated Acts
ICS	Import Control System
ICT	Information & Communications Technology
ICT IM	ICT Infrastructure Management (ITIL process)
ID	Individual Delivery
ILIADe	Intra Laboratory Inventory of Analytical Determination
IP	Internet Protocol / Intellectual Property
IPR	Intellectual Property Rights
IPSec	Internet Protocol Security
IQM	Internal Quality Manual
IS	Information Systems
ISD	Infrastructure and Service Delivery sector
ISO/IEC	International Organisation for Standardization/
	International Electrotechnical Commission
ISPP	Information System for Processing Procedures
IT	Information Technology
ITIL	IT Infrastructure Library
ITOP	Weekly operational planning - Installation and Testing Operational Plan
ITSC	IT Steering Committee
ITSCM	ITSM Continuity Management
ITSM	IT Service Management
ITSM3	IT Service Management 3 (ITSM3 programme)
ITT	Invitation To Tender

Acronyms and definitions	
Acronym	**Definition**
IVR	Interactive Voice Response
IWP	Internal Working Procedures
JIT	Just In Time
J2EE	Java 2 Platform Enterprise Edition
KDB	Knowledge Database
KEL	Known Error List
KPI	Key Performance Indicator
LAN	Local Area Network
LCMS	Local CCN Mail Server
LDAP	Lightweight Directory Access Protocol
LISO	Information Security Officer
LSYA	Local System Administrator
MOM	Minutes of Meeting
MA	Mutual Agreement
MCC	Modernized Customs Code
MCP	Monthly Consolidated Plan
Mini1SS	Mini-One Stop Shop
MPLS	Multi-Protocol Label Switching
MO	Managed Object
MPR	Monthly Progress Report
MRN	Movement Reference Number
MS	Member State
MSA	Member State Administration
MSR	Monthly Service Report
MQ	Message Queue
MTTR	Mean Time To Repair
MVS	Movement Verification System
N.A.	Not Applicable
NA	National Administration
NCTS	New Computerised Transit System
NCTS Lot2	NCTS Service Desk
NCTS TIR	NCTS part dealing with transit declarations and movements of road transport (Transport International Routier)
NECA	National Export Control Application
NICA	National Import Control Application
NTA	National Transit Application
OD	On-demand services
ODL	Operational Document Library
OECD	Organisation for Economic Co-operation and Development

Acronyms and definitions	
Acronym	**Definition**
OGC	Office of Government Commerce
OIB	Office for infrastructure and logistics in Brussels
OIL	Office for infrastructure and logistics in Luxembourg
OJ	Official Journal
OLA	Operational Level Agreement
OLAF	Office De Lutte Anti-fraude / European Anti-Fraud Office
OPL	Official Price List
OR	On Request
OS	Operating System
OWASP	Open Web Application Security Project
PDA	Personal Digital Assistant
P&I	Products & Infrastructure
PERT	Programme evaluation and review technique. Also called "critical path method"
PIR	Post-Incident Report
PQP	Programme Quality Plan
PreCT	Pre-Conformance Test
PSAT (preSAT)	Pre Site Acceptance Test
PS	Project Support sector
QA	Quality Assurance
QC	Quality Control
QoD	Quality of Data
QoS	Quality of Service
QT	Qualification Tests
QTM	Quoted Time and Means
RDP	Remote Desktop Protocol
REX	Registered Exporters
RfA	Request for Action
RfC	Request for Change
RfE	Request for Estimation
RfI	Request for Information
RfO	Request for Offer
RfS	Request for Service
RIF	Risk Information Form
RSD	Release Scope Document
SA	Self-Assessment
SAN	Storage Area Network
SAT	Site Acceptance Testing
SB	Service Block

Acronyms and definitions	
Acronym	**Definition**
SC	Specific Contract
SD	Service Desk
SDLC	System Development Life-Cycle
SE	Service
SEAP	Single Electronic Access Point
SEC	Security
SEED	System for Exchange of Excise Data
SfA	Submit for Acceptance
SfR	Submit for Review
SIPSC	Service Improvement Project Steering Committee
SMT	Service Management Tool
SLA	Service Level Agreement
SLM	Service Level Management
SMM	Service Monthly Meetings per BT
SMS	Specimen Management System
SMT	Service Management Tool
SOA	Scope Of Activities / Service-Oriented Architecture
SPEED	Single Portal for Entry or Exit of Data
SPEEDNET	SPEED Network
SPOC	Single Point of Contact
SQI	Specific Quality Indicator
SRD	System Requirement Definition
SSH	Secure Shell
SSL	Secure Sockets Layer
SSTA	Standard SPEED Test Application
SSTP	Self-Service Testing Portal
SSTWP	Self-Service Testing Web Portal
STTA	Standard Transit Test Application
STEERCO	Steering Committee
SUG	Start Up Guide
SUPCO	Support of Customs Operations
SW	Software
SWOT	Strength, Weakness, Opportunity, Threat
TA	Test Application
T&S	Travel and Subsistence
TARIC	TARif Intégré Communautaire
TASMAN	Tool for Automated Supply management
TATAF	Tariff Applications Technical Architecture Framework
TAX	Taxation Trans-European Systems sector

Acronyms and definitions	
Acronym	**Definition**
DG TAXUD	Directorate-General for Taxation and Customs Union
TC	Technical Centre
TCO	Total cost of ownership
TEDB	Taxes in Europe Database
TEMPO	TAXUD Electronic Management of Projects Online
TES / T€S	Trans-European System
TESM	IT service management for the Trans-European Systems
TESTA-NG	Trans-European Services for Telematics between Administrations – New Generation
TIN	Tax Identification Number
TIP	Technical Infrastructure Plan
TIR	Transports Internationaux Routiers
TO	Take-Over
TOGAF	The Open Group of Architecture Framework
ToC	Terms of Collaboration
ToR	Terms of Reference
ToS	Taxation of Savings
TS	Technical Specifications
TSS	Cf. SPEED
TTA	Transit Test Application
UAM	User Access Management
UCC	Union Customs Code
UIPE	Uniform Instrument Permitting Enforcement
UNF	Uniform Notification Form
UPS	Uninterruptible Power Supply
USB	Universal Serial Bus
USS	User Satisfaction Survey
VAT	Value Added Tax
VIA	VIES Initial Application
VIES	VAT Information Exchange System
VoeS	VAT on e-Services
VoW	VIES-on-the-Web
VPN	Virtual Private Network
VREF	VAT Refund
VSS	VIES Statistical application
VTA	VIES Test Application
VPN	Virtual Private Network
WAN	Wide Area Network
WBS	Work-Breakdown Structure

Acronyms and definitions	
Acronym	**Definition**
WIKI	Collaborative Web site
WP	Work Package
WS	Workshop
X-DEV	Development contractors (FITSDEV/FITSDEV3, CUSTDEV2, CCN2-DEV)
XML	Extensible Markup Language

Table 1: List of Abbreviations and Acronyms

2. Applicable documents

Id	Reference	Title	Version	Date
[A1]	Call for Tenders-ITSM3-Operations	**ITSM3 Operations** - Call for Tenders – (all documents are available in the Baseline)	1.00	-
[A2]	-	**ITSM3 Integration** – Tendering Specifications	1.00	-
[A3]	-	**ITSM3 Integration** – Price Table – Annex 3 to the Tendering Specifications	1.00	-
[A4]	-	**ITSM3 Integration** – Questionnaire – Annex 1 to the Tendering Specifications	1.00	-

The documents listed below can be consulted from the Baseline.

Id	Reference	Title	Version	Date
[R1]	DG TAXUD Mission statement	R110_TAXUD_mission_statement_en 2009.pdf	1.00	23/10/2009
[R2]	DG TAXUD R5 Mission Statement (= current Unit A5)	R111_DG TAXUD Unit R5 - Mission Statement.pdf	1.00	23/02/2011
[R3]	DG TAXUD R4 Mission Statement (= current Unit C5)	R112_DG TAXUD Unit R4 - Mission Statement.pdf	1.00	23/02/2011
[R4]	IT systems and applications project fiches	IT systems and applications project fiches.zip		2015
[R5]	TATAFng Vision Document	CD3-TATAFNG-VD.pdf	1.00	24/02/2015
[R6]	TATAFng Project Strategy	CD3-SC03-DLV-028-10-47-1-TATAFNG-Project Strategy-SfA-v1.00.pdf	1.00	19/02/2015
[R7]	TATAFng requirements and proposed Solutions	CD3-SC03-DLV-028-4-47-1-TATAFNG-RPS-SfA-v1.00.pdf	1.00	19/02/2015
[R8]	Taxation/Excise Fiches	Taxation/Excise Fiches.zip		2015
[R9]	Release Management Plan	CCN2D-CRMP-SC03-Release Management Plan-20141211v1.00.zip	1.00	11/12/2014
[R10]	TEMPO Specific Contract Management – reference manual	TMP-REF-SCCTC-EN2.60	2.60	23/03/2011

2.1 References

Throughout this Call for Tenders package, references are made to:

ITIL: IT Infrastructure Library (ITIL) for the implementation of the IT Service Management Processes. Information about service management processes can be found in the formal publications of the Office of Government Commerce (OGC). References to ITIL are drawn from the publications of the OGC and from a set of complementary publications by itSMF such as the set of "pocket guides" and "IT Service Management based on ITIL: An introduction."

TEMPO: The DG TAXUD methodology to ensure the consistent and efficient management, set-up, development, operation and support of projects and service management for more information. The tendering parties are invited to access TEMPO at the following URL:

https://circabc.europa.eu/w/browse/397be292-a066-451d-8cf3-988f115f098d

With the following parameters to sign in:

User identifier:	**itsm3tempoguest**
Password:	**LmqFyn#3w6**
Domain:	**External**

ISO standards

The following ISO standards are referred as applicable in this Scope document:

- ISO 20000-2:2005 (IT Service Management Part 2 - Code of Practice)
- ISO 27001.2005 (IT Security Techniques – Information security management systems)
- ISO 27002:2005 (IT Security Management - Code of Practice for information security management)

The Baseline (BL): repository of DG TAXUD documents providing detailed specifications, descriptions and reports on DG TAXUD IT service activities of relevance for the contract. The Baseline is published on CircaBC as Annex 10 of the Tendering Specifications. The tendering parties are invited to access the Baseline at the following URL:

https://circabc.europa.eu/w/browse/efcfd0bb-6f2f-467a-88ac-fb08ec56ea3d

With the following parameters to sign in:

User identifier:	**itsm3integrbaseline**
Password:	**18&kYn135G**
Domain:	**External**

For the sake of full clarity, this Baseline of the **ITSM3 Integration** Call for Tenders also includes all the documents of the Call for Tenders **ITSM3 Operations,** including its baseline.

The **ITSM3 Integration** contractor needs to take into account that the Baseline reflects the situation applicable at the time of publication of the Call for Tenders and that it will evolve.

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

1. The **ITSM3 Integration** Call for Tenders (of which this document is part);
2. TEMPO;
3. International standard and best practices as ISO 20000-2:2005, ISO 27001.2005, ISO 27002.2005, ITIL;
4. All documents in the Call for Tenders Baseline.

The latest release of TEMPO is to be used by the **ITSM3 Integration** 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 the organisational structure at the time of writing the Call for Tenders. This structure may evolve.

3. Presentation of the Framework Contract

3.1 Introduction

The present Call for Tenders relates to the provision of IT service management support for DG TAXUD IT systems.

The core of the services is the integration of the technical, administrative and operational management. This involves the architecture, operations, asset, contract, security and project management aspects.

The main objective of the **ITSM3** contract is to ensure the coherence, the completeness and the efficiency of DG TAXUD IT services. The **ITSM3 Integration** contractor will therefore represent and defend the interest of DG TAXUD towards the service suppliers.

Secondary objectives are the provision of the following services:
1. project management support
2. benchmarking
3. consultancy on collaboration

The actual operational and technical services necessary to operate or implement the systems are outside the scope of this contract.

3.2 Overview of the ITSM contractual landscape of DG TAXUD

The IT Services to be provided by the **ITSM3** contractors for **Operations**, **TES support** and **Integration** are depicted in the following diagram:

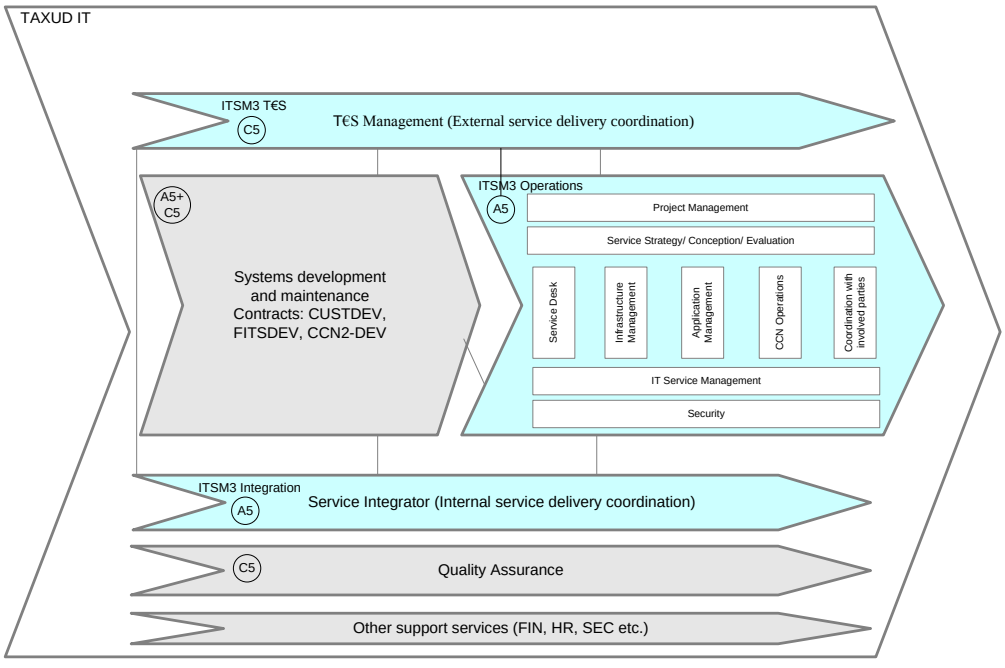

Figure 1: **ITSM3** Contracts Structure: **Operations**, **TES** and **Integration**

The different contracts are:

- **Operations:** IT Service Management 3 (**ITSM3**) **Operations**; covering applications management, operations, infrastructure and building infrastructure for both CCN and central applications. These activities are currently sourced from the ITSM2 Lot1 contract. In addition to the services depicted in the figure above, transition services such as Take-Over and Hand-Over and other supporting services, such as Service Management Tools development and maintenance, translations, organisation and provision of training and missions are foreseen. **ITSM3 Operations** is under the responsibility of unit **DG TAXUD/A5**.

- **TES support:** this contract will provide support services for the coordination of implementation of trans-European systems in Members States. These activities are currently sourced from the ITSM2 Lot2 contract. **ITSM3 TES support** is under the responsibility of unit **DG TAXUD/C5**.

- **Integration:** Operations integration and control including application architecture board, architecture choice, product choice, overall change management across different contracts, project support office, operations management support and benchmarking. These activities are currently sourced from the ITSM2 Lot3 contract. **ITSM3 Integration** is under the responsibility of unit **DG TAXUD/A5**. This is the object of the present Call for Tenders.

3.3 Collaboration with DG TAXUD and the other ITSM3 contractors (Operations, TES)

ITSM3 Integration seeks to establish professional and trustworthy relationships with DG TAXUD internal stakeholders and with the other contractors involved in the service provision for DG TAXUD. Primary communication channels are identified, and the **ITSM3 Integration** Project Manager is the SPOC for all **ITSM3 Integration** services related communications. As more direct contacts are needed to work efficiently in day-to-day activities, secondary supporting communication channels also exist.

3.4 Objectives of the ITSM3 Integration service framework

The objective of **ITSM3 Integration** contract is to support and assist DG TAXUD in its coordination and management tasks related to the **IT service management of DG TAXUD**. **ITSM3 Integration** acts as an independent, external advisor to DG TAXUD, whereas the final decision-making resides within DG TAXUD.

ITSM3 Integration provides value by challenging, investigating and integrating. Its contribution increases the quality and the coherence of the ITSM programme delivery of DG TAXUD.

ITSM3 Integration represents and defends the interest of DG TAXUD towards the service suppliers. **ITSM3 Integration** takes responsibility for the completeness, coherency and the economic and technical soundness of DG TAXUD IT service management initiatives.

ITSM3 Integration provides internal integration and support in various domains such as architecture, specific technologies, operational aspects of IT service delivery, benchmarking, programme planning and coordination. The support of **ITSM3 Integration** encompasses the security aspects in all domains: architecture, service management and service delivery.

ITSM3 Integration does not replace nor overlap with the activities and services provided by the other DG TAXUD contractors. For instance, the **ITSM3 Operations** contractor is unambiguously responsible for the operational security. The CUSTDEV3 contractor is responsible for the secure development. The Quality Assurance contractor is in charge of the security auditing. The role of the **ITSM3 Integration** is to ensure these various actors are synchronised around a common vision and perform adequately. The same applies to asset management, project management and technology advice.

3.5 Global planning

The maximum duration of the Framework Contract is 4 years with 4 possible extensions of one year each. During this period the **ITSM3 Integration** will be taken over, tested, developed, operated, improved and finally handed over to a third party (other contractor or to DG TAXUD).

The Take-Over phase partly coincides with the Hand-Over of **ITSM2 Lot1** to **ITSM3 Operations** contractors. This parallel Hand-Over/Take-Over phases form a challenge that should be carefully taken into account in the planning and starting up of the service.

4. Background information

In this chapter are listed the main activities of DG TAXUD in the area of IT.

4.1 IT activities of DG TAXUD

4.1.1 IT in support to policy

DG TAXUD co-ordinates and manages a set of operational activities relying on IT systems in support of the EU policies for customs, taxation and excise duties (cf. the mission statements in the Baseline [R1], [R2] & [R3]). Actually, this comprises direct and indirect taxation, tariff strategy, eCustoms, the Union Customs Code (UCC), risk management, safety and security, the fight against counterfeited goods, as well as international policy objectives.

4.1.1.1 Union Customs Code (UCC)

The Union Customs Code provided the legal basis for the completion of the computerisation of customs. The UCC was adopted on 09/10/2013 as Regulation (EU) No 952/2013[2] of the European Parliament and of the Council. The adoption of the new legal provisions accelerated and supported the activities of Member States and the Commission as from 2014.

In order to support the development of the electronic systems, Commission Implementing Decision[3] of 29/04/2014 establishing the Work Programme for the Union Customs Code (UCC WP) was adopted. The UCC WP provides high level descriptions of the projects known as the "UCC Projects and related Electronic Systems". The content of the UCC WP is closely linked to the Multi-Annual Strategic Plan (MASP), which is a management and planning tool drawn up by the European Commission in partnership with Member States, as referred in Article 8(2) of the e-Customs Decision.

[2] Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code; *OJ L 269, 10.10.2013, p. 1-101* *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:269:0001:0101:EN:PDF*

[3] 2014/255/EU: Commission Implementing Decision of 29 April 2014 establishing the Work Programme for the Union Customs Code; *OJ L 134, 7.5.2014, p. 46-53* *http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014D0255*

4.1.1.2 e-Customs Decision

A Communication[4] from the Commission, which followed on from the Council Resolution[5] on the simplification of customs procedures, as well as the Commission Communication[6] on a strategy for the Customs Union and the related Council Resolution[7], proposed to make procedures and controls more efficient by simplifying Customs legislation and making better use of electronic tools in customs procedures.

4.1.2 CUSTOMS and FISCALIS Programmes

DG TAXUD IT systems have a legal basis[8] and receive budgetary support from EU programmes, currently **Customs 2020** and **Fiscalis 2020** for which they represent a significant part (more than 80%) of the expenditure.

4.1.2.1 CUSTOMS 2020 Programme

The **Customs 2020 Programme**[9] offers Member States a Union framework to develop, facilitate and enhance co-operation between Customs Authorities, which is more cost-efficient and effective than if each Member State were to set up individual co-operation frameworks on a bi-lateral or multi-lateral basis. The IT capacity building aspect of the Programme covers the development, maintenance, operation and quality control of Union components of the European Information Systems set out in Section A of Annex II of the Customs 2020 Regulation and new European Information Systems established under Union law.

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[4] Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee – A simple and paperless environment for Customs and Trade */COM/2003/0452 final/* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0452:FIN:EN:PDF

[5] Council Resolution of 25 October 1996 on the simplification and rationalization of the Community's customs regulations and procedures; *OJ C 332, 7.11.1996, p.1-2* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31996Y1107%2801%29

[6] Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee concerning a strategy for the Customs Union */* COM/2001/0051 final */* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52001DC0051

[7] Council Resolution of 30 May 2001 on a strategy for the Customs Union; *OJ C 171, 15.6.2001, p. 1-3* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2001.171.01.0001.01.ENG

[8] For example in 2008 important legal acts for IT systems were the so-called "VAT package", the Modernized Customs Code and the eCustoms decision on a paperless environment for customs and trade. http://europa.eu/rapid/press-release_IP-08-208_en.htm?locale=en

[9] REGULATION (EU) No 1294/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 establishing an action programme for customs in the European Union for the period 2014-2020 (Customs 2020) and repealing Decision No 624/2007/EC http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0209:0220:EN:PDF

4.1.2.2 FISCALIS 2020 Programme

The **Fiscalis 2020 Programme**[10] offers Member States a Union framework to develop, facilitate and enhance co-operation between tax authorities, which is more cost-efficient and effective than if each Member State were to set up individual co-operation frameworks on a bi-lateral or multi-lateral basis. The European Information Systems building aspect of the Programme covers the development, maintenance, operation and quality control of Union components of the European Information Systems set out in point A of the Annex of the Fiscalis 2020 and new European Information Systems established under Union law, with a view to interconnecting tax authorities efficiently.

4.1.3 IT systems

DG TAXUD's IT systems are a **unique instrument** to sustain the **continuity of operation of a broad range of customs and taxation procedures** within the EU.

The main objectives of the IT systems are to:

- Support the **uniform management of the Customs Union** and to maintain the fluidity of the **flow of goods at the border** of the EU through the availability of customs trans-European systems (**TES**), such as the New Computerised Transit System (NCTS), the Export Control System (ECS) and the Import Control System (ICS). Any unavailability of these systems would have an immediate and highly-visible adverse impact on the economic activity of the EU; such as lorry queues at the borders and ports, loss of containers, expiry of perishable goods, distortion in the application of legislation, increased risk of fraud and loss in revenue collection, etc.

- Contribute to the **fight against fraud:**
  - **In the area of customs:** DG TAXUD's IT systems support the sharing of risk profiles amongst Member States and feed the European Anti-fraud Office (OLAF) with information on sensitive consignments;
  - **In the area of taxation:** IT systems also allow for a rapid exchange of secure information and thus for the efficient fight against different types of tax fraud. This is the case in the areas of:

[10] REGULATION (EU) No 1286/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 establishing an action programme to improve the operation of taxation systems in the European Union for the period 2014-2020 (Fiscalis 2020) and repealing Decision No 1482/2007/EC *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0025:0032:EN:PDF*

- VIES: information in the field of VAT;
- Taxation on Savings: information about savings income in the form of interest payments;
- DAC1 : information in the following categories:
  - income from employment;
  - director's fees;
  - life insurance products not covered by other Union legal instruments on exchange of information and other similar measures;
  - pensions;
  - ownership of and income from immovable property.
- DAC2: information about some categories of revenue that a beneficial owner who is a natural person received in a Member States in which (s)he is not resident;
- DAC3: information about advance cross-border rulings and advance pricing arrangements;
- administrative co-operation and mutual assistance;
- better control movement of excise goods across the EU.

- **Facilitate** the handling of tax and customs procedures **for citizens and Economic Operators** by enabling the **refund of VAT** from a Member State (in which an Economic Operator is not established) and **through the publication of** the most relevant information (including customs tariff, balances of tariff quotas, VAT number identification), contained in the IT systems, on the Commission's Europa website.

Some Economic Operators have integrated the availability of the information from DG TAXUD systems in their daily processes. Therefore, they rely heavily on these services. The success of these services is constantly increasing.

Most of the IT systems of DG TAXUD are trans-European systems spanning all Member States of the EU. The users are the National Administrations, the traders' communities and the Commission Services. Other IT systems include systems to manage reference data, test and monitoring applications, and dissemination applications to the wide public (e.g. via the Europa website).

A trans-European system (TES) performs specific business functions in customs or taxation as defined in or in support of Union policies. A trans-European system is a **collection of collaborating systems (orchestrated and choreographed) with responsibilities distributed across the National Administrations and the Commission**. It includes processes, applications, services and infrastructure.

A trans-European system (**TES**) is characterized by:

- Exchanges of information between the National Administrations at EU level (NA<->NA); in this case, the system forms a set of interoperable business systems implemented and operated by the National Administrations, under the overall co-ordination of DG TAXUD; the National Administrations are meant to integrate into their own national systems the business processes agreed at EU level; it is referred to as a distributed **TES**;

- And/or exchanges of information between National Administration and the Commission (NA<->EC); in this case, the system is operated by DG TAXUD; it is referred to as a centralized **TES**.

Exchanges take place on a secured Common Communications Network (CCN), according to agreed protocols and data formats.

The development of a TES constitutes a major project to be run over several years, the full description of which is available from the TEMPO Trans-European Systems (**TES**) reference manual. An extract from this documentation is provided here below to introduce the notion of the lifecycle and the respective phases of the trans-European system's development project.

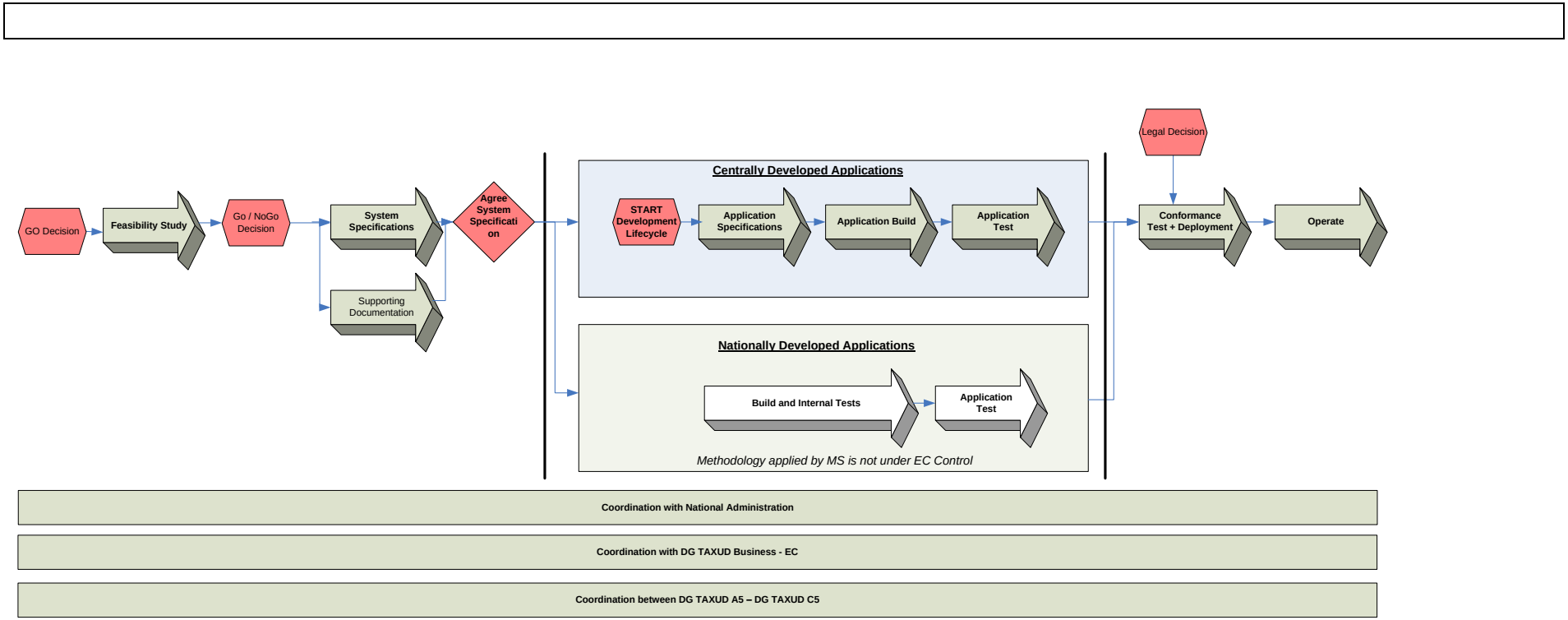

Figure 2: Trans-European System Development Lifecycle

 The tenderer should note that the System Development Life-Cycle is under revision at DG TAXUD in order to adapt to the new architecture and technologies required by the IT Strategy and implemented within the on-going projects (CCN2, CDMS, REX, etc.). A description of the foreseen evolutions is provided in section 4.1.5.15

As examples of some IT systems, one can mention:

- **In the field of taxation**: the *VIES network* enables the tax administrations to verify trader's VAT identification numbers and statements of their intra-EU turnover, *the VAT on e-Services System* provides for the management of the VAT revenues in connection with services provided on the Internet by non-EU traders, the *VAT Refund System* enables traders to obtain the refund of VAT from a Member State in which they are not established, the *DAC2 system* enables Member States to exchange information on some categories of revenues paid to individuals resident in other Member States;

- **In the field of customs**: the *Quota System* enables to publish the tariff quotas and tariff ceiling to the trader community, the *New Computerised Transit System (NCTS)* enables the customs offices to automatically track and control the movements of goods in transit throughout the EU, the *Export Control System (ECS)* provides full control on the conclusion of export operations in particular when different Member States are involved, the *Import Control System (ICS)* is devoted to the import operations, the *Surveillance System (SURV)* complements the other customs systems and contributes to the fight against fraud by enabling the surveillance of the movement of goods inside and outside the EU;

- **In the field of excise**: *Excise Movement and Control System (EMCS)* allows for the control of movements of products falling under suspension arrangement of excise duties.

Overall in 2015, the IT activities generated around 3.2 Billion of exchanges of information between the Member States and the Commission amounting for more than 4.3 Terabytes of information. This information exchange grew by 10 times over the last 5 years and has an annual growth factor of approximately 20% (2015 compared to 2014).

DG TAXUD also makes available, through the Commission's Europa website, a wide range of information and services to the citizens and to the traders in order to enable them to consult measures relating to tariff, commercial and agricultural legislation, tariff quotas, to query authorized Economic Operators, to consult the list of transit customs offices, to validate VAT numbers, to consult the main taxes in force in the EU Member States or to query excise numbers.

In the context of customs international activities, an innovative electronic connection was launched with Russia in 2009 to allow for secure data exchange of TIR movement data with a view to addressing lorry congestion at the EU-Russia border. The success of this system led to the development of the more modern SPEED2 platform that ensures the secure data

exchange with Third Countries. The TIR-Russia system in SPEED shall be migrated in 2016 to the SPEED2 platform, where other systems are already running (e.g. Single Window (EU SW-CVED), MRA China) or will be deployed in the coming months (e.g. FATCA Pilot, MRA with other countries systems).

All these activities rely on secure and reliable communication between the Member States and with the Commission (CCN/CCN2 - read below item 4.1.3.2).

4.1.3.1 Multi-Annual Strategic Plan (MASP)[11]

An important evolution is on-going at DG TAXUD IT systems which is conducted in the context of the Multi-Annual Strategic Plan (MASP) in implementation of the UCC and e-Customs initiative regulations. The main principles of the IT Strategy as defined in the MASP will lead to important changes in the future systems:

- **Service-Oriented Architecture (SOA)**

The future IT systems shall be designed and implemented using a service-oriented architecture that favours the emergence of flexible, modular, easy to change IT systems that benefit from the re-use of existing functionality in different Member States or in the Commission (as advocated by the European Interoperability Framework[12]).

The adoption of the service-oriented architecture leads to the evolution of DG TAXUD application architecture framework, from the current Tariff Applications Technical Applications Framework (TATAF) to a new generation (TATAFng). TATAFng is applied to all new customs IT projects. More information on TATAFng and on the new IT systems being developed can be found at section 4.1.5.14.

- **CCN/CCN2 (see below item 4.1.3.2)**
- **Central EIS (European Information Systems)**

Where appropriate, in view of reducing the total cost of ownership (TCO), EIS could be centrally-implemented, subject to a positive business case.

In order to achieve this objective, DG TAXUD has started creating a high availability IT infrastructure that offers appropriate service levels.

This drives the need for designing modular systems that, using the service-oriented architecture capability, allow to plug the related functionality into national systems while simultaneously foreseeing specific interfaces for Member States that wish to develop their IT system in full. In comparison to a single central functionality, the design and implementation

[11] http://ec.europa.eu/taxation_customs/customs/policy_issues/electronic_customs_initiative/index_en.htm

[12] The European Interoperability Framework (EIF) is a governance framework about public service interoperability between the different stakeholders being Businesses/Citizens/National Administrations/EU institutions.

of this hybrid architecture by the Commission is more complex and time-consuming, and it is less agile in addressing change.

Evolution towards the SOA paradigm together with higher availability requirements resulting by the centralization of trans-European systems has made necessary to review the system development life-cycle (**SDLC**). The actions taken on this context are described in section 4.1.5.15.

- **Collaboration**

Collaboration between willing customs administrations in the design and (possible) implementation of future systems shall be favoured in order to avoid repetition and to reduce redundancy of effort as well as the total cost of ownership (TCO) in the European Union. Collaboration does not necessarily create identical systems, and the creation of a single Customs system is not under consideration.

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

Future systems should offer a single access point for trade, reducing the number of connections to the Customs Union from 28 to 1. Trade costs could be reduced significantly. Moreover, such interface could also be hosted at the Commission.

This principle is under implementation through the Uniform User Management & Digital Signature (**UUM&DS**) project. Aiming at providing an external unified user management, the UUM&DS project will remove the burden of managing a great number of applications and users from DG TAXUD's shoulders. It will federate the national Identity and Access Management (IAM) systems and integrate them via the support of TATAFng.

Projects listed in the MASP are categorised according to the following four groups:

- Group 1: Customs European Information Systems

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

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

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

- Group 3: Customs International Information Systems

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

- Group 4: Customs Co-operation initiatives and technological developments to facilitate Customs EIS

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

The table below summarises the projects foreseen within the Multi-Annual Strategic Plan (MASP).

MASP Projects	Target date of deployment	S1 2017	S2 2017	S1 2018	S2 2018	S1 2019	S2 2019	S1 2020	S2 2020
1.2 UCC Customs Decisions	02/10/2017								
1.3. UCC Proof of Union Status (PoUS)	02/10/2017								
1.4 UCC Binding Tariff Information System (BTI) Update Phase 1	01/03/2017								
Phase 2	01/10/2018								
1.5 UCC AEO updates	01/03/2018								
1.6 UCC Automated Export System (AES)	01/03/2019								
1.7 UCC New Computerised Transit System (NCTS) update	01/10/2018								
1.11 UCC Registered Exporter System (REX)	01/01/2017								
1.12 COPIS Phase 1	03/10/2016								
Phase 2	01/10/2020								
2.1 UCC Notification of arrival, presentation notification and temporary storage	02/03/2020								
2.5 UCC Guarantee Management	02/03/2020								
2.6 UCC Special Procedures	01/10/2019								
2.6 UCC Information Sheets (INF) for Special Procedures	01/10/2019								
2.7 UCC Surveillance 3	02/10/2018								

MASP Projects	Target date of deployment	S1 2017	S2 2017	S1 2018	S2 2018	S1 2019	S2 2019	S1 2020	S2 2020
2.8 UCC Safety and Security and Risk Management	TBD								
2.9 UCC Classification (CLASS)	01/10/2018								
2.10 Adjustments of the existing import applications under the UCC	01/10/2020								
3.2 EU Implementation of the eATA Carnet Project	01/03/2019								
4.3 Master Data Consolidation	01/10/2019								
4.5 CCN2	01/10/2017								
4.6 Direct trader access to European Information Systems (Uniform user management & digital signature)	02/10/2017								

Table 2: MASP planning (source: UCC WP)

4.1.3.2 CCN/CCN2

All these activities rely on secure and reliable communications between the Member States and with the Commission. This is realized thanks to a private interoperability infrastructure, the Common Communications Network (**CCN**) that DG TAXUD has developed and operated for more than 15 years across the EU and which transports and exchanges a massive amount of messages and information.

In particular, in the context of EU enlargement, connecting the candidate countries to the network is one of the first IT activities to be started well before the target enlargement date.

CCN, given its central role, is an important component of the whole IT architecture to ensure the security, availability and continuity of the IT services. It has evolved over the years in the biggest interoperability system linking the Commission and Member States, in terms of number of application data exchanges, and probably among the largest administrative networks worldwide.

A new generation of CCN (called CCN2) is being implemented as the interoperability infrastructure that enables the implementation and operation of the new service-oriented architecture. By adopting CCN2, DG TAXUD creates an interoperability infrastructure which offers location-independent access to services as well as services that are backward-compatible with existing customs IT systems.

Domain	CI	Development & Maintenance	CI type
CCN2	CCN2 Platform	CCN2-DEV	Platform CI
CCN2	CCN2 Reference Applications and Test tools	CCN2-DEV	Platform CI

Table 3: CCN2 components and CI type

More information on the CCN2 related CIs can be found in the **ITSM3 Integration** Baseline (*02. ITSM3 Operations Documents / 03. ITSM3 Operations Terms of Reference, section 4.6.2.2 page 163*).

4.1.3.3 Datacentres

The DG TAXUD Datacentres' baseline architecture was designed according to the following requirements:

- The capabilities of DG TAXUD's twin Datacentres need to be fully leveraged, resulting in increased application availability and improved business continuity;
- Datacentre consolidation: the architecture needs to be flexible and should offer a common/shared infrastructure for hosting applications from different DG TAXUD silos (ITSM applications, CCN/OPS applications, selective applications that are currently hosted by DIGIT, etc.). Furthermore, the architecture should also enable the hosting of environments for DG TAXUD partners, like CUSTDEV, CCN2-DEV;
- The solution has to comply with DG TAXUD's security requirements;
- The architecture should offer the foundation for future evolutions. This includes the introduction of techniques used in cloud-based Datacentres (automated provisioning, catalogue based services …);
- Input to the design are following overarching guiding principles:
    - The target for application availability is 99,80 %;
    - The Recovery Point Objective (RPO) is "near-zero data loss";
    - The Recovery Time Objective (RTO) is 4 to 24 hours depending on applications criticality.

Infrastructure design principles are:

- All tenants and security zones share a common design;
- To each external network (Internet, MPLS networks like CCN etc.) the Datacentre Network provides edge infrastructure (edge firewall, edge switches). The edge is identically designed for each of the external networks;
- One IP subnet per VLAN;

- Servers have their management and data path on several physical and/or virtual interfaces;
- The two Datacentres are distinct L3 domains. The provider advertises the public IP range(s) from the currently active DC. In case of DC failover, the provider will advertise them from the newly active DC. When the provider's access facilities would fail in the currently active DC, the public IP ranges will be advertised from the 'dormant' DC, while DG TAXUD's inter-DC routing keeps these public IP addresses reachable;
- Upon unavailability of one Datacentre, it is possible to selectively free-up computing resources in the other Datacentre, to recover workloads from the failing Datacentre. Running in disaster/recovery mode is accepted at lower performance;
- Storage can be distributed over the rows in the DC for scalability reasons;
- Servers are generic and polyvalent and obtain their personality by booting a specific image from the Storage Area Network (SAN);
- Wide Area Network (WAN) connectivity is able to failover from one Datacentre to the other, regardless the failover capabilities of the overlaying services;
- The target end-to-end oversubscription ratio for the storage network will be at maximum 8:1.

Security design principles are:

- The external access to infrastructure, consoles and operating system (OS) requires a site-site (s2s) IPsec VPN tunnel and the signing of a security convention. A client-site (c2s) VPN is allowed as out-of-band connection only;
- Only privileged users have access to the secured zone and its VLANs (admin, management VLANs);
- Privileged users require strong authentication;
- Non-privileged support users follow regular access to applications via data path;
- 'Strength' of authentication is determined by the DG TAXUD User Access Policy;
- Trust boundary for teleworkers is shifted to the third party they belong to.

More information about the evolution of Datacentres at DG TAXUD can be found in the **ITSM3 Integration** Baseline (*02. ITSM3 Operations Documents / 03. ITSM3 Operations Terms of Reference, section 4.5.2 page 146*).

4.1.3.4 DIGIT Infrastructure services

DG TAXUD makes extensive use of DG DIGIT infrastructure services. In fact, the majority of DG TAXUD central critical applications are hosted in DIGIT Datacentres. The intention is actually to gradually move most of these applications to the DG TAXUD DCs.

DG DIGIT offers a complete set of services (Service Catalogue); the corresponding Infrastructure services used by DG TAXUD are summarized below.

The **Application Housing service** is intended for Customers that need to run an application which is not available through IS Hosting services. By using this service, Customers receive a datacentre quality platform up to the Operating System (OS) level, compliant with DIGIT rules and standards, which enable them to install, run and maintain their application.

Network Infrastructure services are also used by DG TAXUD. In this context, it is important to note that all network flows to and from DG DIGIT are governed by Security Conventions that should be maintained and updated in case of connectivity changes.

4.1.3.5 Aris

The Specifications phases of any DG TAXUD project create the foundation documents to be used throughout the development. The ARIS Business Process Management (BPM) tool provides features for modelling specifications items and cartography of IT systems. It also generates outputs in standard interoperable formats, which facilitates the collaboration with National Administrations of the Member States.

The total amount of models increases every year, reaching 12000 at the beginning of 2015. A little less than 100 users are modelling with ARIS, and 900 are reviewing the ARIS models (main group being the Member States users).

4.1.3.6 Synergia

Synergia Service Manager (SM) is the DG TAXUD IT Service Management tool to support IT operations. It allows interchange of operational information and assignment of operational tasks related to the DG TAXUD systems, applications and environments that are in the scope of the ITSM3 Framework Contract. Synergia is used by DG TAXUD as well as by the IT support teams of the various DG TAXUD subcontractors and of the other stakeholders (National Administrations). Synergia SM has been in production since June 2011. It includes a Service Management Tool (SMT) based on HP Service Manager, an ITSM Portal to interface with the Member States National Administrations, SAP Business Objects (BO) as the reporting tool, a User Management Tool (UMT) and LDAP for user and access rights management. More detailed information can be found in the **ITSM3 Integration** Baseline (*02. ITSM3 Operations Documents / 03. ITSM3 Operations Terms of Reference, section 4.3.1.3 page 123*).

4.1.4 IT Governance

The management of trans-European IT projects involves different levels of governance, implying the Commission and the National Administrations.

- DG TAXUD is **assisted by Comitology committees**, such as the Customs 2020, Fiscalis 2020 committees, and the Standing Committee on Administrative Co-operation. Each of these groups is supported by a sub-committee dedicated to IT matters. Each IT sub-committee meets several times a year under DG TAXUD's chairmanship with the participation of heads of IT from National Administrations.

- **Working groups** with the National Administrations to deal with technical-related project matters that meet with a frequency from monthly to quarterly according to the pace of development. Each TES and IT service from the Commission are overseen by such a working group (e.g. Electronic Customs Co-ordination Group, Customs Business Group, Customs EIS Operations Group, IT Systems Development Group, IT Technology and Infrastructure Group, etc.).

- DG TAXUD also needs to ensure that any decision on IT matters is taken in full understanding of the context, challenges, impact and associated risks. For this reason, DG TAXUD applies internal strong IT governance. All the IT systems are managed under the supervision of an **IT Steering Committee**, chaired by the Director General and composed of the board of Directors, the head of the financial and human resource unit, the head of the Programme Management Unit, and the heads of DG TAXUD IT units. The IT Steering Committee meets regularly (quarterly on average) and takes decisions on IT working plans, priorities and resource allocation upon submission of proposals from the IT units.

4.1.5 New Customs systems

The implementation of the UCC takes place through the Multi-Annual Strategic Plan, the MASP. In IT terms, the MASP takes the form of a multi-project strategic plan of unprecedented complexity in the history of DG TAXUD. The different implementation projects are interdependent and, in addition, the planned time allowed for implementation is very tight.
The complexity of this challenge is increased by the fact that the resulting systems are a combination of centrally developed, centrally operated systems and national developments.

As a result the MASP projects require a very significant amount of coordination at all levels – internally in DG TAXUD, across developers, within the support organisations etc. Of particular importance is the integration of different components within a project, of different projects, and of central and national interacting systems. All these elements need to be certified to work together impeccably to deploy and operate the MASP systems.

4.1.5.1 UCC Customs Decisions (MASP 1.2)

Three different IT sub-projects have been identified:

- Trader Portal (TP) sub-project

- Customs Decisions Management System (CDMS) sub-project

- Customer Reference Services (CRS) sub-project

Initially a purely centralized architecture was proposed for all the functions of the system with only the resulting data to be replicated to the MS for local use. Some MS indicated that they wished to proceed with national developments because they needed to provide their traders with a single IT system for all decisions taken by the administration, extending the Customs decisions to other areas, such as Excise. Most Member States indicated a preference for a

hybrid solution which would support both MS wanting their own developments and those wanting to rely on a common EU solution. In accordance with the hybrid approach, the Customs Decisions project considers both Common Domain and Common Domain solutions for Economic Operators and customs officers as depicted in the picture below. Final Customs authorisations will be available through the CRS.

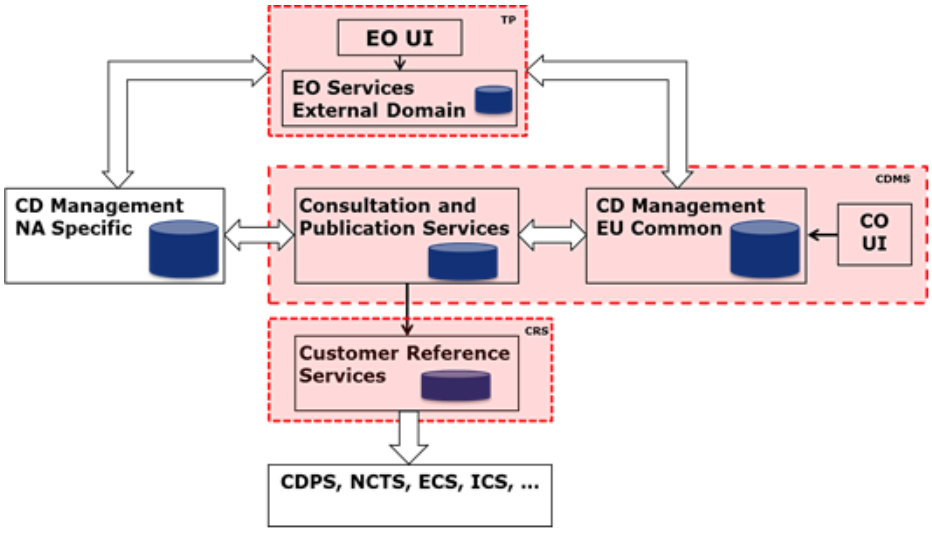

Figure 3: Hybrid Approach – Interactions

The central IT system will allow MS who have no national systems to consolidate all Customs Decisions applications and authorisations in an electronic format and through publication in CRS make them available to all involved MS. MS that implement national systems can also publish information related to decisions processed in their national systems and must do so for all Customs Decisions involving more than one MS. The SOA approach will be followed for centrally developed systems. The SOA approach is not mandatory for MS, although the interaction of the MS systems with the central system will be through services.

The Customs Decisions sub-projects are summarized below:

- The **Trader Portal (TP) sub-project** develops an EU Common access point. It will define a harmonized user interface for traders' interactions with Customs Authorities.

  The objective of the Trader Portal sub-project is to develop a portal that allows users to:

  - draft and submit applications to the appropriate Customs Authorities
  - manage applications and responses to requests by the Customs Authorities
  - view and print applications and authorisations

  Identification, authentication and authorisation of users will be done through the Uniform User Management developed by the UUM&DS Project.

- The **Customs Decisions Management System sub-project** develops a system for the creation and management of Customs Decisions.

  According to the EU Customs Business Process Modelling Policy, the UCC Customs Decisions Business Processes have been mapped to a four level Business Process model with the fourth level (L4) also specifying the required functional and non-functional elements of the system.

  The objective of the CDMS project is to:

  - make these L4 processes "executable" in the centrally developed system
  - provide a user interface for customs officers using the centrally developed system
  - provide a system-to-system data service to allow MS using the centrally developed system to retrieve data from their CDMS
  - ensure the smooth interaction i.e. consultation with MS Customs Decisions systems for decisions impacting more than one MS
  - consolidate Customs Decisions data for publication through CRS

- The **Customs Reference Services (CRS) sub-project** develops a system providing a consistent view of customer data in the context of Customs.

  The objective of the CRS sub-project is to develop a system to:

  - make information available by acting as a layer between systems generating and managing information (e.g. EOS, REX, CDMS) and systems consuming information (e.g. CDPS, NCTS, ECS, ICS)
  - consolidate all data that is relevant to constitute a full picture of a 'Customer' from the Customs point of view:
    - core details on the customer e.g. name, address, and VAT
    - additional information regarding a customer's attributes e.g. authorisations and guarantees
  - provide data replication services.

4.1.5.2 UCC Proof of Union Status (MASP 1.3)

The PoUS system aims at the implementation of a new business process related to the issuing and presentation of the T2L/T2LF document replacing its paper form by electronic means. Automation of these business processes includes the setup of an EIS for the exchange of data between Customs Authorities across MS. The EIS is essentially a system to be developed and maintained to store and retrieve the PoUS document with the following considerations:

- Availability of PoUS data between Customs Authorities, across MS. This allows relevant Customs Authorities to consult PoUS data. MS will need to access the information data from the EIS at the customs office where the goods are presented (Presentation office);

- Reduction of paper-based transactions: a Master Reference Number will be made available. Therefore, the trader at the Presentation office does not have to provide all PoUS data, but just the Master Reference Number across MS.
- Streamlining of processes around management of PoUS: The PoUS data will be highly available and immediate access to this data will be widely and easily possible across MS by means of an indication of Master Reference Number.

An additional functionality of the system will be implemented in order to provide the possibility for traders to submit the PoUS data via an EU harmonized trader interface. This functionality is under discussion and pending agreement in the context of the business case.

4.1.5.3 UCC BTI (MASP 1.4)

While the BTI is currently binding only for the Customs Authorities, it will also become binding for the holder under the Union Customs Code (UCC). As a result, BTI holders will be obliged to include the BTI reference in their customs declaration and the Customs Authorities will have to control this obligation.

In addition, the Court of Auditors requested to control the BTI usage in the context of its Special Report No 2/2008 concerning BTI. This BTI usage control will be performed based on the declaration data on the one hand and the BTI data on the other. It will therefore require modifications to both the existing Surveillance2 system (declaration data) and to the existing EBTI-3 system (BTI data).

The UCC will also require further BTI changes:

- use and validation of the EORI number to identify the BTI holder;
- alignment of the EBTI-3 system to the UCC requirements such as the standard process for Customs Decisions as will be defined in the UCC IA/DA;
- possibility for traders to submit the BTI application and receive the BTI decision electronically via an EU harmonized trader interface.

The implementation of the UCC requirements for BTI will be split into 2 phases, due to the dependency on other projects.

Phase 1 will focus on BTI usage control and alignment of the EBTI-3 system to the standard process for Customs Decisions as will be defined in the UCC IA/DA.

This phase will therefore require modifications to the existing EBTI-3 and Surveillance2 central systems, as well as to the existing interfaces of these systems with the Member States. The Member States will send all relevant data elements from the declaration to Surveillance2 where they will be stored centrally. Processing will occur on a sub-set of those data elements determined by BTI priority needs.

In phase 2 some additional functionality will be implemented:

- More data analysis possibilities as processing will occur on all (52) surveillance data elements as determined by all BTI needs and other Commission stakeholders' needs;

- Traders will have the possibility to submit their BTI applications and receive the BTI decisions electronically via an EU harmonized trader interface.

Information System Perspective:

The UCC BTI project consists of the modification and evolution of 2 existing systems, EBTI-3 and Surveillance2. The existing links of both EBTI-3 and Surveillance2 with the TARIC3 system for validation of reference data remain applicable. Additionally both systems will use the EOS-EORI system for the validation of the EORI number identifying the Economic Operator, holder of the BTI. The existing links of both EBTI-3 and Surveillance2 with DDS for publication remain applicable.

DG TAXUD Units A3 and A4 are the systems and business owners of this application.

UCC BTI Phase 1 is expected to become operational on 01/03/2017.

4.1.5.4 UCC AEO and impacts on MRA (MASP 1.5)

EOS-AEO is an existing and operational system. Changes or improvements are required to come either from internal EU legislation or from international (MR) agreements.

The project "AEO Mutual Recognition (AEO MR) adaptations prior to UCC implementation" (MASP 2013 Rev. 12) has been successfully completed in 2013 with the development and deployment of a standard interface for AEO data exchange with partner countries, the update of the EOS system-to-system interface to allow the AEO data received from partner countries to be disseminated to the EU MS, as well as the validation of the partner countries' AEO status in the EU transaction systems, based on the adopted user requirements (doc. AEO data exchange with partner countries).

Any further IT implementation of new international agreements regarding the AEO MR does not require national development and has no impact on the EOS CDCO Application.

However, with every new partner country (e.g. China, Japan, Canada, New Zealand, Norway), some additional development is expected and the **ITSM3 Operations** contractor needs to perform and monitor internal testing and more importantly conformance testing with the partner country (see above).

4.1.5.5 UCC Automated Export System (AES) (MASP 1.6)

Currently, the Export and Exit formalities including the safety and security features are covered by the functionality of the Export Control System Phase 2 (ECSP2) as described in the Community Customs Code (CCC) and its Implementing Provisions.

However, the current CCC and its Implementing Provisions are to be replaced by the Union Customs Code (UCC) and its Implementing and Delegated Acts (IA/DA) aiming at improving and simplifying Customs business through more efficient Customs transactions and by automating the completion of the Export procedures and Exit formalities covering the common, national and external domains.

One part of the UCC requirements has already been fulfilled and has been implemented by ECSP2, the current Export procedures and Exit formalities, while the other part introduces new processes, new data elements, changes to the existing processes and changes to existing data elements.

The upgraded system that fulfils and meets the UCC requirements as a whole will be the Automated Export System (AES) constituting an evolution of the currently operating ECSP2. The current ECSP2 already covers the handling of export movements and exit summary declarations, and enables electronic lodgement of the declarations, but, in order to be aligned to the new UCC requirements, it needs to be further developed to become the full AES that will have all required functionalities and cover the necessary interfaces to the supporting systems.

So, the Automated Export System (AES) - being an evolution of the currently operating Export Control System Phase 2 (ECSP2) - will follow the same ECSP2 principles, i.e. a distributed system of which the specifications for the common and external domains are produced by DG TAXUD and developed by each and every National Customs Administration separately.

The analysis of the available requirements and specifications shows that major changes to the existing ECSP2 architecture should not be expected. However, interface changes at national level should not be excluded. The impact analysis will further be enriched during the project elaboration phase where analysis of the functional and technical specifications will reach the required level of granularity.

The project has links and dependencies to/on other MASP projects and/or central systems of which the planning progress will be closely followed up so that the UCC AES project can be implemented successfully.

The project belongs to the Customs 2020 Programme and its operational plan will comply with the timeframes of the UCC Working Programme. AES is planned to go in operation on 01/10/2019.

4.1.5.6 UCC transit systems including NCTS (MASP 1.7)

The scope of the project consists of two components:

- Adaptation of the NCTS to the new requirements of the UCC;
- Implementation of the processes related to the use of an electronic transport document as a transit declaration.

Component 1
NCTS automates the common and community transit procedure as well as the control of the movements covered under the TIR procedure within the EU. The current NCTS Phase 4 also covers processing of safety and security data at entry and at exit (transit declaration with safety & security data).

The scope of the development is as follows:

- Alignment to the requirement to incorporate the transit declaration with the reduced data set;
- Alignment of the information exchanges to the data requirements of the UCC DA and IA;
- Alignment to the new requirements related to the transit guarantees (e.g. implementation of monitoring of guarantee reference amount on the mandatory basis);
- Alignment to the new legal requirements related to the registration of en route events (a new process and additional customs office role will be introduced);
- Development of the necessary interfaces with the new supporting systems;
- Alignment to the new requirements related to the expected strengthened safety and security and AEO MR;
- Development of a harmonized interface with AES in case such requirements will be defined at the AES level.

Component 2
Under the current legislation simplified transit procedures are in use for goods carried by rail, air, maritime transport and pipeline. In the UCC IA/DA these simplified procedures are to be replaced and the UCC foresees an electronic transport document as transit declaration in Article 233 (4) e.

The scope of the development is to implement, under the legally defined conditions, processes for the use of electronic transport documents as transit declaration. A further description of the business analysis will be provided in the BCs (Beneficiary Countries) as part of the BPM package developed for this domain.

For both components, the requirements for the envisaged system(s) will also include an analysis of possible new technological or modernized ways of data capturing (i.e. automatic reading of electronic-seal numbers, attachment of documentation/images) and of possible new means of adding/verifying and securing data en route by operators/customs, etc.

4.1.5.7 Registered Exporter System REX (MASP 1.11)

At present, in the framework of GSP, the authorities of beneficiary countries certify the origin of products. Where the declared origin proves to be incorrect but no fraud was committed by the trader, importers frequently do not have to pay the full import duty because they acted in good faith. As a result, there is a loss to the EU's own resources and it is ultimately the EU taxpayer who bears the burden. Since exporters are in the best position to know the origin of their products, it is appropriate to require that exporters provide their customers with statements on origin directly and under their responsibility.

Exporters should be registered with the competent authorities of the beneficiary countries in order to be entitled to make out statements on origin if the total value of originating products in a consignment exceeds EUR 6,000. In addition, the registration of exporters will facilitate targeted ex-post controls. In order to register exporters, each beneficiary country should use the REX established by the COM. Through the system, put in place for the benefit of

administrations and EOs in the EU and in beneficiary countries, the EOs should be able to check – before declaring goods for release for free circulation – that their supplier is a registered exporter in the concerned beneficiary country. Similarly, EU EOs should be registered with the competent authorities in the MS for the purpose of bilateral cumulation of origin and splitting of consignments to be sent to Norway, Switzerland or Turkey.

The main purpose of the system is to replace the current paper-based certification process by an IT-supported self-certification process. A central database will contain the registered exporters. Therefore the REX will also offer the opportunity to MS to enhance their national systems for CDs with an automated verification of the REX number from the declarations against that central database. It is expected to cover exporters from more than 80 GSP countries and exporters from 25 OCT (Overseas Countries and Territories) countries.

The first release of the REX system will support the management of registered exporters of the BCs for the EU, CH and NO; the management of applications of EU traders and will put in place the necessary interoperability features for the collaboration with CH and NO. The integration of Turkey into the GSP schema, the implementation of self-certification for OCT's and FTA (Free Trade Agreements) are out of scope for the first release.

4.1.5.7.1 'BUSINESS PERIMETER' OF THE REGISTERED EXPORTER (REX) SYSTEM

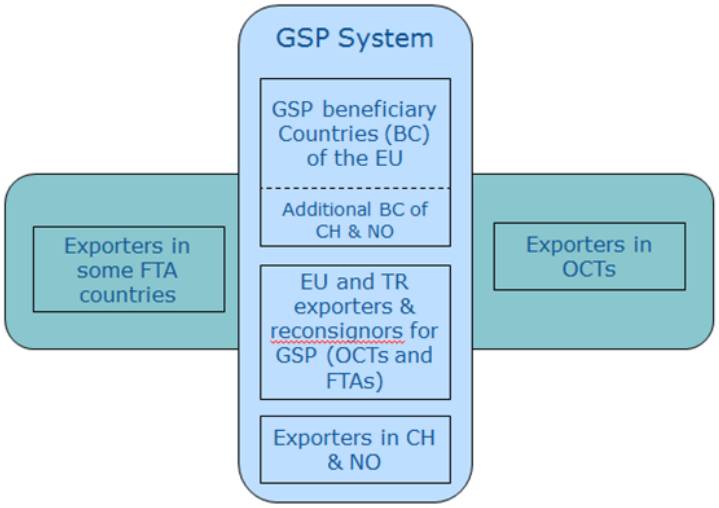

Figure 4: The business perimeter of the REX System

The basic principle of the REX System is the self-certification of origin by exporters and re-consignors of goods. The Economic Operators are only allowed to do so if they are registered by the applicable Competent Authority. The data elements applicable to the registrations are accessible by various IT services.

The REX System will cover, vertically, the GSP system of EU and the agreement existing in that domain between the EU, CH and NO (and TR in the future).

4.1.5.7.2 THE REX IT PROJECT

Based on the Feasibility study carried out in Q1 2014 by DG TAXUD and on subsequent negotiations with CH and NO, the specified full collaboration option on the REX System was agreed by the 3 entities. This full collaboration can be summarized as:

- One common application form, one common REX number for the EU, CH and NO;
- Use a single system for the management of all the BCs (same management rules, same IT application) for EU, CH and NO;
- Each entity to use its own system for its own exporters (as it will be linked to the existing management of the Economic Operators, e.g.: the EU application will reuse EOS data for the Economic Operator during the application process where basic information about the Economic Operator is managed);
- Integrate the 4 systems through a service layer for the use of REX numbers by the Customs Declaration Processing Systems.

The REX IT project, first phase, includes all the necessary activities to be able to deliver the first release of the REX System (REX v1.0) (release to enter into operation on 1/1/2017).
The following elements of the business perimeter will be covered:

- GSP Beneficiary Countries (BC) of the EU
- GSP Beneficiary Countries (BC) of CH / NO
- EU exporters for GSP plus re-consignors to EU, CH and NO for GSP
- Integration with CH/NO exporters and re-consignors to EU, CH and NO for GSP.

Phases	Task/milestone	Start Date	End date
Elaboration	Architecture	05/11/2014	31/08/2015
	Specifications (functional/technical)	05/11/2014	31/08/2015
	◊ Application & Service Specifications for Stakeholders	05/11/2014	
	First package: Integration for validation through CRS webservice		**19/12/2014**
	Second package: Integration for data upload		**15/04/2015**
	Design	05/11/2014	31/08/2015
Construction	Build of the system	01/08/2015	30/06/2016
	Development of system interfaces	01/10/2015	30/06/2016
	Integration	01/03/2016	30/06/2016
Transition	Internal functional testing	01/05/2016	31/07/2016
	◊ Start of Conformance Testing with Stakeholders		**01/08/2016**
	Conformance Testing with Stakeholders (acceptance environment)	01/08/2017	20/12/2016
	Training (training environment)	01/09/2016	20/12/2016
Operations	**◊ Deployment in Operations**		**01/01/2017**
	Start of the use of the system (for encoding traders)	01/01/2017	

Table 4: REX IT Project Outline

The IT analysis, architecture definition and design include the detailed description of the functional components of the REX System which are depicted as follows:

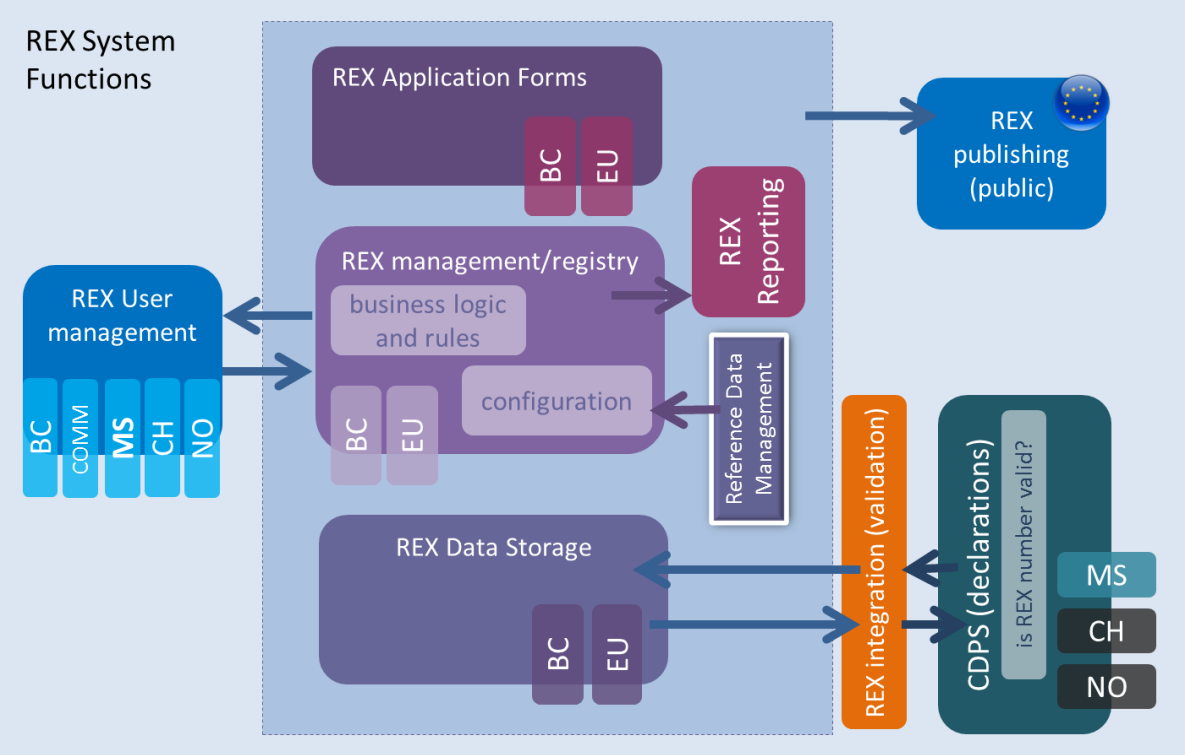

Figure 5: REX v1.0 Functional View

4.1.5.8 UCC special procedures (MASP 2.6)

This project intends to provide IT support to accelerate and facilitate the Special Procedures. The project excludes the Transit procedure, which is subject to different projects, and the Free-Zone, for which no IT development is envisaged because of its nature.

The practical implementation of the UCC Special Procedures project is considered in two aspects:

- UCC Special Procedures Harmonisation: national IT developments for the harmonisation of the special procedures and alignment to the legal provisions defined in the UCC IA/DA;
- UCC Information Sheets (UCC INF) for Special Procedures**:** central services provided for the management of the standardized information.

The UCC INF ensures the administrative cooperation and the standardized exchange of information between Customs Authorities across MS during customs procedures of inward and outward processing and usual forms of handling.

The main business processes to be supported by the INF IT system are as follows:

- Management of INF for Outward Processing (EX/IM and IM/EX);
- Management of INF for Inward Processing (IM/EX and EX/IM).

The automation of the INF business processes includes the set-up of a central EC (DG TAXUD) database that will allow INF data to be available online, which enables easy access to information, better traceability and transparency. The centralized INF system will provide functionalities for:

- Creating and editing INF data;
- Validating INF data, including links with EORI, AEO and Customs Decisions central repositories;
- Automated electronic validation of INF data and quantities;
- Automatic generation of INF Reference Number;
- Requesting and retrieving INF data from the central database;
- Update of INF data and quantities in the database.

The expected benefits of the implementation of the INF IT System are an improvement of the cooperation between MS, increased efficiency of the Special Procedures monitoring and control and a reduction of paper-based transactions. For some MS the electronic INF procedure would be of high importance as it is currently a heavy manual procedure.

4.1.5.9 Surveillance3 (MASP 2.7)

The Surveillance system monitors the import and export of specific goods into/from the Union's common market in term of volumes and/or value. Currently, all imported goods and specific exported goods are monitored by the Surveillance system. The current surveillance system called Surveillance2 has been operational since November 2006 and is operated by DG TAXUD.

The primary sources of the Surveillance system are the import and export customs declarations managed by the National Customs Declarations Processing Systems (NCDPS). The customs declarations are based on the single administrative document (SAD). The Member States provide the Surveillance system with the agreed data elements following a given frequency. The exact list of data elements is not voted yet.

The Surveillance system will receive and manage more data elements. A short term evolution of the existing Surveillance2 system to enter into operation by early 2017 will cover the data scope of additional data elements of the customs declaration but will not provide reporting functionality on all these data elements.

The number of stakeholders and needs in terms of analysis and reporting will increase with the increased data scope. The current system has limited capabilities for data discovery and analysis, reports creation, viewing and distribution to various users at the Commission and in the Member States.

A new generation, referred to as the Surveillance3 system, should be able to communicate to other reference data systems and provide data for further analysis and use by risk management systems (RIF, CRMF, etc.) via predefined and ad hoc reports. This new system needs to provide advanced functionalities in terms of business intelligence, performance, extensibility, treatment of multiple data sources, etc.

The Surveillance3 system consists of a Surveillance3 Reception IT application and a Surveillance3 Data Warehouse IT application. The Surveillance3 Reception IT Application is responsible for the collection of Surveillance Declaration Records (SDRs), while the Surveillance3 Data Warehouse IT Application is responsible for consolidating SDRs and relevant information from other systems, i.e. EBTI-3, TARIC3 and QUOTA2, as well as transforming them into information that can be used for reporting and analytics.

The Surveillance3 project will re-use the Surveillance2+ application for the Surveillance3 Reception IT application for receiving and validating the SDRs from Member State applications. All the functions that do not require a (near) real-time processing will be cut off from the Surveillance2+ application and will be migrated to the Surveillance3 Data Warehouse IT application. The Surveillance3 Reception IT Application will interoperate with the Surveillance3 Data Warehouse IT Application which will be based on SAS for ETL (Extract Transform and Load) and Business Intelligence.

The Surveillance3 Data Warehouse IT application will play multiple roles:

- The role of 'hub-and-spoke' within the Surveillance3 system where data from different systems (Surveillance3 Reception IT application, TARIC3, EBTI-3) will be integrated and linked and be made available for report & analytics as well as the central place from which other systems will be fed with the correct information (TARIC3, EBTI-3 and DDS2).
- The role of reporting environment offering all the required reporting, data analysis & discovery and – for future extension – data mining functionality. The reporting scope of the Surveillance3 system consists of 3 report families:

    - Surveillance reporting;
    - BTI reporting;
    - CDC reporting.

Stakeholders interacting with this application are all the stakeholders interested in reporting and analysing data from one or multiple of the 3 report families of the Surveillance system.

DG TAXUD Units A3 and A4 are the systems and business owners of this application.

Surveillance3 is expected to become operational on 01/10/2018.

4.1.5.10 CLASS (MASP 2.9)

The European Union's customs legislation has established a procedure for solving cases of divergent classification so as to ensure the uniform classification of a product within the European Union. In case of divergent interpretation of the nomenclature, the Customs Code Committee (CCC) either adopts a classification regulation, an explanatory note to the Combined nomenclature or expresses an opinion through a so-called classification statement. The Court of Justice of the European Union also delivers rulings which are crucial to the classification of a specific product and directly applicable in the Union.

These different kinds of classification information are published in different places, by different means. Currently customs officers and traders seeking for all the relevant information for the correct classification of a product have to search in several places (OJEU, comitology register, ECJ rulings). It is especially difficult to find the classification statements of the CCC rapidly. This constitutes a considerable burden, in particular for individual SMEs, which ranked tariff classification of goods as No 12 in a public consultation carried out at the end of 2012 on the most burdensome legislative acts.

In order to provide a single platform where all the classification information (regardless of its nature) is published, DG TAXUD would like to create a database that would hold all classification-related information.

The system would offer considerable benefits to the different stakeholders involved, such as:

- reducing substantially the administrative burden for Economic Operators in general, and more particularly for SMEs, when looking for the correct tariff classification of the products they want to import or export (the system would function as a "one-stop-shop");
- helping the customs administrations of the Member States to cope with the high workload of the staff dealing with tariff classification issues, which have often been reduced as a result of austerity measures, by limiting the time required to find and share the relevant information;
- improving the functioning of the Customs Union and of the Internal Market. By making all tariff classification information more accessible through a single platform, classification divergences should decline and equal treatment of Economic Operators will be better guaranteed;
- better securing the own resources of the EU, by ensuring the correct classification of goods throughout the EU and thus the collection of customs duties that are legally due.

The development is divided into three phases, which are:

- Phase 1 (minimum requirements implementation):
  - Design and implementation of the core CLASS database
  - Implementation of a link to TARIC nomenclatures
  - Upload of Classification Regulations to the system
  - Upload of Combined Nomenclature Explanatory Notes to the system
  - Upload of Classification Statements to the system
  - Upload of European Court of Justice rulings
- Phase 2 (extended requirements implementation):
  - Implementation of a link to the EBTI system
  - Implementation of a link to ECICS
- Phase 3 (linking external sources of classification information):
  - Incorporation of WCO HS explanatory notes
  - Incorporation of WCO HS classification decisions
  - Incorporation of WCO HS classification statements
  - Link to the REACH database (managed by the European Chemicals Agency)
  - Inclusion of ADR data

In addition to the development of the CLASS system, the CLASS project will also include the development of the TARIC3 and CN services required to consult the TARIC3 and CN data.

The system will be built on the DIGIT SEARCH engine, a solution implemented by DIGIT on top of the HP IDOL product. It will be used for the search engine functionality. The update of DIGIT SEARCH will be a sub-project managed by DIGIT. An SLA will be put in place to minimise the risks associated to this dependency.

DG TAXUD Units A3 and A4 are the systems and business owners of this application.

CLASS Phase 1 is expected to become operational on 01/10/2018.

4.1.5.11 Customs Union Performance (CUP-MIS) (MASP 2.11)

The main objective of the project is to set up a Management Information System (MIS) that will support the Customs Union Performance (CUP) Project, which was established to manage and further develop a performance measurement system for the EU Customs Union. The Customs Union Performance Management Information System (CUP-MIS) will support improvement of the functioning of the EU Customs Union.

The main goal of the CUP-MIS is to measure and assess how customs activities and operations lead to/support achieving strategic objectives in terms of effectiveness, efficiency and uniformity. The CUP-MIS represents an important management/steering tool to enhance strategic decision making for the further development of the EU Customs Union. Its findings will also be used to raise awareness about the EU Customs Union and to show the amount and results of the Customs' work to main stakeholders.

The IT system specific objective is to support the governance/management and the practical implementation of the CUP-MIS processes consisting of the collection, storage, processing and reporting functionalities for the CUP-MIS Project.

The IT system technical objectives are to strengthen and improve the value and quality of data and processes covering the key functionalities (collection, storage, procession and reporting); to streamline the existing data sources and their use; to facilitate the data analysis and enhance the reporting mechanisms towards policy-making; to reduce inconsistencies and human errors in data, analysis and reporting; as well as to decrease the burden at the level of the MS and the COM.

Links to other projects:

- Inputs need to be ensured from several projects/systems: Business Statistics of NCTS, ECS, and ICS; EOS (EORI and AEO), COPIS, CRMS, Surveillance 2 and ART 2;
- Inputs are also foreseen from EUROSTAT and DG BUDGET (the OWNRES system and the Annual Activity Reporting for the ACOR Committee);
- Inputs from National Customs IT systems as defined in the CUP project.

DG TAXUD Unit A1 (Customs Policy) is the systems and business owner of this application.

4.1.5.12 CS/RD2 (currently MASP 4.8)

The implementation of the Union Customs Code (UCC) requires new IT systems with increased reference data demands. Also, the UCC promotes design to be aligned with the principles of application centralisation, interoperability and collaboration. The main goal of this project is to develop reference data services that will be able to satisfy the currently known needs for such data of all planned UCC projects, without requiring any further implementation or downtime.

The purpose of the CS/RD2 application is to store, maintain and distribute reference data in the form of Code Lists and Authorities. The reference data is used by both National Administrations (NAs) systems, as well as by DG TAXUD Customs Information Systems (CIS).

CS/RD2 will replace the current CS/RD application. It will continue to provide the same functionalities and interfaces and will ensure backward compatibility with the integrated NAs and DG TAXUD systems. Retaining the CS/RD functionalities will allow NAs to plan the migration to the new functionalities and interfaces in order to benefit of the new features. The deprecated functionality (e.g. EDIFACT format) shall be supported during a transitional period agreed with the relevant stakeholders.

4.1.5.13 ICS2.0 (Security and safety MASP 2.8)

The ICS2.0 project is in its Inception phase: the Vision document of ICS2.0 is being finalized at the time of writing these technical specifications. The description below may be subject to change depending on pending decisions and budget availability.

The ICS2.0 Trans-European System is meant to provide a solution for Member States' customs administrations and the European Commission (DG TAXUD) in order to perform tasks legally assigned by the UCC with regard to customs formalities and risk management (security and safety) for the entry of goods into the customs territory of the Union.

ICS2.0 will be a trans-European system and will be composed of 3 projects:

- **ICS2.0 Basis**: Common Specifications for the ICS2.0 Trans-European System, and the Common Repository component. The use of the Common Repository will be mandatory for all Member States, providing facilities to store and manage the life-cycle of all submitted ENS declarations.

- **Opt-In 1**: The Shared Trader Interface, aimed at providing a functionally and technically harmonized interface for Economic Operators to submit and receive ENS related information, for Member States choosing to opt in.

- **Opt-In 2**: The e-Screening and Risk Management Support for Member States choosing to opt in.

The ICS2.0 Trans-European System will need to support complex processing and collaboration among its participating sub-systems for the entry of goods throughout the ENS+ Lifecycle of a consignment. This includes, among others:

- receiving and linking (or unlinking) of ENS submissions,
- performing collaborative security and safety risk management (e.g. e-Screening) and supporting the manual risk mitigation actions,
- facilitating the risk analysis and assignment of controls advises among Customs Authorities,
- receiving controls results coming from Customs Authorities,
- receiving, processing and correlating arrival notifications and presentation of goods notifications with the respective consignments (linked ENSs).

The complete scope of the ICS2.0 trans-European project contains system components provided under the responsibility of the MS (national components in the National Domain) and central components provided by the Commission in the Common Domain. CCN2 in the Common domain will provide the interoperability layer. The overall schema is the following:

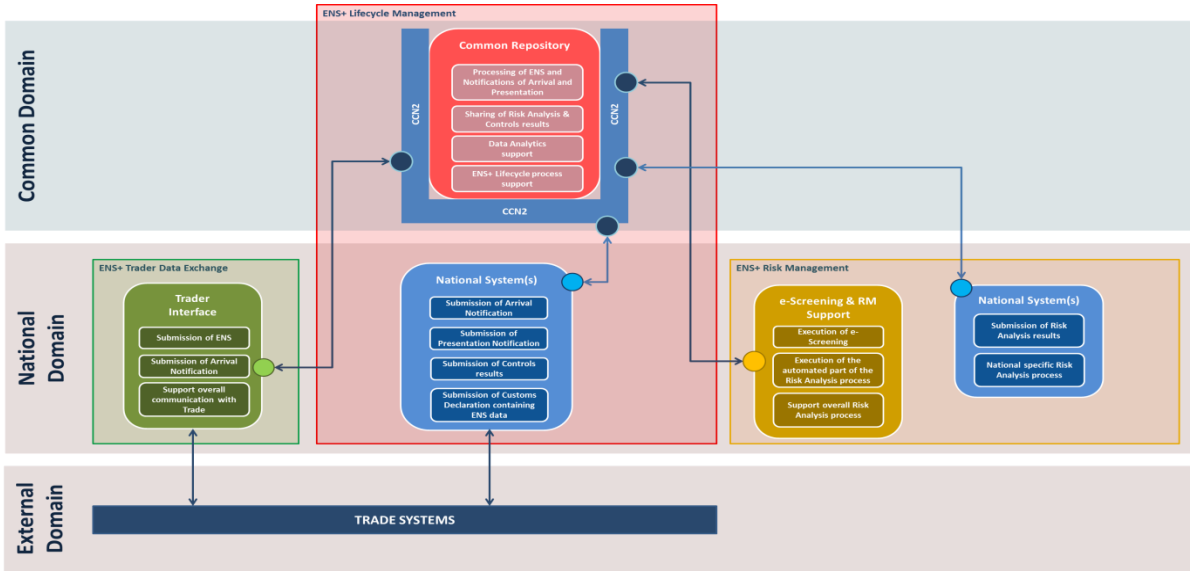

Figure 6: ICS2.0 system components

The following synergies have been identified:

- UUM&DS – will be used for the Identity and Access Management of
- the traders connected to the Shared Trader Interface and
- the Commission users
- CCN2 – will be used as message exchange platform for ENS data and related messages, and for authentication and authorisation of Member States users / systems.
- Projects related to systems that provide Economic Operators data (EOS, AES).

- Projects related to systems that provide reference data (CS/RD2, TARIC).
- TATAFng – will serve as baseline for technical architecture. ICS2.0 will be compliant with the technical architecture, and utilize services to the extent that they are relevant and available.
- SDLC (Dev), SDLC (Ops) – will provide the methodological framework for the project phases.

The main **architectural principles** (AP) of ICS2.0 are the following:

AP1. ICS2.0 will be aligned with the SOA architectural decisions in the MASP strategy and will follow the architectural guidelines of TATAFng where applicable;

AP2. ICS2.0 will be accessible via services exposed via SOAP-based web services for system-to-system interfaces (both synchronous and asynchronous) and Web Interfaces for users (Customs Administration users and Economic Operators);

AP3. CCN2 will be used as the transport network between different system components in Common Domain and National Domain. ICS2.0 will also use the service registry of CCN2 to expose its services to required parties. Finally, ICS2.0 will use the relevant services of CCN2 for the authentication and authorisation of related MS Customs Administrations' IT systems and users;

AP4. UUM&DS will be used for authentication and authorisation of Economic Operators;

AP5. National and Shared/Common system components must be implemented based on common specifications, provide the same interfaces, and participate in the overall choreography in the same manner;

AP6. Considering that CRC1 requires EU-level ENS historical data, a real-time adapted database (e.g. dimensional) with required ENS+ history data will be used for such CRC execution;

AP7. Segregated databases will be used for Risk Management related data required for CRC Category 2 execution;

AP8. Archiving mechanisms should be provided.

AP9. ICS2.0 design must comply with the following Confidentiality/Integrity/ Availability requirements and Security classification:

Confidentiality level	LIMITED HIGH
Integrity level	CRITICAL
Availability level	STRATEGIC
Security classification	SPECIFIC

Table 5: ICS2.0 security classification

AP10. Quality requirements are as defined in the bullet points below:

- Availability:
  The availability requirements for ICS2.0 are 24 hours per day, 365 days per year (24x365) with a very high availability.
  All maintenance activities will be planned and announced well in advance. Downtime during maintenance activities and the deployment of a new application version should be limited and take place in service window. Based on the analysis of weekly ENS submission distribution for ICS1.0 and taking into account estimated change in load, a service window is defined for maximum of 1 hour per week on Mondays between 2:30 AM and 3:30 AM.

- Deployment in operations:
  In order to accomplish this future IT system, it must follow the principle of "Continuous Availability" for next-generation CDCO applications following the SOA paradigm. This will allow the system to have near-zero RTO (Recovery Time Objective) and RPO (Recover Point Objective). Technical implementation of this principle can be achieved by using twin Active-Active clusters running on two distinct Datacentres (DCs) with Global Load Balancer.
  For the high availability calculations, the following assumptions have been made, based on usual practice:

  - RTO: 3 hours (defined)
  - RPO: 0 hours (required)

  As indicated above, the "Continuous Availability" principle with an Active-Active architecture should guarantee continuous activity. The RTO becomes relevant only when recovering from a complete shutdown in both Datacentres which is improbable. Note that reducing RTO will have impact on costs. The following table shows the target availability for EU infrastructure components for 2020.

Component	Target Availability %
Platform (COTS middleware)	99.950%
Operating System	99.970%
Network	99.980%
Building & Facilities	99.995%
Combined	**99.895%**
Max. downtime (per month) - hours	**0 hr 45 min**

Table 6: Target availability for EU infrastructure components in 2020

Because the architecture of ICS2.0 is hybrid, having central applications (Common Repository), shared optional central applications (Shared e-Screening and Shared Trader Interface) and nationally implemented components (National Risk Management, National Import Control Application), we shall make a distinction between availability for each. We put as a requirement the availability for centrally running software components reaching 99.97% (12 min downtime per month) and 99.95% (22 min downtime per month) for nationally running software components.

- Scalability:
  ICS2.0 must be architected to horizontally scale, including an increased number of users and transaction/data volume without changing of technical architecture.

- Volumetrics:
  The system will need to cope with the volume of ENS submissions (complete and/or partial) that are expected to be received from trade during the ENS+ Lifecycle process. Expected number of ENS submissions per year is 326.8 million.

- Performance requirements:
  The following parameters are used as input for assessing the performance requirements:
  - Estimated number of filler (e.g. EOs): 45,000;
  - Estimated number of users from MS Customs Authorities: 3,000;
  - Maximum number of concurrent users from MS Customs Authorities per second: 150.

  Using the ENS submission distribution graph we have calculated that ICS2.0 must perform in a reasonable time frame for 96 peak ENS submissions per second from fillers. In addition ICS2.0 will be used by MS Customs Authorities users to perform various actions regarding consultation and risk mitigation. The system also supports

system-to-system interface to exchange required ENS data with MS. As a result there is high concurrency on the central component. The total number of concurrent users (including system-to-system interactions) can be estimated as 96 (fillers) + 150 (MS Customs officers) + 28*5 (MS systems) = 386 concurrent users.

- Installation:
  The common and shared applications will be installed in the DG TAXUD Datacentres in an Active / Active deployment distributed over two Datacentres to address the high availability requirements.

  The following environments are envisaged per application:

Environment	Count	Comment
Production	2	One environment per Datacentre, with clusters per layer.
Conformance Test	2	Similar to production, but with reduced processing capacity.
Site Acceptance Test	1	preSAT/SAT
Test	1	Performance Test / FAT
MS Test	1	Member State testing; prior to conformance testing.
Development	1	

Table 7: ICS2.0 environments per application

- Helpdesk:
  A trans-European helpdesk will need to be provided during the operations of ICS2.0. For the Shared Trader Interface project (that will manage system-to-system messaging directly with trade systems in the external domain), a first line helpdesk will be organised in the MS, and 2nd and 3rd line support will need to be ensured centrally by DG TAXUD. And also, as the Common Repository is a mandatory repository for all MS, the appropriate level of support is to be provided to the MS (between Common and National Domains).

4.1.5.14 Application architecture: TATAFng

Current applications on production in DG TAXUD have been developed following TATAF architecture model (see 4.1.6.26).

New MASP applications currently under development are following a new SOA approach as defined in TATAFng architecture, guidelines and recommendations.

[R5] - TATAFng Vision Document (CD3-TATAFNG-VD.pdf) [R6] - TATAFng Project Strategy (CD3-SC03-DLV-028-10-47-1-TATAFNG-Project Strategy-SfA-v1.00.pdf) [R7] - TATAFng requirements and proposed Solutions (CD3-SC03-DLV-028-4-47-1-TATAFNG-RPS-SfA-v1.00.pdf)

The aim of the TATAFng project is the definition of the SOA application architecture for DG TAXUD new developments.

- Scope and objectives:

  - TATAFng must enable both application designers and developers to **focus on business functionalities**, by tackling all at once the transversal functional (e.g. drafting) and non-functional (e.g. robustness) requirements and providing with support (e.g. tools, guidelines) easing the development process.
  - TATAFng must also allow **consistently improving the quality of applications**: security, robustness, availability, maintainability, testability, user interface.
  - TATAFng must allow **decoupling applications from other elements of the IT landscape** such as the communications network (CCN, CCN2, SPEED2, Internal Communications Network), or the identity providers (UUM&DS, ECAS, T-REX, the identities provided by CCN and CCN2).

The following figure presents a high level overview of the technical architecture of the application platform and the external parties that interact with the platform.

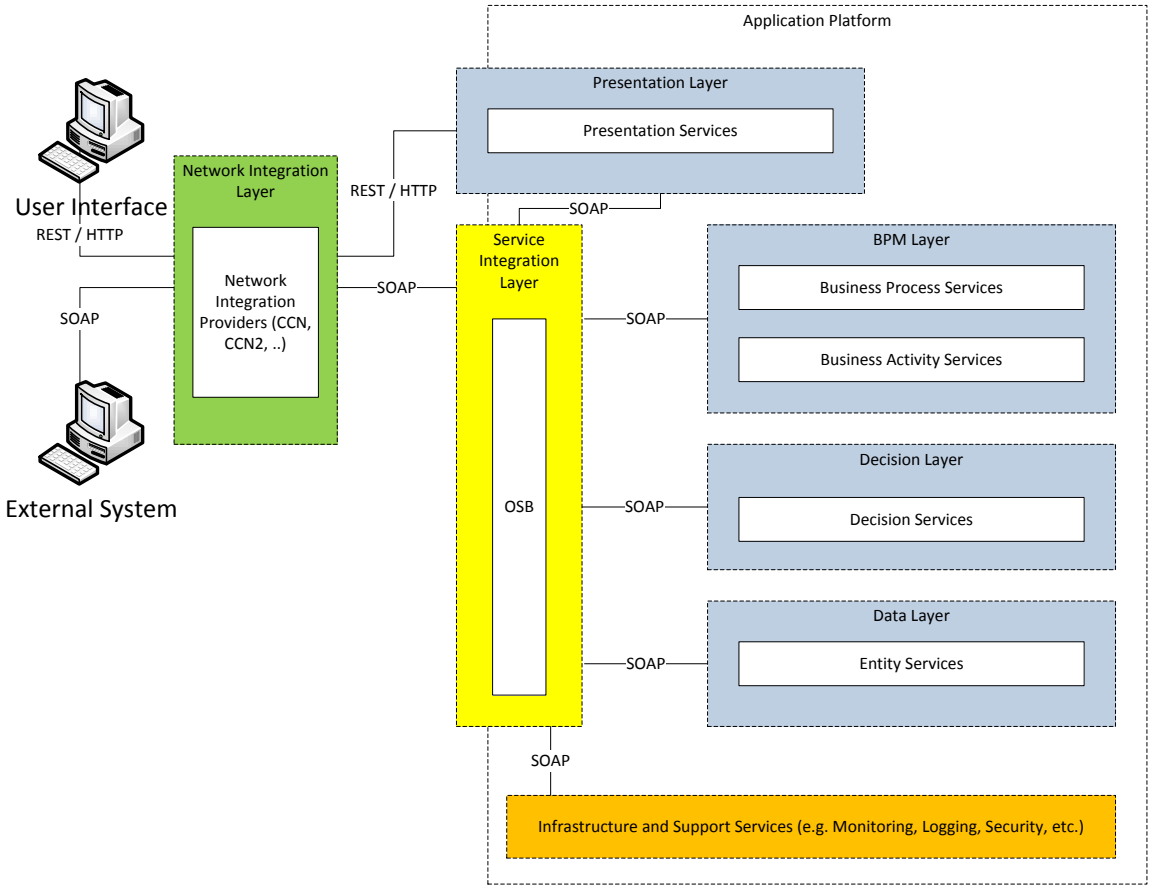

Figure 7: Reference Architecture Overview

The application platform follows a service-oriented architecture approach, in which software components offer services to other components via service contracts. Each service is representing a self-contained unit of functionality. The communication protocol used for communications between services is SOAP.

The application platform is based on the Oracle Fusion Middleware product suite. It uses the Oracle Service Bus (OSB) as Service Integration Layer. All service communications are done through the OSB using SOAP. The only exceptions are presentation services which directly offer REST services over HTTP.

Clients of the application platform are either users that are connecting to the application platform using a user interface such as a browser or other systems that directly communicate with the required services using SOAP. The Clients are connected to the application platform through one of several network integration providers (e.g. CCN, CCN2, etc.).

The services hosted on the central application platform can be split into several categories:

- Presentation Services – They implement the user interface related logic;
- Business Process Services – They provide access to business processes that are running in the Oracle BPM engine provided by the Oracle Fusion Middleware;

- Business Activity Services – These services provide functionality that abstract atomic business logic and often represent a single activity in a business process;
- Decision Services – They encapsulate decision logic and expose it to other services;
- Entity Services – They expose services to perform changes and provide access to business data;
- Utility Services – They expose functionality which is not directly related to performing business operations.

The elaboration project has been divided into two phases and a number of micro-projects, and it is currently under execution. Phase I was delivered in 2015, and phase II is scheduled to be delivered in Q1 2016.

The paragraphs below give a brief description of each micro-project:

Service Oriented Architecture (repository, registry, lifecycle, fault management, robustness)

The goal is to provide a manageable and robust reference high-level architecture for building BPM/SOA applications.

Entity Services

The goal is to provide support for efficiently storing and retrieving data.

Efficient Consumption of Remote Data (Caching)

The goal is to provide mechanism for efficiently consuming reference data that are made available remotely, especially when an intensive use of them is required (e.g.: CSR/RD 2).

Document File Storage

The goal is to allow services to efficiently work with potentially large files (it includes both file transfer and storage).

Application Architecture

The goal is to provide reference architecture and designs for the different kind of reference components (web application, etc.).

Data Lifecycle

The goal is to support the life cycle of data handled by the application, including drafting, versioning, lifetime, as well as data multilingualism.

Replication

The goal is to provide a common approach for doing efficient and robust data replication between components.

Integration with CCN2

The goal is to build a JAAS plug-in authenticating HTTP requests coming from CCN2.

Security Contexts

The goal is to define and support security contexts of web applications, services, business processes, batches, and databases as well as propagation between them.

Integrating IAM of CCN

The goal is to build a JAAS plugin authenticating HTTP requests coming from CCN.

Integration with CCN (exposing services over HTTP)

The goal is to provide support to applications needing to expose services over CCN.

Integrating ECAS

The goal is to integrate the ECAS plug-in that initialises the web application security context for requests authenticated by ECAS.

Integrating T-REX

The goal is to integrate the ECAS plug-in that initialises the web application security context for requests authenticated by T-REX.

BPM (HT, Unit of Work, Large Message)

The goal is to provide guidelines and patterns to implement solutions based on BPM (Unit of Work pattern identified in the context of Customs Decision, implementation of Human Tasks, ability for process to deal efficiently with larges messages).

Logging

The goal is to provide logging facilities allowing distributed components (services, process, web applications, etc.) to log events in the order they actually happened.

Scheduled Tasks

The goal is to provide support for executing scheduled tasks in a way that uses the computational resources in an efficient way.

Integration of UUM&DS

The goal is to either build a JAAS plug-in initialising the security context for requests authenticated on UUM&DS, or integrate the plug-in provided by the UUM&DS project, if there is one.

Interfacing with IAMs

The goal is to allow applications to retrieve information about authenticated users in a transparent way.

Scalability / High-availability

The goal is to provide reference architecture, as well as rules for building components, that make resulting application scalable.

Extended BPM support

The goal is to build business functionalities that are not provided out-of-the-box by the Oracle Business Process Engine (e.g. extended timer support).

Web User Interface

The goal is to provide reference architecture as well as re-usable components to make the development of user interface more consistent and faster (based on REST and Kendo UI).

Internationalisation

Internationalisation is about translating static data such as labels in user interfaces, report templates, mail templates, notifications, etc. (it must not be confused with data language).

Data Presentation

The goal is to allow users to generate pre-defined reports from their data.

Data Auditing

The goal is to make sure that all changes done on the data are traceable and auditable.

Activity Auditing

The goal is to make sure that the activities performed by the users are traceable and auditable (this is different from data auditing in the sense that not all activities modify the data).

Querying and multiple-field search

The goal is to allow users to build customs queries in web applications.

Process Management

The goal is to provide support to operators to get information about processes and manage their lifecycle, by taking appropriate actions when required (recovering faulted process, etc.).

The output of the TATAFng project is:

- Reference Architecture Document
- Reference Application
- Development and testing guidelines
- Technical Artefacts: Plug-ins, Interceptors, Services

4.1.5.15 SDLC

As a consequence of the IT Strategy defined within the MASP for the implementation of the UCC DG TAXUD will need to upgrade considerably the level of IT services that it offers to the Customs Policy activity. This is partly due to a higher dependency form National Administration systems on central services under the responsibility of DG TAXUD and partly due to more new business requirements that demand more robust and flexible IT capabilities.

Among other things, to address the above there is a clear need to revisit the System Development Life Cycle (SDLC) methods and tools in order not only to increase efficiency, quality and control capabilities but also to adapt to new technologies and more demanding requirements. These improvements must be implemented most specially for the new applications and platforms requiring high availability (from 2017 according to the MASP) but they also may need to be applied to all systems in order to ensure the maintainability of a rapidly increasing number of IT assets.

In order to cope with the mentioned issues, two closely coordinated lines of action have been proposed:

- One to deal with the Inception, Elaboration and Construction phases dealing globally with Architecture and BPM to SOA development methods and
- Another to cover the Transition aspects of the lifecycle: delivery, deployment, testing and entry into operation.

4.1.5.15.1 SDLC & SOA DEVELOPMENT

The main objective of the SDLC activity is to fill the gap between the current development lifecycle (described in TEMPO and mainly used for the DG TAXUD customs IT applications) and the one to be used when implementing BPM/SOA IT projects. As it was not the intention to develop a complete new methodology, several enablers at Commission level have been used as input to adapt the existing methodology.

A reference manual is under construction which is considered a high level starting point for the definition of the development phases of the life cycle (Inception, Elaboration and Construction).

At the moment of writing, an action has been launched for the assessment of tools and methods for the implementation of the reference manual, for ongoing or to be started projects. This is based on the use of a common repository for modelling the architecture and specifications of the developed systems.

4.1.5.15.2 SDLC & TRANSITION TO OPERATIONS

In the context of the transition phase of the lifecycle towards the entry into operation, a study was made and resulted in a proposal that is currently under assessment by the affected stakeholders (DG TAXUD and contractors) before launching the implementation.

The implementation solution envisaged covers the following:

4.1.5.15.2.1 Common Asset Repository

To introduce the use of a common repository where the developer would upload the deliverables according to a certain structure (source, binaries, test assets, documentation, etc.). This repository and the content would be owned by DG TAXUD and the responsibility of its maintenance would be to the **ITSM3 Operations** contractor.

4.1.5.15.2.2 Automated Deployment

Producing automated procedures for the deployment of the different software releases delivered by DG TAXUD contractors (platforms, applications and services). These automated procedures would be executed and tested in a controlled FAT environment (similar to that of SAT, CON and Production) and would be part of the acceptance of the software.

The automated procedures would then be reused with different parameterisations and with addition of sanity checks and other operational assets deployment as required in the subsequent environments.

4.1.5.15.2.3 Automated Testing

Producing, during development, automated procedures for the execution of the test plan(s) of the different software releases delivered by DG TAXUD contractors (platforms, applications and services). This is done using a central cooperative platform that allows the follow-up of all testing activities (from design to execution) by providing to all involved parties visibility and the opportunity to interact more closely. This facilitates the creation and maintenance of Test plans and allows stakeholders to make a better judgement on which tests to execute for a given change. Each stakeholder can then focus its efforts on what is deemed needed for him.
These automated tests would be executed and tested themselves in a controlled FAT environment (similar to that of SAT, CON and Production) and would be part of the acceptance of the software.

The automated procedures would then be reused with different parameterisations and with addition of operational, security and other non-functional test scenarios as required for validating the entry into operation.

4.1.5.15.2.4 Release Management Automation

Adding capabilities to automate the integration of the release Management process as a workflow where the different steps from software delivery planning till deployment in operation are managed.

4.1.5.15.2.5 Environment Provisioning

Adding capabilities to define, maintain and provide the developer's standard IT environments with the adequate OS and middleware versions that facilitate the overall automation of releases.

In summary the proposal is to launch a gradual implementation for which the first step would target the set-up of a common asset repository or DSL and implementation of automated deployment for some or all DG TAXUD systems and platforms. This would end with a re-assessment of the options before targeting more complex and ambitious options like automated testing, automation of release management process or automation of environment provisioning.

It is expected that automated testing is by far the most complex and risky of the options and may constitute a programme in itself. Its implementation needs to be integrated with the development side of the SDLC, most specially at governance level but also on its implementation model.

4.1.6 Existing Customs systems

Table 8 below provides the entries of the portfolio of the Customs IT systems and applications at the time of writing the Invitation To Tender. The table has to be read as Configuration Items (CIs) to be managed in a CMDB. These CIs are in line with the CMDB entries managed by the ITSM contractor.

General information on Customs IT systems and applications may be found on the Europa web site:
http://ec.europa.eu/taxation_customs/customs/policy_issues/electronic_customs_initiative/it_projects/index_en.htm

Refer to the IT systems and applications project fiches [R4] for more detailed information. Furthermore, all specifications and documentation for the different IT systems and applications can be found in the **ITSM3 Integration** Baseline (*02. ITSM3 Operations Documents / 04. ITSM3 Operations Baseline URL, section "02. Background Information" / "Applications"*).

The portfolio is organised by families as follows:

- **Movement systems and supporting applications:** include the distributed movement systems NCTS, ECS and ICS together with their supporting applications operated centrally;
- **Internal Applications:** include applications that are used by Commission staff to manage the publications (e.g. the Combined Nomenclature), the budget and other deliverables;

- **Risk Analysis and Control Applications**: include applications that are used in the domain of risk analysis and control;
- **Internet Applications:** are mainly represented by the unique application (DDS2) that allows citizens to consult public information retrieved from other systems and applications;
- **Economic Operators Applications**: include the applications managing information associated with Economic Operators;
- **Tariff and Classification:** include the applications managing customs information concerning goods and more specifically tariff and classification information;
- **TATAF:** includes the technical components which are deployed on a more horizontal level and which are part of the Tariff Application Technical Architecture Framework;
- **SPEED/SPEED2:** includes software components constituting the Single Portal for Entry and Exit of Data (SPEED). This is the gateway for 3rd party countries (e.g. the United States) to interface with DG TAXUD IT environment and CCN when needed.

ID	IT system/application (CI)	Acronym	IT system/application family
1	New Computerised Transit System (NCTS)	NCTS	Movement systems and supporting applications
2	Export Control System (ECS)	ECS	Movement systems and supporting applications
3	Import Control System (ICS)	ICS	Movement systems and supporting applications
4	Central System for Reference Data (CS/RD)	CS/RD	Movement systems and supporting applications
5	Central System MIS (CS/MIS)	CS/MIS	Movement systems and supporting applications
6	Standard Transit Test Application (STTA)	STTA	Movement systems and supporting applications
7	Transit Test Application (TTA)	TTA	Movement systems and supporting applications
8	ECN TIR for Russia	ECN TIR-RU	Movement systems and supporting applications
9	Standard SPEED Test Application (SSTA)	SSTA	Movement systems and supporting applications
10	Activity Reporting Tool (ART-2)	ART2	Internal
11	Combined Nomenclature (CN)	CN	Internal
12	Suspension (SUSP)	SUSP	Internal
13	Community Risk Management System (CRMS)	CRMS	Risk Analysis and Control
14	anti-COunterfeit and anti-Piracy Information System (COPIS)	COPIS	Risk Analysis and Control
15	Specimen Management System (SMS)	SMS	Risk Analysis and Control
16	DDS2-CM	DDS2-CM	Internet

17	DDS2-COL	DDS2-COL	Internet
18	DDS2-EBTI	DDS2-EBTI	Internet
19	DDS2-EOS	DDS2-EOS	Internet
19	DDS2-ECICS	DDS2-ECICS	Internet
20	DDS2-EXPORT	DDS2-EXPORT	Internet
21	DDS2-SEED	DDS2-SEED	Internet
22	DDS2-SURV	DDS2-SURV	Internet
23	DDS2-SUSP	DDS2-SUSP	Internet
24	DDS2-TARIC	DDS2-TARIC	Internet
25	DDS2-TRANSIT	DDS2-TRANSIT	Internet
27	Economic Operators System (EOS)	EOS	Economic Operators
28	Economic Operators System (EOS-MRA)	EOS MRA	Economic Operators
29	Regular Shipping Service (RSS)	RSS	Economic Operators
30	European Binding Tariff Information (EBTI-3)	EBTI3	Tariff and Classification
31	European Customs Inventory of Chemical Substances (ECICS-2)	ECICS2	Tariff and Classification
32	Information System for Processing Procedures (ISPP)	ISPP	Tariff and Classification
33	Quota Management (Quota-2)	Quota2	Tariff and Classification
34	Surveillance management and monitoring (Surveillance-2)	SURV2	Tariff and Classification
35	TARif Intégré Communautaire (TARIC-3)	TARIC3	Tariff and Classification
36	CSI Bridge	CSI Bridge	TATAF
37	HTTP Bridge	HTTP Bridge	TATAF
38	User management (UM)	UM	TATAF
39	SPEED2	SPEED2	SPEED2

Table 8: Portfolio of customs IT systems and applications

4.1.6.1 NCTS BUSINESS DESCRIPTION

The NCTS is the New Computerised Transit System, based upon electronic declaration and processing, and designed to provide better management and control of Community and Common Transit. It involves all EU Member States, the EFTA countries, Andorra, San Marino, Croatia and Turkey. More countries will be joining in the future.

NCTS has most likely made the largest contribution to trade facilitation by simplifying and speeding up the transit procedure for both traders and administrations. NCTS allows traders to submit their declarations before departure, so waiting time at the borders is considerably

reduced. In addition, the use of electronic messages instead of paper documents enables an earlier end and discharge of the operations. This leads directly to the faster release of the guarantee lodged. Further time gains are achieved when considering physical controls on goods. As customs will have decided well in advance whether or not the goods need to be subject to a control, waiting time at the office of destination is shortened. Finally, as NCTS creates an electronic environment capable of directly managing all the movements of goods, formalities for Authorized Consignors and Consignees have become much less cumbersome. Also, any discrepancies can be sorted out more quickly in the electronic enquiry procedure. All these features lead to an overall reduction of (administrative) costs and burdens for businesses.

The Customs Authorities of the Member States control each year **10 million trucks** carrying non-EU goods transiting via the Union in real-time customs control (from departure to arrival and clearance) through almost **50 million electronic information exchanges** sent through the New Computerised Transit System (NCTS).

Since 1 July 2009 NCTS has included the electronic handling of transit declarations under the security amendment Regulation 648/2005 which requires additional information to be included in transit declarations for safety and security purposes. The features implemented on 1 July 2009 allow to:

- upgrade the enquiry procedure which can be initiated when either the time allotted for receipt of transit movement arrival at destination, or the time for receipt of the control results from the Office of Destination has expired;
- introduce the recovery procedure which usually starts as a follow-up to the Enquiry Procedure but it can also be initiated in any state after the movement release in specific cases like when a Customs Officer in the Competent Authority suspects that a fraud or another abnormal incident took place;
- transmit information on movements of sensitive goods to OLAF (Anti-Fraud Transit Information System – ATIS) (including the National transit).

Since 1 September 2011 all Community transit declarations have also been duplicated and sent to OLAF (also for Common transit declarations, except for Switzerland, Croatia and Turkey).

The NCTS was continuously expanding from a geographical point of view, with Croatia and Turkey becoming members of the Common Transit Convention in 2012. The NCTS operations started with Croatia on 01 July 2012 and with Turkey on 01 December 2012.
In 2015, NCTS became operational in the Former Yugoslav Republic of Macedonia and in Serbia.

On 01/01/2009, an electronic connection was launched with Russia to allow for secure data exchange of TIR movement data, in order to address lorry congestion at the EU-Russia border (currently 3,500 movements supported daily). This connection has been established through the SPEED platform (using CCN/CSI) on which SPEED-ECN application is running in order to transfer NCTS message to SPEED message. This is the system called ECN TIR-RU (see 4.1.6.8).

4.1.6.2 ECS Business description

The Export Control System (ECS) is an electronic system that relates to the handling of export and exit of goods from the EU customs territory enabling Customs Administrations in all Member States of the EU to electronically handle Exit Summary Declarations (EXS) and to risk analyse in advance the EXS declarations of the goods exiting the Community. ECS electronically manages some aspects of the export procedure; it will evolve towards the full Automated Export System (AES).

ECS strictly includes what is needed to implement Regulation 648/2005 ("security amendment" to the Community Customs Code) and its Implementing Provisions (Regulation 1875/2006).

4.1.6.3 ICS Business description

The Import Control System (ICS) is an electronic system enabling Customs Administrations in all Member States of the EU to electronically handle Entry Summary Declarations (ENS) and to risk analyse in advance the ENS declarations of the goods arriving into the Community. ICS electronically manages some aspects of the import procedure; it will evolve towards the full Automated Import System (AIS).

The current ICS is the result of AIS phase 1, and is, as such, the first step towards the implementation of the full-blown AIS (Automated Import System). ICS strictly includes what is needed to implement Regulation 648/2005 and its Implementing Provisions (Regulation 1875/2006), and provides a solution to the processing of the Entry Summary Declaration (ENS) at:

- the Office of Lodgement,
- the Office of First Entry (including international diversion), and
- any Office of Subsequent Entry, whether or not declared in the ENS.

4.1.6.4 CS/RD Business description

CS/RD is a supporting application to the movement systems managed by DG TAXUD. This application supports the trans-European systems already in place between the National Administrations. It offers a central repository for reference data. Reference data means the common reference data (e.g. Country code list, Document type Codelist), but also the Customs Offices and the Sharing Authorities.

Each National Administration is responsible for providing and maintaining its Customs Office List in this central database. The CS/RD data are covering various domains: NCTS, ECS, ICS, EOS, COPIS.

4.1.6.5 CS/MIS Business description

CS/MIS is a Central Application which collects the traces of the messages exchanged on the Common Domain, generates statistics and reports, collects the business statistics and the availability details of the National Applications for NCTS, ECS, ICS and ECN TIR Russia.

The CS/MIS application is used by the Commission and National Administrations and provides them with the facilities needed to monitor and report on the operations of the Central and National NCTS, ECS, ICS and SPEED systems. This is done by collecting and distributing business statistics, technical statistics and information on the availability of NCTS, ECS, ICS and SPEED and/or National Systems.

4.1.6.6 STTA Business description

STTA is an application developed by DG TAXUD and used locally by the National Administrations to perform Mode 1 tests before they perform Conformance Testing (Mode 2). Mode 1 tests insure the compliance of messages sent/received by National Application with the NCTS, ECS and ICS specifications (for the interfaces with the Common Domain and the External Domain).

4.1.6.7 TTA Business description

TTA (Transit Test Application) is a central testing application that must be used by the National Administrations for performing Conformance Testing (mode 2). TTA provides a means to test a National Application (National Transit Application, National Export Control Application, National Import Control Application) by using scenarios in order to check Common Domain electronic message exchanges through CCN/CSI gateways.

4.1.6.8 ECN TIR-RU Business description

ECN TIR-RU is a SPEED component that ensures the secured exchange of messages between the Commission (14 Member States participating) and Russia with which the EU has on-going international cooperation. The ECN TIR-RU component called SPEED-ECN currently only supports the exchanges of pre-arrival customs NCTS-TIR information.

The need for information exchange is coming either from operational difficulties to perform customs controls in a time frame which responds to expectations from Economic Operators; or from requirements to achieve secure and safe trade lanes. Indeed the Regulation 1875/2006 introduces such measures from 01/07/2009 onwards in the EU and several of our trading partners have similar measures or plan to introduce them.

SPEED-ECN is converting the EDIFACT messages IE012, received from the Member States' application, to produce an XML message (IES01) sent to the Russian application via CCN/CSI.

4.1.6.9 SSTA Business description

The Standard SPEED Test Application (SSTA) is a centrally developed test application that supports NCTS and SPEED. It offers the NA a light PC application to execute, in a cost effective manner, the mandatory National tests (Mode 1) before applying for conformance testing (Mode 2). Mode 1 tests assure the compliance of the NTA with the SPEED specifications for the interface with the Common Domain and the External Domain.

4.1.6.10 ART2 Business description

The Activity Reporting Tool (ART2) supports the management of the large number of joint action activities under the Customs 2020 and Fiscalis 2020 Programmes (the Programmes) supporting the functioning of the Customs Union and taxation systems in Europe.

ART2 enables the decentralized implementation of the Programmes, where the stakeholders of the Programme, National Customs and Tax Administrations, implement the Programmes managed and led by the Commission. The application covers the full lifecycle of programme management from proposal and action/event managements up to participant management, monitoring and evaluation. ART2 accommodates the specific implementation structures of the Programmes and serves as a single point of reference for all stakeholders situated in the Commission and in the Member States.

Each activity under the Programmes needs to be initiated via ART2. Stakeholders can follow the approval procedure through ART and may be consulted when appropriate. All event (meeting) and participant information is connected to the approved activities. The action fiche describes the background and context, the set objectives and expected results as well as the link to the Annual Work Programme. It also identifies the specific area within customs and taxation to which the activity relates. The programme managers in Member States manage their participation in the different Programme events through ART2 and register participants for events through ART2.

Member States also use the system to enter financial data related to the costs reimbursed to participants or for the organisation of Programme events. The on-time availability of financial data allows the Commission to assess the financial state-of-play at any given time. ART2 is used as the official reporting tool on expenditures carried out by the Member States and is recognized as the means of providing financial information for the annual closure of pre-financing assigned to the Member States in the form of grants. The validation rules provide the Commission with the power of budgetary and management control.

The data in ART are essential for the monitoring and evaluation of the Programmes and their impact. The system provides search functions and pre-set queries that support the filtering of information according to the specific/targeted needs.

4.1.6.11 CN Business description

CN is a system to draw up and publish the Combined Nomenclature for tariff classification and statistical purposes.

In order to monitor the flow of goods into and out of the European Union, the goods are identified with reference to a nomenclature for tariff and statistical purposes, the Combined Nomenclature. The CN consists of a table of goods descriptions with related codes together with rules and notes for its interpretation.

In the past, the CN regulation and the CN Explanatory Notes (CNENs) were prepared manually on paper, i.e. without any kind of electronic support (+/- 1,000 pages in each official language for the CN). The CN management system supports the publication process of the

CN regulation from 2005 onwards (for the publication applicable on 1/1/2006) and solves potential inconsistencies between linguistic versions.

As it is possible to provide the Publications Office with the manuscript in electronic form, the system also helps reducing delays in the publication process.

4.1.6.12 SUSPENSION Business description

Suspension allows the creation of a dossier on the suspension of import duties for certain goods and constitutes a back-up to the publication of suspension regulations in the Official Journal.

The Suspension system supports the legislative work for regulations covering the following measures:

- temporarily suspending the autonomous Common Customs Tariff duties on certain industrial, agricultural and fishery products;
- temporarily suspending the autonomous Common Customs Tariff duties on a number of products intended for the construction, maintenance and repair of aircraft;
- autonomous Community Tariff quotas for certain agricultural and industrial products.

For the autonomous suspensions and quotas there are usually 2 publication cycles or rounds started per year, although this is not a fixed rule.

4.1.6.13 CRMS Business description

The latest amendments to the Community Customs Code (Council Regulation 648/05, CCC) and its Implementing Provisions (Commission Regulation 1875/06, CCIP) introduced a legal basis for the establishment of the Community Risk Management Framework which shall be implemented through an electronic Community (Customs) Risk Management System (CRMS). CRMS includes three essential elements for which an electronic solution has to be or has already been developed:

- Exchange of risk information (RIF system already operational);
- Community (Customs) Priority Control Areas and Common Risk Criteria (in operation since September 2009);
- Comprehensive set of security risk rules to be used for continuous screening of electronic entry and exit summary declarations for the security and safety purpose (not yet developed).

4.1.6.14 COPIS Business description

COPIS is a system to exchange Applications for Action to protect goods subject to intellectual property rights against counterfeiting and piracy.

The purpose of the anti-COunterfeit and anti-Piracy Information System (COPIS) is to protect the Intellectual Property Rights (IPR) as set down in the Council Regulation (EC) No

1383/2003 and Commission Regulation (EC) No 1891/2004. To protect themselves from counterfeiting and piracy, right holders can ask the intervention of Customs in order to take measures against goods infringing certain intellectual property rights at the border. COPIS will simplify and reduce the work in MS and COM and improve the cooperation in the area of IPR protection.

4.1.6.15 SMS Business description

SMS is a system to collect and disseminate the specimens of stamps, seals and certificates used for goods presented at the Community border for importation or transit; the Member States may then perform probes of the shipments and documents. The issuing bodies of the stamps, seals and certificates in the various countries must provide the Commission with the specimen information. The Commission is responsible for its dissemination.

When goods are presented at the Community border, for importation or transit, they are accompanied by documents and/or authentication attributes such as stamps, seals, signatures, etc. These may be subject to forgery, usually with the aim of obtaining a more advantageous tariff regime. In order to fight fraud, the Commission co-operates with the competent government authorities in partner and third countries. Partner countries are those which are closely involved in implementing the co-operation procedure.

4.1.6.16 DDS2

The DDS2 system is a collection of various applications composed of one common module and applications disseminating information for a given information domain.

4.1.6.16.1 DDS2-CM

The DDS2-CM is a restricted domain used for translation and statistics purposes. It permits to:

- Consult/Browse the data imports following their transfer for the production applications (TARIC3, CS/MIS, EBTI3, CS/RD, etc.);
- Get statistics over the number of requests done according to several criteria (year, month, week; application; functions, etc.);
- Manage translations in all official languages related to the screens of this domain.

4.1.6.16.2 DDS2-COL

The DDS2-COL domain covers/disseminates public information with the following services:

- Queries/displays information concerning the Customs Offices involved in Transit/Export/Import/Excise/EOS/RSS: name, address, phone number, opening hours, holidays, etc.;
- Allows downloading of the XML files;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.3 DDS2-EBTI

The DDS2-EBTI domain covers/disseminates public information coming from the EBTI3 application with the following services:

- Queries/displays all non-confidential European Binding Tariff Information (with images);
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.4 DDS2-EOS

The DDS2-EOS domain covers/disseminates public information coming from the EOS application with the following services:

- Permits to validate AEO certificates;
- Obtains detailed information about authorized Economic Operators (when given prior agreement);
- Obtains detailed information about sharing authorities;
- Obtains detailed information about registering authorities (see 4.1.6.16.2 DDS2-COL);
- Obtains detailed information about competent Customs Authorities (see 4.1.6.16.2 DDS2-COL);
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.5 DDS2-ECICS

The DDS2-ECICS domain covers/disseminates public information coming from the ECICS application with the following services:

- Queries/Displays a repository of 300,000 chemical substances in all Community languages along with their tariff classification in the Combined Nomenclature;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.6 DDS2-EXPORT

The DDS2-EXPORT domain covers/disseminates public information coming from the CS/MIS application with the following services:

- Allows retrieval of the status of an Export movement based on its Movement Reference Number (MRN);
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.7 DDS2-SEED

The DDS2-SEED domain covers/disseminates public information coming from the SEED application with the following services:

- Allows the Internet user to verify online the Excise Number and, if the response is positive, the system also enables to know which kind of excise product the Economic Operator is permitted to handle;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.8 DDS2-SURV

The DDS2-Surveillance domain covers/disseminates information coming from the Surveillance application with the following services:

- Allows to consult the public surveillance information based on the origin and/or surveillance types;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.9 DDS2-SUSP

The DDS2-Suspension domain covers/disseminates public information coming from the Suspension application with the following services:

- Publishes public information on autonomous tariff suspensions, in preparation or in force;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.10 DDS2-TARIC

The DDS2-TARIC domain covers/disseminates public information coming from the TARIC3 application with the following services:

- Allows to browse the nomenclature in all Community languages and all Community measures relating to imports and exports;
- Allows search for geographical areas;
- Allows search for regulations;
- Provides the facility to retrieve/get reports on relevant information such as duty rates and regulations;
- Includes Quota information;
- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.16.11 DDS2-TRANSIT-MRN

The DDS2-TRANSIT domain covers/disseminates public information coming from the CS/MIS application with the following services:

- Allows retrieval of the status of a Transit movement based on its Movement Reference Number (MRN);
- Provides the EMAP (Transit Movements Electronic Map);

- Manages the translations in all official languages related to the screens of this domain through a specific restricted access URL.

4.1.6.17 EOS Business description

The EOS business purpose is to support a safer and more secure end-to-end supply chain while facilitating legitimate trade. The Community Customs Code requires that traders provide the Customs Authorities with information on goods prior to import and export to/from the European Union.

The EOS IT system is a central repository of all Economic Operators Registration and Identification system (EORI) records and all Authorized Economic Operators (AEO) applications and certificates of the EU. Member State can check in real time the EORI and AEO data with the objective to process properly the customs declarations.

EOS stores information on more than 4.5 million legal entities registered in the 28 EU Member States that come into contact with customs administrations. Sharing this information between MS avoids the need for Economic Operators to register in each Member State to perform customs operations, significantly reducing red tape and the costs for doing business.

4.1.6.18 AEO-MRA Business description

The Authorized Economic Operator Mutual Recognition project aims at providing a system to exchange AEO data between the EU and its partner countries (i.e. Japan, the USA, Norway, Switzerland, China, Russia, Australia, etc.).

AEO MR objectives:

- Customs processes facilitation and harmonization through the computerization of declarations and data exchanged. Access to the AEO data will be made more widely and easily available;
- Trade facilitation granting benefits to partner country's AEO;
- Recognition of AEO status in a larger number of non-EU partner countries.

AEO MR benefits:

- Control and facilitate the movement of goods into and out of the Internal Market through efficient import and export procedures;
- Increase the competitiveness of European trade through a reduction of compliance and administrative costs and an improvement in clearance times;
- Facilitate legitimate trade through a coordinated approach relating to the control of goods;
- Improve the safety and security of citizens with regard to dangerous and illicit goods.

For the moment Mutual Recognition Agreements have been concluded with Japan, Switzerland, Norway, the USA and China. Discussions have started with Canada.

AEO Mutual recognition with Japan
MRA with Japan is being implemented following the interface control document that has been agreed by both parties. Conformance tests have started on 1/12/2015.

AEO Mutual recognition with the USA
The MRA data-exchanges with the USA are fully operational.

AEO Mutual recognition with Switzerland
The MRA data-exchanges with Switzerland are fully operational.

AEO Mutual recognition with Norway
DG TAXUD is awaiting the confirmation to proceed with the interface control definition document and that NO is ready to start the IT implementation project. Once the approval is obtained, the IT activities on TAXUD side can be contractually planned. The first phase of the IT implementation concerns the production of the Interface Control Document. When there is a formal agreement on this interface document, the subsequent IT activities can be contractually planned and started.

AEO Mutual recognition with Canada
Template ICD has been sent to Canada. The conformance testing is expected to start 6 months after the ICD has been signed.

AEO Mutual recognition with China
The MRA data-exchanges with China are fully operational.

4.1.6.19 RSS Business description

Goods carried on a ship sailing from an EU port to another EU port in the Customs territory of the Union normally leave the Customs territory to enter it again when the ship arrives at the other port. This means in general terms that the Customs status of all goods has to be proven to the Customs (as if the ship entered the Community from a third country). This includes those goods that were in free circulation until they left the port of departure since Union goods lose their status when they are removed from the Customs territory of the Community. For this reason, all goods that are carried by sea are deemed to have non-Union status at the time of introduction into the Customs territory of the Union.

However, shipping services that operate exclusively between two or more EU ports can apply for the status of an authorized 'Regular Shipping Service' (RSS). Once this status is granted, the Customs Authorities consider that the goods carried on those services do not leave the Union Customs territory and the status of Union goods does not need to be proven. Such services can operate as bridges between two or more points in the Customs territory of the Union where there are no Customs checks on either end of the bridge. However, non-Union goods carried by these services must be placed under the Customs transit procedure.

RSS is therefore a simplification offered for vessels that ply only between ports situated in the Customs territory of the Union and may not come from, go to or call at any points outside that territory or in a free zone of control type I within the meaning of Article 799 IP of a port in that territory (Article 313a IP). The goods that are carried by these vessels are presumed to be Union goods and are not subject to customs formalities.

RSS is subject to prior authorisation by the Customs Authorities (Article 313b IP). The application must be submitted to the Customs Authorities of the Member State in whose territory that company is established or, failing this, in whose territory it has a regional office. The authorising Customs Authority seeks the agreement of the Customs Authorities of the other MS concerned. The companies must, inter alia:

- determine the vessel(s) to be used for the RSS and specify the ports of call once the authorization is issued;
- undertake that on the routes of RSS, no calls will be made at any port in a territory outside the customs territory of the Union or at any free zone of control type I in a port in the Customs territory of the Union, and that no trans-shipments of goods will be made at sea;
- undertake to register the names of the vessels assigned to regular shipping services and the ports of call with the authorizing Customs Authority.

In 2010, the authorisations for Regular Shipping Services (RSS) were updated, as established by Commission Regulation (EC) No 177/2010 of 2 March 2010 (OJ L 52, 3.3.2010, p. 28), which stated that RSS authorisations must be stored and processed in the 'electronic information and communication system referred to in Article 14x of Regulation (EEC) No 2454/93'. The RSS application is a centrally developed and centrally operated IT system (light client) which consolidates all RSS applications and authorisations in a single repository accessible by all MS in order to satisfy this legislation. The RSS light client allows customs officers to retrieve all information pertaining to RSS applications and RSS authorisations. It also provides a facility for the consultations between the National Administrations, ensuring that the same procedure is universally and correctly applied for all.

4.1.6.20 EBTI3 Business description

EBTI is a system for exchanging and consulting Member States' goods classification decisions and, therefore, their tariff treatment and application of trade policy measures.

The Commission has created an information procedure on the tariff classification of goods, provided by the European Customs Authorities, in order to achieve the following objectives:

- to ensure the uniform application of the tariff classification rules within the European Union;
- to eliminate the differences in the application of tariff classification rules amongst different traders within the Community;
- to ensure the equality and the legal protection of the operator in terms of decisions taken by the different Customs Authorities.

In order to ensure effective management of the procedure, a computerised system has been developed to hold all BTI-related information. This system, named EBTI (European Binding Tariff Information), has the following business requirements:

- to ensure the transparency of customs information and to provide a guarantee of equality of treatment for the operators of the Union;

- to allow Customs Authorities to verify, when they have to classify specific goods, whether a classification decision has already been taken for similar goods by another European Customs Authority;
- to facilitate the classification of goods by allowing investigation of whether there are any classifications for goods with a similar designation;
- to allow the services of the Commission to ensure coherence of classification by the different National Authorities, by searching for divergent or incorrect classifications;
- to look for attempted fraudulent practice and misuse of the procedure by operators (e.g. multiple requests by the same operator);
- to follow the effective application of the invalidation of BTIs.

4.1.6.21 ECICS2 Business description

The ECICS-2 system is a tool for all parties concerned with chemicals in international trade (legislators, Economic Operators, customs, tax or statistical authorities), as well as specialists (chemists, translators and scientific editors) and the general public all over the world (via the DDS-2 on the Europa Web portal).

It makes it possible to identify internationally marketed chemicals in an unambiguous manner for customs, legal and statistical purposes. It contains about 35,400 names for approximately 28,600 chemicals in the European Union (EU) official languages, with their Combined Nomenclature (CN) customs classification, the industry-standard CAS Registry Number (CAS RN) and the Customs Union and Statistics Number (CUS) assigned by DG TAXUD.

The chemical names are internationally recognized names and they are the simplest and the most systematic ones such as the ISO, INN (International Non-proprietary Names for pharmaceutical substances), and IUPAC (International Union of Pure and Applied Chemistry) nomenclature names. Moreover, ECICS-2 has an IUPAC name translation module in 9 languages of the EU-27 which is unique in the world. The ECICS2 system helps to avoid divergences and fraud, and consequently assists in the smooth operation of the Internal Market. For example, some information is available but classified as confidential, such as synonyms of chemical names commonly used by smugglers or other dishonest operators to avoid detection by the Customs Authorities.

ECICS-2 now also includes the ILIADe application which is a shared directory of the analytical methods, developed by the Italian Customs Agency. The Italian administration is not able to continue to maintain and support the ILIADe application. Therefore the Customs Laboratories Steering Group requested DG TAXUD to take over this application in order to secure its maintenance and operational continuity.

4.1.6.22 ISPP Business description

ISPP(IPR) is a system currently used to manage information on inward processing authorisations.

The inward processing arrangements allow Community operators to be relieved from import duties for components imported from third countries with a view to being processed in the Community and subsequently re-exported. Inward processing is categorised as a customs

procedure with economic impact. Therefore the use of this regime is conditional upon granting of an authorisation by the Customs Authorities. This authorisation contains all particulars and conditions in relation to the use of the procedure.

The main objective of the application is to manage information concerning the IPR (Inward Processing Relief) authorisations. The system facilities allow registering applications for import with a view to being processed and re-exported (inward processing) and decisions regarding granting, rejection, annulment and/or revocation.

4.1.6.23 Quota2 Business description

Quota-2 is a system allowing the direct communication between Member States concerning tariff quotas. It is an evolution of the TQS (Tariff Quota Management and Surveillance System) for the management of tariff quotas.

For a number of products, a reduction of the customs duty payable is allowed for limited quantities of imports. This limitation takes the form of tariff quotas. Tariff quotas may apply to imports from a specified origin, normally within the framework of preferential tariff arrangements, or to imports from all origins.

As the Community is a Customs Union, tariff quotas are managed centrally by the Commission. The Taxation and Customs Union DG performs this management in the name of the Commission via the Quota-2 database (except in the case of tariff quotas managed by import licence, where the management is normally the responsibility of the Agriculture DG).

4.1.6.24 SURV2 Business description

The SURV-2 application deals with the surveillance of both imported and exported quantities for economic or anti-fraud reasons. It satisfies the requirement for the surveillance of the movement of goods inside and outside the Community. These requirements are motivated by the fight against fraud or the need for urgent data in connection with the possible application of tariff safeguard clauses.

Free-trade arrangements concluded since 2000 between the EC and certain third countries (e.g. Mexico) include a requirement for the Community to monitor the quantities of Community goods for which proof of origin is issued with a view to obtaining the benefit of a tariff quota in that third country.

4.1.6.25 TARIC3 Business description

On the basis of the Combined Nomenclature, TARIC sets the relevant rates of duty, other Community levies and other specific Community measures for each type of goods.

The aim of TARIC is to be a compilation of the community tariff, commercial and agricultural legislation, codified in a unique and consistent way. It is implemented by a central database managed by DG Taxation and Customs Union. By integrating and coding these measures, TARIC secures their uniform application and gives all Economic Operators a clear

view of all measures to be undertaken when importing or exporting goods. It also makes it possible to collect Community-wide statistics for the measures concerned.

It should be noted that TARIC contains tariff measures (third country duty, suspension of duties, tariff quotas and tariff preferences), agricultural measures (agricultural components, additional duties on sugar and flour contents, countervailing charges and refunds for export of basic agricultural goods), commercial measures (antidumping measures, countervailing duties, safeguard measures, retaliation measures), measures relating to restriction of movements (import and export prohibitions, import and export restrictions and quantitative limits) as well as measures for gathering of statistical data (import and export surveillances).

All **tariff rates and associated trade policy measures** and information (quotas, anti-dumping duties, etc.) are controlled via a central database managed by the Commission. Some **500,000** changes have to be made annually to this database. Member States replicate this database via daily updates into their national systems so that customs officers can use this information for customs treatment of goods entering and leaving the Union, which is much more efficient than every Member State building their own database. The central database prevents delays in applying tariff measures and potential discrepancies between different countries related to encoding errors and interpretation of the legislation. Equal treatment of traders and trade facilitation is also reinforced. Since 2007 the Customs Programme has spent 3.7 million euro on the tariff database, avoiding the need for every Member State to duplicate this effort.

4.1.6.26 TATAF: TARIFF Application Technical Architecture Framework

In 2001, DG TAXUD started to develop most of its applications following a new technical framework based on the J2EE standards. The following figure gives an overview of the various components of the architecture:

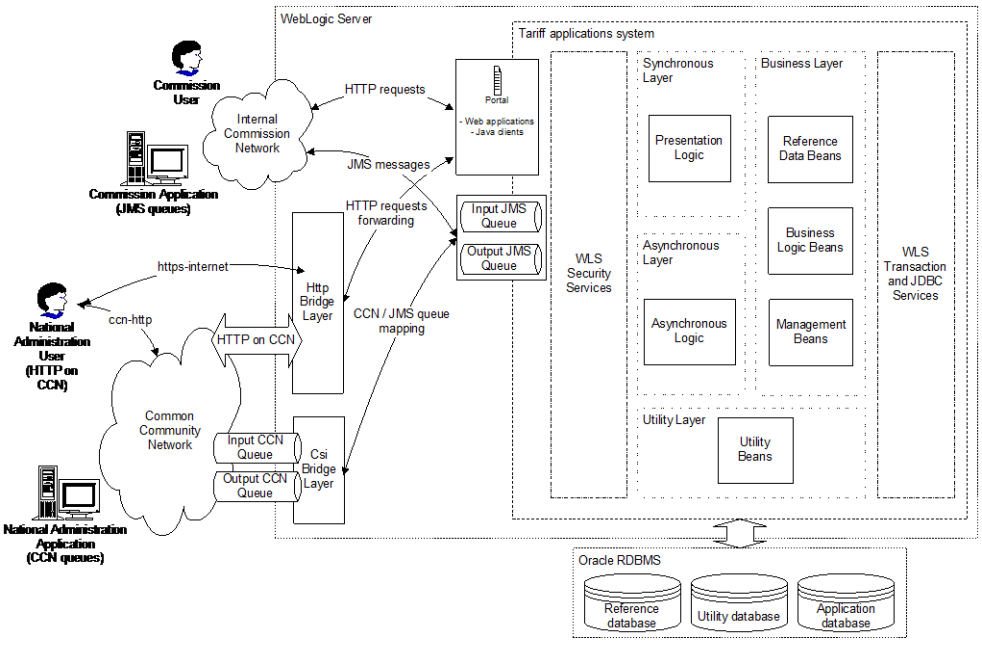

Figure 8: Overview of the TARIFF Application Technical Architecture

The BEA WebLogic Server (WLS) application server supports the whole system. WLS is an implementation of Java 2 Enterprise Edition (J2EE). Notably, the system relies on WLS for deployment, security, and transaction management.

The applications have as a common requirement to keep information in a persistent storage. All persistent data is stored in the Oracle RDBMS. Note that the different databases depicted in the figure only represent logical data separation. It does not suppose physical separation of data in different database instances.

Whenever messages have to be exchanged asynchronously, the Java Messaging Service (JMS) queuing mechanism provided by WLS is used. Two important properties of those queues are the following:

- They can participate in transactions. This means messages can be put into or removed from such queues within a transaction and the operation will be committed or rolled back according to the results of other operations in the same transaction.
- A message can be automatically removed from such a queue if it cannot be read or processed for any reason. This message is then put into an exception queue that can be managed by an administrator.

There are two types of usage of the systems by the national administrations. The national administration can access the Commission systems from system-to-system, meaning direct communication between server applications without the direct intervention of an end user. System-to-system usage communicates through CCN queues. The CsiBridge layer maps CCN concepts on WLS concepts. As a result, the other layers do not depend on CCN.

The second type of usage uses the HTTP protocol to connect interactive end users to the Commission systems. In this type of usage, the interactive user has to connect to the CCN network in order to authenticate himself. Once the user is authenticated, he has the option to continue using the CCN network or to redirect to a HTTPS connection over the public Internet (please note that this last option is not operational anymore but is still part of the framework). The HttpBridge layer handles all HTTP communications originating from national administrations.

The 'tariff applications system' is subdivided into several logical layers that interact with each other.

The business layer hosts all the application logic. This includes the implementation of the business logic specific to each tariff application, and the implementation of some management services (e.g. statistical inquiries, etc.). This layer also provides services to manage the reference data.

The tariff applications system provides two different access paths. The first is a portal, which is actually the entry point for each tariff application. This portal provides links to the different interactive applications. The second access path is a JMS queue, which is actually the entry point for system-to-system asynchronous applications.

The synchronous layer supports the interactive applications. It is mainly composed of presentation logic. The asynchronous layer supports the system-to-system interface. Both layers interact with the business layer to process the messages coming from the users.
The utility layer provides a set of common services shared by the applications and by the different layers (e.g. document storage).

Finally, as explained above, the CsiBridge and HttpBridge layer are responsible for the mapping between the CCN system and the WLS system.

4.1.7 Direct and Indirect Taxation, Recovery of Claims and Excise systems

For more information about existing Taxation/Excise systems, please refer to the Baseline, and more specifically to the Taxation/Excise Fiches [R8]

The scope of this section is to provide an overview of provisional IT activities foreseen in the Taxation and Excise areas in the next years. This strategy is aligned with the strategy of the business units and aims at tackling the tax-related inefficiencies and obstacles to cross-border economic activity in the Internal Market.

Assumptions: the start of several activities is conditioned by a "go decision" date which relies on the result of negotiations with Member States, for example in Tax Committees or Council. When the "go decision" date has not been fixed yet, the planning assumes the most suitable date in order to spread the workload of the different projects over time.

For the coming years, the IT activities to be achieved in Taxation and Excise are articulated around the following main axes:

4.1.7.1 INDIRECT TAXATION RELATED PROJECTS

In the field of VAT, all proposals and new projects are aiming at addressing the significant increase in VAT requests on Europa, at increasing the efficiency of the Internal Market and at safeguarding the tax base and national tax revenue. They are grouped in the following main categories of projects:

- VAT eForms evolutive maintenance, Multilateral Cooperation (EUROFISC) Invoicing Rules and VAT Rates Exchanges (both under the TIC project);
- VAT Refund (operations and evolutive maintenance) and Mini-One-Stop-Shop (MOSS). It is likely that after MOSS goes live, it will evolve into a full One-Stop-Shop system (it is however not expected to have a legal basis adopted before 2018);
- VIES Maintenance: it consists in several projects aiming at improving VIES;
- Vies-on-the-Web Maintenance;
- The introduction of an EU VAT Portal, including a clear and binding list of goods and services not covered by MS standard rates;

- The Self-Service Testing System (SSTS) supporting conformance testing;
- The Taxation Information and Communication (TIC);
- The Taxation Statistics System (TSS);
- The SCAC Statistics eForms.

4.1.7.2 RECOVERY OF CLAIMS

- As the need for recovery assistance is increasing, it is absolutely necessary to reform the functioning of the mutual recovery assistance. To boost the recovery ratio, it is necessary to change the conditions for assistance requests and to develop a system of spontaneous information exchange. The Recovery Committee has requested to update these forms to make them more easy to use and efficient;
- Recovery eForms will be extended to non-EU MS, pending a suitable legal basis for this (see below) ;
- Given the increased number of notification assistance requests, and the need to ensure data protection when notifying tax documents abroad, it has been suggested to develop an EU electronic notification blackboard for notification of tax documents ("Portal for Official Registration of Tax Orders (PORTO)-notifications");
- CAR information exchange. The development of automatic exchange of information with regard to vehicle registrations, with the EUCARIS system used as a basis.

4.1.7.3 DIRECT TAXATION RELATED PROJECTS

The activities are articulated around the following main axes:

- Taxation of Savings (Council Directive 2003/48/EC). Support to the operations of system and identification of means and tools allowing a better quality of data such as improvements of TIN-on-the-Web;
- Administrative Cooperation (Council Directive 2011/16/EU repealing Directive 77/799/EEC). The first main activity consists in setting in place and maintaining electronic eForms to improve the mutual assistance between the Member States (eFDT eForms). The second main activity consists in setting in place an automatic exchange of information regarding five categories of information (DAC1). Additional amendments to this directive introduce additional categories of financial information to be exchanged (DAC2 CRS) and the exchanges of Rulings information (DAC3 Rulings). Above activities include a strong cooperation with the OECD as they are leading a similar project. The extension of the CCN/Mail services to non-EU countries is also part of this axe (see 3.g below). Last developments in the context of the Foreign Account Tax Compliance Act (FATCA) enforced by the USA show that most of the Member States have implemented the format proposed by the USA regarding their information exchange for what concerns their bilateral agreements with the US fiscal administration. In parallel, the OECD has developed the Common Reporting Standard (CRS) which will comprise an electronic format along with an agreement model that will be used by its member countries in their bilateral agreements. The OECD is now currently working on setting in place a Common Transmission System which will be a

worldwide platform for the exchange of information under the CRS, which opens an opportunity for the Commission to propose an interface with the 3rd Countries that would fit the need for rationalization of IT tools as mentioned in the Commission Communication COM(2012) 722 final. Possible EU interconnectivity project with 3rd Countries (CRS), with US (FATCA) and between 3rd Countries (CRA);

- CCN/Mail services extension to the OECD;
- DG TAXUD to act as 24/6 help desk for international exchanges of +-150 countries in the scope of the OECD, and related business and applications management support;
- Standard Audit File for Taxation (SAF-T);
- Creation of an EU Tax Identification Number (TIN): DG TAXUD/D2 and C5 realised a feasibility study;
- Cross-border Withholding Tax Relief at source: FISCO and its equivalent at the OECD, the TRACE (Treaty Relief and Compliance Enhancement) project.

4.1.7.4 OTHER TAXATION RELATED PROJECTS

- The Taxes in Europe Database application (TEDBv2), aiming at providing the citizens with access to the information on taxes, has been redeveloped including TAXREF, which is a project aiming at tracking the evolution of some taxes. Currently, a study is on-going to review the tax forms published on the website (TEDv3);
- An eForm Central Application project has been launched and will aim at reducing Member States deployment costs and efforts by centrally providing the eForms currently used in the VAT, Direct Taxation and Recovery areas. This will also ensure homogeneity of the versions used by the MS. Extension of eForms to OECD Countries;
- In 2014 the Benelux countries have conducted a pilot project named Social Networking Analysis (SNA), whereby existing data from different sources (mainly data available within the Eurofisc network completed with static VIES data, and also with other international and national data) are combined and analysed to detect possible VAT fraud at an early stage. The results were very impressive, with a high detection rate and very few false alerts. DG TAXUD is now called to examine whether this system can be extended EU wide;
- Taxation Web Portal (TWP), after EU VAT Portal project;
- Financial Tax Transactions (FTT);
- ORBIS –Central Server;
- Effective Tax rates.

4.1.7.5 EXCISE

The next maintenance release that will be launched is Phase 3.2 in 2016, then a provisional planning keeps the milestones already defined for Phase 3.3 (2018) and introduces a new release planning for each Excise Domain presented as an independent e-Excise project. Future changes need to be timed to align forthcoming legislative changes (possible revisions of

Directive 2008/118/EC in 2016, possible changes to Council Regulation (EU) No. 389/2012 in 2017, and the implementation of the Union Customs Code from 2016 to 2020).

To achieve a higher level of uniformity between legal provisions and IT implementation, as well as to improve effectiveness and efficiency, excise makes use of the Business Process Modelling methodology, i.e. identifying automated and non-automated Excise Business Domains and the gaps between the automated business processes and their translation into functional requirements. The Business Domains and related future potential projects are listed below:

Currently automated Excise Business Domains and related activities are:

- EMCS Core business, consisting of Core business and Interfaces with Customs systems.
    - Implementation of bar code for the ARC on printout;
    - Definition of a uniform fallback document layout;
    - Definition of 'journey time';
    - Need for standard procedural simplifications for trusted traders, based on Article 31 of Directive 2008/118/EC;
    - Handling of exceptions, 'time limit' issues;
    - Establishing automated links between EMCS, the Export Control System (ECS) and national import systems.
- Administrative Cooperation:
    - Alignment of the data items and messages for administrative cooperation requests for duty paid and duty suspended goods;
    - Clarification of the gaps and the relationship between claims, guarantee management and the Recovery Directive;
- Registration and Authorization Data management - EMCS Economic Operator registration and reference data (SEED);
- Customs Office List management and Reference Data management- CS/RD;
- Statistics management and Availability management - Central Services/ Management Information System for EMCS (CS/MISE);
- EMCS Test Application (TA, M);
- EMCS Converter (M).
- Excise Business Domains, Candidates for Automation:
    - Duty Paid Business to Business;
    - Duty Paid Distance Selling;
    - Risk Management System;
    - Exemption management.
- Excise Business Domains, the automation of which is currently not part of central planning (national or possible collaborative development projects):
    - Guarantee management;
    - User access management (except for Common Domain applications);
    - Business continuity management (except for Common Domain applications).

- Other possible functionalities supporting non-automated Excise business domains or non-excise requirements
    - Support for carrying of Agricultural compliance information;
    - Tobacco track and trace.

4.1.7.6 COMMON PROJECTS

With Communication COM(2012) 722 final, the Commission presented an action plan and set out how it is possible to improve tax compliance and reduce fraud and evasion, through better use of existing instruments and the adoption of pending Commission proposals. It also emphasized the rationalization of the IT tools with the aim to reduce IT costs for the Member States. Moreover, other projects are foreseen to improve the IT collaboration of Member States Administrations on delivering their national projects or to de-silo taxation domains.

The main projects foreseen in the next years are as follows:

- Housing of FITSDEV3 development environment;
- Housing of MS development environment for IT collaboration projects;
- Conformance Test Application (CTA).

4.1.8 Evolutions related to Infrastructure

The infrastructure evolutions are driven by the High Availability (HA) Programme which deals mostly with the consolidation of DG TAXUD's Datacentres and the provision of infrastructure with sufficient capacity enabling high availability, security and SOA capabilities for DG TAXUD IT systems.

This programme is enabling the on-going severe transformations on DG TAXUD IT environment. DG TAXUD's Datacentres will host the three key new systems that will transform the technological blueprint of EU Customs: CDMS; UUM&DS and CCN2. It will also open the possibility to new schemas and paradigms of systems requiring specific and flexible levels of security and accessibility not possible in the current infrastructure.

DIGIT infrastructure services will still be used by the majority of DG TAXUD's applications, however those that are more demanding, in terms of capacity, processing power or operational issues will eventually be migrated to the DG TAXUD Datacentres.

One of the major drivers for the set-up of the DG TAXUD Datacentres is the provision of highly available infrastructure capabilities.

This driver is two-fold: on one hand, and most importantly, it is an enabler for highly available new applications and services as required in the MASP; and on the other hand it will implicitly improve the availability of existing applications.

However, it is essential to understand that highly available infrastructure does not make highly available IT systems. In order to ensure high availability for an IT system, it not only has to be carefully and specially designed with this purpose but also the proper service management processes and automating tools must be introduced to allow continuous monitoring, swift deployment and fast reliable testing of patches and releases.

This is why the objective for 99.8% availability of the infrastructure does not mean that same availability level for the systems running on this infrastructure; in fact, the target of availability for those systems can only be lower and is estimated in between 99.5% and 99.7% - depending on the robustness of their design and on possible external dependencies.

A very similar reflection is to be done with the disaster recovery capabilities. For example, the time to recover (TTR) the infrastructure services from a disaster comes on top of the time to recover (TTR) the applications running on it, either by starting or redeploying them at a new site.

The Datacentre infrastructure is being implemented according to an architecture designed according to DG TAXUD's requirements. This architecture must be the reference and be respected for IT systems' implementation. This means the architecture being documented and shared with all stakeholders via Hosting Guidelines and Infrastructure Service Catalogues.

Although the Datacentre infrastructure was designed to host legacy systems, some were designed before the Datacentre architecture was set up and will require specific measures (mainly SPEED2, CCN and CCN2).

The following is a list of actions foreseen in the mid- and long-term in the context of the HA Programme:

- Feed the service catalogue services;
- Improve/adapt the hosting guidelines;
- Adapt the baseline architecture with future requirements;
- Host new customers in the Datacentres;
- Setup a third row in the Datacentres;
- Improve security measures/procedures;
- Adapt the BCP/DRP procedures' process in the data centres and launch a periodic fail-over test between the Datacentres;
- Set up a back-up Internet service provider in the Datacentre – improvement of the availability;
- Plan a staging environment accessible remotely by the management team;
- Host new applications in the data centre (HA/DR mode) RTO < 2h;
- Implement SIEM services;
- Host FITSDEVx contractors;
- Migrate the whole CCN2-DEV development environment from CCN2-DEV Datacentre to DG TAXUD Datacentre
- Stabilise of the existing applications/services;
- Improve the procedures (DRP) – automation of process;
- Improve the security (Antivirus/SIEM);
- Improve the Monitoring;

- Optimise the “power per rack”/servers – consolidation;
- Enable self-deployment of Virtual Machine for X-Devs;
- Develop a new Iteration of the Architecture with new requirements (including view of 2020 applications).

4.1.9 Evolutions related to Operations

The key major evolutions of Operations services are related to monitoring. The core monitoring tool used in DG TAXUD is currently TIVOLI; however for the management and monitoring of the Oracle SOA platforms deployed at DG TAXUD the intention is to use the Oracle OEM tool, which is to be integrated as much as possible with TIVOLI.

4.1.9.1 TIVOLI RELATED EVOLUTIONS

The current Tivoli environment is used by ITSM2 Lot1 to monitor the infrastructure and applications of DG TAXUD. Part of the set-up is still today in the ITSM "bubble", created in the Luxembourg Datacentres for the relocation of the former ITSM Datacentre. Another part is available in the target environment, for the monitoring of the CCN environment. The systems monitored from within the bubble are both in the bubble and outside the bubble.

ITSM2 Lot1 intends to move the Tivoli monitoring system from the bubble to the target environment in the coming months. This takes into account:

- The monitoring of both Datacentres (one instance of Tivoli must be able to monitor devices in both Datacentres);
- The Tivoli set-up for continuous monitoring of all resources (one instance of Tivoli must be able to monitor all devices);
- The most economic set-up in a high-availability/Disaster Recovery context (the least number of components to cope with HA and DR);
- A consolidation of the ITSM and CCN clusters;
- A consolidation of the whole information in one Data Warehouse.

The following picture might be seen as input for the high-level design of the target environment.

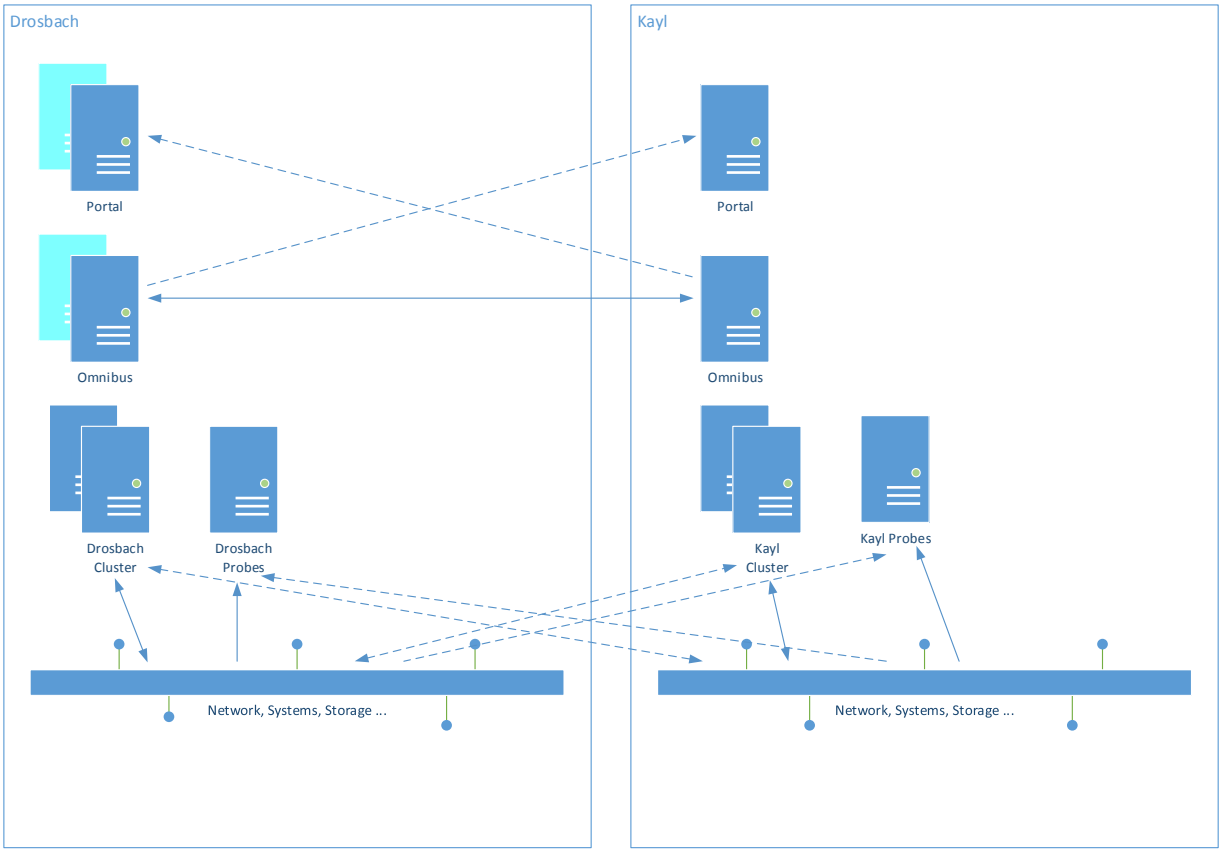

Figure 9: Target Monitoring environment

The scope does not only take into account the Tivoli monitoring components, it also considers all Tivoli components deployed for the management of the DG TAXUD infrastructure. This includes, but is not restricted to, Tivoli Netcool, Tivoli ITM, Tivoli TADDM, Tivoli EM (BigFix), etc.

Following this project, there will be two other actions in the longer term related to the Tivoli environment:

1. The set-up of Tivoli in a HA/DR context
2. The consolidation of the ITSM and CCN monitoring environments

4.1.9.2 ORACLE ENTERPRISE MANAGER RELATED EVOLUTIONS

Within the ITSM part of DG TAXUD IT environment, many services relay on the Oracle technology stack, which is present on existing projects (mostly on SPEED2 platform) and planned for future deployments on platforms not yet in production (e.g. CCN2, TATAFng).

From both management and business perspectives, there is a strong need to centralize the monitoring and management of all Oracle products. Oracle Enterprise Manager (OEM) is proven to fulfil this requirement.

As of today, one OEM instance is used for the management and monitoring of the SPEED2 platform. The intention is to set up a centralized highly available OEM instance to manage both SPEED2 and the SOA platform implementing the TATAFng application architecture. The CCN2 platform, however, will keep its own OEM instance for management and monitoring to ensure the self-containment and independence of the CCN2 platform from the surrounding infrastructure.

The OEM instances will be integrated as much as possible with TIVOLI, which is considered as the main underlying monitoring platform.

4.1.10 Evolutions related to Service Management

The Service Management Programme managed by DG TAXUD involves the analysis and continuous improvement of ITSM processes, the introduction or evolution of tools (e.g. SMT, Service Catalogue), the measurement of quality indicators and levels of service and the maintenance of the Framework Quality Plan.

Among others, the main tactic evolutions currently defined within this Programme are:

- Ensure definition, maintenance and coherence of all SLAs, OLAs, MoUs of stakeholders and contractors that relate to services under the responsibility of TAXUD and promote their convergence;
- Follow up the quality of services delivered by service providers and their compliance with contractual or other agreements (SLAs, OLA, MoUs);
- Ensure the maintenance of FQPs and validate periodically their alignment with reality and launch the necessary CSIP projects to improve the services;
- Ensure that IT Service Management Processes, tools, documentation and implementation are adequate for the future systems, based on SOA and high availability;
- Define and implement Knowledge Management processes, tools and best practices necessary for the best continuity and efficiency of DG TAXUD IT Service Management processes.

4.1.11 Evolutions related to CCN Operations

The scope of CCN2 Release 1 does not include any interface with legacy CCN/CSI middleware. During a certain period between CCN2 Release 1 and CCN2 Release 2 both CCN/CSI and CCN2 will be used.

The scope of the so-called CCN2 Release 2 includes the legacy CCN/CSI interfaces and the migration of the legacy CCN traffic from the existing CCN/CSI infrastructure to the new CCN2 Platform infrastructure. After migration, the CCN/CSI infrastructure will not be used any more. The legacy CCN/CSI traffic and new CCN2 (SOA) traffic will be supported by CCN2 middleware only.

The scope of so called CCN2 Release 3 includes all remaining features of CCN2, amongst all Master Data Management.

4.1.11.1 Residual (post cut-over) risks on CCN/CSI continuity

Considering the almost simultaneous change of CCN development and operations support contractors during 2013, there were a number of risks that could impact the CCN/CSI business continuity. These main risks considered in 2013 were:

- The change of contractors for the 2 CCN-related Framework Contracts but also for other application development and quality contractors – resulting in a significant loss of knowledge of the DG TAXUD business and technical backgrounds by most contractors providing and consuming CCN/CSI services;
- The complexity of the CCN/CSI ecosystem induced by the high and continuously increasing number of CSI applications/stakeholders – imposing an extremely structured and cautious approach in the testing and deployment of CCN/CSI patches and releases that is complicated and time consuming. Furthermore, specific areas in operations support are proven to be complex for both the **ITSM3 Operations** and CCN2-DEV contractors who need to support them;
- The variety of – partially outdated – skills required to maintain the CCN (legacy integration of various COTS) and CSI (legacy development in C/Cobol/Java) software makes it difficult to recompose a team with all necessary skills;
- The fact that many COTS used - especially in the CCN/CSI Gateway Software - have reached their end of life or end of support reduces the durability of CCN/CSI. This also impacts its security and robustness aspects as well since servers will not be able to be patched because of certain COTS being obsolete and thus failing to be compliant to the Patching Policy of DG TAXUD;
- The Take-Over of the CCN portal, including the CCN statistics operation that was not in the scope of the Hand-Over to-date.

4.1.11.2 Proposed Approach to Risk Mitigation

DG TAXUD and CCN2-DEV agreed on the following list of "Petites Manoeuvres & Grandes Manoeuvres (PM/GM)" to mitigate the risks mentioned above. These actions were performed during 2015. The activities groups are listed hereunder:

- GM1 – New release of the CCN/CSI Gateway Software (7.3.0 (for Linux only) and including many COTS updates of most of the COTS used (except Apache and LDAP))
- GM2 – Update of Support Tools (mainly a set of automated scripts to help the work of the ITSM2 Lot1 contractor)
- GM3 – Improvement of SDLC (mainly focusing on the nightly build and automated testing of some new releases e.g. CCN/CSI GW, Stacks and new CCN portal)
- GM4 – Improvement of COBOL stack documentation and missions to MS to upgrade the COBOL stack to the latest applicable version
- PM1 – Elaboration of an Operations Manual for the ITSM2 Lot1 contractor

- PM2 – Improvement of ClearCase documentation
- PM3 – Partial replacement of CCN Portal (based on a subset of the existing CCN/TC Portal of the operational contractor)
- PM4 – Feasibility Study on Apache upgrade
- PM5 – New release of ACT
- PM6 – Replace ForeFront in CCN Mail III
- PM7 – C CSI Stack 5.5.5

It must be noted that all these new releases will have to be deployed (including (P)SAT and Conformance testing) by the operational contractor (**ITSM2 Lot1**, then **ITSM3 Operations**) during 2016 and 2017. Furthermore the CCN2-DEV contractor yearly maintains a Release Management Plan covering all planned releases for the next year for the CCN2-DEV related CIs. The 2015 Release management plan is under review at the writing of the present document (see [R9] CCN2D-CRMP-SC03-Release Management Plan-20141211v1.00.zip).

5. Scope of ITSM3 Integration

5.1 Overview

The main objective of the ITSM3 contract is to ensure the coherence, the completeness, the security and the financial and operational efficiency of DG TAXUD IT services. The **ITSM3 Integration** contractor will therefore represent and defend the interest of DG TAXUD towards the service suppliers.

The services to be performed under **ITSM3 Integration** can be divided as follows:

- Four types of core tasks within **ITSM3 Integration** :

  - **Technology advisory services** (Service Block 2: Integration Advice); advice and leadership support on architecture, operations, development, security and QA. Answering to the question: "Are we doing the right things?"

  - **Management support activities** (Service Block 3: Integration Management Support, Service Block 4: Portfolio Management Support, Service Block 5: Asset management Support); increasing maturity, effectiveness, efficiency and security of the operations. Supporting collaboration and coordination between the various stakeholders. Assist in monitoring the infrastructure operations and security. Assist in the management of the infrastructure transformation projects. Assist in the prioritisation of projects, in the establishment or validation of effort and cost estimates. Answering questions such as: "Are we doing things right?"

    The **ITSM3 Integration** contractor will endorse a direct responsibility on the result of the integration activity. The required service implies an analysis of the information provided by the other contractors (as opposed to a simple consolidation). As an example, should the planning of 2 projects be incompatible, or the scope overlap, or some activities missing in a scope definition, it is the duty of **ITSM3 Integration** to inform DG TAXUD. Failure to do so would lead to the activation of the appropriate SQI.

  - **Benchmarking and assessments** (Service Block 6); answering the question: "Are we getting sufficient return on investment?"

  - **Support on IT collaboration activities** (Service Block 7) which encompasses not only technology advice and management support but also strategic advice and legal support.

- Three types of supporting tasks:

  - **Project management** (Service Block 1); management of the **ITSM3 Integration** contract itself, including contract and internal quality management;

- **Transition** (Service Block 8); tasks covering Take-Over and Hand-Over of the ITSM Integration activities);
- **Other services** and deliverables (Service Block 9).

5.2 Place of work

The work will be performed primarily at the **ITSM3 Integration** contractor premises (extra-muros). Meetings with National Administrations are generally held at the Commission's premises.

The **ITSM3 Integration** contractor should be able to be at DG TAXUD premises in Brussels at half a day notification. This ensures that urgent meetings with limited upfront notice can be attended.

DG TAXUD may request that (part of) the services (typically the services expressed in man/days in the price model) are performed within the Commission's premises (intra-muros).

During the contract and on request of the Commission, services could be delivered inside the tenderer's premises, inside the Commission's premises (e.g. in DG TAXUD) or outside these premises, e.g. National Administrations, other contractors premises, other supplier premises, etc. In the case of services delivered outside the tenderer's or the Commission's premises, and only for those cases, the travel and subsistence expenses shall be reimbursed according to the rules specified in the Framework Contract.

The travel and subsistence expenses for meetings at the Commission's premises (Brussels and Luxembourg, including DG TAXUD's Datacentres in Luxembourg) are to be included in the fixed price elements. No travel and subsistence expenses will be reimbursed **between** Commission's premises (Brussels and Luxembourg, including DG TAXUD's Datacentres in Luxembourg).

All meetings and training sessions during the Take-Over and Hand-Over are to be included in the Take-Over/Hand-Over price elements, including the travel and subsistence of these meetings/training sessions, regardless of their location (DG TAXUD or contractor premises). No travel and subsistence expenses will be reimbursed during the Take-Over/Hand-Over.

The above rules are also applicable for **any other mission**.

5.3 Team requirements

The **ITSM3 Integration** contractor has the responsibility to have a solid, stable and dedicated core team providing the continuous services. This team should cover a wide range of expertise (not necessary always as FTE): project management, contract management, quality management, integration office support, architecture expertise, security expertise, IT operations expertise, as well as technology expertise. The core team should be dimensioned in order to support the volume of activities described in Chapter 10.

The resources providing on-demand support will be part of a pool of expertise. Typically, this type of expertise would cover various technology or business aspects, which do not necessarily require in-depth knowledge of the DG TAXUD environment.

In case of staff replacement, it should 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 day unpaid overlap** between the old and new resource.

 Each staff member assigned by the **ITSM3 Integration** contractor must sign a declaration of confidentiality and a compliance statement to the security rules in compliance with article III.2.2. of the General terms and conditions for IT contracts, annexed to the FC, article 4 of the Commission decision on protection of information systems [C (2006) 3602] and with article 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.

Please refer to Section 9 – "Staff profiles" for details on the staff profiles.

5.4 Deliverables and services to be produced

Please refer to Section 7.4 – "List of Deliverables/Services" for the list of deliverables to be produced by **ITSM3 Integration**.

6. Services to be provided by the ITSM3 Integration contractor

ITSM3 Integration activities are divided into Service Blocks listed below.

ID	Description
Service Block 1	Project, Quality and Contract Management
Service Block 2	Integration Advice
Service Block 3	Integration Management Support
Service Block 4	Portfolio and Risks Management Support
Service Block 5	Asset Management Support
Service Block 6	Benchmarking and Assessments
Service Block 7	Consulting on IT Collaboration
Service Block 8	Transition
Service Block 9	Other Deliverables and Services

Table 9: Table of Service Blocks

A number of tasks from Service Blocks 1 to 5 are part of the continuous services. All Service Blocks can be related to on-demand or otherwise time limited services.

The number of occurrences will depend on the actual needs of DG TAXUD, as well as on the capacity management of **ITSM3 Operations**.

6.1 Service Block 1: Project, Quality and Contract Management

6.1.1 Contract Management (Task 1.1)

A Framework Contract (FC) is executed via Specific Contracts (SC) covering mainly the following types of services:

- Continuous services – fixed price activities including management, integration advice (partly) and integration management support (except for the transition support);
- On-demand activities – specific on-demand activities to cover service provision for request, such as advice on technology selection, benchmarking, assessments, transition and other ad hoc services.

ITSM3 Integration contract management is responsible for any contracts related discussions with DG TAXUD regardless whether it is a continuous or an on-demand service. In practice this means executing the following tasks:

- Contractual Change Management (for FC as well as all SCs);
- Reporting on Financials;
- Answering to requests for offers (RfO) or requests for estimates (RfE);
- Taking care of negotiations, clarifications and precisions related to the above responses;
- Requesting e-triggers, for example to have more man/days or other quantities released under an RfA;
- Requesting the formal acceptance to deliverables or activities;
- Submitting invoices according to the contract and acceptances;
- In the event of a dispute, finding a resolution together with DG TAXUD.

In the above activities, the **ITSM3 Integration** contractor follows the steps as defined by DG TAXUD in the TEMPO document: "Specific Contract Management – reference manual" [R10].

Missions to National Administrations and to the premises of the other contractors can also be performed within the scope of this contract. DG TAXUD must approve these missions, as they require engaging a specific budget as defined in the mission request. **ITSM3 Integration** contract management takes care of requesting for mission budget, and equally reporting correctly on the occurred expenses according to the European Commission's mission rules.

All estimates and offers are sent to DG TAXUD's contractual functional mailbox in two parts:

1. Technical proposal (this part is also delivered on CIRCABC).
2. Technical and financial proposal.

All requests and messages containing commercial information should be sent to the same mailbox.

What is described above relates to the contractual aspects between **ITSM3 Integration** and DG TAXUD. Continuous and on-demand service requests follow a defined demand management process. See next chapter (6.1.2.3.1) for more details on demand management.

6.1.2 Project Management

Project management and governance include activities such as:

- Governance and relationship management;
- Project reporting.

The two activities listed above are the most visible ones to DG TAXUD. Nevertheless, in order for any project to function efficiently and to provide the requested services, project management involves many other tasks as well. The following sections describe these activities:

- Planning and managing the service provision
- Managing the team.

6.1.2.1 Governance and Relationship Management (Task 1.2.1)

6.1.2.1.1 GENERALITIES

- The **ITSM3 Integration** Project Manager acts as a SPOC towards DG TAXUD and the other contractors. (S)He plays a key role in networking and liaising with the other stakeholders. As already indicated before, the SPOC is the primary point of contact towards the other stakeholders. Secondary contacts can be established directly between the team members and relevant counterparts at DG TAXUD and the other contractors.
- **ITSM3 Integration** has regular and frequent contacts with DG TAXUD. This is important in order to capture the needs of DG TAXUD, to stay updated in the developments and progress. Contact is kept via meetings, e-mails and telephone, and much of the communication is ad hoc. Communication is also formalised via steering committee meetings and bilateral monthly meetings.
- **ITSM3 Integration** Project Manager plays an active role in anticipating and meeting DG TAXUD demands. The **ITSM3 Integration** Project Manager seeks to understand DG TAXUD operating environment and challenges in order to optimize the **ITSM3 Integration** services.

6.1.2.1.2 DUTIES OF THE ITSM3 INTEGRATION CONTRACTOR:

- Establish a meeting calendar with DG TAXUD (including bilateral monthly meetings, steering committee meetings, and follow-up meetings (FUMs))
- Send meeting invitations together with the preparatory material to the relevant stakeholders (as agreed, and as needed)
- Report on each meeting in order to share and inform meeting participants and the other team members about the meeting outcomes and action points. These meeting minutes and action points are stored on the **ITSM3 Integration** collaboration platform.

- Bilateral monthly meetings are supported by deliverables as indicated below.

6.1.2.1.3 MEETINGS ORGANISATION:

The meetings above provide a vehicle for coordination, discussions and alignment. The alignment of the goals of **ITSM3 Integration** and DG TAXUD integration efforts is crucial.

In order to perform all its duties in the most efficient way possible, the **ITSM3 Integration** contractor will need to have a clear view and understanding of the business needs and environment of DG TAXUD and of other contractors involved. The following pages provide the reader with a detailed description of the above-mentioned meetings.

Meeting #1. Steering Committee meeting – Management meeting	
	Quarterly meeting or by Mutual Agreement
	TAXUD/A5 - Head of Unit TAXUD/A5/ISD - Head of Sector TAXUD/A5/ISD – Person responsible for major projects where the Steering Committee Meeting is linked to strategic project(s) **ITSM3 Integration** counterpart of the DG TAXUD function(s) above
	A5/HoU
	Estimated duration: 2-3 hours
	**ITSM3 Integration** contractor

Table 10: Steering Committee meeting typographical representation

Scope:

Steering Committees are held (at the request of the **ITSM3 Integration** contractor or DG TAXUD) between DG TAXUD **Head of Unit A5** and the **ITSM3 Integration** contractor's top management (the **ITSM3 Integration** contractor's representative(s) at director level). Steering Committee meetings are chaired by the DG TAXUD **Head of Unit A5**. Meetings will focus on the strategic aspects of contract and risk management.

The Committee discusses:

- High-level progress;
- Issues escalated from the BMM.

The frequency is typically every quarter for standard Steering Committees meetings but can be changed based on the criticality of the topics that need to be addressed (e.g. escalated issues, pain-points, critical activities, major risks). Steering Committees will be organised for the general follow-up of the activities, but can also be organised for strategic projects.

Input to be prepared by the ITSM3 Integration contractor:

- Agenda;
- Slides supporting the meeting;
- Minutes of the previous meeting;
- Actions list[13] (For actions tagged as "STEERCO");
- Risk Register[14] (For risks tagged as "STEERCO").

Output to be prepared by the ITSM3 Integration contractor:

- Updated Actions list (With actions tagged as "STEERCO") - online as well as annexed to the Minutes of the meeting;
- Updated Risk Register (With risks tagged as "STEERCO");
- Minutes of meeting.

[13] The **ITSM3 integration** contractor will maintain a list of actions that need to be followed, with their deadlines.
[14] The **ITSM3 integration** contractor will maintain a Risk Register.

Meeting #2. Bilateral Monthly Meeting (BMM) – Management meeting	
	Monthly meeting
	TAXUD/A5/ISD - Head of Sector TAXUD/A5/ISD – **ITSM3 Integration** Contract Manager **ITSM3 Integration** counterpart of the DG TAXUD function(s) above[15]
	ISD/HoS
	Estimated duration: 2 hours up to 1/2 day up depending on the number of comments to be discussed linked to the MPR (Monthly Progress Report)
	**ITSM3 Integration** contractor

Table 11: Bilateral Monthly Meeting typographical representation

Scope:

The BMM focuses on reviewing the progress made by the **ITSM3 Integration** contractor during the previous month, discussing any problems and issues encountered during the reporting month and setting targets for the following month. BMM meetings are normally planned a few months in advance (for the SC covering the Continuous Services).
Participation in the BMM includes the following tasks:

- Preparation of the BMM agenda including the actions list and supporting slides to be delivered for information one working day in advance of the BMM;
- BMM Preparation, i.e. all the preparatory actions (e.g. listing recent issues or items to be discussed, …);
- BMM Participation;
- Discussion of progress achieved in the previous month;

[15] As a rule, it is important that the parity in the number of participants on both sides be respected in order to hold efficient meetings.

- Make a decision on all comments issued by DG TAXUD the MPR submitted for review. Special attention to be paid to:
    - GQI correction by DG TAXUD allowed where the provided justification is deemed adequate;
    - Quantities correction by DG TAXUD is allowed where the provided justification is deemed adequate.
- Discussion of issues requiring clarification or further elaboration. Any other Business in accordance to Meeting Agenda;
- Discussion of issues escalated from other **ITSM3 Integration** meetings – such as ad hoc meetings;
- Decision on further action. This will include the planning timetable for the next month with priority to problems encountered during the previous month and problems expected to arise during the forthcoming one;
- Review the "BMM-related actions list";
- Compilation of BMM minutes. This activity involves the production of minutes summarising all discussions, findings, decisions, risks (Project Risk Register) and actions (Project Actions List) decided during the BMM.

Input to be prepared by the ITSM3 Integration contractor:

- Agenda;
- Slides supporting the meeting;
- Minutes of previous meeting;
- **Full** Actions list;
- **Full** Risk Register;
- MPR.

Output to be prepared by the ITSM3 Integration contractor:

- Updated Actions list - annexed to the minutes of the meeting;
- Updated Risk Register;
- Minutes of meeting bundled with the MPR of the reporting period concerned.

Meeting #3. Programme Management Meeting (PMM) – Management meeting	
	Monthly meeting (per programme)
	TAXUD/A5/ISD – Programme Manager TAXUD/A5/ISD – **ITSM3 Integration** Programme Manager **ITSM3 Integration** counterpart of the DG TAXUD function(s) above[16]
	ISD/HoS
	Estimated duration: 1 hour
	**ITSM3 Integration** contractor

Table 12: Programme Management Meeting typographical representation

Scope:

The PMM focuses on reviewing the progress made by the **ITSM3 Integration** contractor during the previous month, discussing any problems and issues encountered during the reporting month, setting targets for the following month, and preparing the input for the **ITSM3 Operations** BMM. PMM meetings are normally planned a few months in advance (for the SC covering the Continuous Services).
Participation in the PMM includes the following tasks:

- Preparation of the PMM agenda including the actions list and supporting slides to be delivered for information one working day in advance of the BMM;
- PMM Preparation, i.e. all the preparatory actions (e.g. listing recent issues or items to be discussed, …);
- PMM Participation;
- Discussion of progress achieved in the previous month;

[16] As a rule, it is important that the parity in the number of participants on both sides be respected in order to hold efficient meetings.

- Discussion of issues requiring clarification or further elaboration. Any other Business in accordance to Meeting Agenda;
- Discussion of issues escalated from other **ITSM3 Integration** meetings – such as ad hoc meetings;
- Decision on further action. This will include the planning timetable for the next month with priority to problems encountered during the previous month and problems expected to arise during the forthcoming one;
- Review the "PMM-related actions list";
- Compilation of PMM Summary report and Programme briefing note. This activity involves the production of minutes summarising all discussions, findings, decisions, risks (Project Risk Register) and actions (Project Actions List) decided during the PMM.

Input to be prepared by the ITSM3 Integration contractor:

- Agenda;
- Slides supporting the meeting;
- Minutes of previous meeting;
- **Full** Actions list;
- **Full** Risk Register;
- MPR.

Output to be prepared by the ITSM3 Integration contractor:

- Updated Actions list - annexed to the minutes of the meeting;
- Updated Risk Register;
- Updated Portfolio;
- Summary report of meeting bundled with the briefing note of the programme concerned.

Meeting #4. Ad hoc meeting	
	Ad hoc – on request of DG TAXUD
	To be defined based on addressed topic
	To be defined based on addressed topic
	Estimated duration: 2-4 hours
	**ITSM3 Integration** contractor

Table 13: Ad hoc meeting typographical representation

Scope:

Beyond the pre-defined meetings, ad hoc meetings may be organised if needed as requested by DG TAXUD. DG TAXUD will attempt to plan these meetings in advance in order to allow the **ITSM3 Integration** contractor to prepare it.

This type of meeting does not replace any other meeting covered by continuous services, where **ITSM3 Integration** has a role of taking minutes and following up actions, e.g. **ITSM3 Integration** meetings, kick-off and exit meetings relating to testing/deployment activities,…

Input to be prepared by the ITSM3 Integration contractor:

- Agenda;
- Previous minutes (if any);
- Any supporting material deemed necessary[17].

[17] Any documented input that will be used during the meeting should be provided to the participants at least 24 hours before the meeting.

Output to be prepared by the ITSM3 Integration contractor:

- Updated Actions list (With actions tagged as "AD HOC") annexed to the Minutes of the meeting;
- Updated Risk Register (With risks tagged as "AD HOC");
- Minutes of meeting.

6.1.2.1.4 CUSTOMER SATISFACTION SURVEY

A customer satisfaction survey will be conducted periodically, preferably half way through the Specific Contract execution, via a questionnaire. This survey will be conducted by **ITSM3 Integration** at least once a year, and the results are subject to SQI005 (cf. Section 8.9.5). The survey target population will be the community of DG TAXUD users of the **ITSM3 Integration** services. The survey outcome might result into actions for **ITSM3 Integration**, improvement activities or other recommendations.

6.1.2.2 Project reporting (Task 1.2.2)

On a monthly basis, the **ITSM3 Integration** contractor provides DG TAXUD with a report on the contractual situation during month "m-1". This document, the Monthly Progress Report (MPR), covers:

- Status of the Framework and Specific Contracts;
- Status of RfEs and RfAs;
- Progress made for each programme and task;
- Any possible issue, problem and/or risk pertaining to the Project;
- A detailed summary of forecast plans for the next three months and, additionally, when the Specific Contract is valid for more than three months, a high level planning timetable until the end of the Specific Contract (SC).

A series of annexes should be included into the MPR, providing detailed information on topics, such as:

- Quality indicators;
- Deliverable Tracking Matrix (DTM);
- Risk register of the ITSM3 Integration project;
- Actions list.

The exact list of annexes will be agreed with DG TAXUD and documented in the FQP

The minutes of the BMM meetings are also bundled with the MPR delivery.

6.1.2.3 Planning and Managing the service

6.1.2.3.1 DEMAND MANAGEMENT (TASK 1.3.1)

Any request for service, change or other activity must go via the demand management process. Demand management is the interface between DG TAXUD and **ITSM3 Integration** capacity management (for continuous services) / contract management (for on-demand services).

Request can be received via various channels: by e-mail, during meetings or by phone. The preferred channel to process demands is the synchronisation meeting between the **ITSM3 Integration** Project Manager (**ITSM3 Integration** SPOC) and the DG TAXUD A5/ISD Head of Sector (DG TAXUD A5/ISD SPOC).

The **ITSM3 Integration** SPOC validates the understanding of new requests with the DG TAXUD A5/ISD SPOC in order to formalize the scope, profile, timing, workload and priority associated with the request.

If the request needs resources and/or expertise not available in the **ITSM3 Integration** Continuous Services team, it is processed via on-demand services described earlier in chapter 6.1.1 Contract Management and as defined by TEMPO.

Demand management activities are reported during the BMM and into the MPR.

6.1.2.3.2 CAPACITY MANAGEMENT (TASK 1.3.2)

Capacity management deals with service and change requests that form part of the continuous services. These are either continuous services taken on-board without SPOC-SPOC discussion, or services validated during discussion between the **ITSM3 Integration** SPOC and the DG TAXUD A5/ISD SPOC. Capacity management allocates the necessary resources to perform the requested service and optimises the necessary balancing of resources between various services. DG TAXUD can, at any point of time, request adding a new service to the continuous services, as long as it is agreed and the capacity management process followed.

The core task of capacity management activity is to ensure service provisioning within the **ITSM3 Integration** continuous team. This process is primarily internal to **ITSM3 Integration** but visibility on available capacity is shared with the DG TAXUD A5/ISD SPOC in order to better address conflicting job allocation: if necessary, some jobs can be put on hold to be able to meet more pressing demand.

Capacity management as referred here relates to the continuous services. However, there is a link to the resourcing of the on-demand activities: the **ITSM3 Integration** strategy is indeed to leverage the expertise gained during the continuous services in the execution of the on-demand services.

In all circumstances however, there is a clear distribution of tasks between continuous services and on-demand services. Financial traceability is mandatory, transparent planning and reporting must be enforced.

Capacity management activities are reported during the BMM and into the MPR.

6.1.2.3.3 PLANNING OF THE SERVICE (TASK 1.3.3)

Project Management aligns the overall planning with the contractual requirements in order to allow for timely delivery of the services. BMM meetings and steering committees are an excellent medium to discuss longer-term planning and strategic objectives.

ITSM3 Integration also synchronises with any major events in the **DG TAXUD IT system management environment.** The deliverable tracking matrix (DTM) captures deliverables and related deadlines:

- Planning of the deliverable deadlines;
- Maintain a planned/actual versus baseline graph of milestones;
- Follow-up of the deadlines;
- Calculating SQI values for deliverables;
- Supporting monthly reporting (deliverables accepted with the MPR);
- Informing external stakeholders (DG TAXUD and Lot QA) on the upcoming deadlines.

In addition to regular deliverables, **ITSM3 Integration** produces several non-deliverable artefacts (e.g. QC, direct comments in the tools, weekly overviews or alerts) which are reported in the MPR.

As a guiding rule, all deliverables and other artefacts shared only between DG TAXUD and **ITSM3 Integration** are stored on the **ITSM3 Integration** collaboration platform. **ITSM3 Integration** communicates via e-mail to DG TAXUD any new publishing of relevant materials and provides the required links to access **ITSM3 Integration** Collaboration platform. This concerns unofficial, agreed deliverables.

Deliverables requiring a formal review cycle (organised by Lot QA) or involvement of other contractors are stored on CIRCABC, as agreed with the involved stakeholders, and as directed by DG TAXUD. Official review of deliverables is always through CIRCABC.

Service planning activities are reported during the BMM and into the MPR.

6.1.2.3.4 RISK MANAGEMENT (TASK 1.3.4)

As a part of regular project management activities, **ITSM3 Integration** carries out a comprehensive and traceable risk management of the **ITSM3 Integration** project in compliance with the TEMPO methodology. Risk management contains:

- Risk identification;
- Risk classification (internal, external, business, technical, etc.);
- Risk assessment (impact, likelihood, prioritisation);
- Risk response and mitigation (including contingency plans);
- Monitoring and control: tracking and reviewing previously identified risks, and identifying and assessing new ones. Risk strategies are defined and necessary actions taken (mitigation, avoidance, transfer or acceptance). This is an on-going process and the risk monitoring is part of the project monitoring process.

ITSM3 Integration continuously maintains its Risk Register, and performs a regular review during its internal weekly meetings. **ITSM3 Integration** BMM is also a privileged forum. In case of a critical risk, **ITSM3 Integration** raises an immediate alert to DG TAXUD via e-mail.

Note: **ITSM3 Integration** acts as Deputy Programme Manager for DG TAXUD A5/ISD portfolio and Risk Register maintenance. In order to avoid redundant logging of risks, risks already reported via this specific activity are no longer stored in the dedicated **ITSM3 Integration** Risk Register.

6.1.2.3.5 WORK TRACKING (TASK 1.3.5)

The **ITSM3 Integration** Project Manager follows up the work performed via various channels, e.g. team meetings, internal reporting, regular status update reporting towards DG TAXUD, share of information and collaboration platform. The key point is that DG TAXUD must **not** integrate the (on-demand or continuous) activities of the **ITSM3 Integration** staff. Communications from DG TAXUD must be made only once and then be forwarded to the concerned staff via the **ITSM3 Integration** internal organisation channels.

ITSM3 Integration must ensure adequate progress measurement and follow-up, as well as team coordination and knowledge sharing. Feedback from the activities must be shared cross services, potential improvement points notified (see 6.1.3 Quality Management: Internal CSIP) and action plans are made in order to improve the overall **ITSM3** business (decreasing costs & risks, optimising resources or improving processes).

6.1.2.4 Management of the team (Task 1.4)

6.1.2.4.1 TEAM ORGANISATION

Managing the team is one of the key responsibilities of the **ITSM3 Integration** Project Manager. The **ITSM3** Contractor is expected to document team responsibilities in the form of a RACI matrix part of the FQP. This matrix provides for each profile and task combination a clear indication on who is responsible, accountable, consulted and informed.

6.1.2.4.2 TEAM BACK-UP'S

Back up for different types of services are arranged as follows:

- For continuous and recurring services, back-ups ensure that there is no interruption in the service provision, and that **ITSM3 Integration** provides service as usual.
- In case of holidays, careful planning avoids service disruptions.
- The **ITSM3 Integration** SPOC immediately addresses unexpected absences (e.g. sicknesses) with the DG TAXUD A5/ISD SPOC.
- For on-demand services activities, **ITSM3 Integration** must provide remediation ASAP and plan contingencies as part of the RfA project.

6.1.2.4.3 TRAINING OF THE NEWCOMERS

The aim is to have a stable team, with as few changes as possible. Nevertheless, some changes are inevitable. **ITSM3 Integration** must ensure efficient on boarding of new staff.

ITSM3 Integration must also perform an individual gap assessment and assess training needed by each newcomer. A shadowing / hand-over period of minimum 10 days without extra cost for DG TAXUD ensures knowledge transfer from the leaving person to the newcomer. In case of a force majeure, **ITSM3 Integration** back-up person ensures knowledge transfer.

A regression of knowledge will trigger the complaint mechanism.

6.1.2.4.4 ACCEPTANCE OF NEWCOMERS

DG TAXUD has the right to accept or reject the proposed newcomer. **ITSM3 Integration** PM presents the CV of the newcomer to DG TAXUD. An interview can be organised at DG TAXUD's request to validate the adequacy of the proposed profile.

6.1.3 Quality Management

ITSM3 Integration Quality standards and processes must be listed in the **ITSM3 Integration** Internal Quality Manual (IQM).

Services are also measured and followed up by specific quality indicators, contractually defined and strictly followed via service level management. (Please refer to chapter 8).

6.1.3.1 Internal Quality Assurance (QA) and Control (QC) (Task 1.5.1)

ITSM3 Integration performs quality assurance activities according to their own internal rules and procedures. These activities ensure that the FQP is adhered to across all the activities. Quality assurance and control activities are listed below:

- QA on deliverables (in addition to internal QC: alignment with the expectations, guidance on templates, verification on the content);
- QC on deliverables, and uploads;
- QC on services (control on services performed, minutes, actions, e-mails (via the functional mailbox));
- **ITSM3 Integration** Internal advice, guidance and trainings on all quality related matters and aspects;
- Verification of activities versus quality planning in the FQP and **ITSM3 Integration** IQM.

ITSM3 Integration has a specific storage on the collaboration platform for all QA / QC activities. All related plans, processes and rules are documented in the **ITSM3 Integration** IQM. Furthermore this IQM is divided into two parts. The first part contains **ITSM3 Integration** internal administrative procedures and processes, and is available for DG TAXUD on the collaboration platform, and equally to Lot QA in case of an audit. The second part of the IQM is compliant with TEMPO and lists all operational working procedures of

ITSM3 Integration as agreed with DG TAXUD. This second part of the IQM is available for any relevant stakeholder.

6.1.3.2 Internal CSIP activities (Task 1.5.2)

In the spirit of a continuous service improvement **ITSM3 Integration** must work on the enhancement of the service throughout the contract lifecycle. The provided service must be continuously reviewed and, as needed, improvements suggested. These improvements, if having an impact on DG TAXUD, are agreed upon with DG TAXUD before implementation. The following process is being applied:

- Improvement suggestions, resulting from any **ITSM3 Integration** activities, from team members of from external stakeholders, are recorded.
- The suggestions are discussed and analysed.
- The list of proposals is reviewed regularly by **ITSM3 Integration** (in case or an urgent suggestion, it can be reviewed immediately).
- If it is decided to go forward with a suggestion **ITSM3 Integration** manages the improvement project as any project with the necessary planning, execution, monitoring and control. When an improvement action has a direct impact on DG TAXUD, **ITSM3 Integration** discusses the initiatives first with DG TAXUD, before the implementation. Improvements that are purely **ITSM3 Integration** internal ones are reported in the MPR.

What is described above concerns only **ITSM3 Integration** internal improvement initiatives. These are typically improvements to the day-to-day service delivery: processes, templates, tools or communications. The implementation of these improvements requires limited resources and time. They are typically part of the continuous services.

Furthermore, the service portfolio of **ITSM3 Integration** includes CSIP activities conducted under specific task under Service Block 9: Service Improvement Initiatives. These activities typically involve more stakeholders than only **ITSM3 Integration** and are formally agreed and triggered by DG TAXUD as on-demand activities.

6.1.3.3 Internal audits and self-assessments (Task 1.5.3)

The **ITSM3 Integration** contractor appoints an internal quality auditor and performs Internal Quality Audits and a Self-assessment, at least once a year, covering all the service processes, in order to ensure that the established processes and procedures are adhered to.

Self-Assessment will be conducted by the **ITSM3 Integration** contractor staff responsible for delivering the services. Internal Quality Audits are performed by the **ITSM3 Integration** contractor's internal quality auditor, the reporting line of whom is segregated from that of the team in charge of the contract delivery, so as to prevent any conflict of interest. The **ITSM3 Integration** contractor prepares and sends Audit Plans to DG TAXUD for information **before** performing internal quality audits.

The result of these activities and their related reporting is communicated to DG TAXUD. Certain improvement actions will also be able to be distilled from the day-to-day application of the FQP .

The **ITSM3 Integration** contractor must introduce the necessary plan for implementing the service improvements via the Service Improvement Initiatives (cf. Section 6.9.1.2 below). This covers activities from identification through planning to the implementation of the corrective actions. The **ITSM3 Integration** contractor must follow up the implementation of the prioritised actions agreed with DG TAXUD resulting from these quality audit and self-assessment processes. This is needed to guarantee the evolution of the effectiveness of the services provided by means of the execution of the actions.

6.1.3.4 Collaboration during external audits (Task 1.5.4)

DG TAXUD reserves its right to conduct audits, on the **ITSM3 Integration** contract, including, but not limited to, security audits, either directly or via DG TAXUD's internal audit services or indirectly through externally contracted services e.g. the QA contractor (generally once a year) in order to audit the adherence of the processes and procedures towards the Framework Contract Technical Annex, TEMPO, ISO 20000-2:2005 and ISO 27002:2005.

The **ITSM3 Integration** contractor is required to facilitate this exercise by providing the external audit team with all necessary elements (interviews with personnel, documents, logs,…) during the entire duration of the audit.

The audit report will be provided to the **ITSM3 Integration** contractor; corrective actions will be jointly agreed during a meeting and will be followed up via an action plan. Special attention must be paid to the follow-up of the corrective actions.

6.1.3.5 Maintenance of the Framework Quality Plan (FPQ) (Task 1.5.5)

The **ITSM3 Integration** contractor adapts from ITSM2 Lot 3, delivers and maintains the FQP, ensuring that all activities in this Framework Contract (FC) comply with the Programme Quality Plans (PQP) of Customs, Taxation and Excise, valid at the time the FQP revision is initiated.

The FQP will contain as a minimum:

- Task descriptions of the activities, using this Technical Annex as reference;
- A Deliverable Tracking Matrix (DTM);
- The internal processes of the **ITSM3 Integration** contractor applicable to the contract, including team organisation and composition, Quality Assurance and Control procedures, the escalation process and rules;

- The contact details of all internal and external parties involved on the **ITSM3 Integration** contractor and customer sides, along with their role and the communication processes describing all interfaces, channels of communication and the communications flow;
- The meta description of:
  - The Monthly Progress Report (MPR);
  - The internal procedures;
- The internal procedures themselves; related to QA, QC and Internal Auditing, escalation in the first version of the FQP;
- The approach to the **ITSM3 Integration** service improvements in the execution of the contract;
- The **ITSM3 Integration** contractual Service Level Agreement (SLA), which defines service quality requirements, quality of services, quality targets, objective metrics to measure performance achieved and the means to be used for monitoring all services to be provided during the execution of the FC. It includes the generic definition of the SQI's which will be commonly reused across all Specific Contracts (SCs).

The FQP will need periodic revisions to reflect the evolution of the project, contractual SLA(s) and changes in internal procedures (for which the meta description has been provided or has to be added). The maintenance of the FQP is, as a minimum, requested once per SC as part of the Continuous Services.

6.1.4 Synthesis: Actions, Risks, Requests and Recommendations

During the execution of the above described management activities, various lists, logs and registers are maintained. These are related to actions follow-up, risk management, service requests and improvement recommendations/changes. They all have **ITSM3 Integration** internal entries (relevant for the **ITSM3 Integration** internal organisation only) and DG TAXUD – **ITSM3 Integration** shared entries. As mentioned earlier the sources for these can be various, varying from a strategy change to follow-up of an individual meeting decision.

6.1.5 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration**.

Price ID	Description
P.1.1 to P.1.5.5	All Tasks in this Service Block are priced as Continuous Services.

Table 14: Pricing Units: Service Block 1: Project, Quality and Contract Management

6.2 Service Block 2: Integration Advice

Under Service Block 2, **ITSM3 Integration** is focussing on architecture, technical advice and business continuity aspects of the DG TAXUD IT infrastructure.

ITSM3 Integration must have a deep understanding of the architecture of DG TAXUD's Datacentres and infrastructure technologies, and be able to provide advice to DG TAXUD at strategic (i.e. on cloud opportunities), tactical (i.e. on technology choices), operational (i.e. on lifecycle management of equipment) or commercial (i.e. on licensing policies, standard discounts, and acceptable prices) levels.

Services under this Service Block 2, with the exception of Task 2.4, are categorised as continuous services, and service requests have to go through the **ITSM3 Integration** standard demand and capacity management process (for more information, see chapter 6.1.2.3 Planning and Managing the service).

Tools and methodologies that support the provision of these activities are various, below some examples:

- Best practices from Object Modelling group;
- Best practices from "opengroup.org", such as TOGAF and SOA;
- Several vendor specific publications, white papers, and business reviews.

ITSM3 Integration supports DG TAXUD in the following four main activities.

6.2.1 IT architecture office (Task 2.1)

ITSM3 Integration establishes an IT architecture office, which supports DG TAXUD in coordinating and decision making on all aspects related to DG TAXUD's IT architecture, with a focus on architecture. These services are provided on various formats and architecture levels. Nevertheless, it should be noted that this list is not exhaustive and might evolve during the term of the contract.

- The IT architecture office defines and maintains the Infrastructure and Architecture Repository. Such a repository typically consists of four elements:
    - The Architecture landscape shows an architectural view of the building blocks that are in use within the organisation today, the list of live application with their associate architectural building blocks;
    - The Standards Information Base (SIB) captures the standards with which new architectures must comply, which may include industry standards, selected products, or shared service already deployed within the organisation;
    - The Reference Library provides guidelines, templates, patterns, and other forms of reference material that can be leveraged in order to accelerate the creation of new architectures for the enterprise;

- The Governance Log provides a record of governance activity across the organisation.

Furthermore, the horizontal dimension is supported via assessments and enforcements, for example: organisational, IT governance or risk assessments. Following the assessments, **ITSM3 Integration** supports DG TAXUD in enforcing the cross-sector coordination and communication.

- Technical architecture (including infrastructure) is closely related to the above mentioned dimensions, but more relevant to the activities below (notably to improvements to business continuity, technical reviews and technology choice support). **ITSM3 Integration** will ensure that the implementation of IT systems are in line with the architectural guidelines and standards, and report any deviation.

6.2.2 Advice and support in IT continuity (Task 2.2)

ITSM3 Integration provides support and advice in IT continuity aspects. IT continuity has typically a security focus, but can equally have an operational focus and be related to all aspects of architecture. IT continuity support and advice is provided by:

- Ensuring the coherence, the completeness and the efficiency of disaster recovery plans (DRPs) of the DG TAXUD contractors;
- Monitoring the lifecycle and technology developments of commercial of the shelf products (e.g. ORACLE or Web-Logic) and advising DG TAXUD on required migration plans;
- Managing and commenting on the knowledge management tasks of the DG TAXUD IT contractors.

ITSM3 Integration provides recommendations on business continuity aspects upon request of DG TAXUD.

6.2.3 Technical support to DG TAXUD ISD programmes (Task 2.3)

ITSM3 Integration acts as technical expert and/or system architect for all the programmes part of the DG TAXUD ISD portfolio (see SB4 6.3.1 for details on the list of programmes).

ITSM3 Integration is expected to help DG TAXUD ISD in reaching the following goals:

- Service continuity and operational excellence
- Delivery of new services and applications
- Forecasting, capacity management
- Service optimisation and cost reduction

Technical reviews are performed on request of DG TAXUD on specific artefacts:

- Technical review of deliverables;
- Technical review of tools;
- Technical review of systems;
- Technical review of design.

In addition to the pure technical artefact review **ITSM3 Integration** must:

- act as a technical expert and review/validate the architecture and technical design of the new applications;
- check the compliancy of the architecture with the environment and the architectural guidelines of DG TAXUD;
- check the compliancy of the security mechanism with the security guidelines of DG TAXUD;
- ensure the proposed solution makes the best use of DG TAXUD's resources;
- if requested, perform an inspection at the supplier site (e.g. verifying the alignment of the design with what is actually coded);
- in case of problem (in the ITIL sense), review the existing architecture and design for existing application and propose possible improvements either to the infrastructure team or to the development team.

These types of services would typically be focussing on the application architecture, technical architecture and security, but would not exclude the horizontal dimension either.

6.2.4 On-demand IT expertise for DG TAXUD (Task 2.4)

Provide expertise on every aspect of IT management, IT technology and security to DG TAXUD as to update Deciders with state of the art information. Advice is most likely to support DG TAXUD in the simplification of Organisation, Processes and Technology.

This work is performed in various ways i.e.:

- By performing specific briefings, studies, analyses, assessments and evaluations;
- By providing recommendations;
- By improving and documenting IT processes;
- By recommending improvements of the existing IT organisation;
- By conducting deeper investigations;
- By supporting in prototyping or proof of concepts;
- By delivering guidelines and standards;
- By providing information on initial and recurring costs of solutions;
- By Business Case and Vision Document development.

Technology advice is most likely to address concerns on application, security, or technical architecture levels. For example, **ITSM3 Integration** can evaluate new technologies. **ITSM3 Integration** also assesses solutions based on technology costs.

6.2.5 Pricing Units

Price ID	Description
P.2.1 to	**Tasks 2.1 to 2.3** are covered by the Continuous Services
P.2.4	**Task 2.4** is an On-demand service.

Table 15: Pricing Units: Service Block 2: Integration Advice

6.3 Service Block 3: Integration Management Support

ITSM3 Integration acts as real partner and advisor to DG TAXUD A5/ISD to best support the ITSM operations and transformations. The list here below covers the current activities. Albeit stable, this list must be seen as non-limitative.

DG TAXUD and **ITSM3 Integration** must strive to build a model based on mutual trust, autonomy and management by exception. Economy of resource and enhanced expertise are 2 immediate benefits of this collaboration.

ITSM3 Integration must not perform tasks that are under the responsibility of other contractors. Instead **ITSM3 Integration** must check the conformity of the programme/project management services provided by the contractors (essentially **ITSM3 Operations**) with the terms of the respective contracts.

6.3.1 Support to the programme management of DG TAXUD A5/ISD

DG TAXUD A5/ISD sector is responsible for the IT operations of TAXUD central and trans-European systems both related to Taxation and Customs EU policies, in a context of evolving requirements and technologies.

This responsibility implies the management of the network and data infrastructures, the IT service management processes and the contracts necessary to ensure DG TAXUD business continuity.

The governance of DG TAXUD ISD sector pursues the following tactical objectives:

- Anticipate global budgetary needs for the medium and long term;
- Ensure coordinated sector reporting at strategic and tactical levels (portfolio & programmes);
- Ensure the consolidation of a risk list and global risk management at portfolio level;
- Ensure the alignment of ISD portfolio with other stakeholder's portfolios (DG TAXUD C5, DG TAXUD A5-CIS/EAS, DG TAXUD A3, Contractors, etc.).

The ISD governance strategy relies heavily on the concepts of portfolio, programmes, initiatives and projects. This strategy is described in the document "DG TAXUD A5/ISD Strategic Portfolio v1.10" available in the Baseline.

The Portfolio and the Risk Register are essential tools for the governance of the DG TAXUD ISD sector. Entries into the portfolio are validated by the ISD management team (ISD head of Sector and Head Architect) and managed on a day-to-day basis by the ISD Programme Managers. The **ITSM3 Integration** contractor is requested to assist:

- The ISD management team in the portfolio management (this activity is described in the Service Block 4);
- The ISD programme managers in the support to specific programmes (this is the object of the current Service Block).

The **ITSM3 Integration** contractor will support DG TAXUD in the programme alignment tasks through:

- Task 3.1 – Creation or Maintenance of the programme Vision document
- Task 3.2 - Provision of business cases and vision documents for new initiatives, including effort estimates;
- Task 3.3 - Maintenance of the integrated planning, Risks Register, and projects portfolio of the programme;
- Task 3.4 - Coordination of actions, planning and progress;
- Task 3.5 – Review of deliverables from other stakeholders from an integration perspective (i.e. planning and management of activities; alignment with architectural guidelines and other activities) – (cf. Section 6.2.3) – (**FP**)
- Task 3.6 - Support to risk management (i.e. planning, architecture, technology): the **ITSM3 Integration** contractor will have to identify possible risks, consolidate the risks identified by other stakeholders, support the identification of mitigation strategies, follow up the resulting actions and if needed, raise alerts and propose corrective actions.
- Task 3.7 - Support to **ITSM3** project/activity planning: this task involves maintaining the overview of the planning files of various stakeholders. This is a high level planning overview, indicating the major milestones, dependencies and the critical path between the stakeholders. In this task, the **ITSM3 Integration** contractor will provide assistance to the DG TAXUD/R5 in:
    - Maintaining the **ITSM3** Programme-level work planning;
    - Maintaining an overview of the dependencies in planning between the various stakeholders;
    - Identifying the critical path amongst the stakeholders;
    - Identifying high-level resource requirements;
    - Identifying missing activities, gaps or inconsistencies;
    - Providing alerts on risks/issues identified or reminders of milestones approaching;
    - Supervising, coordinating and actively participating in Change Management, Incident Management, Problem Management, Configuration Management, Release and Deployment activities.
- Task 3.8 - Coordination of actions, planning and progress: this task involves coordinating the planning described above, and when dependencies between the stakeholders are identified, following up and coordinating the activities to ensure that all stakeholders are aware of the planning and its impact on other stakeholders. The **ITSM3 Integration** contractor will:
    - Contact the stakeholders;
    - Ensure awareness of the planning and impact of the actions;

- Ensure awareness of the critical path;
- Alert the stakeholders if this critical path is in danger;
- Ensure that, via reminders and contacts, the actions are being taken and that progress can be achieved.

The progress on this task will be reported in the MPR.

- Task 3.9 - Support in programme status tracking and management: following the activities described above, the **ITSM3 Integration** contractor will report on the status and assess the progress. The following (non-exhaustive) list of activities could be seen as a part of this task:
  - Work progress and status – review and analysis of the delivery focus and challenge;
  - Deliverables/milestone tracking;
  - Take corrective actions or formulate recommendations when identified risks or issues need to be reported to DG TAXUD.

As of beginning of 2016, the activity of DG TAXUD A5/ISD is organised around the programmes described below.

6.3.1.1 Support to the management of the "Service Management and ITSM Tooling" Programme

ITSM3 Integration acts as Project Manager for service management tooling activities and as such, in addition to the generic tasks listed in 6.3.2:

- Facilitate integration between distinct **ITSM3** providers (e.g. review **ITSM3 Operations** and **ITSM3 TES** Collaboration model);
- Check the conformity of the programme management services provided by the contractors (essentially **ITSM3 Operations**) with the terms of the respective contracts.
- Initiate, supervise, coordinates and actively participate in all activities aimed at ensuring the continuity of the services through the contractual transitions, mainly by optimising the documentation management in order to ensure the maintenance and transfer of knowledge, etc.
- **ITSM3 Integration** proposes transformations, drives and coordinates activities of DG TAXUD's development contractors for the following applications: ITSM SMT, ITSM Portal, CMDB, monitoring (Tivoli, OEM), BO Reporting tools. Please note that the list of tools may be subject to change during the course of the contract;
- Manage transition of new providers and coordinates their integration into the tools ;
- Manage stakeholders' expectations and identifies areas of improvements;
- Act as facilitator between **ITSM3** providers when issues are encountered with the tools and tool-related processes (e.g. MSA incident handling and tool constraints).

DG TAXUD can request **ITSM3 Integration** to initiate and manage activities for the adoption of new/future tools. These activities will range from early requirements definition to transition to operations.

Examples of past or future activities are:

- In collaboration with ITSM2 Lot1, simplification of the structure of the operational documentation;
- Review of FQP and attached documents;
- CUSTDEV3, FITSDEV3 Synergia integration; FITSDEV3 Tivoli integration;
- Pilot new initiatives such as Knowledge management process and tools.

6.3.1.2 Support to the management of the "CCN/CCN2" Programmes

DG TAXUD A5/ISD acts as infrastructure provider and system operator. In this context, **ITSM3 Integration** is required to act as Project Manager and as such to:

- Check the conformity of the programme management services provided by the contractors (essentially **ITSM3 Operations**) with the terms of the respective contracts.
- Manage the transition of new providers (CCN2-DEV to CCN3-DEV);
- Manage the stakeholders' expectations and identify areas of improvements;
- Act as facilitator between **ITSM3** and CCN-DEV providers when issues are encountered.

The tenderer must not underestimate the specificities of the CCN programme in terms of project management. Specifically the Project Manager will have to manage the relationship with the National Administrations.

Examples of past or future activities are:

- CCN2-DEV Petites and Grandes Manœuvres (see 4.1.11.2 and an example in the Baseline);
- Manage CCN projects and coordinate amongst **ITSM** stakeholders and the Member States (e.g. Linux gateway migration);
- Manage the transition from the CCN/WAN to the TESTA-NG network provider;
- Manage the roll-out of new CCN versions;
- Manage the roll-out of the CSI over SIAP service;
- Manage the transition from the CCN to the CCN2 platform.

6.3.1.3 Support to the management of the "Policy projects" Programme

DG TAXUD A5/ISD acts as infrastructure provider and system operator. In this context, **ITSM3 Integration** is required to acts as Project Manager and as such act as facilitator between ITSM, DIGIT, CUSTDEV and CCN-DEV providers when issues are encountered.

Examples of past or future activities are:

- Support to the UUM/DS project;
- Support to the REX, Customs Decisions project, including the integration with the UUMDS, CCN2 and TSOAP projects;
- Support to the TSOAP project;
- Support to the enrolment of Eurostat on the CCN network;
- Support to the evaluation of the vision documents for new projects like ICS2, Surv3, etc.;
- Support DG TAXUD in strategic projects such as a new MS joining the EU (e.g. Croatia in 2013, Serbia in 2014).

6.3.1.4 Support to the management of the "Infrastructure" Programme

DG TAXUD A5/ISD manages an infrastructure partially outsourced at DIGIT and partially implemented in DG TAXUD's own Datacentres. The Datacentres host both systems in operation and resources available to the xDEV for development purposes. In this context, **ITSM3 Integration** is required to act as Project Manager and as such to:

- Manage the enrolment of new users of the Datacentre facilities (CCN2-DEV);
- Manage the stakeholders' expectations and identify areas of improvements (for instance in the transition between the development and operations processes);
- Drive the resulting initiatives;
- Manage the activities of the **ITSM3 Operations** contractors in the infrastructure evolutions i.e. (and not limited to):
  - Infrastructure upgrades
    - Oracle database, Weblogic,
    - OS, ….
    - Storage systems
    - Etc.
  - new platforms deployments
    - SAS, …
  - network extensions or evolutions
    - Change of Internet access provider
    - Equipment of an extra row in the Datacentre
    - Replacement of firewalls
    - Etc.
- Act as facilitator between ITSM and xDEV when issues are encountered.

6.3.1.5 Project management, coordination and integration of the "ITSM security" programme

DG TAXUD A5/ISD manages systems that are in operation and transitions to new systems. It also offers infrastructure service to developers. Some of the applications are considered sensitive, in terms of confidentiality integrity and/or availability. In his context, **ITSM3 Integration** is required to:

- Report on DG TAXUD's IT security exposure and propose mitigation plans;
- Define, prioritize and monitor the projects and actions in the area of security;
- On the infrastructure and applications side:
  - Accompany **ITSM3 Operations** to update the Security plan (input: FQP, Security policy, audit recommendations, IT security market research e.g. OWASP);
  - Accompany **ITSM3 Operations** to improve and test IT Security Continuity Management (ITSCM) process, with a focus on response to major security incidents (e.g. security breach leading to DG TAXUD service disruption for Member States/Economic Operators, major leakage of personal data);
  - Propose security-related enhancements to the DG TAXUD or contractors' processes and organisation;
  - Analyse the security report provided by the **ITSM3 Operations** contractor, propose improvements;
  - Monitor the performance of the **ITSM3 Operations** contractor from a security perspective;
  - Monitor the actions resulting from security events, incidents, or security audit findings;
  - Support the change management process from a security perspective;
  - Acts as facilitator between ITSM and any other stakeholder when issues are encountered;
- On the projects side:
  - Check and comment the risk analysis associated with new projects;
  - Check the compliance of new projects with the security architecture guidelines of DG TAXUD and report on any deviation;
  - Manage the stakeholders' expectations and identify areas of improvements (for instance in the transition between development and operations process).

6.3.1.6 Project management, coordination and integration of the "ITSM operations" programme

ITSM3 Integration provides extensive support to DG TAXUD in its management function. The role of **ITSM3 Integration** may range from a facilitator and integrator role to a role of project manager.

Examples of facilitator/integrator activities are to:

- Drive and chair multilateral meetings (e.g. MPM);
- Follow up on **ITSM3 Operations** contractor deliverables such as MPR, operations planning, long-term capacity management planning ;
- Organize trainings and workshops;
- Manage the follow-up after incidents affecting availability or security on PIR and related actions;
- Support the incident, change, problem, capacity and availability management processes;
- Manage the follow-up of the implementation of audit recommendations.

Examples of past or future activities are to:

- Manage upgrade activities of **ITSM3 Operations** (e.g. Web Logic migration, migration from Solaris to Linux);
- Manage infrastructure activities (e.g. updates of storage, networking);
- Coordinate and communicate on deployment of new application/system (e.g. SIAP)

6.3.1.7 Support in process management and improvement

ITSM3 Integration supports DG TAXUD in the coordination and management of the **ITSM3** operational processes. Particular focus is set on process improvement, optimisation and integration. Typical activities include:

- Accompany **ITSM3 Operations** to identify changes to apply to existing IT
- services or to identify new services, in order to implement Simplification
- Provide expert advice on processes to DG TAXUD during meetings with other parties;
- Provide recommendations for process improvements upon ad-hoc requests;
- Assist DG TAXUD in building and implementing a roadmap towards more mature processes;
- Challenge the added value and delivered benefits versus expected benefits of existing operational processes, related workflows and activities;
- Promote a transversal and pragmatic approach to processes towards operational excellence;
- Assess documented processes against real implementation;
- Provide gap analysis on process compliance with either ITIL v2 or ITIL v3.

The process management and improvement stream cover others than purely IT service management related services. Some examples of the other activities are listed below:

- **ITSM3 Integration** reviews deliverables and other artefacts from the integration and **ITSM3** Programme integrity aspects point of view. These reviews can take place traditionally on a document, or directly in a tool, other on-line media (Synergia, Wiki).
- **ITSM3 Integration** supports in transition management - **ITSM3 Integration** provides transition support for other contractors/lots/projects in the **ITSM3** programme, capturing the knowledge gained during various projects and recurring activities and reflecting this knowledge on the project fiches stored in the **ITSM3 Integration** collaboration platform (see [R4] for the template of the project fiche).

The majority of the above activities are continuous services, which are selected, prioritised and resources allocated depending on the DG TAXUD priorities.

Transition support is an on-demand activity.

Tools and methodologies used in the service provision are among others: ITIL good practices, balanced scorecard, Project management, PMO approaches and TEMPO.

6.3.2 Support to project management

The **ITSM3 Integration** contractor will support DG TAXUD in project management tasks through:

- Task 3.10 Provision of various projects artifacts: vision documents, business cases, and others;
- Task 3.11 – Planning maintenance
    - Maintenance of the project planning
    - Identifying the critical path amongst the stakeholders;
    - Identifying high-level resource requirements;
    - Identifying missing activities, gaps or inconsistencies;
    - Providing alerts on risks/issues identified or reminders of milestones approaching;
    - Supervising, coordinating and actively participating in Change Management, Incident Management, Problem Management, Configuration Management, Release and Deployment activities.
- Task 3.12 – Review of deliverables from other stakeholders;
- Task 3.13 - Support to risk management (i.e. planning, architecture, technology): the **ITSM3 Integration** contractor will have to identify possible risks, consolidate the risks identified by other stakeholders, support the identification of mitigation strategies, follow up the resulting actions and if needed, raise alerts and propose corrective actions.
- Task 3.14 - Coordination of actions, planning and progress: this task involves coordinating the planning described above, and when dependencies between the stakeholders are identified, following up and coordinating the activities to ensure that all stakeholders are aware of the planning and its impact on other stakeholders. The **ITSM3 Integration** contractor will:
    - Contact the stakeholders;
    - Ensure awareness of the planning and impact of the actions;
    - Ensure awareness of the critical path;
    - Alert the stakeholders if this critical path is in danger;
    - Ensure that, via reminders and contacts, the actions are being taken and that progress can be achieved.

  The progress on this task will be reported in the MPR.
- Task 3.15 - Support in project status tracking and management: following the activities described above, the **ITSM3 Integration** contractor will report on the status and assess the progress. The following (non-exhaustive) list of activities could be seen as a part of this task:
    - Work progress and status – review and analysis of the delivery focus and challenge;

- Deliverables/milestone tracking;
- Maintenance a planned/actual versus baseline graph of milestones;
- Take corrective actions or formulate recommendations when identified risks or issues need to be reported to DG TAXUD.

6.3.3 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration**

Price ID	Description
P.3.1. to P.3.15	Tasks 3.1 to 3.9 in this Service Block are priced as Continuous Services. Tasks 3.10 to 3.15 in this Service Block are priced as On-demand Services.

Table 16: Pricing Units: Service Block 3: Integration Management Support

6.4 Service Block 4: Portfolio and Risks Management Support

The DG TAXUD/A5 portfolio will be composed of 3 chapters:

- Application portfolio
- Infrastructure portfolio
- Projects portfolio.

The **ITSM 3 Integration** contractor will support DG TAXUD in the following alignment tasks through:

- Activity and policy integration by ensuring alignment between DG TAXUD's IT objectives, **ITSM3** activities and other IT activities contracted;
- Prioritisation of initiatives and projects to reflect the IT objectives and goals;
- Cross-team integration – integration and alignment between the different Lots of **ITSM3** and other DG TAXUD contractors;
- Process and common activity – ensuring alignment between processes, activities and changes;
- Communication management – both internal (between different ITSM contractors and DG TAXUD/A5) and external (towards non-ITSM contractors, other DG TAXUD units);
- Support in the maintenance of the portfolio;
- Maintenance of the DG TAXUD IT delivery Risk Register.

This activity is wider in scope compared to the "Portfolio management support services" provided by the ITSM2 Lot3 contractor. The **ITSM 3 Integration** contractor is expected to perform a gap analysis and to prepare all the necessary tools and artefacts necessary to the execution of Service Block 4 during the Take-Over phase. All necessary data must also be collected during the Take-Over phase.

6.4.1 Portfolio Management Support (Task 4.1)

The **ITSM 3 Integration** is expected to

- Check the conformity of the portfolio management services provided by the contractors (essentially **ITSM3 Operations**) with the terms of the respective contracts.
- Collect and consolidate the information about the ongoing initiatives from the various DG TAXUD A5 and C5 sectors;
- Check the alignment of the project with the IT strategy;
- Provide an estimate of the investment and maintenance cost estimates of the initiative;

- Manage the verification of the validity of the infrastructure requirements contained in the documents (Business cases, vision documents…) – the actual execution is part of Service Block 2;
- Maintain this information, including (but not limited to) the priority, the effort, the risk, and the return associated with an initiative, on a monthly basis in the form of a **global IT Portfolio.** This maintenance will be subject to a strict change management procedure.
- Identify the key milestones from the various sectors perspectives and maintain a **global IT planning** allowing for a per-sector, per-initiative, or a global view. Maintain a planned/actual versus baseline graph of milestones, global and per programme;
- Report on risks, inconsistencies, or deviations.

6.4.2 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration**.

Price ID	Description
P 4.1.	All tasks in this Service Block are priced as Continuous Services.

Table 17: Pricing Units: Service Block 4: Portfolio and Risks Management Support

6.5 Service Block 5: Asset Management Support

Each of the development (CUSTDEV, FITSDEV, CCNDEV) or operations (ITSM operations, CCN/WAN, ITSM trans-European systems) contractor maintains its own operational asset repository. In parallel, Unit TAXUD/C5 maintains a financial asset repository.

The **ITSM3 Integration** contractor is requested to ensure the information are properly synchronised and that all the DG TAXUD hardware and software assets (including certificates) are tracked and managed in a coherent and consistent way.

6.5.1 Asset Management Support (Task 5.1)

The **ITSM 3 Integration** is expected to

- Check the conformity of the asset management services provided by the contractors (essentially **ITSM3 Operations**) with the terms of the respective contracts.
- Consolidate and maintain the information about all the DG TAXUD assets used by/ acquired through the various A5 and C5 sectors.
- Ensure the consistency between the various information sources. Identify inconsistencies: assets that are
    - used but not authorised or owned (or used in a way not compliant with the licensing terms)
    - owned/authorised but not used and generating costs (i.e. maintenance)
    - used without maintenance contract
    - untrackable (incomplete records).
- Report and help DG TAXUD to manage inconsistencies;
- Report monthly on assets status and usage, with a focus on
    - Compliance;
    - Avoidance of unnecessary expenses;
    - Forecast of end-of-life or end-of-support assets.

6.5.2 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration.**

Price ID	Description
P.5.1.	All tasks in this Service Block are priced as Continuous Services.

Table 18: Pricing Units: Service Block 5: Asset Management Support

6.6 Service Block 6: Benchmarking and Assessments

Benchmarking and Assessment activities are on-demand activities, and thus require issuing of an RfA. See on-demand activity ordering process in Section 6.1.1 Contract Management.

6.6.1 Benchmarking (Task 6.1)

ITSM3 Integration will conduct benchmarking activities on other contractors on behalf of DG TAXUD. While doing so, **ITSM3 Integration** respects the benchmarking clauses of the model framework contract. Furthermore, **ITSM3 Integration** will conduct the activities following the guidelines as defined in this document.

In the model framework contract clauses, the "*benchmarker*" refers to **ITSM3 Integration**. The "*Contractor"* refers to any DG TAXUD contractor whose prices and/or quality are subject to this benchmarking exercise.

The benchmarking exercises can be launched in order to obtain usable answers to several concerns, such as but not limited to:

- Is DG TAXUD paying a fair price for the received quality of the supplies and/or the services during the term of the contract?
- Does the price paid correspond to the evolution of market prices for similar supplies or services?
- Is DG TAXUD receiving the best possible quality of supplies or services at a given price?
- Can DG TAXUD get the same supplies or services for less, or better supplies or services for the same price or less?
- Is the **ITSM3 Operations** contractor performing the various IT services according to the market IT best practices (technical and organisational) and professional standards?

Benchmarking is seen as a structured comparative analytical process that delivers reliable and independent information on the services that DG TAXUD receives from **ITSM3 Operations** in terms of costs (see full listing and description of those services in the "**ITSM3 Operations** Technical Annex - Scope of Activities" in the Baseline). However, DG TAXUD may also request a benchmark on the quality of service delivered if it deems this is necessary.

The purpose of the benchmarking activities in this call for tenders is to help DG TAXUD to identify opportunities to improve the **ITSM3** service provision by comparing the performance cost of the **ITSM3 Operations** contractor with other similar service providers on the market.

It is required that the **ITSM3 Integration** contractor maintains a database of research data that is relevant to the areas of action of **ITSM3**.

ITSM3 Integration uses its own benchmarking methodology. DG TAXUD does not need the database of research data for benchmarking, but **ITSM3 Integration** must describe its

methodology in the IQM. The benchmarking must have a consistent approach, methodology and taxonomy. It is expected to follow the steps described below:

1. **Planning and kick-off:** define the objectives, set up the benchmarking project, establish the timeline and prepare the materials, set up the data collection questionnaire, etc.
2. **Data collection:** collect data, conduct stakeholder interviews, submit data;
3. **Data analysis:** validate data, generate performance comparisons, confirm gaps with DG TAXUD, draft report;
4. **Executive presentation:** present results to stakeholders, review recommendations, provide conclusions, discuss next steps and provide final report.

The approach presented above gives **an example** of a benchmarking approach.

6.6.2 Assessments (Task 6.2)

Assessments performed by **ITSM3 Integration** typically take place at the request of DG TAXUD on a specific ITSM programme related topic that requires extra attention or assessment. This could relate to (non-exhaustive list):

- Upcoming changes;
- Service provision maturity;
- Provision of a “second opinion” on a matter;
- Assessment towards a certain methodology, standard/market or best practise;
- Assessment of purchase prices/offers linked to infrastructure/services provided by the **ITSM3 Operations** contractor.

The figure below illustrates a possible process for assessments.

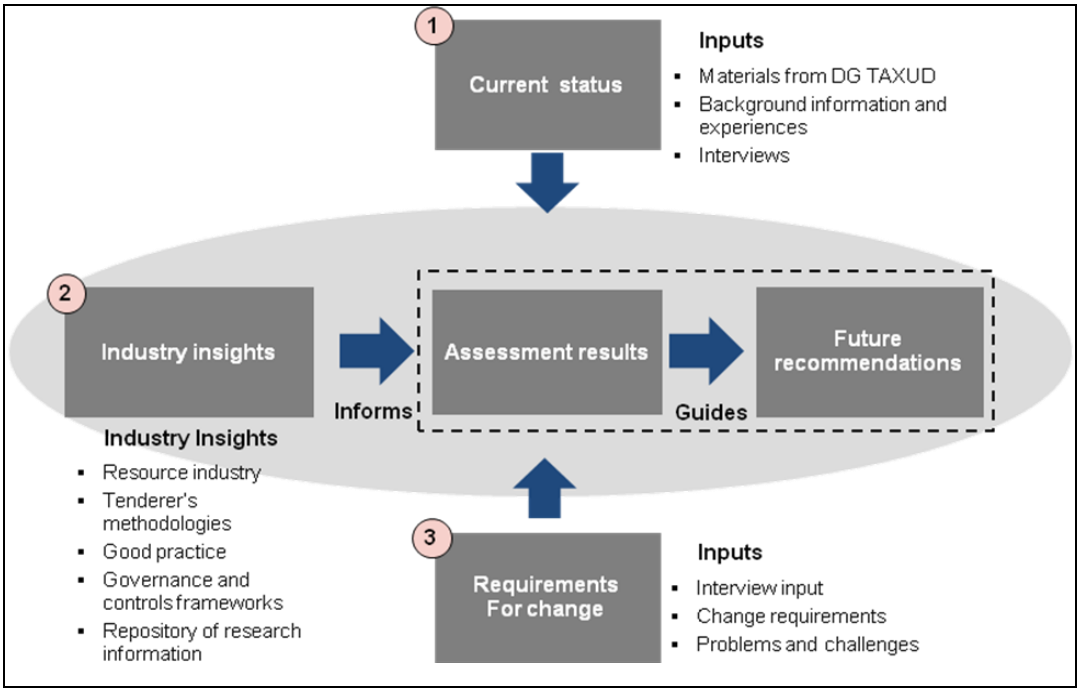

Figure 10: Assessment process

The starting point **(1)** will be the current situation, based on material and background information received from DG TAXUD and from possible other sources. As a second step **(2)** the **ITSM3 Integration** contractor should take into account relevant methodologies, best practice and experience, and then **(3)** collect requirements for change and challenges to identify the desired future stage.

By comparing the current status with the desired future stage and supporting this with **ITSM3 Integration** contractor's methodologies and approaches, the assessment results can be formulated and improvement action identified.

An assessment could be supported by various tools, checklists, best practice and/or assessment methodologies.

In the context of **ITSM3,** the assessment requested from the **ITSM3 Integration** contractor could typically cover topics such as: IT service maturity, provision, improvements, as well as impact and implementation of service improvements. In principle, an assessment could cover any of the services provided by **ITSM3 Operations** or **TES** or integration aspects between various lots of **ITSM3**.

6.6.3 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration**.

Price ID	Description
P.6.1 to P.6.2	All tasks in this Service Block are priced as On-demand Services.

Table 19: Pricing Units: Service Block 6: Benchmarking and Assessments

6.7 Service Block 7: Consulting on IT collaboration

6.7.1 Definition

Reducing tax gaps, providing better services to the public and improving the effectiveness of their administration are on the top of agendas of National Administrations (NAs). As a result, international modes of coordination and cooperation are ever growing between EU Member States (MS). In the face of on-going changes in the field of Customs, VAT, Direct Taxation, Recovery and Excise, substantial enhancements and new developments in the area of IT are unavoidable. Taking also into account the budget constraints faced by public administrations, EU Member States agreed that the traditional way of developing similar functionalities 28 times is not an efficient use of public funds. Furthermore, such an approach will not cope with the challenging further developments of existing Taxation IT systems in a synchronised fashion.

A managed IT Collaboration allows increasing the number of shared IT activities between the Member States as well as increasing the number of reusable components across the Taxation silos. This reduces the costs for IT implementation, deployment and operation in the Member States while offering increased agility in responding to the EU policy expectation.

DG TAXUD is supporting the NAs to organise IT Collaboration, Member States sharing and reusing of resources and knowledge for a common objective by facilitating and speeding up the formation of working arrangements between Member States interested in IT Collaboration. Providing experience-based best practices can serve Member States as a starting point and create a common understanding of the scope and expectations. Most of the IT collaboration activities are managed through IT Collaboration Projects Groups.

The **ITSM3 Integration** contractor shall support DG TAXUD and the Member States in IT Collaboration activities and the production of documentation related to the IT Collaboration projects.

6.7.2 Service Requirements

6.7.2.1 Strategic advice (Task 7.1)

The contractor shall support DG TAXUD and involved Member States in the strategic improvement of an environment that allows and facilitates a successful collaboration in the design, development and operation of IT Systems.
Based on the experience of IT Collaboration projects, the contractor shall advice on best practice and common approaches that make IT Collaboration sustainable.
The contractor shall support the elaboration and provision of training activities on the different methodologies and tools to be used for IT Collaboration.
The contractor shall be able to manage the dynamics of an international stakeholder environment with hundreds of stakeholders in national customs and tax administrations. The contractor shall strategically advise DG TAXUD and Member States on the elaboration and execution of a communication plan to the different stakeholders, with the objective of informing, promoting and engaging them to IT Collaboration projects.

6.7.2.2 PMO (Task 7.2)

The contractor shall support DG TAXUD on the preparation of meetings and workshops among Member States, shall facilitate the meetings, and shall support the production of minutes in accordance with the Framework Quality Plan.
The contractor shall organise and host conferences calls with DG TAXUD and Member States, shall participate as note taker, and shall facilitate the discussion as required.
The contractor shall support DG TAXUD and the Member States in administrative, planning and reporting activities.

6.7.2.3 Legal guidance (Task 7.3)

The contractor shall support DG TAXUD and Member States in the exploration and definition of legal aspects before, during or after IT Collaboration projects.
The contractor shall support DGTAXUD and Member States in the exploration and definition of joint procurement procedures and approaches for IP rights and licensing.

6.7.2.4 Valuation (Task 7.4)

The contractor shall master cost-benefit analysis methodologies and shall support DG TAXUD and Member States before the start of IT Collaboration projects in the assessment of the potential savings through IT Collaboration.
The contractor shall support DG TAXUD and Member States in the closing of IT Collaboration projects with guidance on adequate financial reporting mechanisms.

6.7.2.5 IT Architecture & Technologies (Task 7.5)

The contractor shall provide guidance on IT architecture principles, patterns and standards that support DG TAXUD and Member States before and during IT Collaboration projects, in the effort to produce reusable and interoperable IT systems.

6.7.3 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration**.

Price ID	Description
P.7.1 to P.7.5	All tasks in this Service Block are priced as On-Demand Services.

Table 20: Pricing Units: Service Block 7: Consulting on IT Collaboration

6.8 Service block 8: Transition

6.8.1 Definition

This Service Block comprises the following services:

- Task 8.1 - Planning of the Take-Over and Hand-Over services – (cf. Section 6.8.2.1)
- Task 8.2 - Set up and maintenance of **ITSM3 Integration** contractor's resources – (cf. Section 6.8.2.2)
- Task 8.3 - Phased Take-Over of services – (cf. Section 6.8.2.3)
- Task 8.4 - Phased Hand-Over of services – (cf. Section 6.8.2.4)

6.8.2 Service Requirements

The services described below do not differ in essence from what is described in the TEMPO Hand-Over/Take-Over activities.

All deliverables, outputs and value created (or taken over) directly and indirectly by the **ITSM3 Integration** contractor - including all assets purchased through the **ITSM3 Integration** contractor – which are related to the services in the scope of the respective Framework Contract - remain/become property of the European Commission.

6.8.2.1 Planning of Take-Over and Hand-Over (Task 8.1)

6.8.2.1.1 PLANNING OF THE TAKE-OVER

The Take-Over activities need to be planned and agreed upon with DG TAXUD. The Take-Over is from existing services; in this case, from the ITSM2 Lot 3 contractor.

The **ITSM3 Integration** contractor will have to propose the detailed Take-Over Plan in the relevant SC, which will be refined in terms of resources, schedule, deliverables and acceptance.

A Take-Over Plan must cover at least the following items:

- The scope of the activities to be set up, including the list of the different stakeholders involved;
- The planning of the Take-Over;
- The tests and criteria to use to carry out the Take-Over and set-up of the FAT.

6.8.2.1.2 TAKE-OVER PLAN

Before the start of the Take-Over activities, the Commission must accept the initial Take-Over Plan. Changes to the plan after the start will have to be agreed by the Contractor and the Commission.

The Take-Over Plan must be aligned with the Hand-Over plan of the incumbent contractor(s) and must include at least the following points:

- Take-Over methodology, including a change management approach;
- Inventory of items in the scope of the Take-Over;
- Identification of all activities in the scope of the Take-Over;
- Detailed planning of the activities;
- FAT details including acceptance criteria;
- Knowledge transfer and management approach, activities, artefacts and planning;
- Risk management approach, activities, artefacts and planning. Minimum required: a risk analysis with mitigation and a fallback plan;
- Detailed planning of activities towards the stakeholders of the project (DG TAXUD, National Administrations, other partners, contractors, etc.).

 The **ITSM3 Integration** contractor is requested to take note of 8.9.8. This SQI is linked to a **direct liquidated damage** and will be invoked in case of unavailability of personnel at Take-Over time and/or if the **ITSM3 Integration** contractor would fail to complete the take-Over duties within the regarded take-over period.

6.8.2.1.3 CRITERIA OF ACCEPTANCE

The level of service provision to be achieved by the **ITSM3 Integration** contractor during each step will be assessed and accepted against the fulfilment of the activities defined in TEMPO. At the end of each step, all responsibility covered by the step will have completely switched over to the **ITSM3 Integration** contractor.

Progress will be documented in the Take-Over Report. At the end of each step, an intermediate version of the Take-Over Report will be submitted to DG TAXUD for review and acceptance. The Commission may reject version(s) and/or the final report if critical activities of the step or the Take-Over as a whole have failed or if a noticeable decrease in the quality of the services has been detected during the Take-Over period.

6.8.2.1.4 PLANNING OF THE HAND-OVER

The Hand-Over period represents the period, during the contract, when the **ITSM3 Integration** contractor is required to transfer the project information and knowledge to DG

TAXUD or to any specified third parties on its behalf. It is considered that the implementation phase should last **3** months. The total duration of the Hand-Over is therefore 3 months + the duration of the planning, preparation and follow-up phases.

During the Hand-Over period, the **ITSM3 Integration** contractor will make the totality of the knowledge acquired during the contract available to DG TAXUD or to any specified third parties on its behalf. It will hand over **all** the tools, documentation, deliverables, scripts, and other internal procedures, tools and packages, as well as provide appropriate training and coaching to allow the new supplier to take over whilst assuring continuity.

The Hand-Over process includes the following phases:

- **Planning:** to set up the list of all activities, resources, deliverables and milestones required to perform successfully the Hand-Over to DG TAXUD or to any specified third parties on its behalf;
- **Preparation:** to identify, collect and store all deliverables required to allow a smooth and complete transfer of knowledge from the **ITSM3 Integration** contractor to DG TAXUD or to any specified third parties on its behalf; to prepare, when required, the training sessions for the project team of the next service provider;
- **Implementation:** to perform effectively the transfer of project knowledge (using planned training and ad-hoc technical meetings) and deliverables (documents, software, hardware) from the **ITSM3 Integration** contractor to DG TAXUD or to any specified third parties on its behalf;
- **Follow-up:** to provide "help" to DG TAXUD or to any specified third parties on its behalf during the Hand-Over process. All the support activities related to the transfer of knowledge (ad-hoc technical meetings) from the **ITSM3 Integration** contractor to DG TAXUD or to any specified third parties on its behalf must be included. The **ITSM3 Integration** contractor **may not** ask DG TAXUD or any specified third parties on its behalf to pay (within a bi-lateral contract) for the support during the Hand-Over phase due to the fact, among others, that intellectual property generated during the current Framework Contract belongs to the Commission.

6.8.2.1.5 DURATION

For both the Hand-Over and the Take-Over, it is considered that the implementation phase should last no more than **3** months. The total duration is therefore (max. 3 months) + the duration of the planning, preparation, and follow-up phases.

 Failure to pass on the information and knowledge to the new contractor or DG TAXUD will result in non-payment of the continuous services of the incumbent contractor during the Hand-Over period.

6.8.2.2 Set-up and maintenance of ITSM3 Integration contractor's resources (Task 8.2)

The new team must demonstrate that it has the minimum skills, experience and expertise that are necessary to carry out the requested services and activities, and produce the required deliverables in a professional way.

Among others, the team must demonstrate capabilities to:

- Manage international and multi-partner projects;
- Demonstrate technical expertise and experience in the core activities of the **ITSM3 Integration** contractor;
- Possess a mindset that is goal and quality oriented.

 The selected team is required to be dedicated (for a full 100%) to the activity or to be available up to the degree that was foreseen in the Call for Tenders.

6.8.2.2.1 TRAIN AND SUPPORT THE TEAM

The **ITSM3 Integration** contractor is responsible for providing staff with the adequate level of qualification and therefore for their training. The **ITSM3 Integration** contractor must ensure that their staff are fully aware of its own quality system, the TEMPO Quality Methodology, the project security requirements as well as the project goals, context, planning and policy impact.

Some examples of induction trainings that the **ITSM3 Integration** contractor could attend are:

- DG TAXUD organisation and stakeholders;
- **ITSM3 Operations** activities;
- **ITSM3 TES** activities;
- **Lot QA** activities;
- Methodologies and tools.

6.8.2.2.2 SET UP AND MAINTAIN THE OFFICE INFRASTRUCTURE AND THE NECESSARY TELECOM RESOURCES

The **ITSM3 Integration** contractor must foresee the setting-up of the necessary office infrastructure: PC's including office automation tools, printers, printer and e-mail-servers as well as all modern connectivity facilities (Internet, e-mail, phone, and fax).

Access to the office infrastructure must be restricted to pre-defined authorized persons (**ITSM3 Integration** contractor's team members, DG TAXUD's representatives and occasional accompanied visitors, such as representatives of the other contractors involved).

6.8.2.3 Take-Over of services (Task 8.3)

6.8.2.3.1 DESCRIPTION

The Take-Over period will start as soon as the related Specific Contract has been signed and will end by the acceptance of the FQP and the Take-Over Report.

The key objectives are to:

- Achieve a thorough integration of the **ITSM3 Integration** contractor's team and the involved DG TAXUD representatives;
- Define clearly the new services to be developed and provided and formalize the support requested for the different activities;
- Be ready to perform all the services (with the required level of service support);
- Ensure that proper coordination and collaboration procedures are put into place with the other project stakeholders (e.g. other contractors, Commission's internal services);
- If needed, organise meetings to meet the key actors and confirm the coordination processes;
- Ensure a thorough induction of the team working on this assignment. The induction includes, among other things, the assessment and transfer of knowledge, material and information. Induction activities should contribute to optimise the quality framework of the contract.

The **ITSM3 Integration** contractor is responsible for taking all the steps required to achieve a rapid Take-Over and a seamless start of activities in order to meet the planning requirements of DG TAXUD. As the Take-Over period of **ITSM3 Operations**, **ITSM3 Integration** and **ITSM3 TES** may overlap, it is critical that all parties do their utmost to provide an operational and optimal service as planned.

The **ITSM3 Integration** contractor will be responsible for:

- Acquiring the necessary understanding and knowledge to perform the assignment, including the induction of the teams;
- Proceeding with the Take-Over according to the agreed plan;
- Running the Take-Over Plan and to produce a Take-Over Report during the activities and submit a final version at the end of each of the Take-Over period.

During the Take-Over period, DG TAXUD will provide the **ITSM3 Integration** contractor with the following:

- Access to all relevant Baseline documentation and deliverables. This concerns items that can also be found referred to in the "Scope of Activities of the **ITSM3 Operations** Technical Annex" in the Baseline, but also other items that are currently used on a day to day basis by DG TAXUD and that will serve as an input for the activities described within this document;

- Whenever deemed necessary by DG TAXUD, invitations to participate in Working Committee meetings and technical meetings with other contractors involved;
- The possibility to attend meetings or training sessions with the relevant representatives of DG TAXUD and/or other contractors to ensure understanding of the operating environment, to address Take-Over questions, with a pre-defined maximum number of persons attending from the **ITSM3 Integration** contractor's side.

6.8.2.4 Hand-Over at the end of the contractual period (Task 8.4)

At the end of the contractual period, the **ITSM3 Integration** contractor will hand over to DG TAXUD, or any specified third parties on its behalf, in accordance with instructions to be given by DG TAXUD, the totality of the **ITSM3 Integration** services, the totality of the live and historical data and information detailing the services provided, the up-to-date version of any tools (if any) developed/maintained by the **ITSM3 Integration** contractor, free of any rights, unless otherwise agreed by DG TAXUD.

The **ITSM3 Integration** contractor will take all steps required to hand over part or all of his activities to the Commission or to a third party at the end of the **ITSM3 Integration** contractor's Framework Contract, or earlier on upon request from the Commission.

6.8.2.4.1 HAND-OVER OF ALL ARTEFACTS

The **ITSM3 Integration** contractor will hand over to the Commission, or any third parties on its behalf, upon completion of the contract, all reports and data such as maps, diagrams, drawings, specifications, plans, statistics, calculations, databases, software and supporting records or materials acquired, compiled or prepared by the **ITSM3 Integration** contractor.

6.8.2.4.2 TRAINING AND SUPPORT DURING HAND-OVER

The **ITSM3 Integration** contractor must provide training and support to a third party, if necessary, taking over the service. This includes support to the "shadowing" of the **ITSM3 Integration** contractor's activities by the third party. The shadowing and trainings will be provided on request, and if so requested, for a total duration of **3 months**.

Examples of training that the **ITSM3 Integration** contractor may be requested to give are:

- DG TAXUD organisation and stakeholders;
- **ITSM3 Integration** activities;
- Methodologies and tools.

6.8.2.4.3 PRODUCTION OF THE HAND-OVER REPORT

The **ITSM3 Integration** contractor has to provide a Hand-Over report to the Commission for review, and acceptance at the end of the Hand-Over activity.

6.8.3 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration.**

Price ID	Description
P.8.1 to P.8.4	All services are priced as one-off prices.

Table 21: Pricing Units: Service Block 8: Transition

6.9 Service Block 9: Other Deliverables and Services

This Service Block allows DG TAXUD to order services not predefined in the Technical Annex, but that still do fall within the scope of **ITSM3 Integration** activities. These are typically ordered with an RfA, and defined together with DG TAXUD and **ITSM3 Integration**.

In cases like this **ITSM3 Integration** follows the on-demand ordering mechanism as explained in the Section 6.1.1 Contract Management.

The services covered under this section are:

- Task 9.1 - Trainings, Workshops and Demonstrations – (cf. Section 6.9.1.1) – (**FP**)
- Task 9.2 - Service Improvement Initiatives – (cf. Section 6.9.1.2) – (**OD**)
- Task 9.3 - Other ad hoc services and deliverables in the scope of **ITSM3 Integration** – (cf. Section 6.9.1.3) – (**OD**)

6.9.1 Service requirements

6.9.1.1 Trainings, Workshops and Demonstrations (Task 9.1)

The **ITSM3 Integration** contractor will provide training/workshops on request from DG TAXUD.

DG TAXUD may request the training/workshops to be held in **English or French**. The training and workshops could be attended by **up to 20 participants**/per session designated by DG TAXUD.

The training sessions would be related to coordination and collaboration between the stakeholders of the **ITSM3** contracts. They could cover topics such as processes, issues and changes related to the integrator role. Typically, they will be topics that involve multiple stakeholders and that fall under the scope of **ITSM3 Integration** activities and expertise.

The **ITSM3 Integration** contractor will prepare, coordinate and provide training sessions in accordance with the Framework Quality Plan. The training sessions will be held either at the Commission premises or at the **ITSM3 Integration** contractor's premises. An average of **2 days per training** session is foreseen.

The **ITSM3 Integration** contractor will provide:

- Training in English or French;
- Training material (e.g. training notes, evaluation forms) to be distributed to all participants;

- Training Evaluation Reports including the original evaluation forms filled in by the participants in the training session;
- The agenda/briefing for the training/workshop and confirmation of the items presented or discussed in the workshop with DG TAXUD.

Demonstrations are assumed to be live visualisations and exhibitions of methodologies, tools or applications. All actions and deliverables applicable for a training or workshop are also applicable to demonstrations with the necessary adaptations. For example, the questions in the evaluation form have to reflect the aim of the demonstration.

6.9.1.2 Service Improvement Initiatives (Task 9.2)

The **ITSM3 Integration** contractor should drive initiatives and actions to improve the collaboration and coordination between the various stakeholders. The **ITSM3 Integration** contractor will be expected to suggest improvement projects to DG TAXUD, which in turn authorises these actions. The **ITSM3 Integration** contractor should be targeting the ideal "operating model" in the **ITSM3** environment.

6.9.1.3 Other ad hoc services and deliverables in the scope of ITSM3 Integration (Task 9.3)

This Service Block relates to any activities in the scope of the **ITSM3 Integration** contract not specified elsewhere.

These activities will be defined and ordered on a case-by-case basis via the SC and RfA procedure initiated by DG TAXUD.

6.9.2 Pricing Units

Section 11 – "Pricing Model" contains the complete list of services provided by **ITSM3 Integration.**

Price ID	Description
P.9.1 to P.9.3	All tasks in this Service Block are priced as On-Demand Services.

Table 22: Pricing Units: Service Block 9: Other Deliverables and Services

7. Deliverables and services

7.1 Classification of the impact of a late delivery

The deliverables and services are classified on the impact that the late SfR or SfA delivery has on the project and its participants and possible stakeholders. There are 4 categories that are applicable: **Major**, **High**, **Medium**, and **Low**.

The Commission may request other parties involved in the business threads (BT) (like the operations contractor, the QA contractor) to review deliverables submitted by the **ITSM3 Integration** contractor. The comments from the Commission will include the comments of these third parties. If comments are delivered in various batches, the date of the last batch of comments is considered as the start of the T2 period.

Furthermore, DG TAXUD reserves the right to mutually agree (and record in the DTM) with the **ITSM3 Integration** contractor a review cycle different from the one originally agreed upon in the Specific Contract.

The delivery to DG TAXUD is measured by a SQI. The late delivery impact is classified, by DG TAXUD, as one of the following values:

- Major;
- High;
- Medium;
- Low.

The default classification is "Medium".

Section 7.4 below lists the deliverables to be provided for each Service Block. The deliverables are qualified by their planning, acceptance mechanism and the impact of their late delivery (SQI).

7.2 Planning Mechanism

The planning information will relate:

- **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, in compliance with this 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 an RfA within an SC;
- In the CSIP;
- Mutual agreement between the DG TAXUD and the **ITSM3 Integration** contractor during the course of the SC, each planning agreement being recorded in the MPR of the month when the agreement took place;
- On the **ITSM3 Integration** contractor's 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 and actual date of delivery are reported in the Monthly Progress Report.

7.3 Acceptance mechanism

7.3.1 Acceptance of deliverables

The acceptance procedures applicable to the deliverables and services are specified hereafter. The Framework Quality plan 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, the following decreasing precedence will prevail: SC, Technical Annex, and FQP.

No formal acceptance applies for deliverables for which neither this Technical Annex nor 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 **ITSM3 Integration** contractor Submits for Review (SfR) its deliverable to the Commission, and any nominated party[18], at the agreed date, starting T1;
- The Commission reviews the SfR deliverable and returns its comments to the **ITSM3 Integration** 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 **ITSM3 Integration** contractor of the review comments from the Commission[19];
- The **ITSM3 Integration** contractor submits its author's positions for each of the comments submitted by the Commission;
- The Commission may call a review meeting with the **ITSM3 Integration** contractor to resolve outstanding review issues;
- The review meeting decisions are submitted by:
  - The **ITSM3 Integration** contractor in case of minor or medium size review;
  - The Commission (or any other third party designated by it, such as the QA contractor) in case of major size review.
- The **ITSM3 Integration** contractor implements the review comments, according to author's positions agreed and the review meeting decisions (in case a review meeting took place), and Submits for Acceptance (SfA) its deliverable before the end of the T2 period, 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).

[18] The Commission may use the support of the QA contractor for the management of the review cycles of submitted deliverables.

[19] The Commission may request other parties involved in the business threads (like the development contractors, the QA contractor) to review deliverables submitted by the **ITSM3 Integration** contractor. The comments from the Commission will include the comments of these third parties.

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 **ITSM3 Integration** contractor of any deviation of the SfA deliverable from the author's 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 **ITSM3 Integration** 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 Requests for Action (RfA) will define additional periods if required and will set the pre-agreed dates for delivery.

The Commission draws the attention of the **ITSM3 Integration** contractor to the fact that:

- the T1/T2/T3 review cycle is tightly related to the contractual planning:
  - a contractual date qualified for Review (SFR date) implies that the T1/T2/T3 review cycle for the deliverable starts at that date;
  - a contractual date qualified for Acceptance (SFA date) implies that the T1/T2 part of the cycle must be completed for the deliverable by that date.
- the T1/T2/T3 review cycle constitutes an integral part of the production of the deliverables. In particular the contractor shall not claim any additional costs to manage the T1/T2/T3 review cycle.
- For each milestone of a RFA the **ITSM3 Integration** contractor has to provide a RfA Interim/Closure report as part of the supporting documents to be annexed to the invoice as defined in Task 1.1 – Contract Management.

7.3.1.1 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.

7.3.1.2 Deliverables accepted via the Monthly 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 should contain a list of all deliverables presented for acceptance through it.

7.3.2 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 (Framework Contract, Specific Contract, RfA), which itself may refer to other applicable SLAs/OLAs.

The Monthly Service Report (MSR) 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.

7.3.3 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 MPR, which includes the various Monthly Service Reports 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, FQP on the other hand, the latter will always take precedence.

7.3.4 FQP, Take-Over and Hand-Over

The acceptance of the FQP and the Take-Over will be subject to a FAT, the aim of which is to verify the integrity between the FQP and Take-Over reports with the set-up of the **ITSM3 Integration** contractor.

The acceptance of the Hand-Over will be subject:

- Firstly, to a FAT performed in the premises of the **ITSM3 Integration** contractor;
- Secondly, to a SAT in the premises of the third parties nominated by the Commission to Take-Over from the **ITSM3 Integration** contractor after the transfer of knowledge.

7.3.5 Bespoke Software

Acceptance of new applications or extensions of existing applications is performed according to a FAT/preSAT/SAT scheme, unless the Commission decides to go through a simple qualification.

7.3.6 ICT infrastructure services

The ICT infrastructure services will be accepted after reception of the delivery notification and by the formal acceptance of the Site Acceptance Test report delivered by the **ITSM3 Integration** contractor following an on-site verification of the report quality.

7.3.7 Review and acceptance by the National Administrations

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 EN, FR or DE) within a given period (from 2 to 10 weeks according to the volume of the deliverables and their importance).

The **ITSM3 Integration** 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's 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 **ITSM3 Integration** contractor will deliver the minutes of the workshop also according to a 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 National Administrations and Candidate Countries.

Once the NAs and the Candidate Countries accept the bundle, the **ITSM3 Integration** contractor will consolidate the "workshop decision" into the deliverables and deliver the final version of the document, again according to a SfR/SfA cycle. This final version becomes part of the documentation baseline of the project.

All deliverables produced by the **ITSM3 Integration** contractor under this step will be in EN only.

The timing of the consecutive SfR/SfA cycles can be defined in the FQP, Specific Contracts, and the Requests for Action.

7.4 List of Deliverables/Services

The table below lists the deliverables/services together with an indication of the impact that a late SfA may have.

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Contract Management					
1.1	**D.1.1.1**	SC Proposal in answer to a RfO	SfR RfO + 10 working days	MPR	Major
1.1	**D.1.1.2**	Estimate for Action (EfA) in answer to an RfE	SfR RfE + 5 working days (offer for less than 20 working days) SfR RfE + 10 working days (offer for 20 working days or more)	MPR	Major
Project Management - Governance and Relationship Management					
1.2.1	**D.1.2.1.1**	Agenda of a meeting	SfR meeting – 5 working days	IA	High
1.2.1	**D.1.2.1.2**	Material supporting the meeting	SfR meeting – 5 working days	IA	High
1.2.1	**D.1.2.1.3**	Minutes and other outputs (including Actions list and Updated Risk Register) of meeting	SfR meeting + 2 working days	IA	High
Project Management - Project Reporting					
1.2.2	**D.1.2.2.1**	Monthly Progress Report (MPR)	SfR: Max (end of the reporting period + 5 working days, Date of BMM – 5 working days) SfA: Date of BMM + 10 working days	MPR	High
1.2.2	**D.1.2.2.2**	Project Actions list	As needed, MPR	MPR	High

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Project Management – Risk Management					
1.3.4	**D.1.3.4.1**	Internal risk analysis records, on contractor's premises, upon request from DG TAXUD	Request + 2 working days	MPR	Medium
Project Management – management of the team					
1.4	**D.1.4.1**	Per-task resource allocation table		MPR	Medium
1.4	**D.1.4.1**	Presence table and continuity arrangements for the forthcoming weeks	Once per week, or request + 1 working day	MPR	Medium
Quality Management - Internal QA and QC					
1.5.1	**D.1.5.1.1**	Quality Assurance records, filed on contractor's premises, upon request from DG TAXUD	Request + 2 working days	MPR	Low
1.5.1	**D.1.5.1.2**	Quality Control	Request + 2 working days	MPR	Medium
Quality Management - CSIP					
1.5.2	**D.1.5.2.1**	CSIP records status report	MPR, Request + 2 working days	MPR	Medium
Quality Management - Internal quality audit and self-assessment					
1.5.3	**D.1.5.3.1**	Self-Assessment reports	At least twice per year	IA	Medium
1.5.3	**D.1.5.3.2**	Internal Quality Audit reports	At least twice per year	MPR	Medium

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Quality Management - Cooperation during audits					
1.5.4	**D.1.6.4.1**	Contractor's position on the audit report	20 working days after reception of the audit report, for acceptance	IA	Medium
Quality Management - FQP maintenance					
1.5.5	**D.1.6.5.1**	Framework Quality Plan (FQP) – initial review	SC01 T0 + 4 months for acceptance	IA	Major
1.5.5	**D.1.6.5.2**	Framework Quality Plan (FQP) - maintenance	SC	IA	Major
Integration advice – IT architecture office					
2.1	**D.2. 1.1**	Opinion or advice to support the Architecture board meeting as an answer to a request from DG TAXUD.	Request + 2 working days, Mutual agreement	IA	Major
Integration advice – Advice and support on IT continuity					
2.2	**D.2.2.1**	Advice in supporting the IT continuity	Request + 2 working days, Mutual agreement	IA	Major
Integration advice – Deliverable reviews					
2.3	**D.2.3.1**	Technical review of Deliverable produced by third party	As per review cycle	IA	Medium
Integration advice – Technology choice support					
2.4	**D.2.4.1**	Report on specific topics as requested by DG TAXUD	Mutual agreement, RfA, SC	IA	Major

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Integration management support – support to the programme management of DG TAXUD A5/ISD					
3.1	**D.3.1.1**	New or updated Programme Vision Document	Beginning of each SC for Continuous Services Request + 5 working days, Mutual agreement	MPR	Low
3.2	**D.3.2.1**	Business Case document	Request + 5 working days, Mutual agreement	MPR	Medium
3.3	**D.3.3.1**	Updated projects portfolio	Monthly	MPR	High
3.4	**D.3.4.1**	Issue log (issues related to integration aspects, scope issues, change issues)	Monthly, As needed	MPR	High
3.5	**D.3.5.1**	Comments on deliverables as outcome of the Review process	As per review cycle, Mutual agreement	IA	Medium
3.6	**D.3.6.1**	Updated Risks register, mitigation plans	Monthly; Request + 2 working days, As needed	MPR	Major
3.6	**D.3.6.2**	Actions list – updated with risk-related actions	Request + 2 working days, MPR	MPR	Medium
3.7	**D.3.7.1**	Updated **ITSM3** Integrated planning (GANNT chart)	Request + 2 working days, MPR	MPR	Medium
3.8	**D.3.8.1**	Dependencies and critical path identification between the planning timetables of various stakeholders	As needed	MPR	Medium
3.8	**D.3.8.2**	Reminders and alerts in the event the planning is in danger	As needed	MPR	Medium

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
3.9	**D.3.9.1**	Progress review - Review comments to DG TAXUD	Daily	MPR	Medium
3.10	**D.3.10**	Project Business Case or Vision document	Request + 5 working days, Mutual agreement	MPR	Medium
3.11	**D.3.11.1**	Updated project Integrated planning (GANNT chart)	Request + 2 working days, MPR	MPR	Medium
3.11	**D.3.11.2**	Dependencies and critical path identification between the planning timetables of various stakeholders	As needed	MPR	Medium
3.11	**D.3.11.3**	Reminders and alerts in the event the planning is in danger	As needed	MPR	Medium
3.12	**D.3.12.1**	Comments on deliverables as outcome of the Review process	As per review cycle, Mutual agreement	IA	Medium
3.13	**D.3.13.1**	Updated Risks register, mitigation plans	Monthly; Request + 2 working days, As needed	MPR	High
3.13	**D.3.13.2**	Actions list – updated with risk-related actions	Request + 2 working days, MPR	MPR	Medium
3.14	**D3.14.1**	Issue log (issues related to i.e. integration aspects, scope issues, change issues)	Weekly, As needed	MPR	High
3.15	**D.3.15**	Progress review - Review comments to DG TAXUD	Daily	MPR	Medium

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Portfolio Management Support for TAXUT IT Service Delivery					
4.1	**D.4.1.1**	Updated IT service delivery projects portfolios	Monthly	MPR	High
4.1	**D.4.1.2**	Updated Risks registers, mitigation plans	Monthly; Request + 2 working days, As needed	MPR	High
4.1	**D.4.1.3**	Updated TAXUD IT Service Delivery Integrated planning (GANNT chart)	Request + 2 working days, MPR	MPR	High
4.1	**D.4.1.4**	Issue log (issues related to i.e. integration aspects, scope issues, architectural issues, change issues)	Monthly, As needed	MPR	High
4.1	**D.4.1.5**	Comments on Vision Documents and Business cases as outcome of the Review process	As per review cycle, Mutual agreement	MPR	High
Asset Management Support for TAXUT IT Service Delivery					
5.1	**D.5.1.1**	Updated assets information base	Beginning of each SC for Continuous Services	MPR	High
5.1	**D.5.1.2**	Report on exceptions: i.e. inconsistencies, out-of-maintenance or end-of-life assets	Monthly, As needed	MPR	High
5.1	**D.5.1.3**	Updated DG TAXUD asset management procedures	Monthly, As needed	MPR	Medium
Benchmarking and Assessments: benchmarking					
6.1	**D.6.1.1**	Benchmarking plan	Request + 2 working days, Mutual agreement	IA	Medium
6.1	**D.6.1.2**	Intermediary benchmarking report	Mutual agreement	IA	Medium

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
6.1	**D.6.1.3**	Presentation of benchmarking results	End of benchmarking exercise + 5 working days	IA	High
6.1	**D.6.1.4**	Final benchmarking report	End of benchmarking exercise + 10 working days	IA	High
Benchmarking and Assessments: assessments					
6.2	**D.6.2.1.**	Assessment plan	Mutual agreement, RfA, SC	IA	Medium
6.2	**D.6.2.2**	Intermediary assessment report	Mutual agreement, RfA, SC	IA	Medium
6.2	**D.6.2.3**	Presentation on assessment results	Mutual agreement, RfA, SC	IA	High
6.2	**D.6.2.4**	Final assessment report	Mutual agreement, RfA, SC	IA	High
Consulting on IT collaboration:					
7.1	**D.7.1**	Deliverables to be specified in the RfA/SC	RfA, SC	IA	Medium
7.1	**D.7.1.1**	Report on specific topics as requested by DG TAXUD	As needed	IA	Major
7.1	**D.7.1.2**	Strategic advice: consultancy report with an accompanying presentation	As needed	IA	Medium
7.1	**D.7.1.3**	List and roles of stakeholders	Request + 2 working days, Mutual agreement	MPR	Low
7.1	**D.7.1.4**	List of dependencies among the stakeholders	Request + 2 working days, Mutual agreement	MPR	Low
7.1	**D.7.1.5**	Newsletter to External stakeholders	Request + 2 working days, Mutual agreement	IA	Low
7.1	**D.7.1.6**	Business case for new initiative	As needed	IA	Medium

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
7.2	**D.7.2.1**	Agenda of a meeting	SfR meeting – 5 working days	IA	High
7.2	**D.7.2.2**	Material supporting the meeting	SfR meeting – 5 working days	IA	High
7.2	**D.7.2.3**	Minutes and other outputs (including Actions list and Updated Risk Register) of meeting	SfR meeting + 2 working days	IA	High
7.2	**D.7.2.4**	Preparation of workshops (presentation, coordination etc.);	SfR meeting – 5 working days	IA	High
7.2	**D.7.2.5**	Participation and facilitation of workshops	SfR meeting – 5 working days	IA	High
Transition: Planning of Take-Over and Hand-Over					
8.1	**D.8.1.1**	Take-Over and set-up Plan	Mutual agreement, RfA, SC	IA	Major
8.1	**D.8.1.2**	Hand-Over Plan	SfR and SfA as per SC Normally 6 to 9 months in advance of the anticipated date for the Hand-Over	IA	Major
Transition: Set-up and maintenance of ITSM3 Integration contractor's resources					
8.2	**D.8.2.1**	Set-up of the service environment and resources	Mutual agreement	MPR	Medium
Transition: Take-Over of services					
8.3	**D.8.3.1**	Take-Over Report	SfA 1 month after the end of the Take-Over	IA	High

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
Transition: Hand-Over of services					
8.4	**D.8.4.1**	Hand-Over training material	2 months before the beginning of the Hand-Over for review, 2 weeks before for acceptance	IA	Major
8.4	**D.8.4.2**	Inventory of Hand-Over materials and services to be delivered to DG TAXUD or a third party	3 months before the beginning of the Hand-Over for review, continuous update	IA	High
8.4	**D.8.4.3**	Hand-Over report	SfA 1 month after the end of the support to the Hand-Over.	IA	High
Other deliverables and services					
9.1	**D.9.1.1**	Training sessions/ Workshops/Demonstrations: Agenda, briefing	Date of the Training sessions/ Workshops/Demonstrations – 15 working days for review, date of the Training sessions /Workshops/Demonstrations – 5 working days for acceptance, Mutual agreement	IA	High
9.1	**D.9.1.2**	Training sessions/ Workshops/Demonstrations: Presentation material	Date of the Training sessions/ Workshops/Demonstrations – 5 working days for review, date of the Training sessions /Workshops/Demonstrations – 2 working days for acceptance, Mutual agreement	IA	High
9.1	**D.9.1.3**	Training sessions/ Workshops/Demonstrations: Presentation hand-outs	Date of the Training sessions/ Workshops/Demonstrations – 15 working days for review, date of the Training sessions /Workshops/Demonstrations – 2 working days for acceptance, Mutual agreement	IA	High

Task ID	Deliverable ID	Description	Planning	Acceptance mechanism	Impact of a late SfA
9.1	**D.9. 1.4**	Training sessions/ Workshops/Demonstrations: Report (including filled-in evaluation forms)	Date of the Training/Workshop + 10 working days, SfA	IA	High
9.2	**D.9.2.1**	Improvement projects and initiatives: Suggestions	As needed	MPR	Medium
9.2	**D.9.2.2**	Improvement projects and initiatives: Planning	As needed	IA	Medium
9.2	**D.9.2.3**	Improvement projects and initiatives: Report (end of activity)	End of activity date + 5 working days for review, Mutual agreement	IA	Medium
9.3	**D.9.3 X**	Other ad hoc deliverables/services in the scope of **ITSM3 Integration**	As needed, Mutual agreement, SC, RfA	IA	High

Table 23: List of deliverables and services

8. Service Level Agreement (SLA)

This SLA commits the **ITSM3 Integration** contractor to fulfilling the services delivered to DG TAXUD.

The objective is to provide a framework for the delivery of high quality services that meet the needs of DG TAXUD and the customers/users of DG TAXUD, e.g. the National Administrations.

8.1 Intended readership

The target audience for this document includes the parties to this Agreement and their representative bodies, and other interested parties, e.g.:

- The European Commission and their representative DG TAXUD;
- The **ITSM3 Integration** contractor and their representatives;
- The **ITSM3 Integration** contractor, fulfilling the Quality Check responsibilities (for the parts that do not contain information related to contractual aspects).

8.2 Agreement period

This Agreement will start at the signature of the first Specific Contract. This agreement remains valid as long as the Framework Contract is in force or until it is superseded by a revised agreement.

In each SC, a set of indicators will be selected by DG TAXUD and weight will be defined for each of those that will allow calculating the quality of the services delivered for that SC and eventual Liquidated Damages if service level is not achieved. All indicators should be monitored and reported upon in the Monthly progress report.

8.3 Service description

The SLA covers the continuous and on-demand services described in the **Technical Annex of the Specific Contract based on the Framework Contract**. The service provider commits itself to deliver those services according to the terms of the Framework Contract/Specific Contract.

The Service Provider shall not be liable for any delay in fulfilling or for the failure to fulfil the obligations resulting from this SLA, if this delay or failure is caused by circumstances, which could not have been reasonably foreseen by the parties. If the Service Provider is not able to fulfil its obligations or is not able to fulfil them in time, he shall immediately inform the Service Requester in writing of the situation and of its expected duration.

8.4 Approval of the SLA

The prerequisite for the acceptance of the SLA is the signature of the Framework Contract. Its entry into force will be associated with the signature of the related Specific Contract.

8.5 Changes to the SLA

There will be no change to this SLA during the lifetime of the Specific Contract except via an amendment to the Specific Contract.

8.6 Calculation of Specific Quality Indicators (SQI's)

8.6.1 Calculation of the SQI

SQI's are calculated in general using the following steps in sequence.

Note that the indicator related to availability defined later in this document does not follow this general approach.

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.

Normalize the Measurement (M_{norm})

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

$$M_{Nom} = \frac{M - Target}{Target - Limit}$$

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

SQI_{prof} as a result of the Profiling function

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

1 It limits the SQI_{prof} upwards, versus irrelevant over-performance of QoS above target;

2 It defines linear proportionality between the SQI_{prof} and the under-performance of QoS

below Limit;

3 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 normalized 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 $\underline{M_{Norm}} > 0 \Rightarrow SQI_{prof} = f(\underline{M_{Norm}}) = 1$ i.e. the QoS leads to a Measurement above *Target*

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

If $M_{Norm} = -1 \Rightarrow SQI_{prof} = f(\underline{M_{Norm}}) = -1$ i.e. the QoS leads to a Measurement on *Limit*

If $M_{norm} < -1 \Rightarrow SQI_{prof} = f(\underline{M_{norm}}) = \underline{M_{norm}}$ i.e. the QoS leads to a Measurement below the *Limit*

This profiling function is plotted in the figure below:

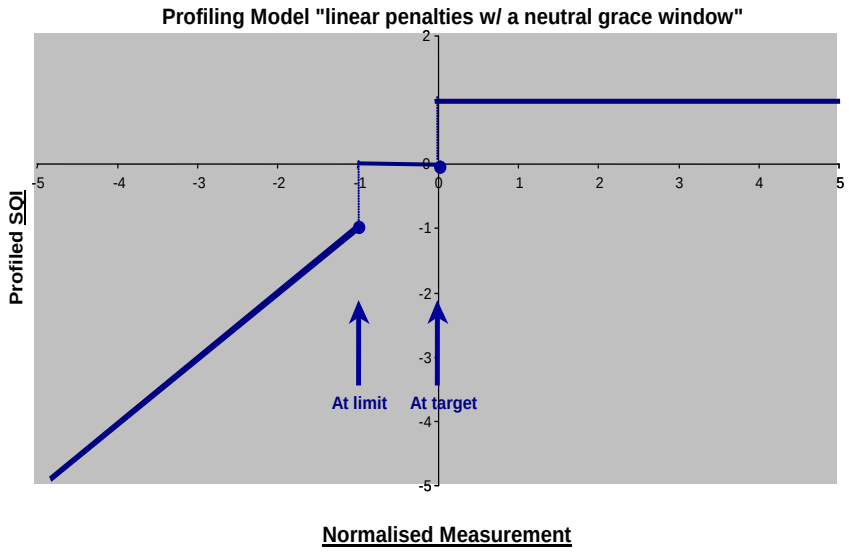

Figure 11: SQI Profiling function representation

Averaged profiled SQI

When a single SQI_{prof} 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_i according to the following formula:

$$SQI_{prof} = \frac{\sum_{i}^{n} SQI_{prof_i}}{n} = \frac{\sum_{i}^{n} f(\underline{M}_{nom_i})}{n}$$

Where n is the number of occurrences of the given SQI_{prof} during the application period.

8.6.2 The general quality indicator

The GQI is the weighted average of so-called contractual SQI specified in the Specific Contract/RFA as a subset of all the SQIs defined in SC/RFA. It allows a global assessment of the QoS for all services and deliverables.

8.6.3 Determination of Weights

The choice of the SQI contributing in the GQI calculation and their respective weights will be defined in the SC/RFA. DG TAXUD reserves its rights to change the SQI combination and weights in the GQI for each contract, as an instrument to force the non-regression and continuous improvement of the quality of service.

8.7 Service delivery performance and reporting

The Service Level Management is the process of defining, agreeing, documenting and managing the levels of IT Services to meet the required quality. The **ITSM3 Integration** contractor manages this SLA and provides DG TAXUD with the following commitments on quality of service and user satisfaction in order to increase confidence that DG TAXUD services quality Level will be met.

8.7.1 Service level reporting

8.7.1.1 Monitor and report services delivered by the contractor to DG TAXUD in compliance with this SLA

The **ITSM3 Integration** contractor commits to monitor all necessary services in order to be able to calculate the SQIs as defined in this SLA.

The detailed method for monitoring, logging and delivering the necessary data will be mainly described by the **ITSM3 Integration** contractor in the FQP.

8.7.1.2 Monthly progress and service reporting

The MPR will contain the full calculations for all SQIs described in this SLA, including the normalisation, profiling, and calculation of the provisional value of the GQI. The MSR will contain the actual values of the SQIs.

8.7.1.3 Monitor and report on evolutive maintenance of the SLA

The **ITSM3 Integration** contractor will maintain the SLA and monitor and report on it as described above.

The **ITSM3 Integration** contractor will monitor and propose updates to this SLA when needed. All evolutions of this SLA **must be part of an amendment to the Specific Contract and/or Framework Contract**, and must follow all rules set by the Commission in this case.

8.7.2 Reporting of exceptions and deviations from service levels

In case of exceptions or deviations from the expected service levels, the **ITSM3 Integration** contractor will escalate the issue to the Commission immediately. The **ITSM3 Integration** contractor will also propose solutions for the incident(s) in question, and propose solutions to avoid such incidents in the future. All procedures related to this must be described in the FQP

In case of major issue or dispute between the customer and the **ITSM3 Integration** contractor, a full escalation procedure should be described in the FQP. The escalation path should include at least the service level manager, programme manager and the DG TAXUD A5 Head of Unit.

8.8 DG TAXUD responsibilities

DG TAXUD will ensure that the **ITSM3 Integration** contractor has timely access to appropriate DG TAXUD personnel and will arrange for **ITSM3 Integration** contractor personnel to have suitable and safe access to the relevant DG TAXUD facilities and systems, e.g. Circa, meeting facilities when required.

8.9 Full list of SQI's

The table below defines the set of SQIs.

#	Description	SQI	Target	Limit
1	Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a **Low** Impact	SQI-001 cf. Section 8.9.1	0 delay	15 working days
2	Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a **Medium** Impact	SQI-002 cf. Section 8.9.2	0 delay	10 working days
3	Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a **High** Impact	SQI-003 cf. Section 8.9.3	0 delay	5 working days
4	Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a **Major** Impact	SQI-004 cf. Section 8.9.4	0 delay	1 working days
5	Measure the satisfaction of DG TAXUD with the services provided by the **ITSM3 Integration** contractor	SQI-005 cf. Section 8.9.5	Very satisfied	Somewhat satisfied
6	Measure that the initial value of the "Total number of months experience in the core team that will be assigned full time to the project" remains at an acceptable level	SQI-006 cf. Section 8.9.6	95%	85%
7	Measure that **ITSM3 Integration** contractor does not expose its internal legal organisation to DG TAXUD and their users	SQI-007 cf. Section 8.9.7	0	2

#	Description	SQI	Target	Limit
8	Measure that the **ITSM3 Integration** contractor's team is dedicated to the **ITSM3 Integration** project without any side activities or projects.	SQI-008 cf. Section 8.9.8 **Liquidated Damage**	100%	90%
9	Measure that the **ITSM3 Integration** management support (SB3) performance in reporting risks and projects planning is adequate.	SQI-009 cf. Section 8.9.9 **Liquidated Damage**	0	0
10	Measure that the **ITSM3** Portfolio and Risks management support (SB4) performance in reporting risks and projects planning is adequate.	SQI-010 cf. Section 8.9.10 **Liquidated Damage**	0	0
11	Measure that the "**ITSM3 Integration** advice" (SB2) performance is adequate in producing, commenting or validating architectural designs, including security aspects.	SQI-011 cf. Section 8.9.11 **Liquidated Damage**	0	0
12	Measure that the "**ITSM3 Integration**" performance is adequate in reporting operational and security risks.	SQI-012 cf. Section 8.9.12 **Liquidated Damage**	0	0
13	Measure that the "**ITSM3 Integration**" performance is adequate in reporting on asset management support (SB5).	SQI-013 cf. Section 8.9.13 **Liquidated Damage**	0	0
14	Measure the number of complaints received and confirmed by DG TAXUD concerning tasks that were already the object of complaint(s) in the previous 6 months.	SQI-014 cf. Section 8.9.14	0	0
15	Measure the number of complaints received and confirmed by DG TAXUD. Complaints that are already considered for SQI 9 to 13 are not considered for this SQI.	SQI-015 cf. Section 8.9.15	0	2

Table 24: Full list of Specific Quality Indicators

The **ITSM3 Integration** contractor will provide all raw data, as an annex to the MPR, to DG TAXUD allowing for a verification of the provided figures.

8.9.1 SQI-001 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact

SQI Attribute	SQI Attribute description
SQI Name	SQI-001
SQI Description	Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact
Unit of Measurement of the SQI	%
SQI Target	0 delay
SQI Limit	15 working days delay
SQI Calculation	The actual delivery date is the date the deliverable is uploaded on CircaBC. If the deliverable must be uploaded several times on CircaBC for Review: • The actual delivery date is the date of the last upload for Review; If the deliverable must be uploaded several times on CircaBC for acceptance: • The actual delivery date is the date of the last upload for acceptance; • 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 **ITSM3 Integration** 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. The planned delivery date is defined in the last approved version of the DTM for all deliverables. The SQI will be calculated for every reporting period. The SQI for the reporting period will be normalized, then profiled.

SQI Attribute	SQI Attribute description
	The SQI value for the final GQI will be an average of all profiled SQIs during the SC. SQI = AVERAGE(A_D-P_D) where: A_D 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. and P_D is the planned delivery date of the deliverable *Note: if $A_D < P_{D\ then}$ the delay is to be considered as zero.*
Applicable services/deliverables	Please refer to Section 7.1 – "Classification of the impact of a late delivery" for the classification of delay impacts considered in the calculation of this SQI. In the absence of classification, a deliverable is considered to have a delay impact of **Medium**.
Minimum number of Measurements	1 deliverable

8.9.2 SQI-002 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Medium Impact

Please refer to 8.9.1 – "SQI-001 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact" replacing:

- SQI ID value by: SQI-002
- SQI Description value: Impact by: Medium
- SQI Limit value by: 10 working days

8.9.3 SQI-003 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay whose delay would have a High Impact

Please refer to 8.9.1 – "SQI-001 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact" replacing:

- SQI ID value by: SQI-003
- SQI Description value: Impact by: High
- SQI Limit value by: 5 working days

8.9.4 SQI-004 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Major Impact

Please refer to 8.9.1 – "SQI-001 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact" replacing:

- SQI ID value by: SQI-004
- SQI Description value: Impact by: Major
- SQI Limit value by: 1 working day

8.9.5 SQI-005 - Measure the satisfaction of DG TAXUD with the services provided by the ITSM3 Integration contractor

SQI Attribute	SQI Attribute description
SQI Name	SQI-005
SQI Description	Measure the satisfaction of DG TAXUD with the services provided by **ITSM3 Integration**
Unit of Measurement of the SQI	**Notation:** - Very satisfied (Value=5) - Somewhat satisfied (Value=4) - Neither satisfied nor dissatisfied (Value=3) - Somewhat dissatisfied (Value=2) - Very dissatisfied (Value=0)
SQI Target	Very satisfied
SQI Limit	Somewhat satisfied
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. All answers will be collected and assigned their associated values. One occurrence of both extreme values of the answer set will be removed and the remaining values averaged.
Applicable services/deliverables	All
Minimum number of Measurements	5

8.9.6 SQI-006 - Core team experience safeguard

SQI Attribute	SQI Attribute description
SQI Name	SQI-006
SQI Description	Measure that the initial value of the "Total number of months experience in the core team that will be assigned full time to the project" remains at an acceptable level
Unit of Measurement of the SQI	%
SQI Target	95%
SQI Limit	80%
SQI Calculation	Total months of professional experience in similar functions for the core team assigned full time to the project **8** weeks after the signature of the first Specific Contract / Total months of professional experience in similar functions for the core team staff proposed in the tender
Applicable services/deliverables	All
Minimum number of Measurements	1

8.9.7 SQI-007 - Measure that the ITSM3 Integration contractor does not expose its internal legal organisation to DG TAXUD and their users

SQI Attribute	SQI Attribute description
SQI Name	SQI-007
SQI Description	The number of times the internal organisation through eventual different legal entities (e.g. members of a consortium) is exposed to DG TAXUD, its third party contractors or users of the services.
Unit of Measurement of the SQI	Number of occurrences
SQI Target	0
SQI Limit	2
SQI Calculation	Count the number of occurrence of the breach of this SQI notified by DG TAXUD over the reporting period.
Applicable services/deliverables	All
Minimum number of Measurements	0

8.9.8 SQI-008 - Measure that the ITSM3 Integration contractor's team is dedicated to the ITSM3 Integration project without any side activities or projects

SQI Attribute	SQI Attribute description
SQI Name	SQI-008 – **Liquidated Damage**
SQI Description	Measure that the **ITSM3 Integration** contractor's team is dedicated to the **ITSM3 Integration** project without any side activities or projects
Unit of Measurement of the SQI	%
Direct Liquidated Damage	The Direct Liquidated Damage will represent **20%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	100%
SQI Limit	90%
SQI Calculation	The hours spent by the **ITSM3 Integration** contractor's team are to be reported in each MPR with a clear split between the hours spent on the **ITSM3 Integration** project and other activities or projects[20]. A ratio is calculated between the two and reported.
Applicable services/deliverables	All
Minimum number of Measurements	0

[20] Only allocation of team members to other activities or projects exceeding their announced and agreed **ITSM3 Integration** allocation ratio (e.g. full time, 4/5, etc.) are to be considered and reported on.

8.9.9 SQI-009 - Measure that the ITSM3 Integration management support (SB3) performance in reporting risks and projects planning is adequate

SQI Attribute	SQI Attribute description
SQI Name	SQI-009 –**Liquidated Damage**
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning the materialisation of a risk, a scope inconsistency or a planning integration issue that was not reported by the ITSM3 Integration contractor.
Unit of Measurement of the SQI	Number of occurrence
Direct Liquidated Damage	⚠ The Direct Liquidated Damage will represent up to **20%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All risk registers, portfolios and consolidated plannings
Minimum number of Measurements	1

8.9.10 SQI-010 - Measure that the ITSM3 Integration Portfolio and Risks management support (SB4) performance in reporting risks and projects planning is adequate

SQI Attribute	SQI Attribute description
SQI Name	SQI-010 –**Liquidated Damage**
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning the non-identification of a project or the materialisation of a risk, a budget, scope or a planning integration issue that was not reported by the ITSM3 Integration contractor.
Unit of Measurement of the SQI	Number of occurrence
Direct Liquidated Damage	The Direct Liquidated Damage will represent up to **20%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All risk registers, portfolios and consolidated plannings
Minimum number of Measurements	1

8.9.11 SQI-011 - Measure that the "ITSM3 Integration advice" (SB2) performance is adequate in producing, commenting or validating architectural designs, including security aspects

SQI Attribute	SQI Attribute description
SQI Name	SQI-011 – **Liquidated Damage**
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning the materialisation of a risk or an architectural or technical issue that was not identified by the ITSM3 Integration contractor.
Unit of Measurement of the SQI	Number of occurrence
Direct Liquidated Damage	The Direct Liquidated Damage will represent up to **20%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All deliverables under SB2
Minimum number of Measurements	1

8.9.12 SQI-012 - Measure that the "ITSM3 Integration" performance is adequate in reporting operational and security risks

SQI Attribute	SQI Attribute description
SQI Name	SQI-012 – **Liquidated Damage**
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning the materialisation of a risk or a security issue that was not identified by the **ITSM3 Integration** contractor due to insufficient assessment, materialisation being a security exposure (and not necessary a security incident).
Unit of Measurement of the SQI	Number of occurrence
Direct Liquidated Damage	The Direct Liquidated Damage will represent 2**0%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All risk registers, portfolios and consolidated plannings.
Minimum number of Measurements	1

8.9.13 SQI-013 - Measure that the "ITSM3 Integration" performance is adequate in reporting on asset management support (SB5)

SQI Attribute	SQI Attribute description
SQI Name	SQI-013 – **Liquidated Damage**
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning the materialisation of a risk, a licensing/ownership issue or an unnecessary spending on equipment, licences or maintenance that was not identified by the ITSM3 Integration contractor.
Unit of Measurement of the SQI	Number of occurrence
Direct Liquidated Damage	 The Direct Liquidated Damage will represent up to 2**0%** of the total costs of the Continuous Services for each month where the situation occurs.
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All services under SB5
Minimum number of Measurements	1

8.9.14 SQI-014 –Measure the number of complaints received concerning repetitive issues

SQI Attribute	SQI Attribute description
SQI Name	SQI-014
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD concerning tasks that were already the object of complaint(s) in the previous 6 months.
Unit of Measurement of the SQI	Number of occurrence
SQI Target	0
SQI Limit	0
SQI Calculation	The **ITSM3 Integration** contractor must record all user complaints in a complaints database accessible to DG TAXUD and mark them as such. The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All services
Minimum number of Measurements	1

8.9.15 SQI-015 – Other complaints

SQI Attribute	SQI Attribute description
SQI Name	SQI-015
SQI Description	Measure the number of complaints received and confirmed by DG TAXUD. Complaints that are already considered for SQI 9 to 13 are not considered for this SQI.
Unit of Measurement of the SQI	Number of occurrence
SQI Target	0
SQI Limit	2
SQI Calculation	The **ITSM3 Integration** contractor provides a list of the complaints raised during the reporting period in the MPR. During the BMM, DG TAXUD assesses the different complaints, and accepts or rejects them. The accepted complaints are used for the calculation of this SQI. For the rejected complaints, the contractor provides to DG TAXUD a complete explanation (based on the minutes of the BMM), that can then be sent to the issuer of the complaint to explain why the complaint was rejected.
Applicable services/deliverables	All services
Minimum number of Measurements	1

8.10 General Quality Indicators

The following General Quality Indicators (GQI) need to be considered:

- **GQI_Mgnt** measuring the General Quality of the continuous services related to basic management services;
- **GQI_RfAs** including the Hand-Over and Take-Over activities triggered by RfA during the Specific Contract.

8.10.1 GQI for the continuous services related to basic management services

The **GQI_Mgnt** is calculated as the sum of the specified f(**SQI)** (profiled SQI) taking their respective weight into account. It is calculated monthly. The final GQI is the **average** of the individual GQIs computed each month during the Specific contract.

The **GQI_Mgnt** indicator during a specific month is calculated as follows:

$$GQI\_Mgnt = \sum_{k=1}^{N} (f_k(SQI) * weight_k) / \sum_{k=1}^{N} (weight_k)$$

Where: *N is the number of Service Quality Indicators (SQI); f_k (**SQI**) is the value of the profiled SQI number "k"; $weight_k$ is the weight of the SQI number "k"*

The table below summarise the related SQI and their respective weight used to compute the final GQI_Mgnt:

SQI Name	Weight
SQI-001 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Low Impact	5
SQI-002 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Medium Impact	10
SQI-003 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a High Impact	20
SQI-004 - Measure the respect of the deadline for sending for Review/Acceptance (SfR/SfA) a deliverable whose delay would have a Major Impact	25
SQI-005 - Measure the satisfaction of DG TAXUD with the services provided by the **ITSM3 Integration**	10
SQI-006 – Core team experience safeguard	10
SQI-007 – Measure that the **ITSM3 Integration** contractor does not expose its internal organisation to DG TAXUD and their users	5
SQI-014 – Measure the number of complaints received concerning repetitive issues	10
SQI-015 – Other complaints	5

Table 25: SQIs and their respective weights for GQI_Mgnt

The table below summarises the SQI(s) linked to a Liquidated Damage:

SQI Name	Note
SQI-008 - Measure that the **ITSM3 Integration** contractor's team is dedicated to the **ITSM3 Integration** project without any side activities or projects	**Liquidated Damage**
SQI-009 – Measure that the **ITSM3 Integration** management support (SB3) performance in reporting risks and projects planning is adequate	**Liquidated Damage**
SQI-010 – Measure that the **ITSM3 Integration** Portfolio and Risks management support (SB4) in reporting risks and project planning is adequate	**Liquidated Damage**
SQI-011 – Measure that the " **ITSM3 Integration** advice" (SB2) performance is adequate in producing, commenting or validating architectural designs, including security aspects	**Liquidated Damage**
SQI-012 – Measure that the "**ITSM3 Integration**" performance is adequate in reporting operational and security risks	**Liquidated Damage**
SQI-013 – Measure that the "**ITSM3 Integration**" performance is adequate in reporting on asset management support (SB5)	**Liquidated Damage**

Table 26: SQI(s) linked to a Liquidated Damage

8.10.2 GQI for the Additional on-demand Services or QTM triggered by RfA (GQI_RfAs)

The **GQI_RfAs** is calculated as the sum of the specified f(**SQI)** (profiled SQI) taking their respective weight into account. It is calculated at the end of each activity, which has been triggered by an RfA.

A SQI may be defined, mutatis mutandis, for an RfA, in which case the Liquidated Damages would be calculated at the end of the RfA on the total budget of the RfA and applied on the last payment related to the RfA, when applicable.

The Quality of Service of each RFA will be assessed by calculating a Global Quality Indicator (GQI).The following is an **example** of RfA to which 2 SQIs have been associated.

$$GQI^{RFA} = 0{,}20 * f(SQI\ x) + 0{,}80 * f(SQI\ y)$$

8.10.3 GQI for the Hand-Over services

The GQI associated to the Hand-Over services is calculated as follows for the Hand-Over period.

GQI_HO = 100 % x f(SQI-011[21])

8.11 Liquidated Damages

Liquidated Damages may be applied to the Service Provider in the framework of the current Service Level Agreement. The Liquidated Damages are related to deficient quality of the services provided. They are derived directly from the GQI calculation.

Liquidated Damages are expressed as a reduction of the amount due by the service requester to the service provider.

8.11.1 Liquidated Damages not linked to GQI

Liquidated Damages, not linked to GQI may be applied and are defined for the following SQI(s):

- SQI-008 - Measure that the **ITSM3 Integration** contractor's team is dedicated to the **ITSM3 Integration** project without any side activities or projects.
- SQI-009 - Measure that the **ITSM3 Integration** management support (SB3) performance in reporting risks and projects planning is adequate
- SQI-010 - Measure that the **ITSM3 Integration** Portfolio and Risks management support (SB4) in reporting risks and project planning is adequate
- SQI-011 - Measure that the " **ITSM3 Integration** advice" (SB2) performance is adequate in producing, commenting or validating architectural designs, including security aspects
- SQI-012 - Measure that the "**ITSM3 Integration**" performance is adequate in reporting operational and security risks
- SQI-013 – Measure that the "**ITSM3 Integration**" performance is adequate in reporting on asset management support (SB5)

[21] On the Hand-Over report

8.11.2 From GQI_Mgnt to Liquidated Damages calculation

For the global GQI_Mgnt, the Liquidated Damages are applied at the end of the Specific Contract and applied on the last payment related to the Specific Contract, when applicable.

If (GQI) < -1	Liquidated Damages = 20% of the Continuous Service amount due for the reporting month
If -1 <= (GQI) < 0	Liquidated Damages = (-(GQI))*20% of the Continuous Services amount due for the reporting month
If (GQI) => 0	Liquidated Damages = 0

⚠ In any case, the total amount of Liquidated Damages to be paid **cannot exceed 100%** of the amount to be paid by the Commission for the delivered continuous services.

8.11.3 From GQI_RfAs to Liquidated Damages calculation

For the GQI_RfAs, the Liquidated Damages are calculated at the end of each RFA as follows (**except for Hand-Over activities** for which the Liquidated Damages are computed as described below):

If (GQI_RfAs) < -1	Liquidated Damages = 20% of the amount due for the RFA
If -1 <= (GQI_RfAs) < 0	Liquidated Damages = (-GQI_RfAs))*20% of the amount due for the RFA
If (GQI_RfAs) => 0	Liquidated Damages = 0

For the Hand-Over, the GQI is calculated for the Hand-Over period.

The Liquidated Damages are calculated as follows and are based on the amount due for the Hand-Over services:

If GQI_HO < -1	Liquidated Damages = 100% (relates to the amount for the services related to Hand-Over activities)
If -1 <= GQI_HO < 0	Liquidated Damages = (-GQI_HO) * 100%
If GQI_HO => 0	Liquidated Damages = 0

9. Staff profiles

9.1 Staffing

It is the tenderer's responsibility to propose an adequate team organisation (including team structure, set of profiles, team sizing per profile, responsibility allocation & reporting lines), and staffing in order to perform the activities and deliver the products and services defined in the current Technical Specifications in full compliance with the quality requirements.

The tenderer is requested to provide a definition of the profiles proposed in order to support the organisation. The profiles definitions must match the definitions of the tasks (see chapter 6: "Services to be provided by the **ITSM3 Integration** contractor"). Minimum experience for all non-administrative profiles must be either of level 5 or level 8[22].

The **ITSM3 Integration** contractor **must staff in line** with the team organisation that the **ITSM3 Integration** contractor will propose in the **tender**.

The **ITSM3 Integration** 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) relevant experience but also in terms of skills and capacity to lead the teams and to keep a broad knowledge and overview of all activities undertaken by the **ITSM3 Integration** contractor.

DG TAXUD can – at any point in time – request the CVs of the assigned staff. DG TAXUD reserves the right to request replacements of staff not in line with the resource profiles expressed in the **ITSM3 Integration** contractor bid.

By bidding for this Call for Tenders, the contractor commits to ensure full transparency to DG TAXUD regarding its staffing. The number of staff, names, location, qualifications, etc. shall be communicated to DG TAXUD on a regular basis and/or at a specific request.

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22 The experience of the staff is expressed in levels, corresponding to a number of years of relevant experience. Relevant experience means experience specific for the tasks that are related to the profile.

Experience Level	**0**	Less than 1 year
	1	More than 1 year
	3	More than 3 years
	5	More than 5 years
	8	More than 8 years

The experience as a particular profile, expressed in months, must be easily verifiable on the CV.

As mentioned in the "Annex 3 – Price table", the tenderer is requested to provide a daily rate for the staff profiles proposed.

The **ITSM3 Integration** contractor must demonstrate for each person proposed in the team that his/her CV meets the specification(s) of the profile.

For all profiles, the **ITSM3 Integration** contractor will ensure that all staff holds the relevant technical certification, corresponding with the assignment and with the required experience level.

All profiles must have followed the relevant training and/or certifications.

All profiles must have (or acquire within the first **8** weeks of their assignment) knowledge of ITIL and SMT and of the internal DG TAXUD organisation and processes.

The **ITSM3 Integration** contractor must ensure that technical expertise in line with DG TAXUD's technical development/operations environment is sufficiently available. Expertise with technologies and methods used by DG TAXUD shall be identified clearly in the proposed CVs.

9.2 Languages

All deliverables must be delivered in UK English unless otherwise specified. Staff proposed must be capable of communicating, orally and in writing, in this language.

During meetings (bilateral, workshops, steering Committee, etc.), either French or English will be spoken.

9.3 Office infrastructure

The **ITSM3 Integration** contractor must provide the necessary office infrastructure in its premises for the successful execution of the tasks. It is the **ITSM3 Integration** contractor's responsibility to define and size this infrastructure.

The tenderer is requested to take into account the office (automation) infrastructure outlined below into account, but to keep the considered "state-of-the art" infrastructure from security and operational excellence point of view for all ITSM teams during the FC at all sites where the **ITSM3 Integration** contractor is based:

- Secured room(s) for hosting the staff;
- Secured meeting room(s) that are dedicated to **ITSM3 Integration** activities (capacity up to **15** people) with phone/Internet access available to DG TAXUD and/or other contractors;
- An adequate office environment, including phone, fax, scanner, CD-ROM/DVD production, laser colour printing, secure document shredder and colour photocopying facilities;

- An adequate phone/virtual conferencing facility accessible from the Internet;
- One industry standard PC (personal computer) per staff member with office automation tools which must be inter-operable with those currently used in DG TAXUD;
- Suitable printing, file and Web server facilities;
- Individual and functional e-mail addresses and web accesses for each person.

 The **ITSM3 Integration** contractor has to ensure that the security right management is handled so that only authorized users can access the secure zone hosting the above-mentioned facilities and people.

9.4 Collaboration platform

The tenderer is requested to provide a collaboration platform to support the exchange of information with DG TAXUD. This collaboration platform must be adequate for the exchange of non-public documents.

It is the **ITSM3 Integration** contractor's responsibility to define, size and manage this infrastructure as well as to ensure the information transfer from the incumbent collaboration platform to the one (s)he will propose.

10. Volumetric

The table below displays purely indicative figures about the "occurrences" of a certain task to be performed under the Continuous Services per year. These figures are based upon the past experience (during the course of the ITSM2 LOT3 contract).

10.1 Volumetric for Continuous Services

ID	Work Item	Volume estimates
Project, Quality and Contract Management (SB1)		
V.1	Coordination meetings (BMMs, PMMs, and ad hoc)/year	12 BMMs + 52 ad hoc meetings
V.2	SCs/year	1 for Continuous Services, 1 for On-demand services
V.3	RfAs/year	~30
V.4	Steering Committees/year	4
V.5	Audits/year	1
V.6	Internal audit and assessments/year	1 Internal audit 1 Assessment
V.7	Documents to QC/year	All **ITSM3 Integration** deliverables
V.8	Major Revision of FQP	1 FQP/FC
V.9	Updates to FQP/year	FQP: 0 – 1
V.10	Pages reviewed/year	~20,000 pages / year
V.11	Number of CSIP initiatives / year	Approx. 10
Integration Advice (SB2), Integration Management Support (SB3) and Portfolio and Risks Management Support (SB4)		
V.12	Requests for advice or opinion/year	10 – 20 requests / year
V.13	DG TAXUD architecture board meetings/year	3 – 5 / year
V.14	Documents and Pages reviewed/year	180 documents, 15,000 pages / year
V.15	Meetings to be attended and minutes drafted/year	150 meetings / year
V.16	Actions to be followed up/year	5 actions / meeting; 20 actions / audit; 5 actions / PIR
V.17	Nr of programmes to support	6
V.18	Nr of concurrent projects per programme	8 (1 more than a year, 3 more than 6 months)

ID	Work Item	Volume estimates
V.19	Nr of inception activities of other contractors followed / year / programme	6-10
V.20	Nr of vision documents / business cases produced/year	10
V.21	Nr of TAs (or equivalent documents) to be drafted	120/year, avg size 3 pages
V.22	Nr of business cases / vision docs issued by other sectors / year	3
V.23	Nr of security audits follow-ups / year	2
V.24	Nr of risk assessments / year	3
V.25	Nr of major security incidents / year	6
Asset Management Support (SB5)		
V.26	Nr of DG TAXUD Hardware assets in the DG TAXUD datacentres	Approx. 1500
V.27	Nr of DG TAXUD Software assets in the DG TAXUD datacentres	Approx. 2500
V.28	Nr of assets in the CUSTDEV premises	24

Table 27: Table of volumetric for continuous services

10.2 Volumetric for On-Demand Services

ID	Work Item	Volume estimates
Integration Advice (SB2)		
V.102	Requests for technology choice support/year	0-2 requests / year
Integration Management Support (SB3)		
V.103	Support to project management	2 to 6 FTE in parallel
Benchmarking and Assessment (SB6)		
V.104	Benchmarking exercise/year	0 to 1
V.105	Assessment/year	1
Consulting on IT collaboration (SB7)		
V.106	Report on specific topics as requested by DG TAXUD	5 / year
V.107	Strategic advice: consultancy report with an accompanying presentation	4 / year

V.108	List and roles of stakeholders	6 / year
V.109	List of dependencies among the stakeholders	6 / year
V.110	Newsletter to External stakeholders	6 / year
V.111	Business case for new initiative	4 / year
V.112	Agenda of a meeting	30 / year
V.113	Material supporting the meeting	30 / year
V.114	Minutes and other outputs (including Actions list and Updated Risk Register) of meeting	30 / year
V.115	Preparation of workshops (presentation, coordination etc.);	30 / year
V.116	Participation and facilitation of workshops	30 / year
V.117	Documentation of workshops (minutes, reports)	30 / year
V.118	Web conference call preparation and hosting	50 / year
V.119	Web conference call minutes	50 / year
V.120	Project Actions list	20 / year
V.121	Quality Control	15 / year
V.122	Support drafting of Project Initiation Documentation (PID): Documentation	20 / year
V.123	Dependencies and critical path identification between the planning timetables of various stakeholders	4 / year
V.124	Reminders and alerts in the event the planning is in danger	4 / year
V.125	Improvement projects and initiatives: Suggestions	10 / year
V.126	Improvement projects and initiatives: Planning	10 / year
V.127	Improvement projects and initiatives: Report (end of activity)	10 / year
V.128	Update of IT Collaboration roadmap: Planning	4 / year
V.129	Guidance on Project Agreement, Licenses, Legal and Procurement aspects: Suggestions	10 / year
V.130	Cost and Benefits analysis support: Documentation	20 / year

V.131	Technical review of Deliverables produced by third party.	10 / year
V.132	Guidance on Enterprise and IT architecture principles, patterns and standards: Suggestions	4 / year
Transition (SB8)		
V.133	Take-Over/Hand-Over plan	1 plan for Take-Over, 1 plan for Hand-Over
Other deliverables and services (SB9)		
V.134	Induction trainings to attend	5-15 training courses total
V.135	Assistance to **ITSM3 Operations** FAT or SAT or other on-site missions	1 to 3 per year
V.136	Hand-Over trainings to give	5-10 training courses
V.137	Training, workshop and demonstrations	10 WS/Trainings/Demonstrations of 2 days / year
V.138	Improvement projects	1 – 2 projects / year

Table 28: Table of volumetric for on-demand services

11. Pricing Model

DG TAXUD is aiming at an "all inclusive" pricing model based on the volumetric of all Service Blocks. Please refer to Annex 3 to the Tendering Specifications: "Price Table" for the actual pricing model template.

It must be noted that services expressed in man/days will be ordered at the daily rate as indicated in the "Profiles" part of the financial table. The computed "man/day of average profile" (i.e. the average cost) is only used for calculating the budget envelopes. Man/days will not be ordered at this computed average.

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