



report

D 2.1

June 12, 2009 | Version 3.2

Interoperability Management Framework

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1. Introductory chapter and methodology

1.1. Introduction

Explanatory note (2009.06.12)

The Project Plan for the CESARE IV project was prepared early 2007 and finalised in autumn 2007. The main objective of CESARE IV as defined in the project plan was to provide input to the European Commission and their work with the definition of EETS. At the same time as the CESARE IV was defined, the European Commission by DGTREN started the work with their EETS Decision linked to the EFC Directive. Hence, there were two parallel tracks that in principle had more or less the same goal but were driven by different forces and were subject to different impacts from different environments. Even if there were procedures for mutual information (both formal and informal) during the preparation of the Decision and the CESARE IV project reports, the two parallel tracks have resulted in some differences, both concerning concept, terminology and administrative/legal solutions. This is first of all relevant for the CESARE IV Work packages 01 EETS Basic Guidelines and 02 IM framework, functions and procedures. As the Decision was voted upon before WP 03 IM preparation and implementation was started, this will be a premise that has to be taken into account in WP 03.

The main reasons for the differences between the results of WP 01 and WP 02 of CESARE IV and the Decision are first of all:

- *The CESARE IV project builds on the CESARE I - III projects and keeping consistency between these four projects has been an important issue;*
- *WP02 builds on the reports from WP 01 and consistency between these two work packages has been a constraint for the work done in WP 02;*
- *The Decision was subject to several major changes in its lifetime from start to the voted March 2009 version. A continuous adoption of these changes was not possible within the well defined CESARE IV project plan including the time schedule;*
- *The CESARE IV results reflect the competence and experience of all the European EFC experts and organisations that have been involved so far in the project. There are issues where this competence and experience have caused differences between the CESARE IV results and the Decision. It has, however, been a major goal of the partners of the CESARE IV to provide the best possible advice to the European Commission and to act as independent experts.*

CESARE is a suite of projects promoted by ASECAP, the ASECAP associated organizations and the road administrations of several European countries known as "the Stockholm Group" (SG). CESARE is co-financed by the European Commission, with the objective to help specifying, designing, developing, promoting and implementing a common Interoperable European Electronic Toll Collection System (EETS) on the European road network. CESARE has been divided into several phases, whereby the previous phase called CESARE III has been completed in October 2006. The results of CESARE III showed that there was a need for further actions in a next project phase (CESARE IV) in order to realize the interoperability objectives. The main goal of CESARE IV is to define a framework for establishing an interoperable European Electronic Tolling Service (from now on, EETS), functioning in a coordinated way at the European level and allowing the Member States to fasten the pace of their national implementation plans for EETS. In this way CESARE IV will contribute to the implementation of the Directive 2004/52/EC.

This document is part of the reporting of the CESARE IV Work Package 2 IM framework, functions and procedures. The Report D2.1 includes the Interoperability Management (IM) framework. The purpose of this document is to propose a legal, administrative and organisational, economical and operational framework.

Report D2.1 IM Framework is first of all a high level description of IM framework given by essential requirements and proposals on how IM could be organised and operated from a legal, organisational, financial and operational point of view. Report D2.1 will be followed by Report D2.2 IM functions and procedures which will include more details on how IM should perform the daily operation of EETS as well as the interfaces between IM and other external entities linked to IM as sources or sinks for information flows. Even more details will be further developed in WP3 reports IM preparation and implementation.

The work in WP2 is performed by a group of about 20 experts with a wide range of expertise within legal, organisational and operational issues regarding Electronic Fee Collection (EFC). These 20 experts represent 13 European countries, most of them having many years of experience in interoperable EFC systems.

1.2. Methodology

1.2.1. Work description

Coming to the very specific point of defining the framework for an Interoperability Management of the European Electronic Toll Service means drawing a complete set of principles from the material collected from Directive 2004/52/EC, draft Decision of the Commission on EETS definition, conclusions of interoperability projects (in particular CESARE, especially CESARE III results and CESARE IV – WP1 Report D1.2 EETS Basic Guidelines; RCI; MEDIA) and inputs of potential main stakeholders (both Toll Chargers and potential EETS Providers through CESARE IV Advisory Forum). Some of these Toll Chargers have already implemented regional interoperable electronic fee collection systems (e.g. Scandinavian EasyGo service, French TIS-PL). Their practical experience has been an extremely valuable input to this report. In addition to this documentation, external benchmarking studies have been performed by WP2 in order to examine existing IM solutions in other sectors; the four studied industry sectors were Energy, Postal Services, Railways and Telecommunications.

The definition and development of IM framework, covers the following issues:

- Identifying and analysing the complete set of issues;
- Defining basic requirements, including requirements coming with European scale;
- Drawing concrete and practical conclusions in order to meet identified requirements.

Two main objectives govern the methodology for this first report of CESARE IV WP2:

- identifying the requirements necessary for an interoperability management (what are the needs for an IM? To what extent is an IM necessary to main stakeholders to offer users an EETS that conforms to Directive 2004/52/EC?);
- as often as possible, making use of procedures and structures that already exist.

The report D2.1 is divided into 3 main sections.

Starting with the

- Essential Requirements (section 2);
- ... principles could then emerged for defining:
- Legal and operational framework (section 3);
- Financial framework, Responsibility and Liability in relation to the management of interoperability (section 4).

The procedures in relation to this framework will be detailed in the second WP2 report (D2.2).

1.3. Readers guide for the Essential Requirements

The Essential requirements are described by 6 subchapters:

- EETS documentation including regulation, contractual documentation and standards (covering the Items 6– 9 in the ANNEX 2: Items Report);
- Certification of equipments, European Electronic Toll Service providers and core service operators (covering Items 10– 16 in ANNEX 2: Items Report);
- Information on certified equipment, interoperable service providers and operators – List keeping (covering Items 17 and 18 in ANNEX 2: Items Report);
- Security policy and protection of users personal data (covering Item 19 in the ANNEX 2: Items Report);
- Access of users to the interoperable service (covering Items 20– 23 in ANNEX 2: Items Report)
- Settlements of disputes (covering Item 24 in ANNEX 2: Items Report).

Each subchapter includes (when possible) 2 figures, showing the interfaces between the stakeholders:

- the first figure only shows the “external” interfaces between IM and the stakeholders, based of the conclusions of CESARE III and IV (WP1). This first “External Interfaces” figure aims at defining more precisely the recommendations of the previous stages.
- the second figure, “All Interfaces” defines who (inside the IM) is in charge of the relationship described in the first figure, and also shows the internal interfaces between IM components

The background of all figures is the same (refer to Figure 1 : Common background for figures dealing with interfaces).

The top part of the background is the European Level.

The bottom part shows two Member States, MS1 and MS2. To illustrate our conclusions, it has been decided to show the following stakeholders:

- In MS1: a Toll Charger (TC1) (whose toll domain is located in MS1), 2 Providers (EP1A and 1B) (that are registered in MS1), an OBE manufacturer (that is registered in MS1);
- In MS2: a Toll Charger (TC2), a Provider (EP2A), a Notified Body (that is registered in MS2), a Road Side Equipment manufacturer (registered in MS2);
- Standardization bodies can be either European or national, so they are placed in their own dedicated box;
- In each MS, it is mentioned also obviously the “Legal Authorities”, without defining the structure and level of authority it can have in each MS (the government itself, a dedicated authority like the National Regulatory Authority, or an agency, or other...);
- 2 Courts of Justice have been added to illustrate the dispute settlement interfaces: a national Court of Justice in MS2, and the European Court of Justice at European level.

A dedicated square has been added for “All Stakeholders”: it will be used when information is sent to various stakeholders: a single arrow will point at this box (drawing multiple arrows pointing at every stakeholder would have been too heavy and unclear).

A dedicated square has also been added for “standardization bodies” between the European and the national Level, since they can be International, European or national.

Note that:

- MS1 has no Notified Body (to illustrate a possible situation);
- OBE manufacturer in MS1 provides all EP (in both countries) with OBE.

As explained above, the following chapters will first describe the relationship between the stakeholders (outside the yellow ellipse) and IM itself (including its national and European components). Then they will, as a conclusion of each chapter, describe the relationship inside the ellipse.

2. Essential Requirements

For each of the following 6 chapters, relevant tasks of IM are analysed from previous CESARE results and inputs from CESARE IV WP1, WP2-Benchmarking Studies, WP4-Advisory Forum.

Conclusions and recommendations are aimed at clarifying the required level for an effective legitimacy and degree of integration of IM.

As explained in the “Readers Guide” included in the previous chapter, Figure 1 shows the common background.

3 different colours are used for the different kinds of stakeholders:

- “EETS stakeholders” (Blue) : Stakeholders already existing and that will be regularly involved in the Service:
 - Toll Chargers (TC);
 - EETS Providers (EP);
 - OBE and RSE manufacturers;
 - Notified Bodies (NB).
- “IM Stakeholders ” (Yellow) : Some stakeholders do not exist yet and need to be created for IM:
 - Toll Committee ;
 - Coordination Group of EETS Legal Authorities;
 - TC advisory forum;
 - EP advisory forum;
 - Coordination group of Notified Bodies.
- “External Stakeholders” (Green): Stakeholders already existing that occasionally intervene in the different processes:
 - European Commission;
 - European and national Courts of Justice;
 - Standardization bodies.

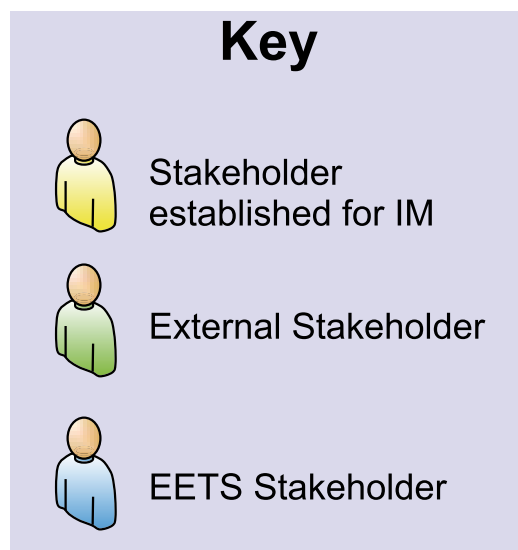
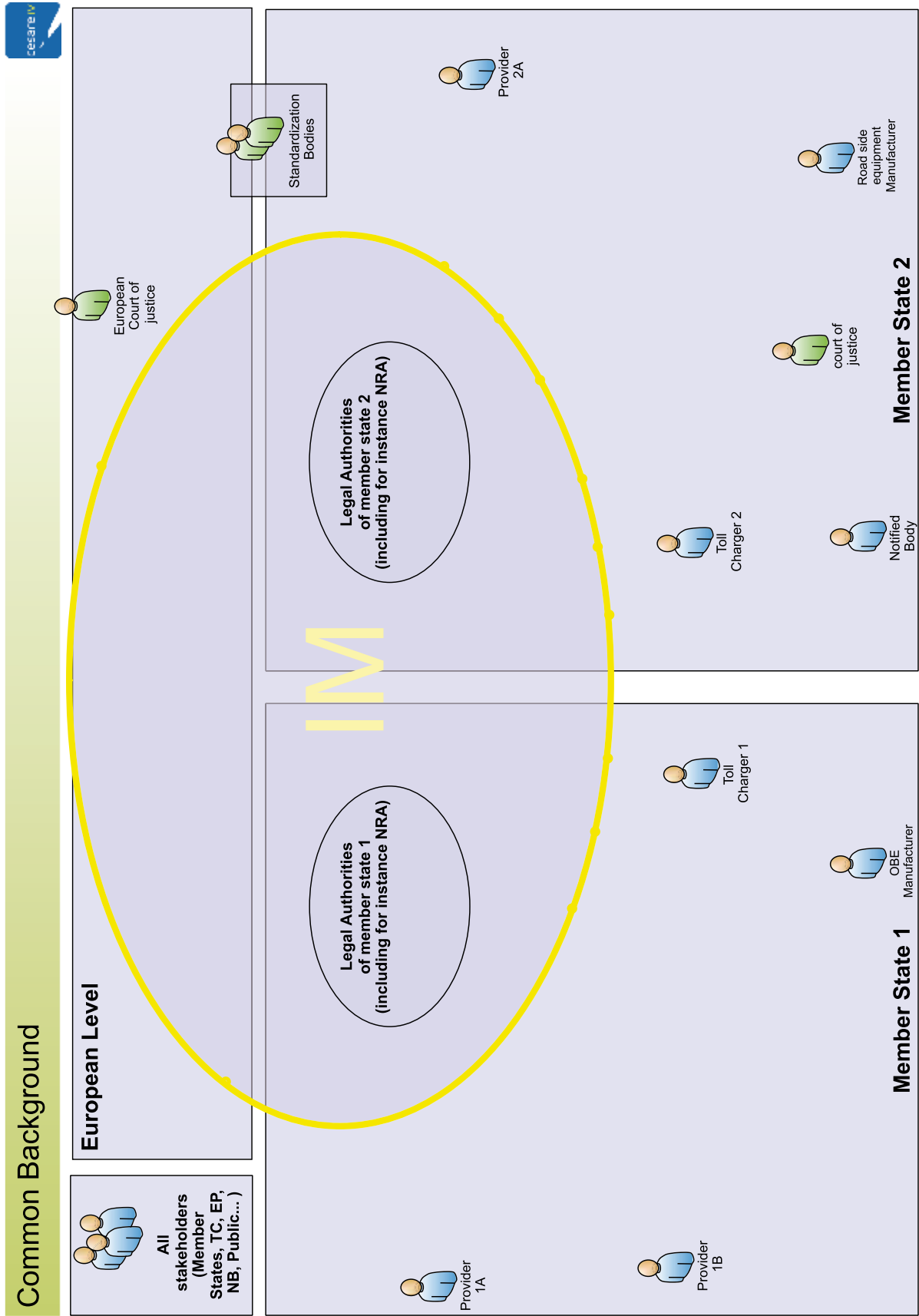


Figure 1 : Common background for figures dealing with interfaces



2.1. Involved stakeholders/operators

According to the conclusions of CESARE III, the regulatory role of IM could be performed by a person, an organisation, or several organisations acting together based on both rules defined on a regulatory level and contractual agreements between the participants. Voluntary agreements between members of professional associations are also possible.

Compared to other industries, EETS stakeholders offer a great diversity of statuses, core business, while they interact in delivering the service to the end users, e.g. Toll Chargers may be public or private entities, EETS Providers could be financial institutions or oil companies or other industry, etc.

Further explanation is provided in section 3.1 below.

2.2. IM status, financial framework and membership

Interoperability Management should be configured with regards to the needs for:

- legitimate and binding decisions applicable to stakeholders with various statuses;
- transparency;
- independence;
- contribution of stakeholders in decision-making processes.

Instead of a unique body in charge of the whole Interoperability Management role, Work Package 2 has come to the conclusion that IM should be performed at both European and national levels, by a “constellation” of different actors or authorities. Allocation of tasks to these different bodies will be specified according to the essential requirements for Interoperability Management.

Further explanation is provided in section 3.3 below.

2.3. EETS Regulation (including rules definition)

2.3.1. WP1 Conditions

The following IM related conditions are closely related to this issue and describe the necessary functions of IM role to be fulfilled in order to guarantee a successful operation of EETS.

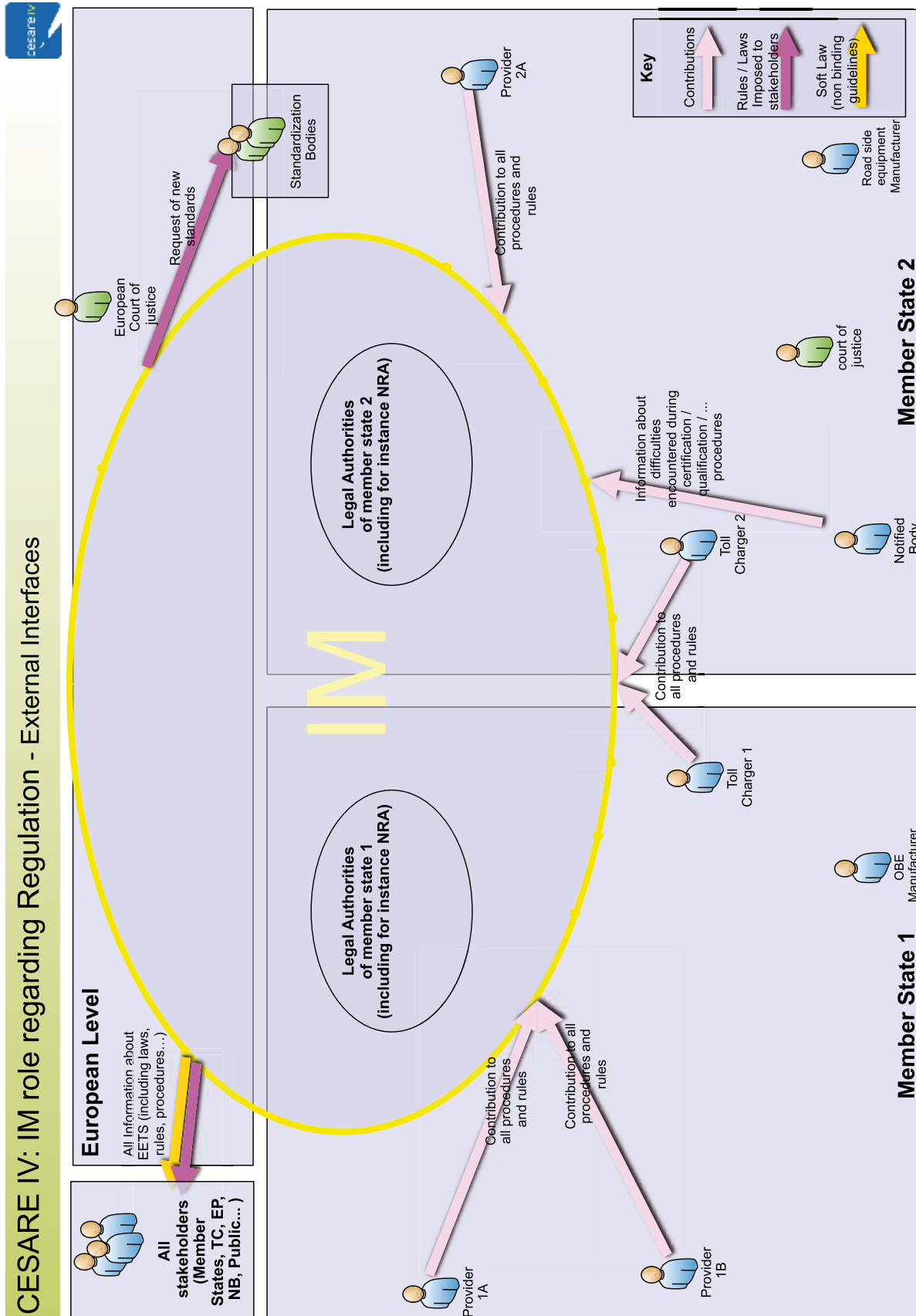
CIV WP1 ref.	Reference Condition	Duty/Right
G-N02	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D
G-N007	IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service.	D

2.3.2. IM main responsibilities

The following list of responsibilities is the essence of previous work done in CESARE III and CESARE IV WP1 related to this issue:

- Issuing a common set of rules in order to define EETS procedures and specifications, rights and duties of EETS stakeholders, etc.;
- Requesting for new EETS related standards when there is a lack of relevant European standards needed for the EETS specifications.

Figure 2 : IM role regarding Regulation - External interfaces



2.3.3. IM components and internal interfaces regarding EETS Regulation

2.3.3.1. Prerequisites

- Independence of Interoperability Management (i.e. stakeholders shall not take part as members of IM in any legislation-making process);
- Consultation of stakeholders before any decision is taken and/or involvement in the regulation process [Stakeholders participating through an advisory forum? Different advisory forums for different stakeholders in order to collect advices reflecting different interests];
- Level of regulation writing and updating: it cannot be performed at MS level, since common regulation needs to be applicable to any MS. The writing and updating shall be performed at European Level. Same conclusion for the new standards.

2.3.3.2. Conclusions / Requirements

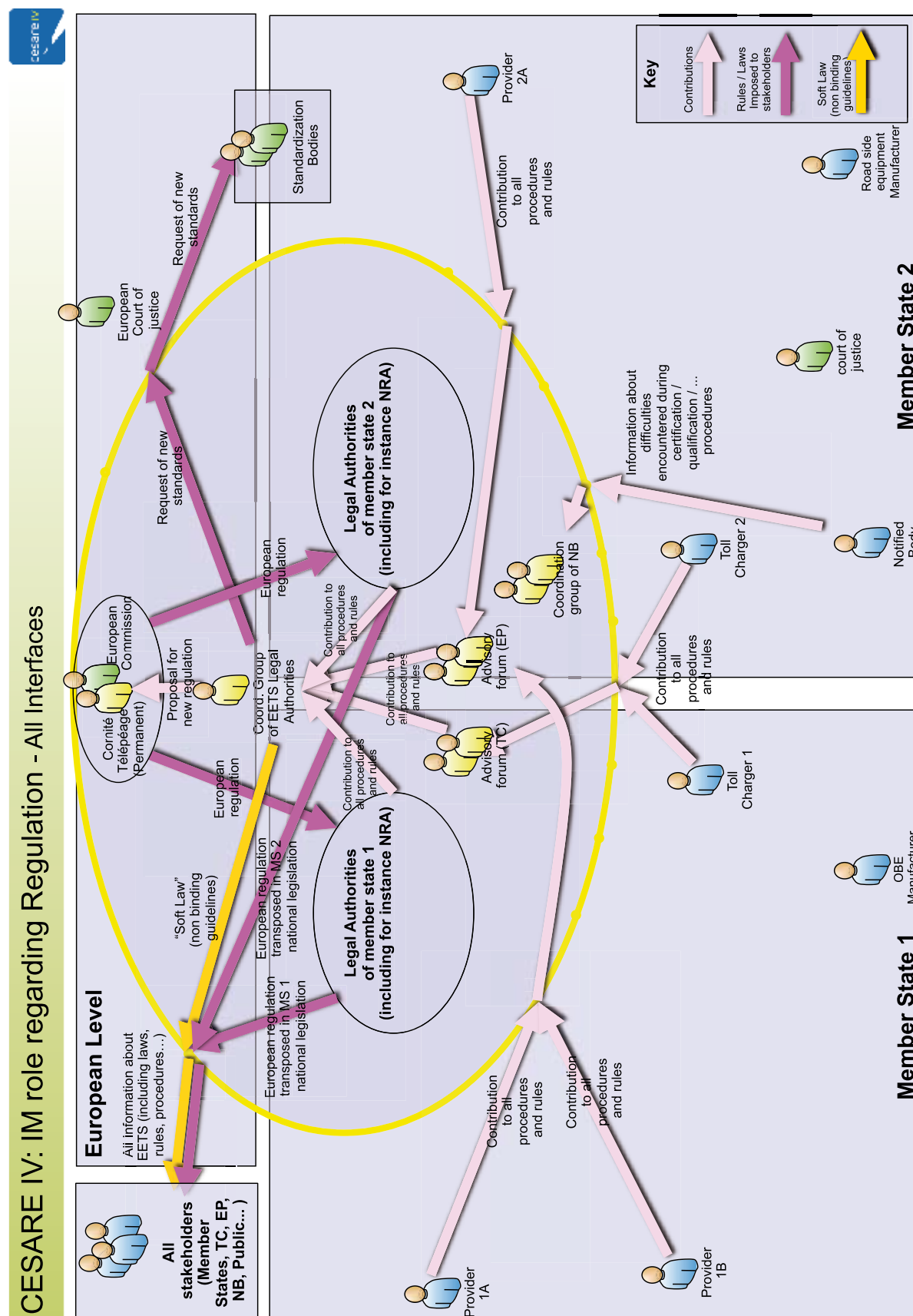
- Proposal for new regulation or updating may be written by a Coordination Group of EETS Legal Authorities (CGLA) after consultation of the stakeholders (the decision process inside the CGLA is described in 3.3.2.2);
- Toll Chargers may be consulted by the CGLA through a dedicated advisory forum¹;
- EETS Providers may be consulted by the CGLA through another dedicated advisory forum;
- New regulation and updating applicable to all Member States shall be decided at European level (EC) based on CGLA recommendation, and imposed to MS;;
- Where applicable European EETS regulation shall be transposed into each national legislation, and information about it can be found locally (like any other national regulation);
- The Coordination Group of EETS Legal Authorities shall be the primary EETS contact in discussions with standardization bodies and stakeholders dedicated advisory forums.

The figure below illustrates these points.

(In relation to the Items analysis in the attached ANNEX 2: Items Report < items 8 and 9> the tasks of organisation 'European Commission' are shared between IM components shown as European Commission, Comité Télépéage and Coordination Group of EETS Legal Authorities in the next figures)

¹ I.e. the decision-making process includes a simple consultation of the stakeholders within the different dedicated advisory forums. With this procedure, to the condition that the consultation of the different advisory forums is planned at an appropriate stage in the decision-making process, the way of involving stakeholders in the decision-making process could be really effective and does not interfere with the needs for identifying and evaluating the responsibility linked to the decision-making power.

Figure 3 : IM role regarding Regulation - All interfaces



2.4. Information about EETS (including Information on certified equipment, interoperable service providers and operators - List-keeping)

2.4.1. WP1 Conditions

The following IM related conditions are closely related to this issue and describe the necessary functions of IM role to be fulfilled in order to guarantee a successful operation of EETS:

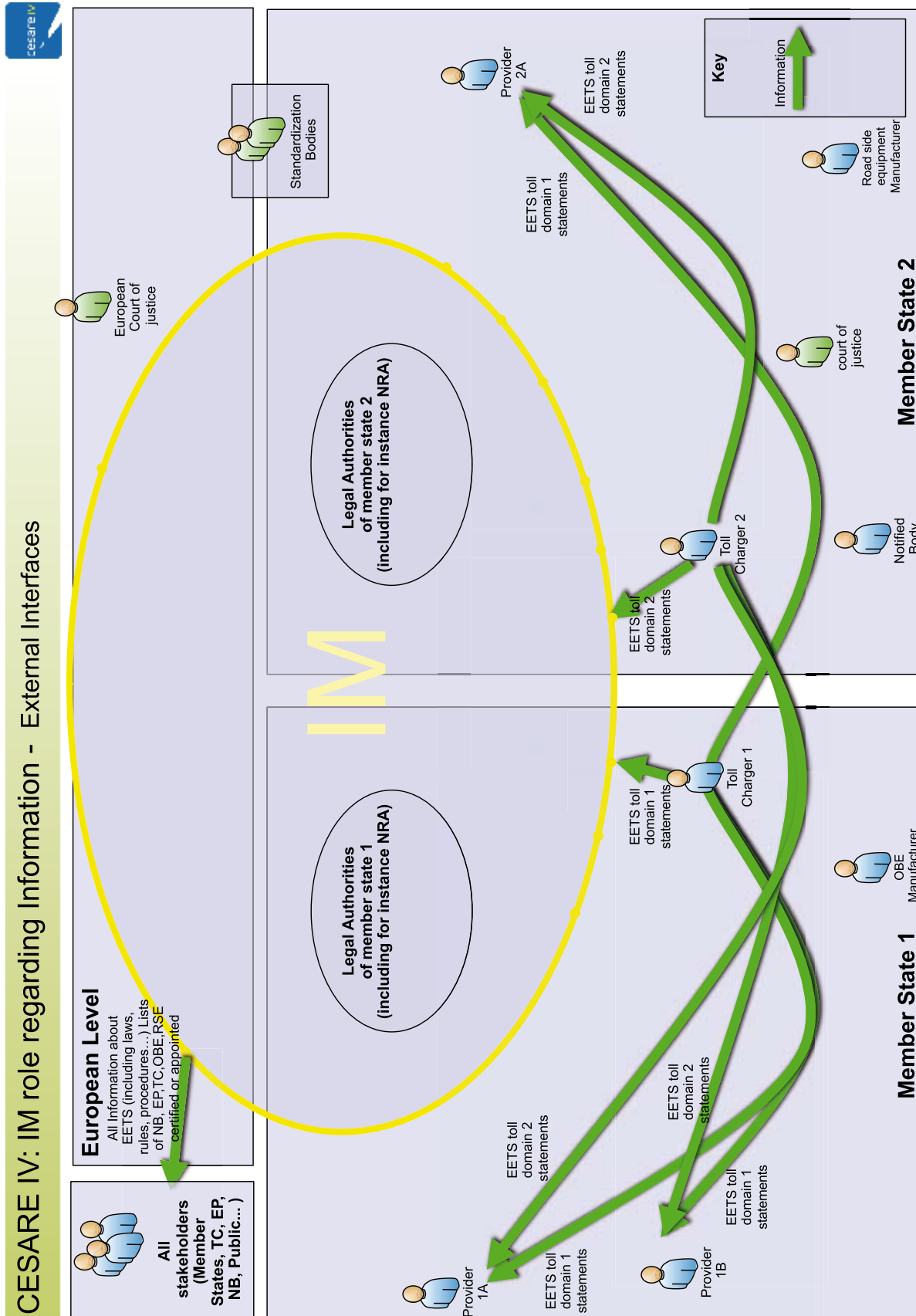
CIV WP1 ref.	Reference Condition	Duty/Right
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts.	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates.	D
G-N015	IM shall maintain and continuously update the register of authorised EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

2.4.2. IM main responsibilities

The following list of responsibilities is the essence of previous work done in CESARE III and CESARE IV WP1 related to this issue:

- IM should provide all relevant information on EETS core service, procedures, rules... to all stakeholders, e.g. EETS Providers, Toll Chargers, EETS equipment suppliers and Notified Bodies...
- IM should collect the Toll Domain Statements from the Toll Chargers (these statements are a part of EETS documentation) even if they can be received (by Notified Bodies) directly from the TC (as showed in the next figure). If the need is confirmed by the stakeholders (TC and EP), they could implement a centralized database to store these statements at a European level. But IM will not take part of the creation and maintenance of this database since the statements exchanges are a part of the contractual private agreements between TC and EP. This information is public. All stakeholders may require information or confirmation from the IM, about the EETS status of an OBE, an RSE, an EP, a TC or a Notified Body, as illustrated in the next figure.

Figure 4 : IM role regarding Information - External interfaces



2.4.3. IM components and internal interfaces regarding EETS Information

2.4.3.1. Prerequisites

- Toll Chargers domain statements must be easily collected by any EP asking directly the TC;
- List-keeping can hardly be performed by a third party: the best way to ensure the correctness of the list(s) is to put MS in charge of the list-keeping of their own certified/notified equipments or stakeholders.
- The validity of a certification can easily be checked by any stakeholder up on request to the MS that has issued it.

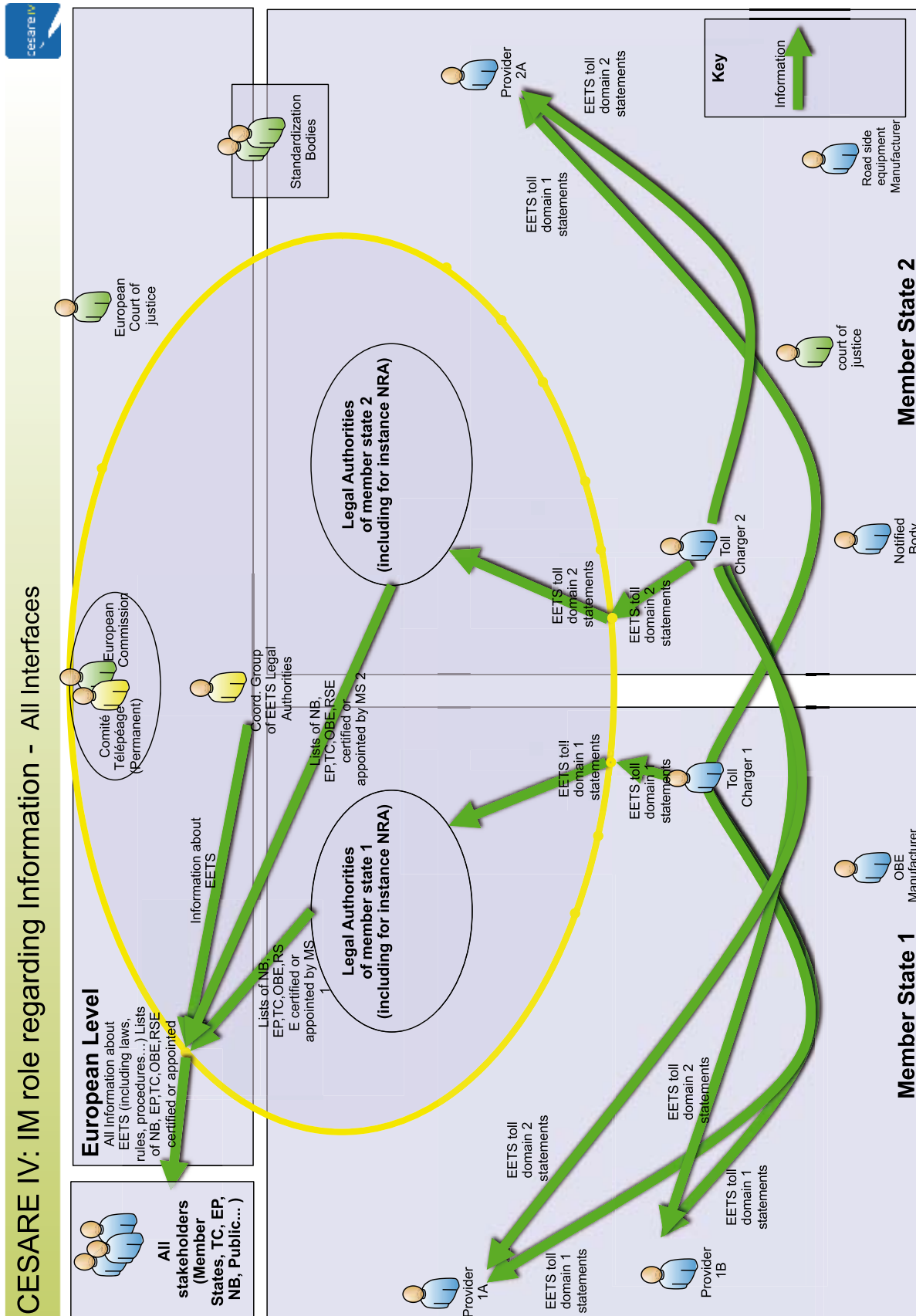
2.4.3.2. Conclusions / Requirements

- Toll domain statements shall be directly communicated to any EP by each TC upon request, but they are also sent to the Member State. On TC and EP's initiative, if the need is confirmed by these stakeholders, a centralized database could be created and organized by them, to allow TCs to automatically distribute the updated Toll Domain Statements. Each MS shall keep the list of the equipments/stakeholders that have reached an EETS status confirmed by a decision of the MS (appointment of a Notified Body, certification of an EETS equipment, qualification of a Toll Charger, approval of an EETS Provider).

As shown in the next figure, this kind of information is communicated directly to the information seeker by from the MS that has performed the certification.

The figure below illustrates these points.

Figure 5 : IM role regarding Information - All interfaces



2.5. Procedures leading to EETS status

2.5.1. WP1 Conditions

The following IM related conditions are closely related to this issue and describe the necessary functions of IM role to be fulfilled in order to guarantee a successful operation of EETS:

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N017	IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on non-discriminatory basis.	D
G-N018	IM shall develop procedures for and assist in the adhesion of new TCs to the service. The criteria for the incorporation, maintenance and withdrawal of TCs shall also be established and managed by IM.	D
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS.	D
C-N02	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements.	D
G-N21	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D
G-F02	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

2.5.2. IM main responsibilities

According to CESARE model, qualification clearly falls within the Interoperability Management role.

Indeed, EETS leads to transfer the responsibility of the collection of tolls from Toll Chargers to EETS Providers. This means that EETS requires TC to enter into contractual agreements with EP.

In order to ensure EETS will be implemented on a non discriminatory basis, the issue of procedures leading to an EETS status is therefore central to the definition of EETS and will sit at the heart of the Commission Decision. This Decision will, at a high level, define the process for reaching an EETS status and allocate the different tasks referring to these procedures leading to EETS status among the different components of IM.

Regarding EETS Providers, certification will need to consider both technical issues relative to the compatibility of charging equipment, and commercial issues relating to the capability of EETS Providers to carry out the commercial processes required to ensure that Toll Chargers receive the correct payment in relation to Service Users who enter their toll domains. In practical terms, in addition to a check of the conformity of EETS constituents (as they are defined within the draft Commission Decision version 9 there is also a need for testing the compliance of EETS Providers' systems with each Toll Charger system to ensure that the service can be delivered smoothly and that Toll Chargers will receive the payments due to them.

On the basis of the previous work and conclusions of CESARE III and CESARE IV-WP1, IM responsibilities regarding certification cover five types of decisions that are supported by predefined and specific procedures applied to all stakeholders.

These five "decisions" types of IM are as follows:

- appointment of a Notified Body;
- certification of OBE;
- certification of RSE;
- qualification of a Toll Charger;
- approval of an EETS Provider.

The present chapter focuses on appointment of Notified Bodies, certification of OBEs and/or RSEs, qualification of Toll Chargers and approval of EETS Providers since these procedures lead to a "status" regarding EETS (i.e. attest ability to play a role as an EETS actor and therefore give some rights and duties).

In the following diagrams used in this chapter:

- procedures leading to an EETS status granting an "EETS status" are represented in red boxes; they result from the performance of a decision-making authority;
- intermediate/part decisions are represented in blue boxes;
- yellow boxes represent the decisions unrelated to full EETS status (such as approval of an EETS Provider).

2.5.3. IM components and internal interfaces regarding procedures leading to EETS status

2.5.3.1. Notified Body appointment

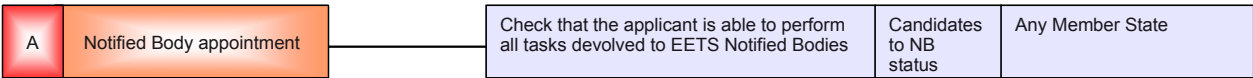
Member States can notify body(ies) according to criteria set out in the Decision, which can undertake different tasks in different EETS certification processes of EETS equipments and stakeholders. These tasks, as parts of certification processes defined by IM, are the basis for decisions regarding certification of EETS constituents and stakeholders.

The main conclusions for IM components and internal interfaces regarding appointment of Notified Bodies are as follows:

- the decision of appointment of a Notified Body is taken by any MS;
- the appointment procedure starts on the request of a candidate applying to be appointed as Notified Body;
- the appointment procedure consists in checking that the applicant is able to perform all tasks devolved to EETS Notified Bodies.

These principles are part of the summary diagram inserted at the end of this chapter (as Procedure type A).

Figure 6: Notified Bodies appointment – Decision of appointment



This procedure of appointment of Notified Bodies is not further detailed within CESARE IV - Work Package 2.

2.5.3.2. OBE and RSE certifications

Each OBE/RSE shall be certified by a MS, possibly based on a technical certification delivered by a Notified Body appointed by the MS.

The main conclusions for IM components and interfaces regarding OBE and RSE certification are as follows:

- the decision of certifying an OBE or an RSE is taken by any Member State;
- the certification procedure for OBE (Certification process type B) and RSE (Certification process type C) starts on the request of a OBE or RSE manufacturer ;
- the certification procedure of OBE and RSE consists in performing technical checks (B11 and C11 in the diagram) in order to demonstrate that the OBE or the RSE complies with all standards and interoperability constituents (tangible objects as interoperability constituents according to Commission draft decision version 10);
- the certification procedure of OBE and RSE is performed by a Notified Body that, will deliver its conclusions to the manufacturer and to the Member State whose decision of certification has been requested by the manufacturer.
- the result of these certification procedures is to allow the stakeholders to use the certified equipments (OBE and RSE).

Figure 7 : Equipements Certifications

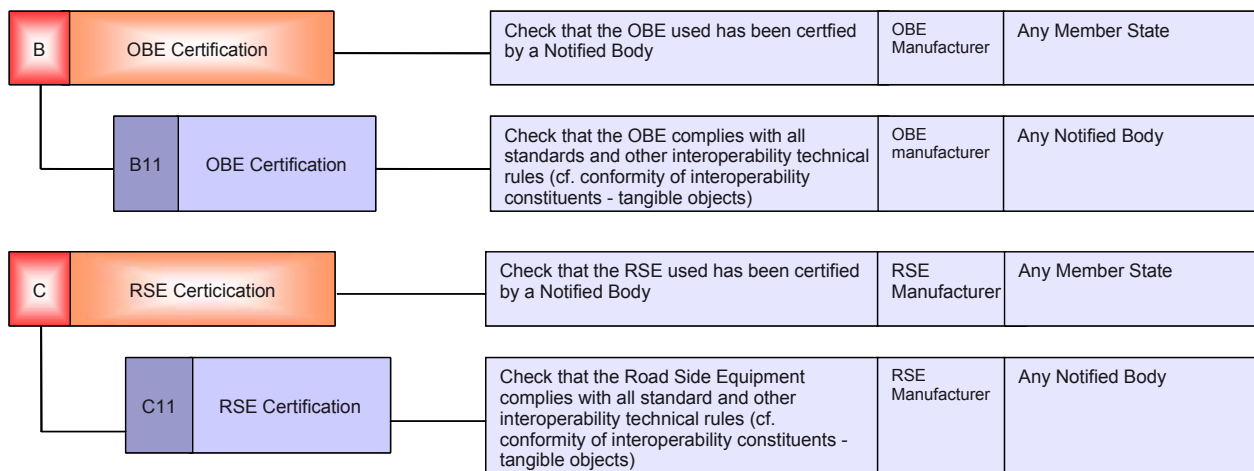


Figure 8 : IM role regarding OBE and RSE Certification - External Interfaces

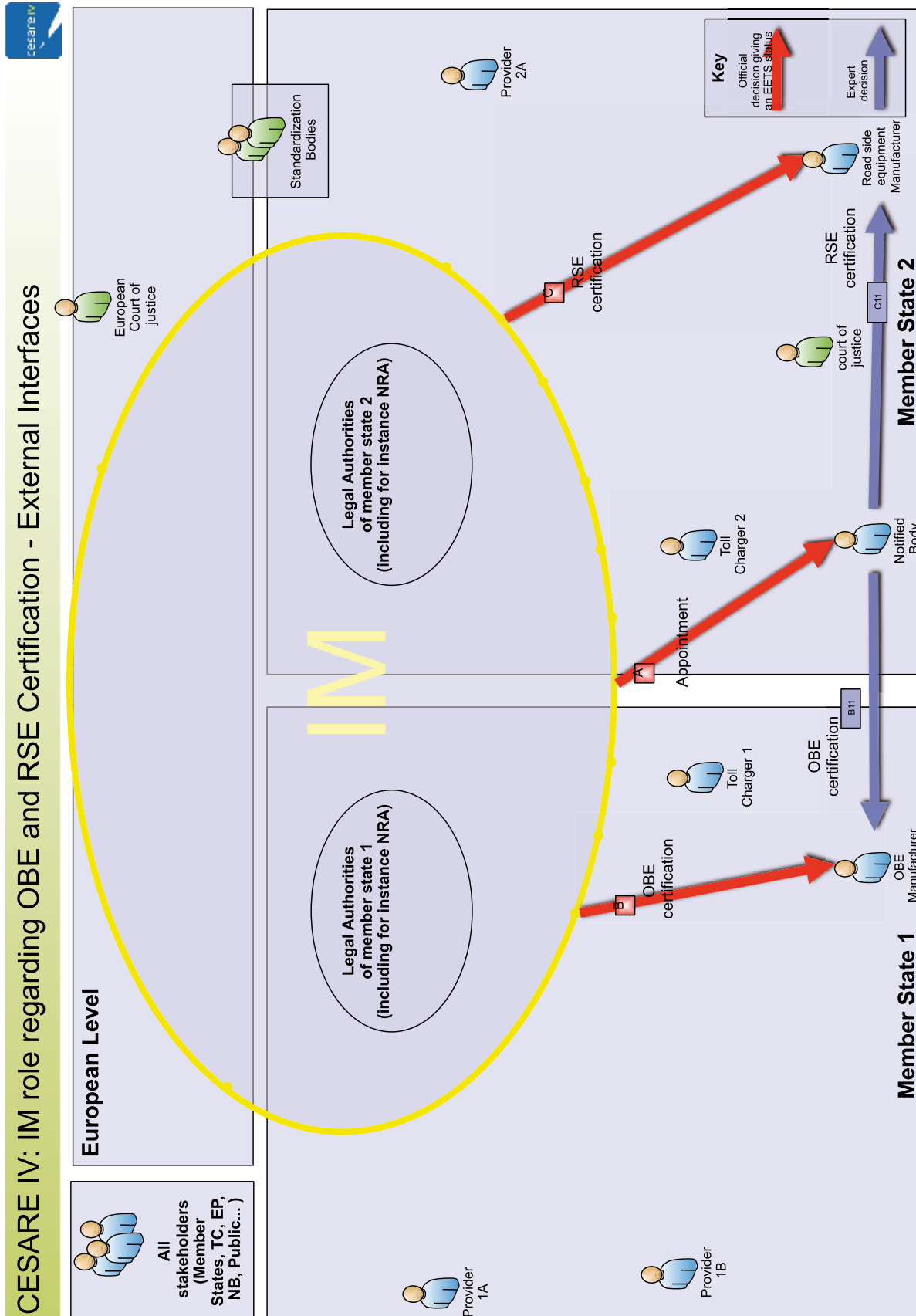
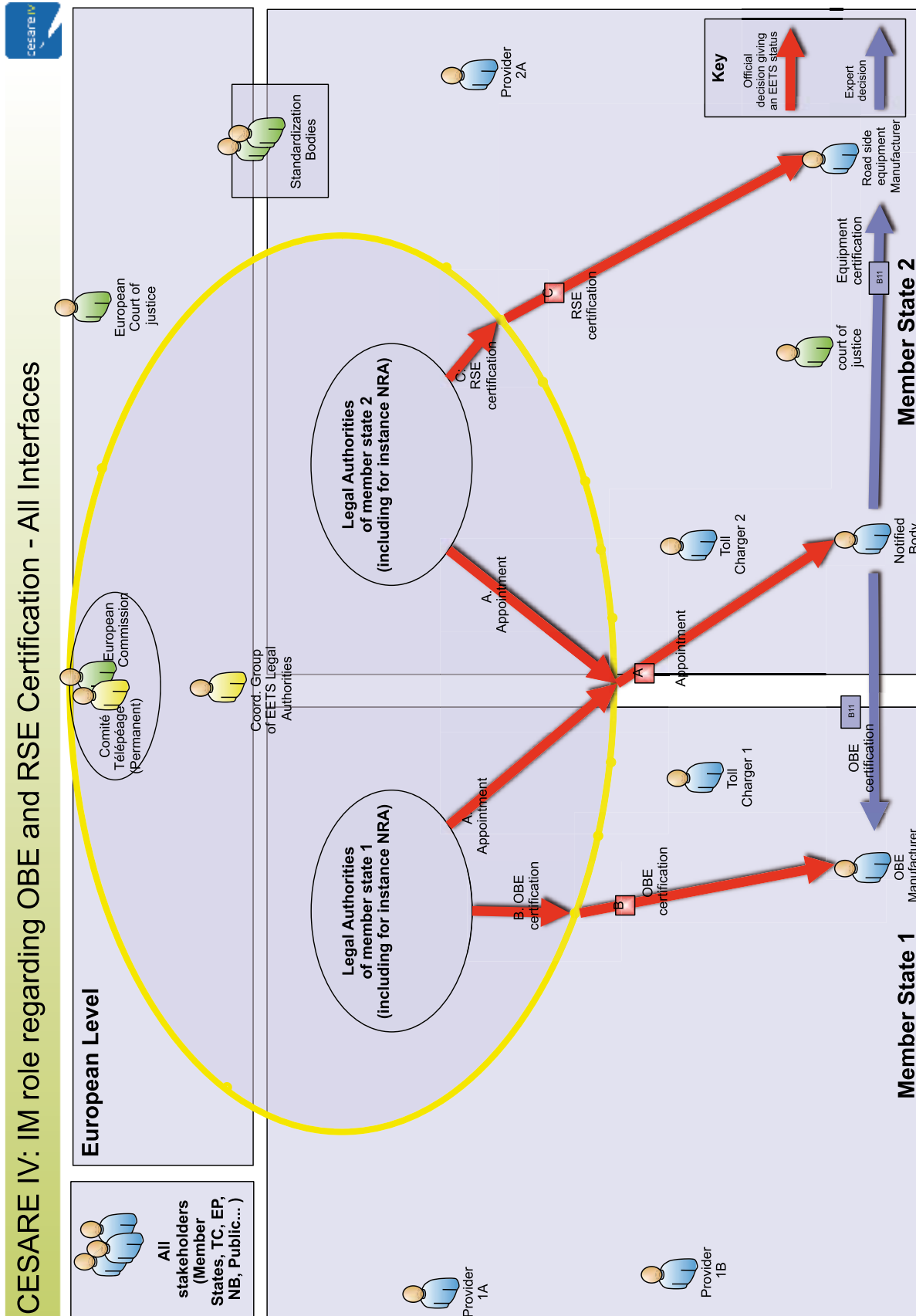


Figure 9 : IM role regarding OBE and RSE Certification - All Interfaces



2.5.3.3. Toll Chargers qualification

Each TC should certify its RSE and procedures applying to the MS where the Toll Domain is located, possibly based on a technical qualification report established by a Notified Body.

Qualification D allows a Toll Domain (that falls under the scope of the Directive) to join the EETS domain. It is based on two technical checks:

- to guarantee that certified RSE are used (D11), and
- to make sure that TC system (internal procedures, software...) is EETS compliant i.e. to check technical conformity (D12).

This qualification D guarantees to any EETS stakeholder to the Coordination Group of EETS Legal Authorities and to the European Commission that the concerned Toll Domain conforms to the EETS rules and specifications and is properly incorporated into the EETS Domain (and consequently that the Directive is properly implemented in the MS).

The detailed procedure for TC qualification has not yet been specified. However, it seems evident that there will be a difference between the qualification of a TC operating a DSRC based system and a TC operating an autonomous system. The toll collection infrastructure used by the TC operating an autonomous system will be based on a physical infrastructure consisting of:

- EETS compliant OBEs provided by EETS Providers;
- one or more positioning systems, e.g. GPS or GALILEO and ground based position system supporting satellite systems in points in the road network where there is a need for accurate coordinates, e.g. ramps and parallel roads located close to each other ;
- one or more air-communication system, e.g. GSM (Global System for Mobile communication) and e.g. UMTS (Universal Mobile Telecommunication system) for exchange of data between the OBE and the EETS Provider and in some cases the TC.

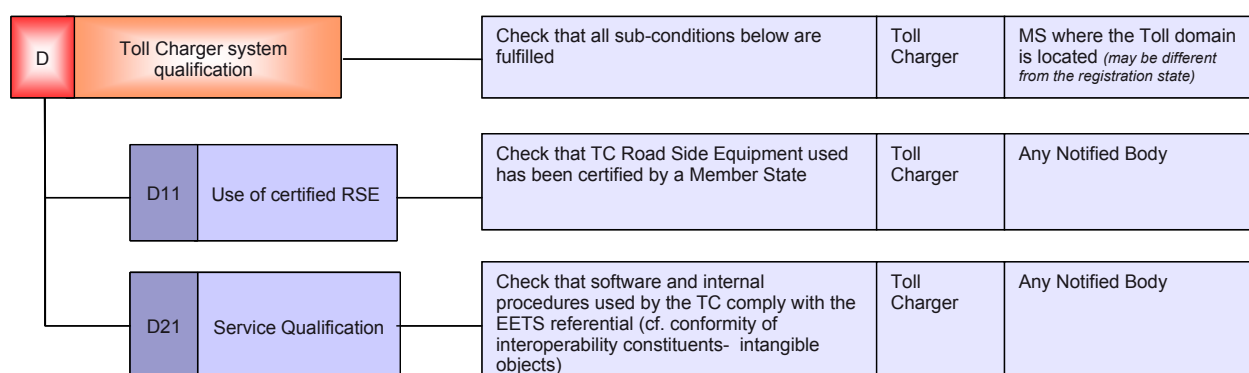
The positioning and communication systems used for the toll charging will not be the responsibility of a single TC but left to the telecommunications authorities on a national and European level. Hence, there will not be a need for qualification D11 for TCs operating autonomous systems. However, the D21 will still be relevant to ensure that a TC provides the EETS compliant services.

In case of TC qualification failure (i.e. the TC domain is not ready to accept EETS users, because of ineffective or insufficient system adaptation), the TC domain cannot join the EETS domain. The Directive is consequently not fully implemented in the MS, so the National Legal Authorities have to make sure (using if necessary their legal power) that the appropriate technical improvements are performed as soon as possible. The Commission can also, using already existing means, enforce the Directive in case of "lack of motivation" from the national authorities to force their TC to become EETS compliant... In the while, a service will be proposed without TCs that are not compliant.

Moreover, one can assume that all European TC domains will not be compliant before the EETS implementation deadline, so the EETS domain will grow regularly during the first years (further analysis of this point will be provided in WP3).

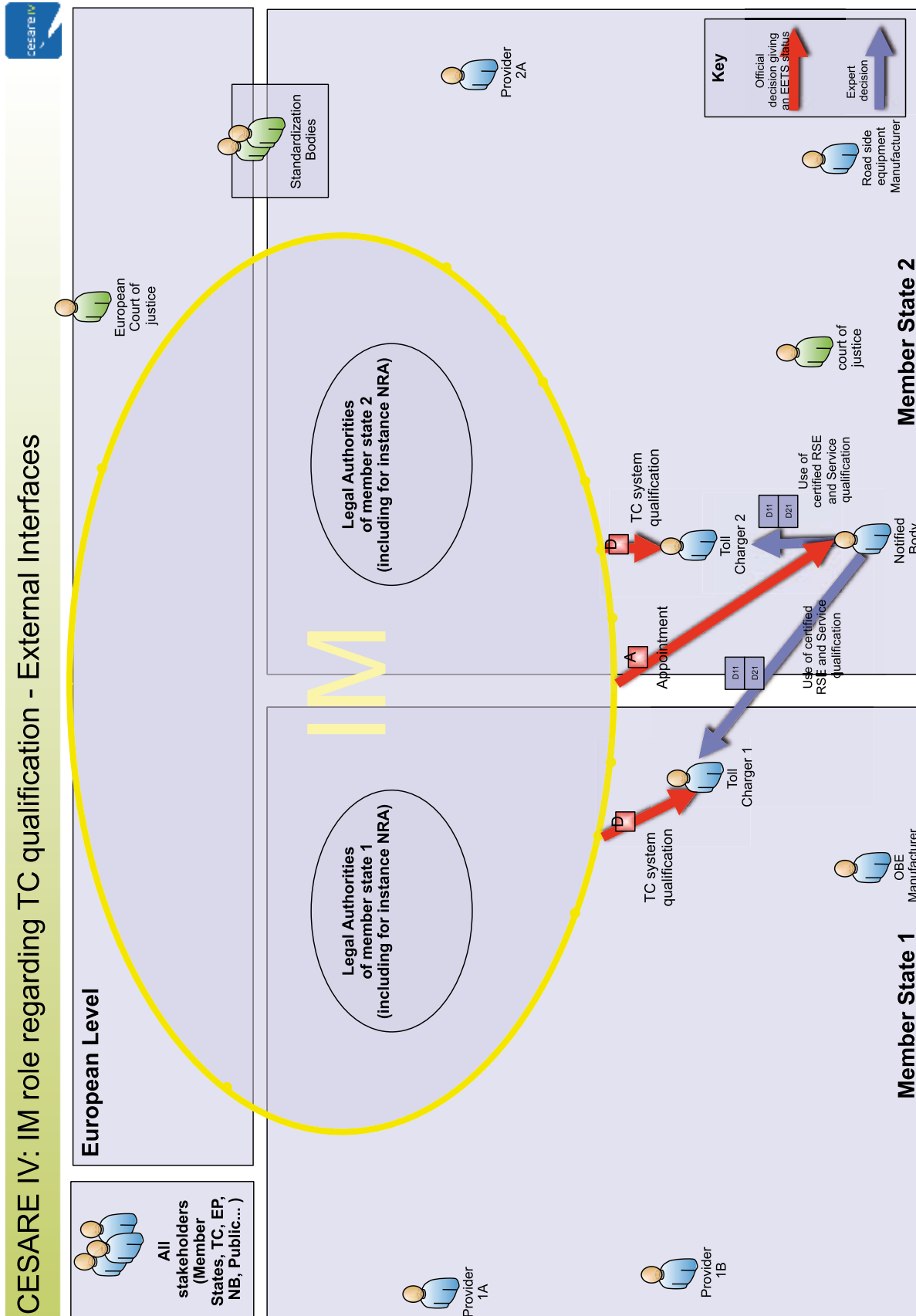
After implementation of EETS, each new TCs (in case of extension of the EETS Domain²) will have to be qualified on both technical qualification (procedure D) and suitability for use (both technical and contractual, same procedure as E2 but dedicated to new TC).

Figure 10: Toll Chargers Qualification



² In case of a new MS joining the European Union or of a new TC.

Figure 11: IM role regarding TC Qualification - External Interfaces



[illegible]

2.5.3.4. EETS Providers approval

Approval E allows a Provider to officially become an EETS Provider.

This procedure leading to the status of EETS Provider is aimed to attest both the financial, administrative and technical compliance to EETS specifications and that the service is provided with a full coverage of the EETS domain i.e. has a European scope.

Therefore EETS Providers Approval procedure is based on two sub steps: E1 and E2:

- E1 “pre approval” “pre approval” acknowledges that the Provider uses certified OBE (E11), with an EETS compliant system (internal procedures, software,...) (i.e. technical conformity - E12), and guarantees its financial and administrative ability (E13). this pre-approval proves that the applicant is “serious” enough to request the “suitability for use” (E2);
- E2 “suitability for use” (both technical suitability for use and contractual I suitability for use) proves that the EP is technically compatible with all Toll Domains (E21) and that the EP has a contract with all TC (E22).

The Procedure E1, i.e. the pre approval phase, demonstrates the financial, administrative and technical compliance of the applicant to EETS Provider status. This sub-procedure gives to all partners of this applicant to EETS Provider status the relevant information on its financial and administrative ability and on its technical features. Considering this, the status of pre-approved EETS Provider is meaningful and gives precise information to economical partners.

This status also grants to the pre-approved EETS Provider the right to request the suitability for use (both technical and contractual) that will imply cooperation with each Toll Charger (Notified Bodies performing the second phase of approval procedure may need TCs assistance .

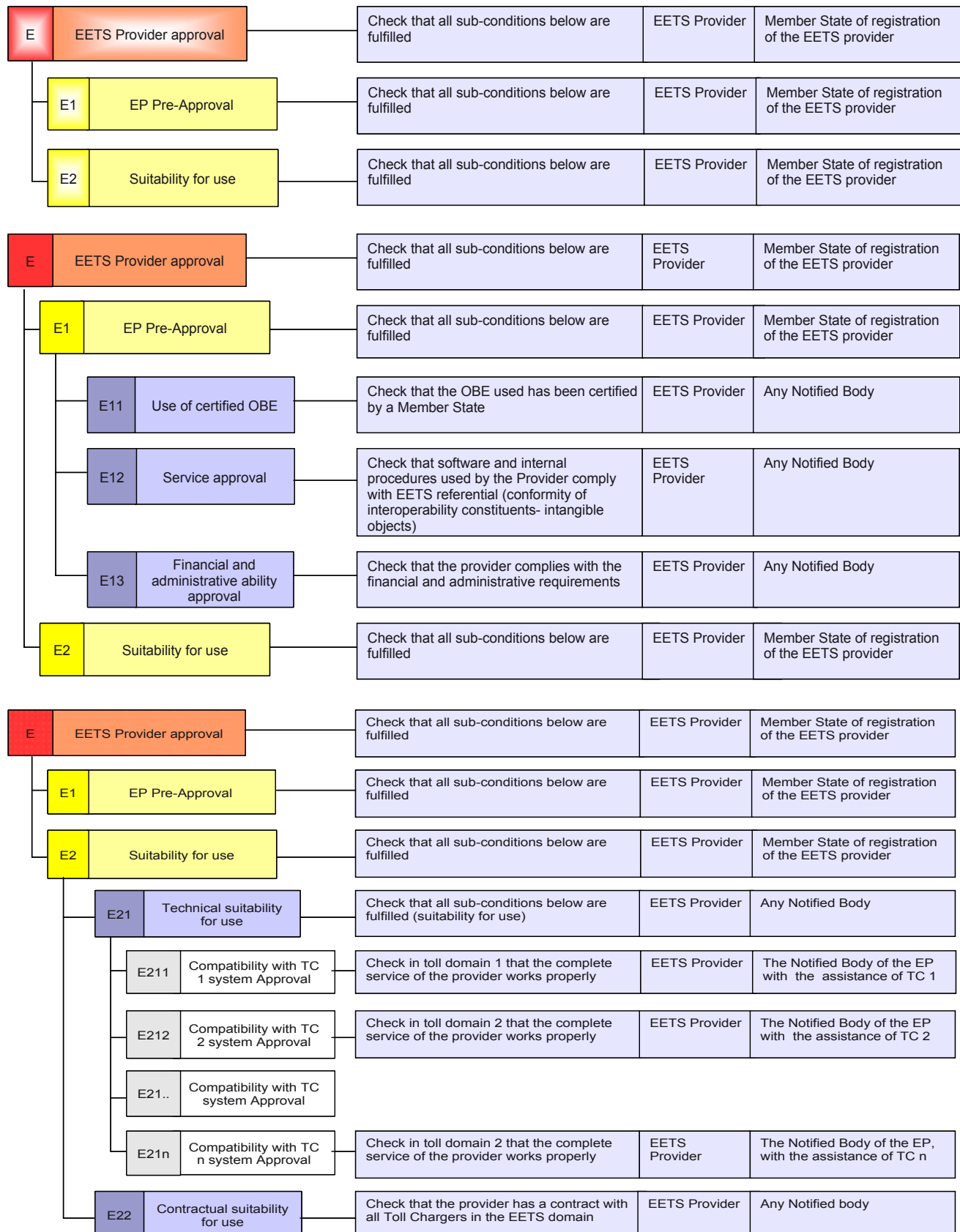
The Procedure E2, i.e. suitability for use (both technical and contractual), means that the approved EETS Provider offers the users a full-coverage service, i.e. a European service according to the Directive.

As a principle, decisions allocating a meaningful status regarding EETS (i.e. both pre-approval and approval) are taken by a Member State (generally the MS where the EP is registered).

Nevertheless, some WP2 members pointed out that the issue of the extent to which Toll Chargers will have a role in the formal approval process will be a key element of the Commission decision, which will need to balance the need to develop an accessible market against the importance of protecting the interests of Toll Chargers. According to them, the functions set out at item E2 in the Approval Overview – the Suitability for Use testing – may be carried out after formal certification of the EETS Provider, as part of the process of developing the service contract, rather than as a precondition for formal approval.

All procedures leading to EETS status are described more precisely in the following diagram: (Figure 16: Procedures leading to EETS status detailed overview) that is the basis to describe the complete interfaces for OBE-RSE (Figure 9 : IM role regarding OBE and RSE Certification - All Interfaces), EP (Figure 15 : IM role regarding EP approval - All Interfaces) and TC (Figure 12 : IM role regarding TC qualification - All Interfaces).

Figure 13: EETS Providers approval



CESARE IV: IM role regarding EP approval - External Interfaces

The diagram illustrates the external interfaces of the IM (Internal Market) role regarding EP (European Parliament) approval, structured into three main levels: European Level, Member State 1, and Member State 2.

European Level:

- All stakeholders (Member States, TC, EP, NB, Public...):** Represented by a group of people icon.
- European Court of Justice:** Represented by a person icon.
- Legal Authorities of member state 1 (including for instance NRA):** Represented by a person icon.
- Legal Authorities of member state 2 (including for instance NRA):** Represented by a person icon.
- Standardization Bodies:** Represented by a group of people icon.

Member State 1:

- Provider 1A:** Represented by a person icon.
- Provider 1B:** Represented by a person icon.
- Toll Charger 1:** Represented by a person icon.
- OBE Manufacturer:** Represented by a person icon.
- Notified Body:** Represented by a person icon.

Member State 2:

- Toll Charger 2:** Represented by a person icon.
- Provider 2A:** Represented by a person icon.
- Road side equipment Manufacturer:** Represented by a person icon.

Key:

- Official decision giving an EETS status:** Red arrow.
- Official decision not giving any EETS status:** Yellow arrow.
- Expert decision:** Blue arrow.

Flowchart Details:

- Member State 1:**
 - Provider 1A:** Receives EETS approval (red arrow) from Legal Authorities of member state 1. Provides Pre-approval and suitability for use (yellow arrow) to Legal Authorities of member state 1. Provides Use of certified OBE, Service and financial approval (blue arrow) to Legal Authorities of member state 1. Provides Technical and contractual suitability for use (blue arrow) to Legal Authorities of member state 1.
 - Provider 1B:** Receives EETS approval (red arrow) from Legal Authorities of member state 1. Provides Pre-approval and suitability for use (yellow arrow) to Legal Authorities of member state 1. Provides Use of certified OBE, Service and financial approval (blue arrow) to Legal Authorities of member state 1. Provides Technical and contractual suitability for use (blue arrow) to Legal Authorities of member state 1.
 - Toll Charger 1:** Provides Appointment (red arrow) to Legal Authorities of member state 1. Provides Toll (blue arrow) to Legal Authorities of member state 1.
 - OBE Manufacturer:** Provides Appointment (red arrow) to Legal Authorities of member state 1. Provides Toll (blue arrow) to Legal Authorities of member state 1.
 - Notified Body:** Provides Appointment (red arrow) to Legal Authorities of member state 1. Provides Toll (blue arrow) to Legal Authorities of member state 1.
- Member State 2:**
 - Provider 2A:** Receives EETS approval (red arrow) from Legal Authorities of member state 2. Provides Pre-approval and suitability for use (yellow arrow) to Legal Authorities of member state 2. Provides Use of certified OBE, Service and financial approval (blue arrow) to Legal Authorities of member state 2. Provides Technical and contractual suitability for use (blue arrow) to Legal Authorities of member state 2.
 - Toll Charger 2:** Provides Appointment (red arrow) to Legal Authorities of member state 2. Provides Toll (blue arrow) to Legal Authorities of member state 2.
 - Road side equipment Manufacturer:** Provides Appointment (red arrow) to Legal Authorities of member state 2. Provides Toll (blue arrow) to Legal Authorities of member state 2.

Figure 15 : IM role regarding EP approval - All Interfaces

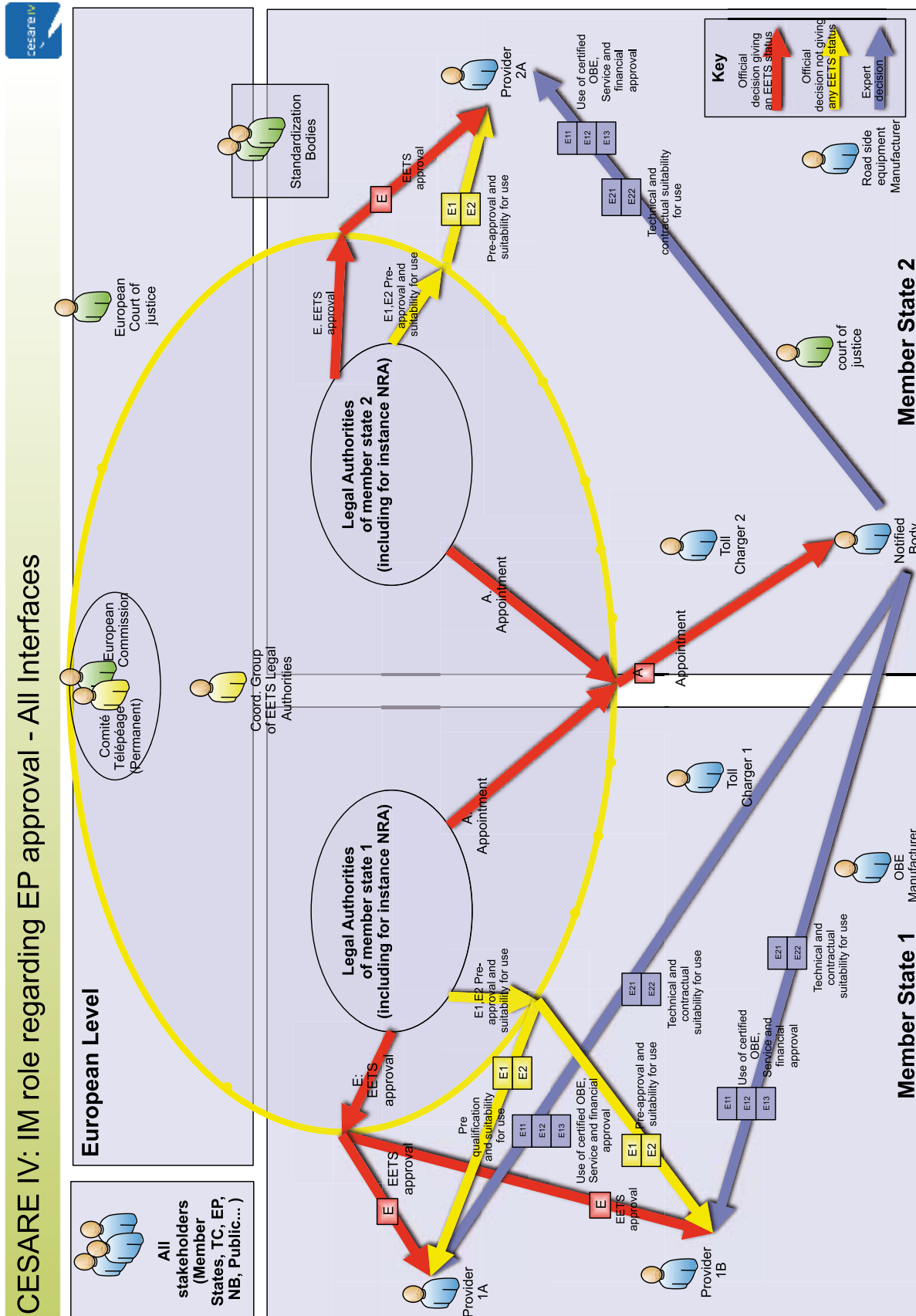
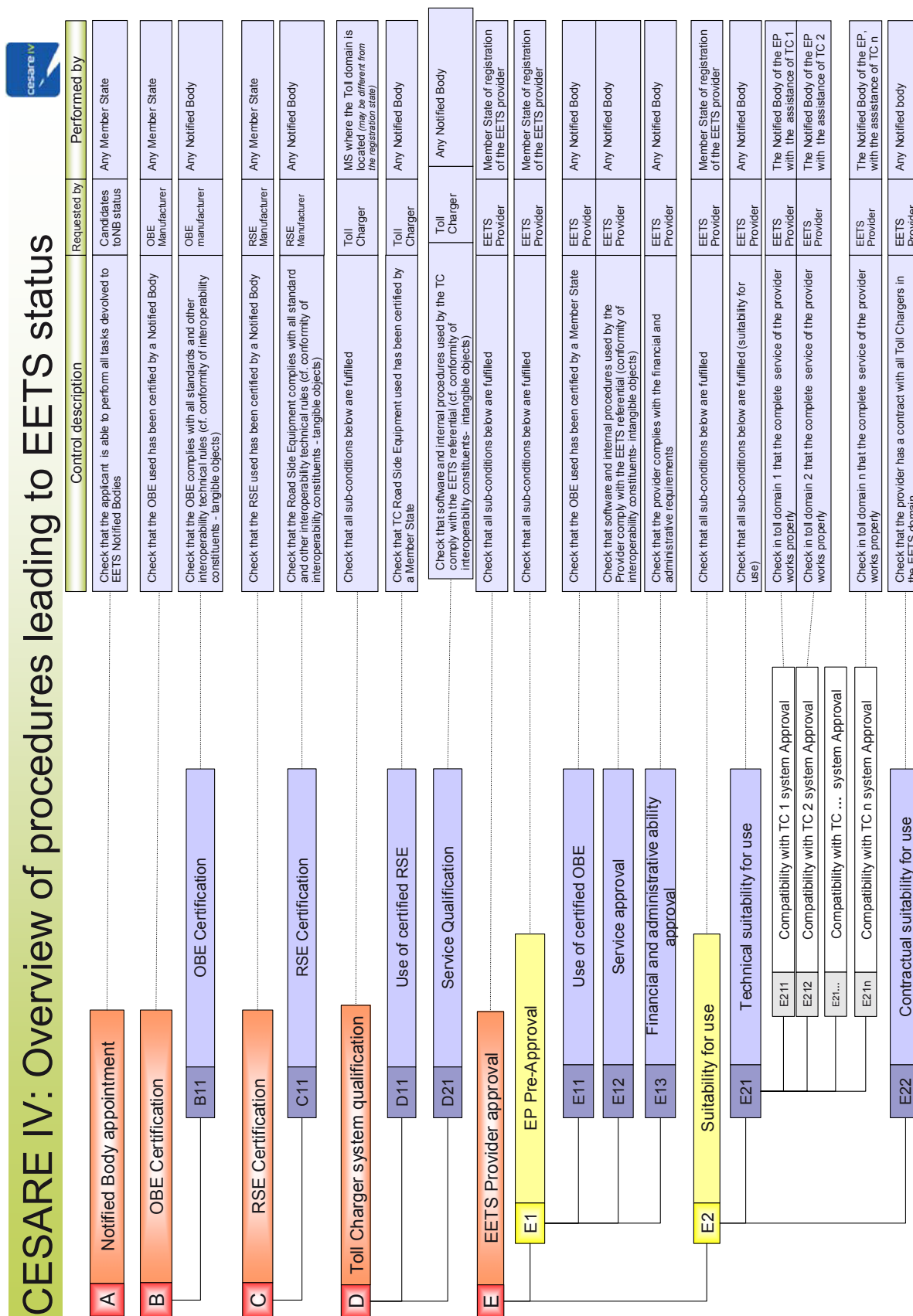


Figure 16: Procedures leading to EETS status detailed overview



2.6. Security policy and protection of users personal data

2.6.1. Security Policy

2.6.1.1. WP1 Conditions

The following IM related conditions are closely connected with this issue and describe the necessary functions of IM role to be fulfilled in order to guarantee a successful operation of EETS:

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N23	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N24	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N25	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

2.6.1.2. IM main responsibilities

Pursuant to the Directive 2004/52/EC, security policy, as a part of data exchange between EETS Providers and Toll Chargers, needs to be defined in order to implement EETS.

It has to be underlined that the exchange of security objects is part of ISO 12855, currently drafted, and which describes the data exchange between EETS Providers and Toll Chargers.

The draft EC Decision has specified that security policy has to be considered as an essential requirement condition which must be met by the EETS, its subsystems and their interoperability constituents. It has been also emphasised that Toll Chargers, EETS Providers and EETS Users must be protected against fraud/abuse by other EETS stakeholders.

The CESARE IV Report D1.2 has defined four conditions (GN-23, GN-24, GN-25, ES-N007) relating to security policy which covers a wide range of tasks, from the definition of a security policy framework, to the monitoring and auditing of proper implementation of the policy and the distribution of security objects.

The benchmark studies do not provide any recommendation on the security framework.

2.6.1.3. IM components and internal interfaces regarding security policy

Regarding security policy, IM components and internal interfaces could be as follows:

- Definition of the security policy: to ensure the need of consistency throughout Europe, the definition of security policy should be addressed at a European level. The Commission and/or the Coordination Group of EETS Legal Authorities could be entitled of this task. The definition of the security policy shall be developed with the involvement of the relevant stakeholders like European Data Protection Supervisor, EETS Providers and Toll Chargers, European Standards Organisations, notified bodies.
- Monitoring and auditing of security policy compliance: this task required a concrete approach, close to the daily provision of EETS. Therefore, the operation and EETS related equipment of Toll Chargers and EETS Providers shall be regularly audited for the purpose of convincing the EETS authorities of their compliance with Directive 2004/52/EC and related Commission Decision. The EETS Authorities could specify the auditing process.
- Management of security lists: WP2 recommends that organisations of EPs and TCs handle operational aspects regarding conditions and procedures to be followed in the daily interaction between the actors involved. A private body may be set-up by organisations of EP and TC for this purpose.

2.6.2. Protection of users' personal data

2.6.2.1. WP1 Conditions

There was no relevant IM related condition identified by WP1 that is closely connected with this issue:

CIV WP1 ref.	Reference Condition	Duty/Right
	No relevant condition	

2.6.2.2. IM main responsibilities

As set out in the Directive 2004/52/EC, “the introduction of electronic toll systems will entail the processing of personal data, which needs to be carried out in accordance with Community rules”.

Furthermore, the EC Directive and draft EC Decision underline that “EETS shall fulfil security essential requirement in compliance with European legislation on the protection of individuals with regard to the processing of personal data and on the free movement of such data”. In particular, compliance shall be ensured with Directive 95/46/EC³ and Directive 2002/58/EC⁴.

The benchmark studies outlined that involved stakeholders must also comply with national regulation on privacy.

The privacy policy have to provide security features relative to the protection of data stored, handled and transferred between stakeholders in the EETS environment. The security features shall protect the interests of EETS stakeholders from harm or damage caused by lack of availability, confidentiality, integrity, authentication, non-repudiation and access protection of sensitive user data appropriate to a European multi-user environment.

2.6.2.3. IM components internal interfaces regarding protection of users’ personal data

Without prejudice to European legislation on personal data protection, Member States may define national privacy policy.

Each stakeholder shall comply with mandatory rules and shall be consequently responsible for its own database.

3 Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (OJ L201, 31.7.2002, p. 37).

4 Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (OJ L281, 23.11.1995, p. 31) as amended by Regulation (EC) No 1882/2003 (OJ L284, 31.10.2003, p. 1).

2.7. Access of users to interoperable service

EC Directive sets out that the contract which gives “access to the service on the whole of the network and subscriptions shall be available from the operator of any part of the network and/or from the issuer”

2.7.1. WP1 Conditions

There was no relevant IM related condition identified by WP1 that is closely connected with this issue :

CIV WP1 ref.	Reference Condition	Duty/ Right
	No relevant condition	

2.7.2. IM main responsibilities

In CESARE III Report D1.1 the requirements of European Directive 2004/52 on Interoperable EFC, relating to the access of users to interoperable service, was analysed. They are:

- EETS users and/or vehicles shall not be discriminated against by the toll system (non-discrimination principle);
- Users have to be offered the EETS;
- EETS users have to be accepted in all electronic toll systems (that fall under the scope of the Directive).

In this document, it has also been stated that “The Service User expects to make the EETS contract in the country of its choice and to have a selection of different EETS Providers. He is also interested to use existing business relations and payment means. The Service User expects to be able to use the EETS to benefit as soon as possible. EETS user shall not be discriminated in toll systems compared with other users (every available tariff has to be offered to all users of the same vehicle class / configuration at that time of day, etc.).”

The Report D 1.2 of CESARE IV has lined out that the issue related to the right for any Service User to have access to EETS and related consequences should be clearly set out. Indeed, a Service User has to subscribe a contract with an EETS Provider in order to have access to EETS, but it was not stated how this access will be managed/organized.

2.7.3. IM components and internal interfaces regarding access of users to interoperable service

One of the main issues is the right of the Service User (SU) to enter into a contract with any EETS Provider. In particular, if they do not meet the predefined condition (like having been cancelled from a previous EETS contract, not fulfilling a previous EETS contract, etc.), are they allowed to have access to the EETS? If access is denied, what are the recourses of a SU?

2.7.3.1. Prerequisites

2.7.3.1.1 Conditions for a Service User to have access to the EETS

The external benchmarking studies show that, in all sectors, users have the right to have access to the service on non-discriminatory conditions. Basically the users are requested to pay for the service and are denied further supply or service if they fail to fulfil their payment obligation. However a service qualified as universal must be provided in any case to the users, such as telecommunication fixed lines and postal service.

The answer lies within the draft EC Decision which stipulates that “EETS Providers shall make public their contracting policy towards EETS Users, which may require the fulfilment of certain conditions by EETS Users”.

2.7.3.1.2 Alternative way for giving to an EETS User access to interoperable service if denied

Neither the EC Directive nor the draft EC Decision has been dealing with this issue so far.

2.7.3.1.3 Procedures for the settlement of disputes regarding users access to interoperable service

No specific pre-requisite.

2.7.3.2. Conclusions / Requirements

2.7.3.2.1 Conditions for an EETS User to have access to the EETS

Pursuant to EC competition legislation, EETS Providers shall give access to EETS Users on non discriminatory conditions, and these conditions must be made public.

Moreover, when an EETS User does not fulfil his contractual commitments, the EETS Provider (on its own initiative or on a TC request) should be allowed to take any appropriate measure to limit his risk/damage. This remedy could be a restriction of the right to access EETS (blacklist), subject to prior notice to the EETS User.

2.7.3.2.2 Alternative ways for giving an EETS User access to interoperable service if denied

In case of non fulfilment of the Service User's obligations:

- access to EETS may be denied to this SU;
- there is no alternative way for this SU to get an access to the EETS.

In case of insolvency risk of the SU (for instance, several payment failures), access to the EETS could be subject to the acceptance of a pre-payment mode.

Anyway it is not an EP's responsibility to ensure payment facilities for a SU not fulfilling the objective and non-discriminatory requirements for having an EETS OBU.

And since EETS is (to the SU) an optional service, each TC ought to have already existing local payment schemes with the effect that denied access to EETS will have limited adverse consequences for the individual SU.

2.7.3.2.3 Additional note

IM will have an important task in terms of ensuring that the EETS is implemented and provided to the SU as a continuous service over the entire network and that the interpretation of the legal framework and daily operation are carried out as planned. To ensure this, a common set of operational conditions and procedures should be defined and used in the relations between the actors involved in EETS. IM function in these regards will extend to the definition, communication and follow-up of efficient conditions and procedures to be followed in the daily interaction between the actors involved.

Regarding the relationship between EP and SU:

- There should be a contract between the EP and the SU with a set of common EETS rules in addition to the terms covering local use, including common rules for information regarding complaints
- IM is responsible for setting up justifiable reasons for denying access, e.g.:
- the EP can and will deny the SU access to the EETS service if the requirements concerning the SU's payment obligations to the EP are not fulfilled. Failure to comply with the payment obligations can either be actual non-payment or insufficient payment.
- in toll domains where declarations of specific parameters are required the SU can be denied access if the parameters are declared incorrectly.
- It is important that there is no uncertainty regarding the status of an OBU (valid/invalid) for both the TC and SU.

The EETS procedures written by IM will have to take into account the facts that:

- The distribution of information regarding not valid OBUs must be based on a clearly defined time periods. Such defined timetable is the key for allocating responsibility between the EP, TC and SU both in case of a blacklisted OBU and a valid OBU. Harmonised rules in this respect would significantly facilitate the operation of such a cross-border system;
- If the SU has a valid OBU, the latter must be treated as such. If the EP or the TC is responsible for not treating the SU correctly it is their responsibility to hold the SU harmless. If the SU is responsible for the failure he will be responsible according to the applicable rules for debt collection and possible prosecution.

2.7.3.2.4 Procedures for the settlement of disputes regarding users access to interoperable service

The definition of procedures for the settlement of disputes regarding Service Users access to interoperable service has been addressed by the WP2.

The external benchmarking studies pointed out that the settlement of disputes (that could lead to allocation of damages) can be addressed to national courts.

2.8. Settlement of disputes

2.8.1. WP1 Conditions

The following IM related conditions are closely connected with this issue and describe the necessary functions of IM role to be fulfilled in order to guarantee a successful operation of EETS:

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	D
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	D

2.8.2. IM main responsibilities

Regarding Settlement of disputes, the essential requirements calling for IM have been clearly analyzed by WP2 and this analysis leads to the conclusion that:

- IM should have a power of investigation:
- on its own initiative or on demand of an “plaintiff” who has the feeling that the behaviour of an EETS stakeholder has departed from the EETS rules and usages;
- this investigation power is restricted to ask for some detailed information and/or justification to the stakeholder and to inform the parties of the results of this investigation; but it should not lead to a binding decision (and therefore, is not subject to judicial review);
- apart from this investigation power, settlement of disputes falls under the scope of existing schemes such as arbitration or proceedings in front of a court of justice , national or European:
- WP2 has come to the conclusion that regarding Settlement of disputes, there was no need for a specific set of rules and institutions and that existing schemes are suitable for disputes related to EETS as they are for any other industry or sector;
- these existing procedure of arbitration or judicial settlement of disputes answer the concerns of both Toll Chargers and Providers for compensation in case of a prejudice, since they may lead to the allocation of damages in case the plaintiff suffered a prejudice;
- these procedures also answer the concern for a fast settlement or freezing of the dispute since emergency rulings could be rendered.

N.B.: These procedures for Settlement of disputes may be distinguished from a branch of the regulation power that is performed by IM and that may lead to give, refuse or cancel an EETS status in consideration of the compliance (or non compliance) with the EETS rules. This type of decision is devoted to define and update the EETS perimeter regarding both equipments and stakeholders. Regarding this, IM cannot be considered as the proper authority for the settlement of disputes).

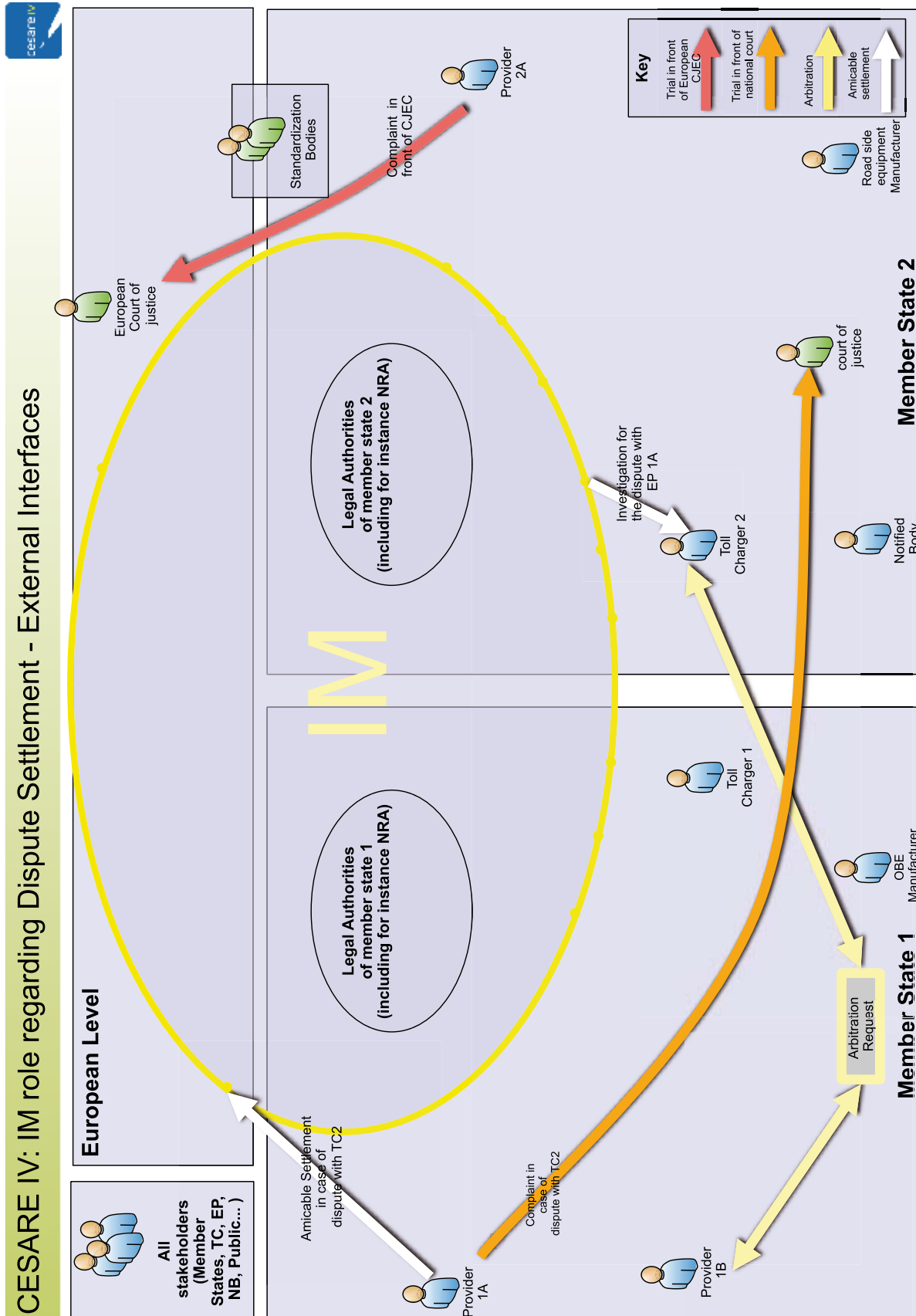
Therefore, the following list of responsibilities is the essence of previous work done in CESARE III and CESARE IV WP1 related to the issue Settlement of disputes:

- Investigation in case of amicable settlement of dispute (requested by a single party);
- Arbitration in case of amicable settlement of dispute (requested by both parties);
- Clarification of the EETS rules (on request of the parties).

Hence in the figure below, different (and non exhaustive) cases of disputes are illustrated:

- A dispute between EP1A and TC2, and EP1A requires for an amicable settlement to the IM, and IM investigates the problem with TC2 (for instance, excessive delay during the phase of suitability for use which requires active cooperation from TC).
- A dispute between EP1A and TC2, and EP1A lodges a complaint against TC2 with a national court of justice of MS2.
- A dispute initiated by EP2A and involving the respect of EC regulation by a MS, and EP2A lodges a complaint against MS with the Court of Justice of the European Communities, after having exhausted the national recourses.
- A dispute between EP1B and TC2, and both parties agree to require for arbitration

Figure 17: IM role regarding dispute settlement - External interfaces



2.8.3. IM components and internal interfaces regarding settlement of disputes

2.8.3.1. Prerequisites

- In case of a dispute regarding EETS (either precontractual or contractual dispute⁵), there should be a fast and non costly way of settling the dispute (instead of a trial);
- Procedure for settlement the disputes (judicial or amicable) that already exists and that could be appropriate for EETS should be used:
- national courts of justice;
- Court of Justice of the European Communities for any case coming under its authority⁶;
- arbitration;
- In case of need for clarifications of the EETS rules, TC or EP should be given the opportunity to ask IM (at either European or national level);
- Any dispute can eventually be settled by a trial (in existing courts).

2.8.3.2. Conclusions / Requirements

Two different settlements can be proposed by IM: amicable and judicial settlement. To these procedures that are not specific to EETS, IM investigation power could also be added as an EETS specific tool to avoid the risk of dispute or to ease the settlement of an existing dispute.

2.8.3.2.1 Investigation

- In case of a dispute, any stakeholder who suffers the consequences of a non compliant behaviour regarding EETS rules and common practices is offered the opportunity to require an investigation from the relevant Member State (possibly the national EETS Legal Authorities) in order to facilitate and accelerate an agreement between the parties
- This investigation procedure does not lead to any binding decision. The recommendations issued are consequently not subject to judicial review.

2.8.3.2.2 Judicial Settlement or arbitration (amicable settlement)

- When a decision (e.g. about certification) is giving a right or status, it may be subject to judicial review according to the existing national or European legislation.

With regards to the independence of any procedure of settlement of dispute in front of either a national or European court of justice or an arbitrator, a clarification of the EETS rules may be asked from IM (at either European or national level).

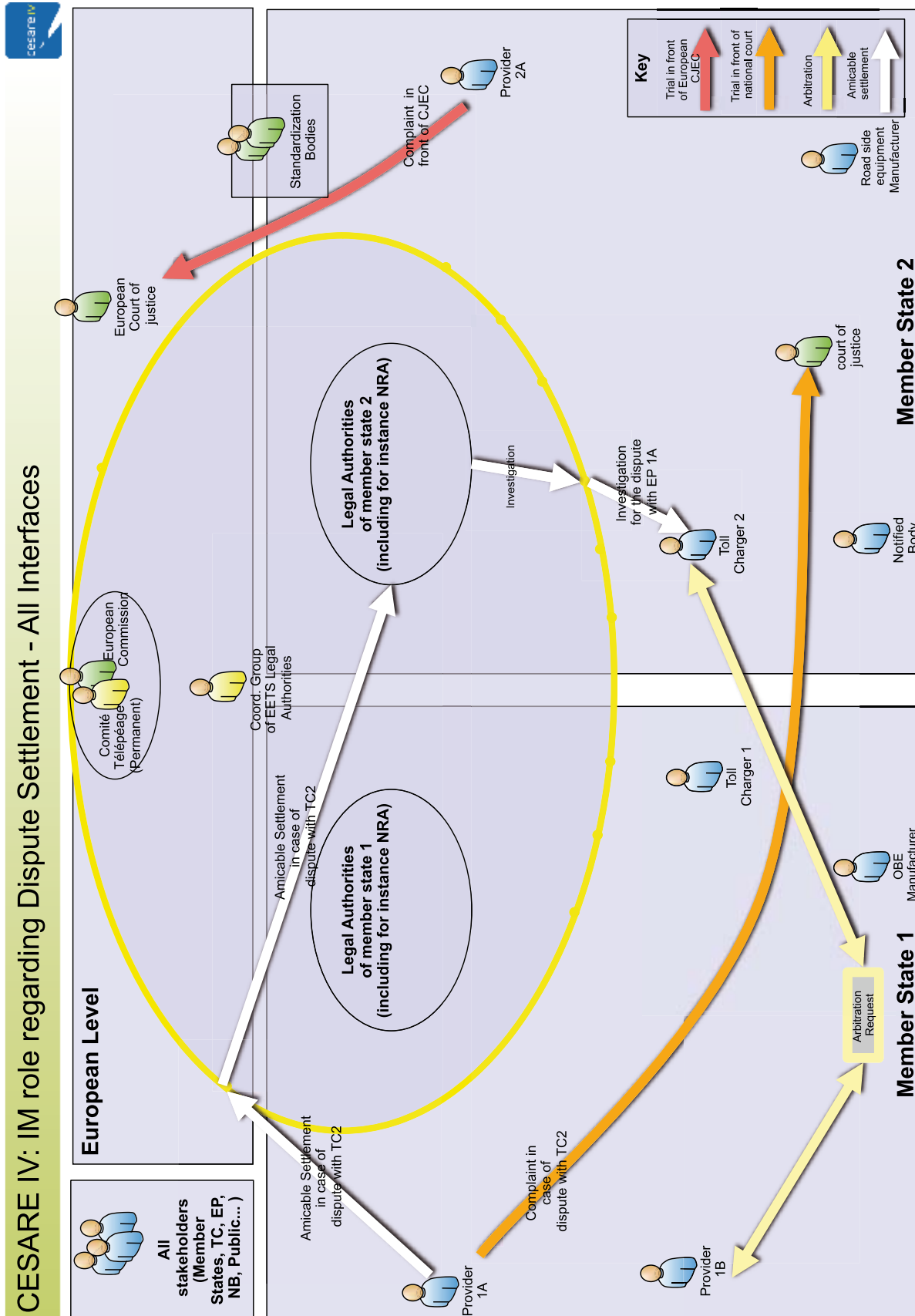
5 For instance, a provider applying to an EETS certification against a Notified Body, or a pre-certified EETS.

6 • Proceedings for annulment: <http://europa.eu/scadplus/leg/en/lvb/l14549.htm>;
• Proceedings for failure to fulfill an obligation: <http://europa.eu/scadplus/leg/en/lvb/l14550.htm>;
• Proceedings for failure to act: <http://europa.eu/scadplus/leg/en/lvb/l14551.htm>;
• Action for liability: <http://europa.eu/scadplus/leg/en/lvb/l14553.htm>;
• Reference for a preliminary ruling: <http://europa.eu/scadplus/leg/en/lvb/l14552.htm>.

According to the conclusions above, the figure below shows that:

- The request from EP1A for IM investigation is received by MS2 Legal Authorities, that use their investigation with TC2 to clarify the situation; this procedure could not lead to any compensation for the “plaintiff”;
- The trial between EP1A and TC2 with the National Court of Justice in MS2, as well as arbitration, can lead to allocation of damages to the plaintiff in case he demonstrates his prejudice;
- Arbitration between EP1B and TC2 is performed upon request of both parties.

Figure 18: IM role regarding dispute settlement - All interfaces



3. Legal and operational framework

3.1. Overview and starting point

In this section the legal and operational framework of the Interoperability Management will be described. According to the project definition of Cesare IV, this section is based on a thorough, concrete, and pragmatic analysis of IM issues. In order to complete this task, Work Package 2 members approached the addressed issues from various sides. This open minded approach was made in consideration of the complex dimension of interoperability as a whole and Interoperability Management in particular.

According to the conclusions of Cesare III this regulatory role could be performed by a person, an organisation, or several organisations acting together based on rules defined on a regulatory level and/or based on contractual agreements between the participants.

This section aims at proposing legal schemes that conform to the specifications based on the analysis of Essential Requirements (cf. section 2)

3.1.1. Legal environment

The legal and operational framework for Interoperability Management proposed in this Report is part of an existing legal environment. While the Report aims at designing a self-containing, complete, and open-minded approach for an IM system, it also considers the existing legal structures of the EETS environment and the general legal principles of the European Community.

3.1.1.1. Directive 2004/52/EC on Interoperability

The European Directive on Interoperability of Electronic Road Toll Systems in the Community (Directive 2004/52/EC) does not refer explicitly to the Interoperability Management or its legal and operational framework. However, it describes some of the functions allocated to IM on an abstract level. Article 3 Section 1 states that the "EETS will be defined by a contractual set of rules allowing all operators and/or issuers to provide the service as well as a set of technical standards and requirements". This implies the need for an Interoperability Management responsible for providing, updating and monitoring those rules, standards and requirements.

In recital 20, the Directive furthermore explicitly refers to the Principle of Subsidiarity which is one of the major legal aspects that have to be taken into account when designing an IM for the EETS. The Principle of Subsidiarity as set out in Article 5 of the Treaty establishing the European Community emphasizes that (except in the areas which fall within the exclusive competence of the Community) the EC only acts when it is more effective than actions taken on a national, regional, or local level. It is closely connected to the principles of proportionality and necessity, which require that any action by the Community should not go beyond what is necessary to achieve the objectives of the Treaty. These principles have a major impact on the question whether IM components should be established on a national or pan-European level and whether they can be subject to national legislation.

3.1.1.2. Draft EC Decision (Version 8 – November 2008)

The draft EC Decision according to Article 4 Section 4 of the Directive (“Decisions relating to the definition of the European Electronic Toll Service”) has been subject to discussion in the Toll Committee. As for the legal and operational framework for an IM, input from Work Package 2 is expected from the Commission and delivered in this document.

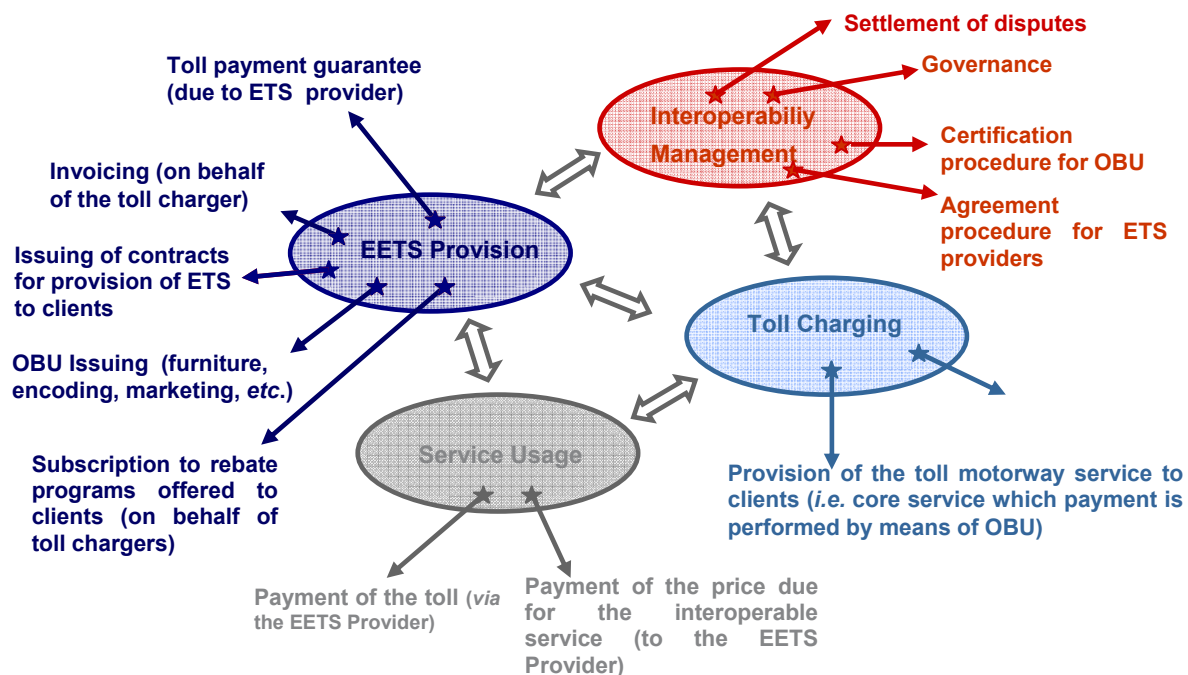
3.1.1.3. Other (Subsidiarity Principle, jurisdiction (“Meroni Principle”))

Finally, the legal environment for IM is also defined by European jurisdiction. Mentionable in this context are the European rules on delegation of powers as set out in the judgements of the European Court of Justice, especially in the so called “Meroni Principle” (Case 9/56, Meroni, June 13, 1958). The judgement contains the principle that the European Commission cannot delegate powers to bodies other than or controlled by the Commission itself. This does not rule out the possibility to set up such bodies as advisory bodies or consulting organizations.

3.1.2. IM Overview and input from WP1

3.1.2.1. IM Role according to CESARE III

While questions regarding the details of IM were left open in the CESARE III project, the conclusions of the project, such as the CESARE III role model were included in the CESARE IV, 2WP2 considerations. The Interoperability Management Role thereby was described as the functionality that deals with overall management of interoperable Electronic Fee Collection, including rules for interoperability, id-schemes, certification, common specifications, etc.



3.1.2.2. IM tasks identified within CESARE IV - WP1

Work Package 1 of CESARE IV provided inter alia a list of tasks (rights and duties) for every role in the EETS environment (Toll Charger, EETS Provider, Interoperability Management, Service User) in Report D1.2. It addressed the issue of interoperability on a detailed and practical level. However, regarding IM, this list of tasks was not exhaustive.

At this point, the aspects related to “who” will perform IM tasks and “how” these tasks are to be carried out, which are central for the legal and operational framework for the IM, were left to WP2 investigation.

3.1.2.3. Input Used

• External benchmarking studies

Work Package 2 decided to compare the legal and operational structure of industries where issues of interoperability are dealt with. WP2 therefore conducted benchmark studies of relevant industries to compare experiences and find out more about IM models established. The industries addressed were the energy sector, the railway sector, the telecommunication sector, as far as fixed lines are concerned, and postal services. The benchmark questions included specific questions on how certain IM tasks are performed and on who performs these tasks. The external Benchmark Studies are attached to this report in ANNEX 3: External benchmark studies.

• External benchmarking studies

Starting from these external benchmarking studies and through the analysis of the various interoperable sectors/industries selected for the External benchmarking studies, Work Package 2 analysed the main tasks allocated to IM role in the document Items Report.

This document makes a synthesis from the results of the different external benchmarking studies and according to the main themes in relation with IM role (24 items structured in 8 chapters).

Questions addressed in this report are whether IM components should be organized on national or pan-European level, whether they should be public or private organizations, and whether they should be implemented on a statutory or contractual basis. Factors taken into account were the time factor for actions / decisions of the IM components, legal rights that might be affected by the IM's decision, questions of competition, consistency and transparency, market dynamics and risks for the overall EETS environment.

Therefore the Items Report gives an overview of the different possibilities of setting up and organizing IM components for the various tasks that IM has to perform. The Items Report is attached to this report in ANNEX 2: Items Report.

• CESARE IV Advisory Forum

In order to include the knowledge and ideas of future stakeholders of the EETS environment in the proposal for a legal and operational framework of the IM, the CESARE IV Advisory Forum was asked for input on these issues. Therefore, one of the meetings of the Advisory Forum was dedicated to discuss on IM .

Finally, the high level structure for a legal and operational framework of IM is based on the discussions of the WP2 members at the plenary meetings and includes practical knowledge from other interoperable systems as much as expertise in tolling projects across Europe and inputs from potential partners in the implementation of EETS.

3.2. Participation in governance

In Work Package 1, the Interoperability Management was described as a role and the detailed tasks necessary to establish, coordinate, control and operated the EETS from a management perspective were assigned to this role. Work Package 2 was assigned inter alia to define who will participate in the IM role and set out the legal and operational framework for those IM components.

After taking into account the input described under point 1.1 above, the tasks of the Interoperability Management should be assigned not to a single organization/institution but to a number of components, some of them already existing, some of them to be created in the future. From the components still to be created some will be established on a national and some on a pan-European level.

3.2.1. European level

The European Commission, the Electronic Tolling Committee (ETC) and the Member States will continue to perform the IM tasks allocated to them in the European Treaties and in the Directive on Interoperability.

These tasks cannot be performed at national level and correspond to the minimum set of rules needed for implementing the EETS (e.g. definition of technical specifications of the EETS OBE).

These tasks will be mainly:

- to define and specify all certifications procedures, to collect in this purpose all TCs systems specifications that are held only by TCs themselves;
- to set up and update the overall legal and technical framework for the EETS;
- to make strategic decisions on the evolution of the service;
- to specify the EETS mandatory requirements and the EETS soft rules, i.e. in EETS Application Guide.

3.2.2. National level

Some of the central IM tasks will be assigned to components on a national level in each Member State. This conclusion can be drawn from the analysis of different industries in the Benchmark Studies and is in line with the Principle of Subsidiarity. Furthermore it will fulfil the need for a decentralised, flexible and practical solution for the operation of EETS on a daily basis. According to the different nature of IM tasks that should be performed, components that could participate in IM on a national level or perform subsidiary tasks, could be:

- National Regulatory Authorities (NRA) (only functional or dedicated entity);
- Notified Bodies;
- Dispute Resolution Bodies.

3.2.3. Standardization bodies

On a European level, the standardization bodies (CEN, ETSI) will continue to perform their tasks as part of the IM. In addition, the members of Work Package 2 have identified the need for a pan-European coordination of the activities allocated to the national level. Therefore, it is suggested to establish the following IM components at a European level:

- Coordination Group of EETS Legal Authorities
- Coordination Group of Notified Bodies.

The Coordination Group of EETS Legal Authorities should be composed of representatives from the relevant authorities of each Member State (NRA). Likewise, if needed, all Notified Bodies could be represented in the Coordination Group or Notified Bodies. European legislation requires the bodies notified in relation with a particular domain to participate in the corresponding Coordination Group, or to keep themselves informed of, and apply as general guidance, the administrative decisions and documents produced by their Coordination Group.

3.2.4. Involvement of stakeholders

Work Package 2 has not agreed on a suggestion to establish an individual IM component composed of EETS stakeholders (EETS Providers, Toll Chargers, Manufacturers) as such an organization outside of the control of the European Commission could not be equipped with decision-making powers. At the same time, the involvement of the EETS stakeholders should not be limited to a single IM component. In fact, stakeholders should be involved in the Interoperability Management of EETS at all levels and within all components through separate Advisory Forums (TC AF and EP AF) and public consultations. In order to coordinate the input given to the European and national IM components, stakeholders are free to form one or several private organizations. It is left to the stakeholders to decide on the internal structure of this organization.

3.3. Type of legal status for IM components

The type of legal status for the IM components is defined by the tasks allocated to each component and the overall legal environment as set out under point 1.2 above. During the process of discussion, various alternatives for the legal status of IM components were discussed, i.e. a Joint Venture structure based on a contractual framework, a European Agency with centralised mandatory power, decentralized bodies in the member states based on private or public law.

WP2 is in favour of a decentralized legal structure that, each time it is feasible, allocates the main IM tasks to a national level, coordinating those activities on a pan-European level and keeping the European level only for tasks that need centralization with no doubt (for instance, regulation which differs from transposition or associated rules that are in the scope of MS).

3.3.1. EETS National Legal Authorities

Note: Liability and funding will be covered in the next section (“Financial and Economical framework - Responsibility and liability”).

With respect to MS sovereignty, national level IM components are identified as EETS National Legal Authorities which may include for instance NRAs.

The analysis of the Benchmark Studies revealed that in most relevant industries, the main IM functions were allocated to national public bodies with mandatory power. Those National Regulatory Authorities (NRAs) are established under the national law of the Member States and are equipped with the power to make binding decisions for all parties involved.

From the benchmarking studies, WP2 has come to the conclusion that EETS National Legal Authorities should be independent from the stakeholders; and that this combination of legal power and independence from stakeholders is a rather effective condition to ensure at the same time:

- fair competition between the stakeholders,
- strong and executable decisions.

Note: When a national authority is a stakeholder (e.g. tax authorities) the “independent” role could be played for example by a ministry in charge of transport when the tax is collected by the ministry in charge of taxes...). This choice has to be left to each MS with respect to the Subsidiarity principle.

3.3.1.1. Definition of tasks

The main IM tasks allocated to the MS (only functional or dedicated entity) should be:

- Appointment of notified bodies, certification of equipments and stakeholders (cf. section 2.5)
- Monitoring of compliance of EETS rules and standards, including the rules for adhesion and withdrawal of stakeholders;
- Auditing of the daily provision of the EETS concerning procedures, level of quality, and compliance with the common set of technical and functional requirements;
- Maintaining and updating a register of certified EETS Providers Toll Chargers;
- Promotion and dissemination of information on the EETS.

3.3.1.2. Duties and rights (i.e. independence, mandatory powers, reporting duties)

In order to perform these tasks, the EETS National Legal Authorities need to be fitted with the power to make binding and executable decision towards all parties involved in the interoperable service. In order to guarantee the undistorted function of the EETS, EETS National Legal Authorities should also have the right to make interim decisions, if necessary. They should be able to react to complaints or distortions of the interoperable service immediately. They should have the right to demand necessary information from stakeholders as well as from any IM component. The decision of the EETS National Legal Authorities can have a strong impact on the stakeholders. Therefore, each party subject to a decision of EETS National Legal Authorities should be heard and have the possibility to make a statement in advance of any measure taken against it. The decision of EETS National Legal Authorities should also be subject to judicial review in each Member State according to national legislation.

3.3.1.3. Applicable law

As the EETS National Legal Authorities are established in each Member State, national law is applicable on their action i.e. on the subject of liability. Also the internal organization is to be decided by the Member States acknowledging and ensuring the duties and rights of the EETS National Legal Authorities. The Member State should also have the possibility to assign an already existing body that meets the relevant specifications with the regulatory tasks.

3.3.2. Coordination Group of EETS National Legal Authorities

Note: Liability and funding will be covered in the next sections ("Financial and Economical framework - and liability")

In addition to EETS Legal National Regulatory Authorities, a Coordination Group of EETS Legal Authorities (CGLA) should be formally established on a pan-European level. This Coordination Group should ensure the development of consistent regulatory practice and consistent application of the EETS common rules and procedures in all Member States. The EC Commission decision should address the implementation of this Coordination Group that will set up its own internal rules.

3.3.2.1. Definition of tasks

The main IM tasks allocated to the Coordination Group of EETS Legal Authorities should be:

- Inputs to Commission and Toll Committee work, in order to contribute to the definition and evolution of EETS rules and procedures;
- Issuing soft law (non binding documentation), recommendations;
- Overall Coordination of Member States' activities;
- Promotion and dissemination of information on the EETS at a pan-European level
- Definition of a European security policy.

Note about the first point (Inputs to EC Decision and Toll Committee work):

Whatever the way to define them, the EETS rules and procedures definition process will result in some common, official and very accurate technical rules (like the EETS OBU technical specifications and certification procedures, including the testing procedures). This high level of detail is required by the responsibility that results from the certification and to guarantee the rights of all stakeholders (e.g. protecting EETS Providers against discrimination).

WP2 team considers that there should not be any "interpretation" margin left to any stakeholder (even the MS). The minimum common set of rules must be complete and sufficient to ensure a proper running of the EETS. Supplementary rule or procedure could lead to inconsistencies.

Some "hard choices" have to be made, implying modification to TC and EP systems that will be more or less costly, (depending of each stakeholder existing system). That is the reason why this report proposes that EETS rules should be written by the Commission and imposed to all stakeholders, and that all the necessary discussions between the stakeholders should take place before the implementation of these rules through both TC advisory forum and EP advisory forum, and then in the Group of Coordination of EETS Legal Authorities, and finally in the Comité Télépéage.

3.3.2.2. Internal organization

All EETS national legal authorities should be represented in the Coordination Group of EETS Legal Authorities which should be created by a decision of the European Commission. It should be a forum to exchange experiences with the TC and EETS Providers in each Member State and should advise the European Commission based on that experience on request or on its own initiative. The members of the Coordination Group should endeavour to reach consensus whenever possible. If consensus cannot be accomplished, decisions should be made by majority rule (as mentioned supra this Coordination Group would not be endowed with any regulatory power: CGLA is to advise the Commission in order to help for regulation making process (including the Application Guide which is not binding) and, maybe, to provide non regulatory tools - or "soft laws").

3.3.3. Notified Bodies

Note: Liability and funding will be covered in the next sections (“Financial and Economical framework – Responsibility and liability”)

3.3.3.1. Definition of tasks

Some of the IM tasks need to be performed by a component with a high level of technical expertise and experience with complex, interoperable, technical systems. Those tasks should be performed by Notified Bodies which are appointed by the Member States. When appointing a Notified Body the Member States have to ensure that besides proven technical expertise the independence of the Notified Body and their staffs is guaranteed.

The tasks allocated to the Notified Bodies under the responsibility of the MS should be:

- Certification of EETS Equipment (certifications B11 and C11: OBE and RSE);
- Certification of Stakeholders (certifications E11-E12-E13-E21-E22: EETS Providers and certifications D11-D21: Toll Chargers’ System);
- Where requested by the MS, monitoring of compliance with security policy.

Note: These tasks do not include the definition (even partial) of the EETS rules and procedures used in the certification process, because:

- Notified Bodies can not accurately define these procedures as they do not have the total knowledge of the TC systems. The TC will have to contribute to the definition of the detailed procedures
- Notified Bodies are not legitimate to define these procedures: the final definition of EETS common procedures will probably imply “hard choices”. These decisions cannot be taken by any notified body.

Consequently, the Notified bodies will simply have to apply the already designed certification procedures.

3.3.3.2. Duties and rights

Stakeholders that are subject to the Notified Bodies activities should be obliged to provide all information that is necessary to perform the certification process. Notified Bodies have to take all the necessary measures to secure the confidentiality of sensitive information.

3.3.3.3. Internal organization

Regarding the definition of the notified bodies, WP2 team’s understanding of the decision is that NB have to be independent from the stakeholders, and since they are in charge of mainly technical certifications we supposed that the best stakeholders to take the role are the already existing companies specialized in technical control (for vehicles for example) and other legal certification (e.g. TÜV, Veritas). And they can also be a part of the national administration when this kind of technical expertise exists in a Member State (e.g. National Certification Agencies already exist in some MS). Both solutions can even be found in the same MS.

3.3.3.4. Applicable law

As the Notified Bodies are established in the Member States, national law is applicable on the Bodies' action e.g. on the subject of liability. Also the internal organisation is to be decided by the Member States acknowledging and ensuring the duties and rights of the Notified Body (due to the fact that possible mistakes in the certification process may cause considerable damage to parties involved in the EETS, the Notified Body should be covered by an appropriate insurance).

The Member States have the possibility to notify existing body(ies) that meet the relevant requirements in relation with the tasks of a Notified Body.

3.3.4. Coordination Group of Notified Bodies

Note: Liability and funding will be covered in the next sections ("Financial and Economical framework - Responsibility and liability")

Notified Bodies should have an extremely limited interpretation margin about EETS rules and procedures. But a coordination group can be useful to allow exchanges of information about difficulties encountered by the NB during certification procedures. This group would rather be created on the initiative of the NB themselves.

3.3.5. Dispute resolution bodies

No dedicated resolution bodies have to be established.

National courts of justice will be in charge of judicial review regarding EETS. In case, Court of Justice of European Communities may also be involved for cases that fall under its jurisdiction.

3.3.6. Toll Committee / European Commission

WP2 recommends that the ETC Committee shall be implemented as a permanent group.

3.4. Operational framework – Internal and external interfaces

The operational framework of the IM can be described by the tasks that are related to the IM as well as the IM internal and external interfaces see Figure 19: Example on IM tasks and internal and external interfaces. By IM external interfaces is meant the interfaces between the IM and its stakeholders, e.g. the interface between the IM and the EETS Provider. By internal interfaces is meant the interfaces between the IM components, e.g. between the EETS National Legal Authorities and the Co-ordination Group of EETS National Legal Authorities.

The tasks allocated to each IM component are already described in previous chapters as main responsibilities in Essential requirements for each component and repeated in more detail in 3.3 Hence, for simplicity it will not be repeated here. The IM internal and external interfaces are described by all the diagrams in Chapter 2 and will for simplicity not be repeated here. However, some internal interfaces are commented below.

3.4.1. IM interfaces

Internal Interfaces (Relationship between IM components)

- EETS National Legal Authorities / Coordination Group of EETS National Legal Authorities – Notified Body
While bi-lateral exchange of information between national authorities should not be restricted, it is suggested to focus the main flow of information on an exchange between the Coordination Groups. The Coordination Groups should pass the relevant information on to their members.

- EETS National Legal Authorities / Coordination Group of EETS National Legal Authorities – Dispute Resolution Body

While the EETS National Legal Authorities can be involved in dispute resolution on a first level, the actual judicial review should be independent from the regulatory body. Therefore, the Dispute Resolution Body may refer to the EETS National Legal Authorities or the CGLA for information, the decision-making process itself should be completely independent.

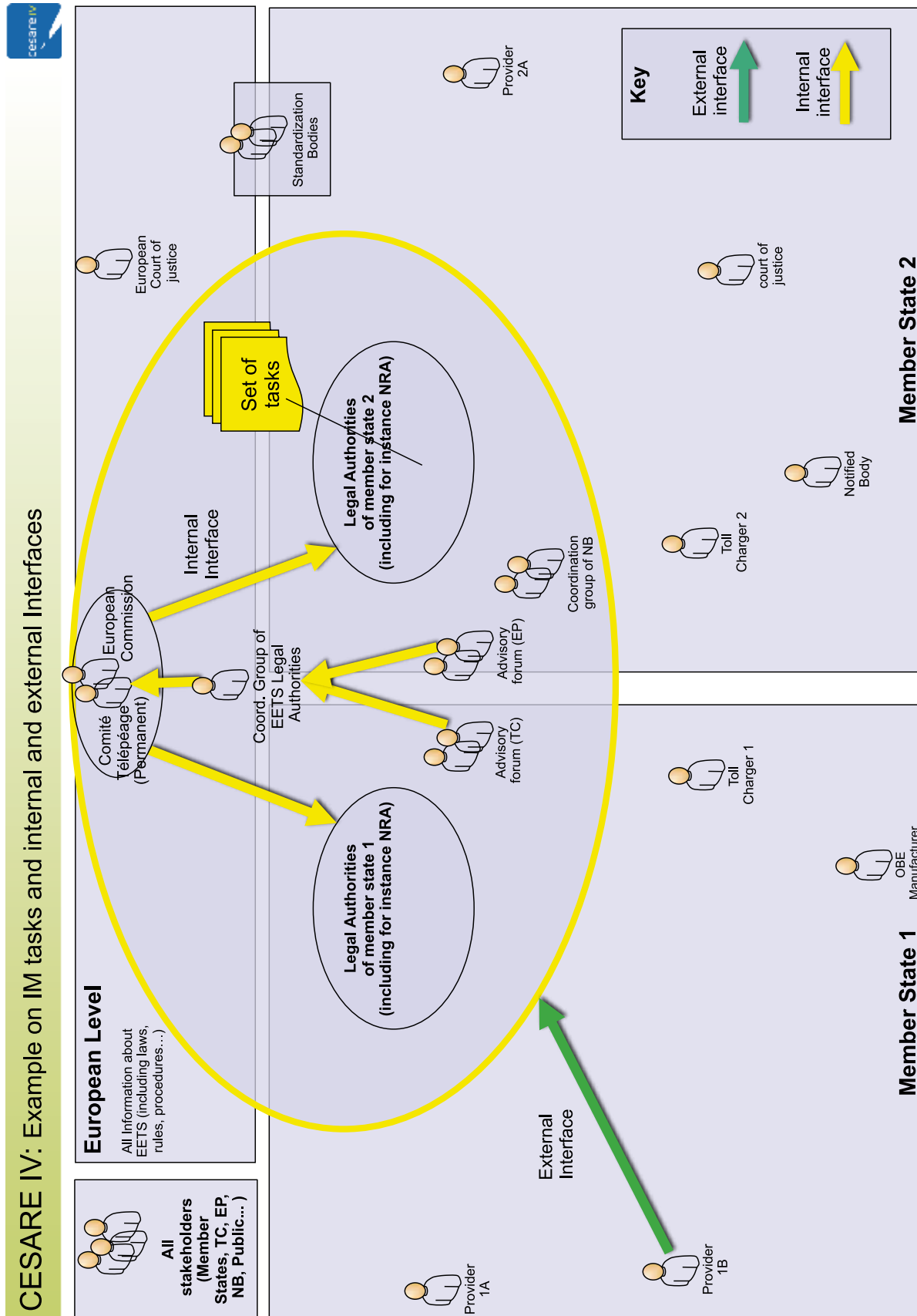
- Notified Body – Dispute Resolution Body

For the same reason, the interface between the Notified Bodies and the DSB should be limited to providing necessary information to the DSB.

3.4.2. Involvement of Stakeholders (EETS Providers, Toll Chargers, Service Users)

Both Advisory Forum of EETS Providers and Advisory Forum of TCs are to be implemented on the initiative of the relevant stakeholders and do not have to be formally addressed by the Commission decision.

Figure 19: Example on IM tasks and internal and external interfaces



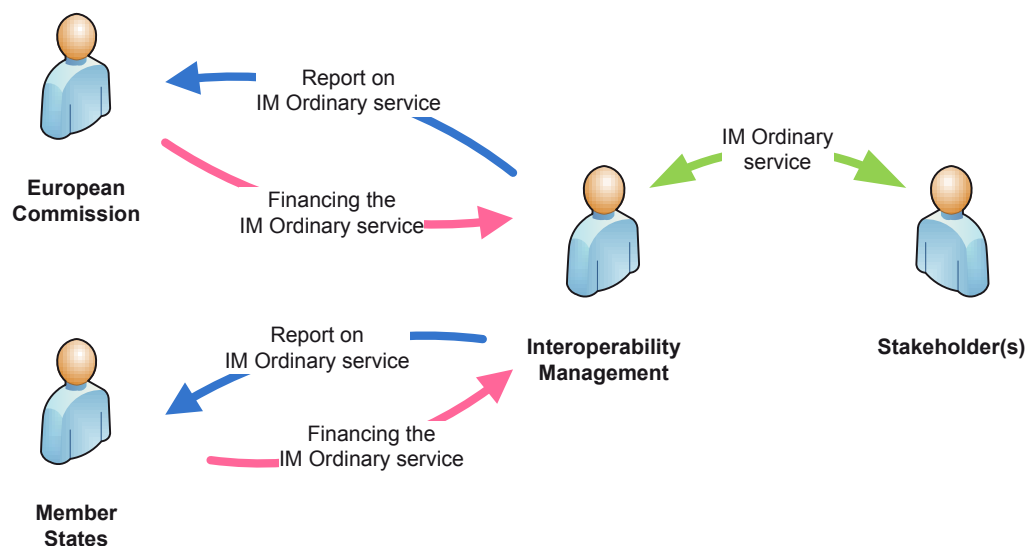
4. Financial and Economical framework

The main principle is that any IM service provided or any IM regulatory task performed by IM shall be paid either by the entity benefiting from the IM service or a third party financing the cost of the regulatory task, e.g. funding by a Member state via a public authority, e.g. Ministry of Transport.

Hence, there is a distinction between:

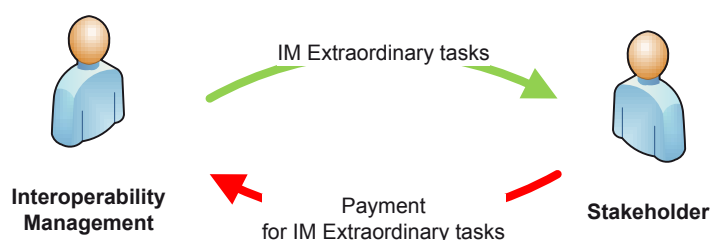
- an IM general interest task, that is not particularly dedicated to any stakeholder e.g. monitoring the implementation of the EETS test and certification policies (see 2.3). This kind of task is called “ordinary service” in the following paragraphs.

Figure 20 : Principle of IM general interest tasks and task financing



- a typical IM service provided to one or more clearly identified stakeholders (mainly EETS Providers and Toll Chargers, but IM can provide services to Notified Bodies, OBE manufacturers...): for example to any applicant for the EETS Provider certification, (see 2.5.3.4). This kind of task is called “Extraordinary tasks” in the following paragraphs.

Figure 21 : Principle of IM services and service payments



Hence, the principles recommended by WP2 for the payment for IM services and IM regulatory tasks financing could be the following:

- The identified stakeholders shall pay for the IM services they have specially required from IM (Extraordinary tasks);
- The European Commission and the Member State shall pay for the IM general interest tasks necessary for the Interoperability Management and operation of EETS (Ordinary Service);
- Some WP2 members suggested that a fee could also be collected from the EETS stakeholders (mainly TC and EP) for the payment of the IM general interest tasks;
- The initial costs for the establishment of IM are shared between the EC and the Member States (that could be considered as a part of the Ordinary Service).

This document does not, at this level of detail, go further into the principles for the calculation of the payments and task financing or how the split between the EC and Member States should be.

4.1. Ordinary service financing

4.1.1. Services to all users

- Definition of the EETS core service and procedures
- Provision of a continuously updated EETS core definition and procedures for interoperability to all stakeholders
- Provision of a set of standard EETS terms and conditions to be used in contracts
- Provision of common rules and procedures for data exchange
- Handling of requests from the stakeholders concerning clarification of EETS rules and procedures
- Handling of opinions and recommendations from any stakeholder on different issues
- Management of a numbering scheme for entities, procedures and equipment
- Provision of a continuously updated EETS test and certification policies
- Handling of requests from the stakeholders concerning the status of certification bodies
- Development and maintenance of procedures for settling of disputes between stakeholders
- Monitoring the daily operation of EETS and carrying through audits
- Development of the EETS security policy and the monitoring of its implementation
- Requesting and handling of information needed for audits and monitoring procedures
- Monitoring the implementation of the EETS test and certification policies
- Co-ordination between Member states organizations (national regulatory organizations, notified bodies and dispute resolving bodies) and the European Commission
- Monitoring the status of all Notified Bodies, of all certified EP and TC system, and of all certified OBE and RSE...
- Reports to national authorities on :
 - changes in the core service definition or crucial policies
 - EETS implementation of Authority constraints and/or requirements
 - EETS operational irregularities
 - regulatory tasks that are subject to authority financing

4.2. Extraordinary tasks financing

Extraordinary Tasks can be summarised in the following list:

- Managing the registration of a Provider, a Toll Charger, assessment of an OBE, a Road Side Equipment
- Appointment of a Notified Body
- Arbitration of a dispute between two stakeholders
- Decision in a preliminary ruling procedure
- Handling of a change request from a stakeholder (OBE manufacturer for example) concerning in the EETS rules and procedures.

5. Document revision history

Date	Version	Description
19.11.2008	0.1	First draft. Structure only. By V. Dumerc
26.11.2008	0.2	V. Dumerc
01.12.2008	0.3 / 0.6	Merging of contributions into D2.1
V. Dumerc added some contributions and conclusions		
03.12.2008	1.0	First version submitted to WP2
09.12.2008	1.1	V. Dumerc + C Ambrun
12.12.2008	1.4	Added some contributions by V. Dumerc
15.12.2008	1.45	R.Tempier – V.Dumerc
15.12.2008	2.0	Second version after commenting period, submitted to WP2
29.12.2008	2.1	Integrated some comments, added a glossary
02.02.2009	3.0	Integrated all comments, for WP2 team and steering committee validation
07.02.2009	3.1	Deletion of section 4.3 on request of Project Management Team
08.06.2009	3.2	Version 3.2 prepared by WP2 Leader (editorial changes proposed by C. Surmont accepted and no change on the content) – Approval of Project Management Team

ANNEX 1: Glossary and abbreviations

Glossary

The following Terms are used in the document.

Term	Definition
Certification	In the directive and the draft decision this word refers to all compliance checks with EETS rules, for all stakeholders and equipments. Regarding the vocabulary, the present report is more specific: <ul style="list-style-type: none"> • Equipments (OBE and RSE) are “Certified” • EETS Providers are “Approved” • Toll Chargers are “Qualified” • Notified Bodies are “Appointed”
EETS Service Provider (EP)	A legal entity (or group of legal entities) providing the European Electronic Toll Service (EETS) for all EETS toll domains to Service Users..
Enforcement	The process of compelling observance of a law, regulation, etc. (EN ISO 17573).
EETS toll transaction	The data describing the charged road use concluded by the Toll Charger according to national and local law taking into account the toll declarations.
Interoperability	The ability of systems to provide services to and accept services from other systems and to use the services so exchanged to enable them to operate effectively together (EN ISO 17573).
Interoperability Manager (IM)	In the EETS context, the Interoperability Manager (IM) is an entity or an organisation (i.e. a set of entities), which plays the role of managing the interoperability of the European Electronic Tolling Service, including in their functions the governance and other main components of the Service.
Notified Body	Body in charge of certain parts of the equipments and stakeholders certification/qualification/approval
On-Board Equipment (OBE)	Equipment fitted within or on the outside of a vehicle and used for toll purposes.
Role	Identifier for a behaviour, which may appear as a parameter in a template for a composite object, and which is associated with one of the component objects of the composite object. Roles defined in the European Electronic Service: Interoperability Manager (IM), Toll Charger (TC), EETS Provider (EP) and Service User (SU).

Term	Definition
Service User (SU)	A generic term used for the customer of an EETS Provider, one liable for toll, the owner of the vehicle, a fleet operator, a driver etc. depending on the context (EN ISO 17573).
Toll	A charge, a tax, a fee, or a duty in connection with using a vehicle within a toll domain (EN ISO 17573).
Toll Charger (TC)	A legal entity (or group of legal entities) in charge of the Toll Charging role, including amongst others, the operation of toll domains, collection of tolls and enforcement tasks.
Toll Context Data	A set of EETS relevant data related to a certain Toll domain. This information is expected to be loaded in the OBE in tolling systems based on GSSM/GPS technology.
Toll Domain	An area or part of a road network where a toll regime is applied (EN ISO 17573).

Abbreviations

The following abbreviations can be used in this document.

CEN	Comité Européen de Normalisation
CESARE	Common Electronic Fee Collection System for a Road Tolling European Service
CtTp	Comité Télépéage
DSRC	Dedicated Short Range Communications
EFC	Electronic Fee Collection
EETS	European Electronic Toll Service
EP	EETS Provider
ETC	Electronic Toll Collection
ETSI	European Telecommunication Standardization Institute
GNSS	Global Navigation Satellite Systems
GPS	Global Positioning System
GSM	Global System for Mobile Communications
HGV	Heavy Goods Vehicle
IM	Interoperability Manager (EETS Interoperability Manager)
ISO	International Organization for Standards
NB	Notified Body
OBE	On-Board Equipment
RSE	Road Side Equipment
SU	Service User (EETS Service User)
TC	Toll Charger (EETS Toll Charger)
UMTS	Universal Mobile Telecommunications System

ANNEX 2: Items Report

Version 3.0 | June 12, 2009

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1. Introduction

This document is an annex to the CESARE IV Report D. 2.1 Interoperability management framework.

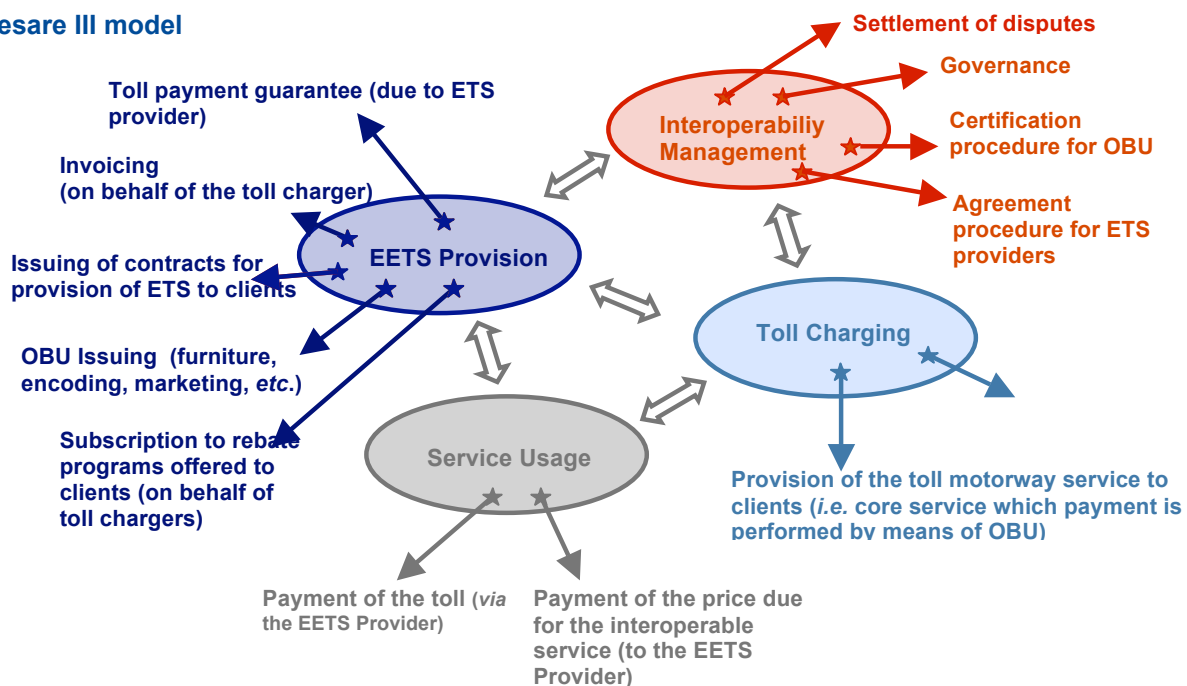
The Annex is a thematic description of interoperable systems/services already implemented. This Annex is to be used as an input to both Report D.2.1 and Report D.2.2, as it may provide interesting ideas and highlight some pitfalls that should be avoided.

2. Involved stakeholders/operators in interoperable electronic toll services

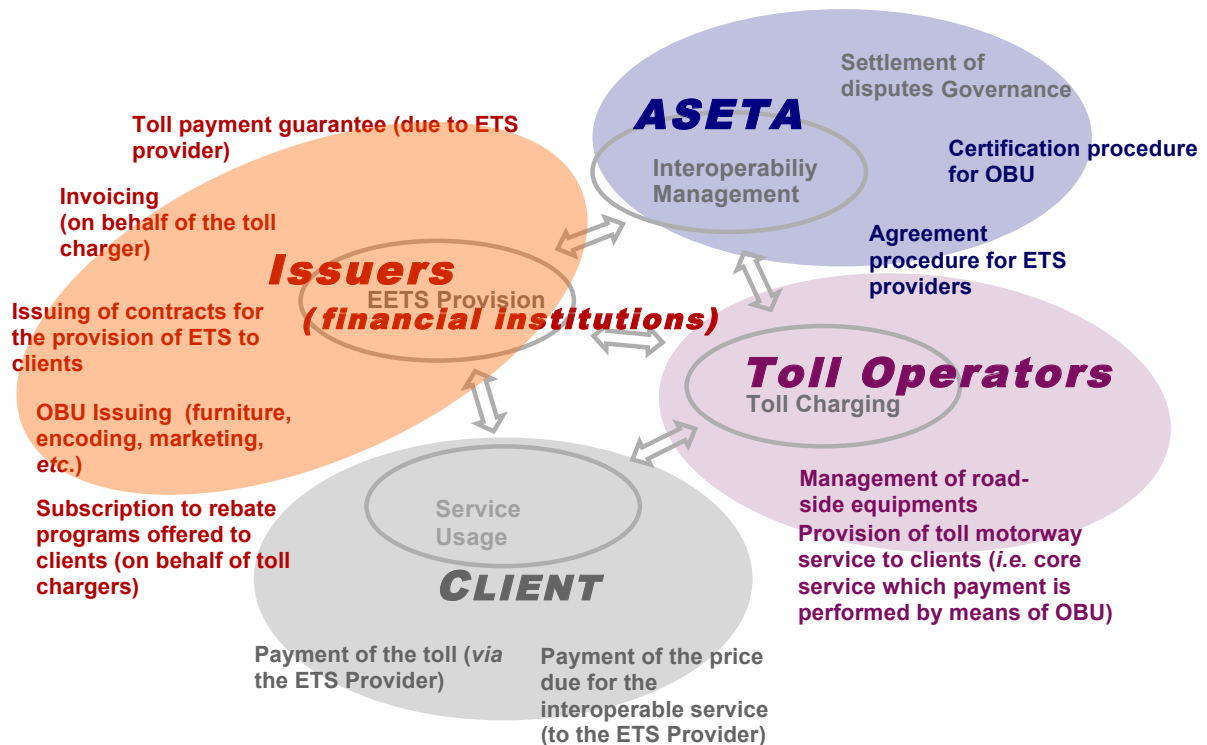
Item 1: Identification of stakeholders/operators of the service in existing schemes

WP1 conditions: no relevant condition for Item 1.

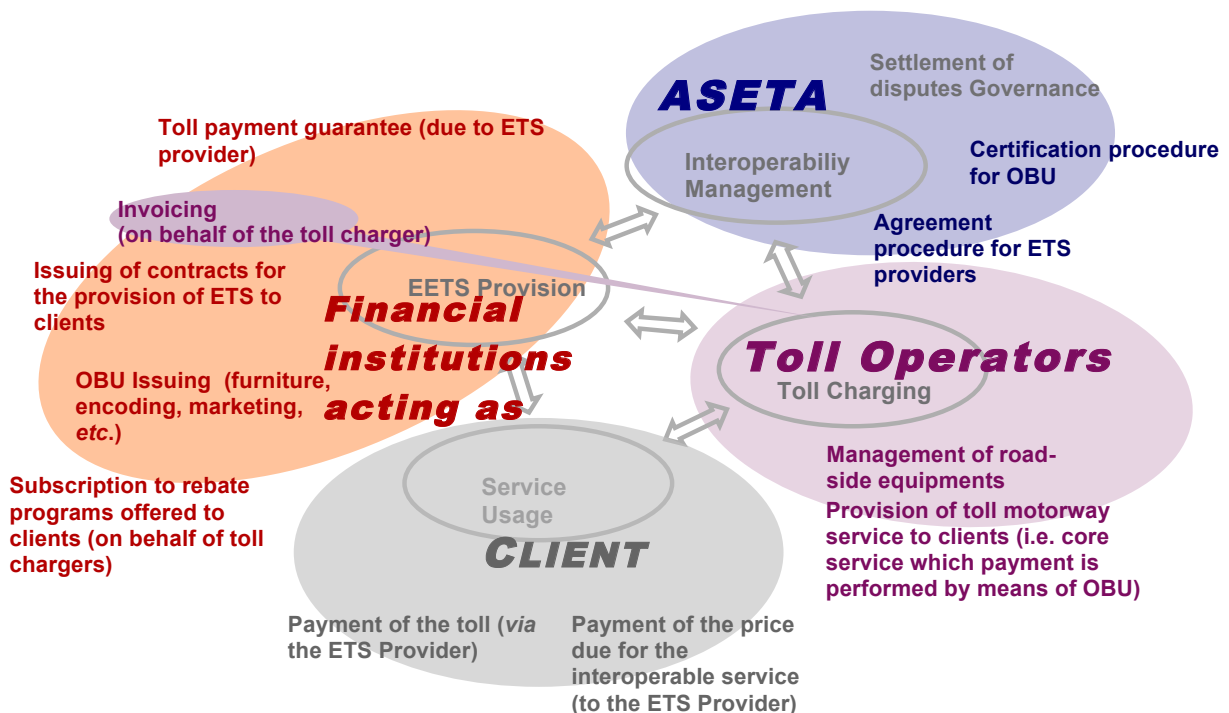
• Cesare III model



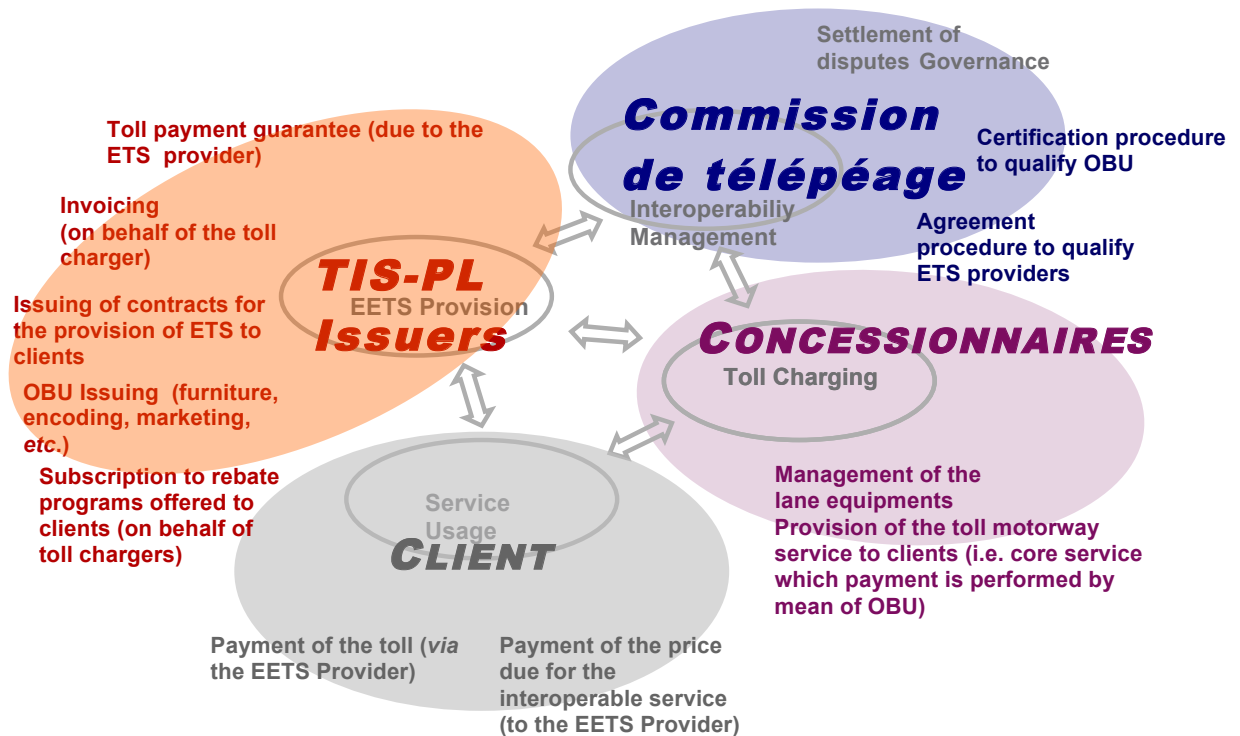
• Via-T (issuers other than financial institutions)



• Via-T (financial institutions acting as issuers)



• TIS-PL



3. IM status, financial framework and membership

Item 2: National bodies/entities for regulation/standardization of interoperable service

WP1 conditions: no relevant condition for Item 2.

2.1. Benchmarking studies

The external benchmarking studies of the energy, postal, telecommunications and the railway sectors show that a majority of member states have set up national regulatory authorities (NRA) which are in charge of regulation of interoperable service.

However, the studies point out that the tasks performed by these national regulatory authorities differ from state to state and from sector to sector

- Energy : in each member state, a national regulatory authority has been set up and is responsible for regulation but not for standardization.
- Postal service: member states are responsible to mandate a national regulatory body with statutory powers in order to enable them to fulfil their tasks.
- Railways: European Directives mandate national regulation to ensure compliance with the obligations arising from EU Directives and charge them with ensuring compliance with competition rules.
- Telecommunications: in each member state, a NRA has been set up. Standardization is drawn up by specific bodies which are coordinated by European or international organization.

2.2. Statement pros/cons

2.3. Conclusions and recommendations

The external benchmark studies point out the need for national bodies in charge of regulation. Most of the European Directives or Decisions recommend setting up national regulatory authorities.

Key success factors

- Tasks allocated: most of the national regulatory authorities are only in charge of regulation tasks. Standardization is drawn up by other organization.
- Statutory powers in order to enable them to fulfill their tasks
- Coordination with others national regulatory authorities

Item 3: European/international coordination of national bodies/entities (supranational body and/or decision-making process with unanimity/majority rule) for interoperable management tasks (coordination and other)

WP1 conditions: no relevant condition for Item 3.

No relevant information in benchmarking studies.

4. Legislative and contractual rules (including standards)

Energy	<p>Bodies:</p> <ul style="list-style-type: none"> a. CEER (Council of European Energy Regulators - Informal body): a private association coordinating the activities of the national regulators. Issuing non binding documents: guidelines, position papers and opinions. CEER is a not-for-profit association. b. ERGEG (European Regulators' Group for Electricity and Gas - Formal body): created by a decision of the European Commission and composed of the European regulators. ERGEG gives advise (on its own initiative or upon request) to the Commission on specific questions related to the regulation of the energy market. The stakeholders are involved through public consultations
	<p>Decision making process</p> <p>Decisions are made by majority rule. In case of the CEER by weighted votes. Those decisions however are not binding for the stakeholders or the commission</p>
Railways	<p>Body</p> <p>European Railway Agency was set up to help create an integrated railway area by reinforcing safety and interoperability. The Agency has been established to provide the EU Member States and the Commission with technical assistance in the fields of railway safety and interoperability. The agency is funded by the EC</p>
	<p>Decision making process (EC Regulation n° 881/2004)</p> <p>Unless stated otherwise, the decisions of Administrative Board shall be taken by a two-thirds majority of its members entitled to vote. Each member entitled to vote shall have one vote.</p>

<p>Postal service</p>	<p>Body</p> <p>There is a European Committee for Postal Regulation which is made up of representatives of postal regulatory authorities, but it does not appear to exercise any executive authority.</p> <p>Decision making process (ECPR intern regulation)</p> <p>ECPR Members shall endeavour to reach consensus whenever possible. If consensus cannot be reached, propositions shall be adopted by simple majority. Abstentions shall not be taken into account in calculating the majority.</p>
<p>Telecommunications</p>	<p>Bodies</p> <p>c. The ERG (European Regulators Group for electronic communications networks and services) set up by the Commission to provide a suitable mechanism for encouraging cooperation and coordination between NRA and the Commission, in order to promote the development of the internal market for electronic communications networks and services, and to seek to achieve consistent application, in all Member States, of the provisions set out in the Directives of the new regulatory framework. The ERG is composed of the heads of the relevant national authorities.</p> <p>d. The IRG (Independent Regulators Group) is an informal forum where the Commission is not present.</p> <p>The Commission has planed, in 2007 review process, to establish a European regulator to serve as its main advisor on all European regulatory affairs. It is not supposed to replace national regulators, but it is supposed replace the ERG and work in coordination with the NRAs and the European Commission.</p> <p>However, the actual ERG members NRAs have manifested their disagreement.</p> <p>Decision making process</p> <p>The ERG shall adopt its rules of procedure by consensus or, in the absence of consensus, by a two-thirds majority vote, one vote being expressed per member State, subject to the approval of the Commission.</p>

3.1. Statement pros/cons

3.2. Conclusions and recommendations

In the different industrial sectors evaluated, a European body has been created by European Directives or Decisions to address recommendations or to issue opinions to the Commission.
Reticence from Member States to delegate or mandate a pan European body in charge

Key Success Factors

- Membership: the independence of the NRA members could grant
- Tasks allocated,
- statutory powers in order to enable them to fulfill their tasks
- coordination with others NRA

Item 4: Membership and/or involvement into decision-making process for interoperability management tasks (plenary members, associated members, other participants)?

WP1 conditions: no relevant condition for Item 4.

4.1. Benchmarking studies

The external benchmarking studies show that the decision-making process for interoperability management tasks at national level (where relevant) is handled by independent members from market players. This has been decided to grant the independence of the NRAs members.

Although, in order to increase transparency in exercising regulation, the NRAs can before taking major decisions implement a public consultation. They also could have to justify their decisions.

The European bodies which have been set up are composed of the heads of the relevant national authorities. These bodies could be entitled to consult extensively and at an early stage with market participants, consumers and end-users in an open and transparent manner.

4.2. Statement pros/cons

4.3. Conclusions and recommendations

Key success factors

The Directives recommend that the national regulatory authorities members' should be legally separate from and operationally independent of operators. Indeed, the independence of the NRA members could ensure transparency and competition

However, it could be useful to associate EETS Providers and Toll Chargers

Item 5: Financial resources for interoperable management tasks

WP1 conditions: no relevant condition for Item 5.

5.1. Benchmarking studies

The external benchmarking studies show relevant information about this item in telecommunication and railway sectors.

Telecommunications:

The interoperable management tasks are supported by operators

Railways:

The regulatory body is financed through a fee fixed to a certain rate to be paid by the infrastructure operators.

The notified bodies are paid by the companies which are utilizing the notified bodies to become accredited.

The European Railway Agency is financed by the European Budget, which means by all Member States according to the budgeted requirements.

The organisation Rail Network Europe is financed through member fees.

Postal service and Energy:

Postal regulatory authority is responsible for disseminating details of access agreements.

The external benchmarking studies show that.

5.2. Statement pros/cons

5.3. Conclusions and recommendations

Key success factors

- National Regulatory Authority: EETS Providers and Toll Chargers should support interoperable management tasks.
- European Body: interoperable management tasks handled by this organization should be support by the European Budget

5. Contractual and non contractual documentation (including standards)

Item 6: Definition and maintenance of the interoperable core service, including its technical, functional, and service quality specifications

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N002	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D

6.1. Benchmarking studies

The external benchmarking studies show that only a few elements of a European wide interoperable core service are set up in the individual sectors (energy, postal services, railways and telecommunications).

The definition and maintenance of the interoperable core service is still mainly addressed at national level, except for the telecommunications sector where the regulatory framework has been defined by EU legislation and by specific bodies producing globally-applicable standards (ETSI, CEN).

Within the telecommunications sector, the National Regulatory Authority (NRA) ensures the application of the regulatory framework and develops standard in each country and the stakeholders/operators have to follow the NRA regulations. Commercial interoperability aspects are regulated in bilateral agreements between companies.

So far in the energy sector the Pan-European units (CEER/ERGEG) are not competent to define services and standards. However, the plans of the European Commission presented in the Third Liberalisation Package contain the creation of a new Energy Regulatory Agency where questions of standardisation can also be addressed.

The core service in the postal area is defined in statute (European Directives), although there may be pressure to redefine the core service as the market matures.

On a European level the technical specifications for interoperability within the railway sector are drawn up by the European Railway Agency and subject to approval by the Commission. NRAs usually consult the expertise of the operators before they implement new regulations, which stay under the responsibility of the NRAs.

6.2. Statement pros/cons

Time Factor

The interoperability must cover the entire European toll road network; therefore a European wide information flow in time has to be guaranteed by the IM (Condition G-N006 and G-N010). Also an update, when required, of the EETS core service definition and procedures for interoperability is absolutely necessary (G-N002). Another very important aspect concerning time factor is the availability of sufficient lead time for the implementation of the EETS core service.

Legal Rights

If the core service definition extends beyond an existing framework under which an actor operates and thereby causes major investments for the actor, the question arises how such actor could be compensated for the required investments. An example for such a case would be a private TC who operates in the framework of a concession and gets new obligation through the EETS core definition.

Competition

Obviously the EETS core service definition will be in coherence with the relevant competition laws. Additionally the issue of favouring large companies needs to be taken into account. It's important to avoid any possible kind of discrimination of smaller companies in a broad sense extending also to the avoidance of unnecessary burdensome requirements (which small companies typically could have difficulties to meet).

Consistency & Transparency

A thoroughly developed core definition of EETS is a key factor for achieving the necessary requirements of consistency and transparency. Ambiguities and gaps in the definitions would easily result in the development of individual solutions with ensuing miscommunications and disturbances. Hence, the core definition must be comprehensive and also easy to grasp.

Market Dynamics

As stated in the condition G-N004 the IM shall involve both, the EP and TC in the definition of EETS core rules and regulations in order to give them the possibility to express their opinions before any major decisions are made. Concerning the involvement of the EPs and TCs in the development of the EETS core rules and regulations, it's important to state that only certified EPs and TCs should be involved in the definition process, without obtaining any decision power. That means that all in the definition of EETS core rules and regulations involved certified EPs and TCs shall be in a position to express their opinions and are requested to provide their input and recommendations, but do not obtain any power in the decision making process.

Risks

The involvement of the actors (EP and TC) works as a quality assurance process in order to minimize problems of changes in the implementation of the EETS core service definition.

6.3. Conclusions and recommendations

Organisation

The basic IM tasks defined in the conditions G-N002, G-N004, G-N006, G-N10 ought to be fulfilled by the European Commission in terms of a developed Decision and associated Application Guides.

The EETS National Regulatory Authority which shall be set up in each Member State, shall obtain the mandate and power required for performing their tasks.

The European Commission shall define the regulations via Directives, Decisions and an Application Guide for EETS and monitor the cooperation between the NRAs.

The development of the core service definition and revisions thereto should be financed by public authorities (e.g. European Commission and/or Member States).

Key success factors

One of the key success factors is to regulate as little as possible for procedures and involve EPs and TCs in the definition of EETS core rules and regulations. Additionally the ENRAs shall obtain the required mandate and power by European and national legislation.

According to Condition G-N006 and G-N010 dealing with informing the EP and TC about EETS definitions and rules, clear communication and information procedures should be defined in order to guarantee a best possible information flow. Also in condition G-N004 it's stated that the IM shall establish procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made, which also leads to a necessity of setting up clear communication procedures.

Item 7: Definition of the basic requirements governing the relationship between stakeholders and/or operators, i.e. common elements of their relationship (identifying legislative rules and contractual part)

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

7.1. Benchmarking studies

According to G-N003 the IM shall provide a set of standardized EETS terms and conditions to be taken into account by the EETS actors in the development of their respective contractual relationship.

There are 2 types of contracts to be made by the EETS actors:

- TC-EP contract: This is the contract between the Toll Charger and the EETS Provider
- EP-SU contract: This is the contract between the EETS Provider and the Service User

In the TC-EP contract the necessary rights and duties of the TC and EP for achieving interoperability and preserving the interests of the SU need to be standardized (to the extent not covered by the legislative rules).

In the contract between the EP and the SU aspects particularly related to the different roles and responsibilities of the EP and TC, respectively ought to be standardized as diverging rules in these regards could be confusing for the SU.

In the external benchmarking studies it could be seen, that most contractual relationship between stakeholders and/or operators is built on a national level.

In the energy sector the relationships are mainly governed by national legislation and the decisions of the national regulator. The different stakeholders/operators are involved in the process through consultation.

Within the postal services access agreements are also managed on a national basis. Additionally the national authority set a list of minimum requirements that have to be included within those agreements.

The real access to the railway network is only possible via a bilateral contract on private level between the infrastructure provider and the railway service provider.

(NOTE: A major difference with the EETS is that a railway service provider is not required to have access to all infrastructures.)

Also in the telecommunications sector bilateral agreements between operators should follow National Regulatory Authority's regulations. Additionally a Directive set a rule regarding interconnection so that all network operators have rights and obligations regarding interconnection agreements.

The internal benchmarking study from Easy Go showed an example of regulated standard terms and conditions. Easy Go is organised as a joint venture between private and public partners on a voluntary basis. By entering this joint venture the EP has to accept the defined contractual terms between EPs and TCs. Additionally selected clauses must be transferred to the contract between the EP and the SU (customer contract).

7.2. Statement pros/cons

Time Factor

It's important that the set of standardized terms and conditions is fully developed before the first bilateral negotiations between the actors take place in order to avoid time consuming negotiations and development of diverging terms and conditions.

Legal Rights

Development of standardized terms and conditions will help to establish balanced and reasonable relations and avoid abuse of a strong position in the negotiations.

Competition

A minimum set of standardised EETS terms and conditions which are valid for all actors, helps to avoid discrimination between the actors.

Consistency & Transparency

By developing standardized terms and conditions the necessary requirements of consistency and transparency are supported.

Market Dynamics

Only necessary items should be included in the standardised EETS terms and conditions in order to allow maximum flexibility for the actors and thus encourage market development.

Risks

Standardization should be limited to the extent of standardization to what is necessary for achieving the objectives with EETS.

7.3. Conclusions and recommendations

Organisation

The set of standardised EETS terms and conditions should be developed in a process involving organisations looking after the interests of the respective parties and under the supervision of an impartial body.

To ease the dissemination and respect of standardization rules, operators should be consulted within the course of the decision-making process.

The development of standard EETS terms and conditions should be financed by public authorities (e.g. European Commission and/or Member States).

Key success factors

A key success factor is that only necessary items should be included in the standardised EETS terms and conditions for a maximum of flexibility and competition.

Item 8: Scale of international and/or European standards as a basis to technical and functional requirements for the interoperable core service(s)

8.1. Relevant CESARE 4 WP01 condition(s)

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D

8.2. Benchmarking studies

The external benchmarking shows major differences between the different sectors concerning the use of ISO and CEN standards for achieving an interoperable core service. In the energy sector there are very few European standards so far and the standards available are mostly national standards (requirement specifications). In the postal sector the results of the benchmarking indicated that there were no ISO or CEN standards used for defining the interoperable service. In the railway sector there are national standards and 'permissive' UIC agreements that are gradually replaced by European directives and decision (TSIs) of the Commission based on these Directives. Finally, in the telecommunication sector (fixed line network) the benchmarking results confirm that for interoperability it is essential that technical requirements are based on international and/or European standards defined by specific bodies (ITU, ETSI, etc.).

The internal benchmarking shows that for the interface between the Service User (the OBE) and the Toll Charger (the RSE for DSRC systems), the ISO and CEN EFC standards are quite crucial concerning defining the interoperable service. The OBE – RSE interface is probably the most essential interface in achieving interoperability. Hence, the main focus has been on the interoperability issues in this interface. There are also examples on project specific profiles based on the standards, e.g. the PISTA specification which includes a specific selection of functions, attributes etc from some of the EFC standards. For the interface between the Service Provider and Toll Charger there are no ISO and CEN standards used so far (there will be a new standard within 2010) and each national and regional interoperability toll regime have their own specification for interoperability.

The telecommunication sector may be the sector closest to the EETS concept as the telecommunication sector includes interconnected networks exchanging messages with well defined data. Hence, interoperability in fixed line networks requires technical, functional and contractual interoperability in the same way as EETS will do. The experience from the telecommunication sector clearly states the need for standards enabling interoperability.

8.3. Statement pros/cons

Time Factor

The time factor could be seen both from an operational and an implementation point of view. From an operational point of view the use of standards will be advantageous as the standards are based on research, state-of-the-art and best practice solutions. Hence, the use of standards should guarantee the most secure and efficient way of operating the interoperable EFC system and minimise the number of obstructions and delays in the system. From a purchase and implementation viewpoint the use of standards will also be advantageous as it will minimise the purchase and implementation period, e.g. by referring to standards in the specifications and using ISO and CEN standards for compliance testing of the different interfaces in the interoperable system.

Legal Rights

Not seen as relevant for Item 8.

Competition

Using ISO and CEN standards will improve the basis for a fair competition not only between the operators but also between the EETS equipment suppliers. By using standards as the core part of a specification for equipment supplies or operational services it will guarantee an equal platform for tendering processes both for EFC equipment and services. Using standards in the specifications will also be very much in line with the EC directives for tendering procedures and will be an important measure not to limit or distort competition so that national and EC competition laws are violated. The standards will also support the definition of objective access criteria for the different types of operators.

Consistency & Transparency

The use of ISO and CEN standards will support the requirements for consistency and transparency. One of the driving forces behind the standards is the objective of having open interfaces ensuring interoperability and equal competition terms. Any open interface can easily be tested for being compliant with the standard covering the interface and the same test points that are used for compliance checking may also be used as audit points for consistency and transparency. The EFC standards are build in a hierarchical way enabling standards to be linked to each other by referencing each other and importing information from each other. The linking, referencing and import of for instance data elements, support the consistency throughout the EFC system from an end-to-end perspective.

Market Dynamics

Using standards could cause a more static market than not using standards. Standards usually remain for many years when they reach a stable state. However, there are mechanisms that allow for updating standards but they should always be backwards compatible enabling 'old' and 'new' systems to work together. The benefits of using standards more than overweigh the possible negative consequences of having less market dynamic. There will always be a possibility both for new products and new services within the framework of the standards.

Risks

The use of standards will reduce the risks for errors and mistakes that could result in extensive losses and damages. The standards are based on best practice and state-of-the-art and will usually be well proven through real life implementations.

8.4. Conclusions and recommendations

Organisation

The WP01 condition G-N002 states that the IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective. The G-N005 states that the IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS. The external and internal benchmarking clearly confirms that the use of standards is both advantageous and necessary to achieve interoperability in EETS.

As EETS has many similarities with the telecommunication sector a possible way forward for EETS could be to adopt the administrative, organisational and regulatory framework used for Telecommunication. Transforming and adapting the telecommunication framework could then give the following distribution of IM sub-roles and responsibilities (strictly limited to the Item 8 related tasks):

• The European Commission shall

- define the rules via Directives, Decisions and Application Guide for EETS. This also includes any additional specification not covered by the standards but needed for interoperability. An Application Interface Profile is an example of an additional specification. Where necessary, the Commission may request that standards be drawn up by the European standards organizations (European Committee for Standardization (CEN), European Committee for Electrotechnical Standardization (CENELEC), and European Telecommunications Standards Institute (ETSI)).
- draw up and publish in the Official Journal of the European Communities a list of standards and/or specifications to serve as a basis for the implementation of EETS.
- monitor the co-operation between the EETS National Regulatory Authority in standard related issues.

• The Member States shall

- set up an EETS National Regulatory Authority (ENRA) in each Member state
- give the ENRA the mandate and power required for performing their tasks
- guarantee the independence of the ENRA with a view to ensuring the impartiality of their decisions

• The ENRA shall

- ensure the use of EETS rules and standards in EFC systems purchase, implementation and operation on a national level
- monitor that national EETS compliant systems implement international and European standards
- co-operate with each other and with the Commission in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of EETS rules and if needed participate in a co-ordination forum set up by the EC, e.g. a European EETS Regulators Group (EERG) to provide a suitable mechanism for encouraging cooperation and coordination between ENRAs and the EC. The EERG could be composed of the heads of the relevant ENRAs.

The organisational recommendation described above requires the establishment of at least the ENRAs which should be public organisations with the mandate and powers to fulfil their responsibilities listed above via legislation. The recommendation may also include the establishment of a public and regulatory organisation for co-operation between the ENRAs and the EC and between the ENRAs themselves (EERG).

The services provided by the IM related to the use of standards as a basis for the technical and functional requirements should be part of the IM regulatory tasks (EETS core service definition establishment and maintenance) which should be financed by public authorities, e.g. the EC and/or the relevant Member State.

Key success factors

The IM responsibility referenced as G-N005 on the use of standards could only be properly dealt with if the following pre-requisites are present:

- All relevant standards are available and stable enough to be used as a basis for EETS specification enabling EC to fulfil their responsibilities as listed above
- The ENRAs are given the required mandate and power by European and national legislation
- The co-operation between the ENRAs themselves, the co-operation between the ENRAs and the EC and the co-ordination between the co-ordinated ENRAs (EERG) and the EC is running smoothly

Item 9: Definition of common rules and procedures for data exchange between stakeholders/operators

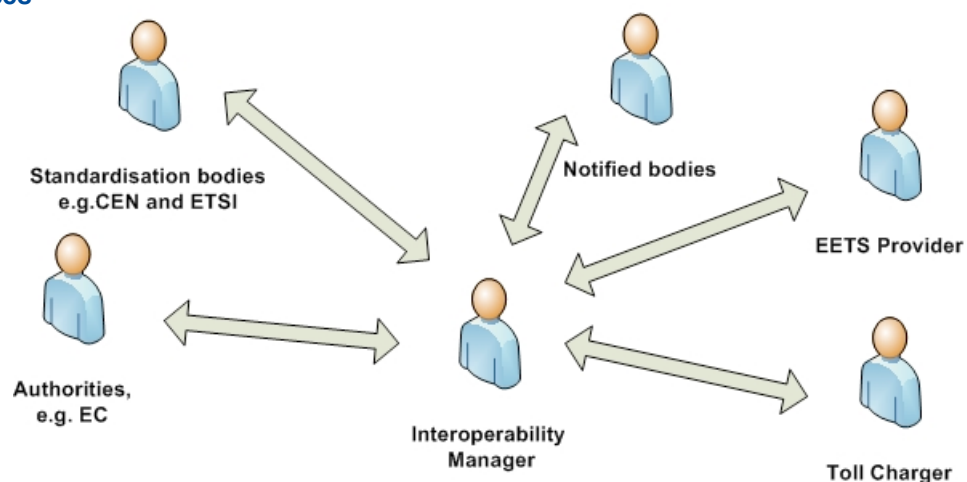
9.1. Relevant CESARE 4 WP01 conditions

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N007	IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service.	D

The data exchange between the EETS Provider and the Toll Charger is one of the crucial interfaces in EETS concerning interoperability. Condition G-N007 states that there shall be common rules for this interface to the extent needed for EETS. The condition does not state that it shall be the IM itself that establishes these rules but the IM is always responsible for that such rules are established and available. CEN TC 278 RTTT WG1 EFC is now preparing a new standard for the information exchange between the EP and TC and following the conditions mentioned in Item 8 the common rules and procedures should be based on this new standard.

Item 9 which is based on G-N007 focuses on the IM involvement in the interface between the EP and the TC. There are also other interfaces with data exchange, see Figure 1, where the IM is involved, e.g. between the Authorities and the IM. These interfaces are described in Section X in D.2.1 and are seen as outside the scope of Item 9. The interfaces between the IM and the EP and TC are covered by Item 6 and 7.

Figure 1: IM interfaces



9.2. Benchmarking studies

As for Item 8 the benchmarking shows major differences between the different sectors. In the Energy sector the common rules and procedures for data exchange are defined by national legislation and national regulators. The stakeholders are involved through consultation. For the postal services the data exchange is not an issue. For the railway sector it is stated that the responsibility for the common rules and procedures is within the domain of the European Railway Agency in co-operation with the European standardisation bodies. For the telecom sector the Member States shall ensure that NRAs (national regulatory authorities) take the utmost account of European Commission recommendations in carrying out their tasks. Where a national regulatory authority chooses not to follow a recommendation, it shall inform the Commission giving the reasoning for its position. Where the Commission finds that divergence at national level in regulations creates a barrier to the single market, the Commission may take the appropriate technical implementing measures. Usually, operators work on definitions under NRAs request and NRAs are responsible to define them as rules.

9.3. Statement pros/cons

Time Factor

The interface between the EETS Service Provider (EP) and the Toll Charger (TC) is the second most important interface for interoperability which means that an individual issue related to a certain local network may cause an obstruction to the complete system. In such a situation the time factor is critical and a resolution must be obtained without delay. Hence, concerning the time factor it is crucial that the IM ensures that there are unambiguous rules and procedures for data exchange between the EPs and TCs as well as exceptions handling when an obstruction occurs.

Legal Rights

The rules and procedures for data exchange should ensure that the legal rights of the EPs and TCs are not infringed. The exception handling as described above may directly affect the rights and duties of an individual operator. The exception handling should be based on certain legal requirements including communication of the subject matter, the right to explain, full reasoning behind a decision and the possibility to appeal a decision.

Competition

Common rules and procedures ensure a fair competition between operators and prevent any limitation or distortion of the competition with the risk of violating national and EC competition laws. Fulfilling the common rules and procedures will be an objective criteria for access to EETS both for EPs and TCs. Hence, the IM responsibility stated in G-N007 will be a measure to ensure equal terms and a fair competition.

Consistency & Transparency

Common rules and procedures for the data exchange between EPs and TCs will contribute to consistency and transparency with respect to the technical, administrative and organisational aspects. Common rules and procedures for the data exchange imply an open interface specification for the interface between the EP and the TC and enables access to control points for both consistency and transparency checking and monitoring.

Market Dynamics

The common rules and procedures may imply restrictions on market dynamics. However, the need for stable rules and procedures is overweighing the need for market dynamics. Within 2010 there will be a new CEN standard for the interface between the EPs and TCs. The standard will be an enabling standard, i.e. a tool-box with a set of possible messages between the EP and TC. The rules and procedures should be based on this enabling standard which is also expected to have the required flexibility to cope with any foreseen toll regime context and set of charging parameters.

Risks

The use of common rules and procedures including the use of CEN standards for the data exchange will reduce the risks for errors and mistakes that could result in extensive losses and damages. The standards are based on best practice and state-of-the-art and will usually be well proven through real life implementations.

9.4. Conclusions and recommendations

Organisation

The WP01 condition G-N007 states that the IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service. The G-N005 states that the IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.

A possible way forward for EETS could be to adopt the administrative, organisational and regulatory framework described for Item 8 which would give the following distribution of IM sub-roles and responsibilities (strictly limited to the Item 9 related tasks):

• The European Commission shall:

- define the common rules and procedures for data exchange via Directives, Decisions and Application Guide for EETS. This also includes any additional specification not covered by the standards but needed for interoperability. An Application Interface Profile (AIP) based on the future CEN standard for data exchange between the EP and TC (EN 12885 Information flows between service Provision and Toll Charging) is an example of an additional specification. The AIP could also be a CEN standard in the same way as the EN 15509 is for the interface between the On-Board Equipment and Roadside Equipment in DSRC based EFC systems.
- monitor the co-operation between the EETS National Regulatory Authority in EP – TC data exchange related issues.

• The Member States shall

- set up an EETS National Regulatory Authority (ENRA) in each Member state
- give the ENRA the mandate and power required for performing their tasks
- guarantee the independence of the ENRA with a view to ensuring the impartiality of their decisions.

• The ENRA shall

- ensure the use of EETS common rules and procedures in EFC systems implementation and operation
- co-operate with each other and with the Commission in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of the EETS common rules and procedures for data exchange between EPs and TCs and if needed participate in a co-ordination forum set up by the EC, e.g. a European EETS Regulators Group (EERG) to provide a suitable mechanism for encouraging cooperation and coordination between ENRAs and the EC. The EERG could be composed of the heads of the relevant national authorities.

The organisational recommendation described above requires the establishment of at least the ENRAs which should be public organisations with the mandate and powers to fulfil their responsibilities listed above. The recommendation may also include the establishment of a public and regulatory organisation for co-operation between the ENRAs and the EC and the ENRAs (EERG).

The services provided by the IM related to the exchange of data between the EP and the TC should be parts of the IM regulatory tasks (EETS core service definition establishment and maintenance) which should be financed by public authorities, e.g. the EC and/or the relevant Member State.

Key success factors

The IM responsibility referenced as G-N007 on the insurance that common rules and procedures for data exchange between EP and TC are established could only be properly dealt with if the following pre-requisites are present:

- The ENRAs are given the required mandate and power by European and national legislation
- The co-operation between the ENRAs themselves, the co-operation between the ENRAs and the EC and the co-ordination between the co-ordinated ENRAs (EERG) and the EC is running smoothly

6. Certification of equipments, approval of interoperable service providers qualification of core service operators

Item 10: Definition, maintenance and monitoring of rules and regulations for adhesion and withdrawal of operators

10.1. Benchmarking studies

In most benchmarking studies a clear distinction is made between the operator of the infrastructure and the commercial service provider who needs to cooperate with the operator of the infrastructure for providing his services.

In the railway sector a pre-examination of an infrastructure operator through the regulatory body is possible (audits etc.) according to applicable regulations. The regulatory body is responsible for the economical implementation of the interoperability independent of the Notified Body who is responsible for the technical implementation. The notified body is an accredited authority/body which can be nominated by every Member State and is chosen according to some prerequisites for accreditation, which are harmonised and notified European wide. The railway service provider will be certified by the national regulatory bodies. Hereby it's important to mention, that this certification needs to be done by every country where the service provider intends to use the railway infrastructure. In contrary the technical implementation done by the notified body is only necessary in one country as this is valid European wide.

In the telecommunications sector operators have to obtain the general authorization form NRA. The general authorization gives undertakings the right to provide electronic communications networks and services and to negotiate interconnection with other providers in the European Community. The NRAs may require the undertakings concerned to provide information necessary to verify compliance with the conditions of the general authorization or of rights of use. Where an undertaking does not comply with one or more of these conditions, the NRA must give it a reasonable opportunity to state its views or remedy any breaches within a period agreed with the undertaking or specified by the NRA. If the undertaking concerned does not remedy the breaches within the set period, Member States may empower the relevant authorities to impose financial penalties where appropriate. In cases of serious and repeated breaches, the NRAs may prevent an undertaking from continuing to provide electronic communications networks or services or suspend or withdraw rights of use.

In the energy sector rules and regulations are defined in national legislation. The national regulators are responsible for the definition, maintenance and monitoring of these rules and regulations.

In the UK postal sector, the statutory regulator Postcomm is responsible for managing the adhesion of new operators

10.2. Statement pros/cons

Time Factor

Adhesion and, especially, withdrawal decisions are critical for any undertaking. So, for the definition, and maintenance of rules and regulations in this matter, the factor time is less critical than due care.

Monitoring compliance to these rules should be performed in due time in order to detect diverging behaviour as soon as possible.

In order to allow an EETS provider to include a new toll domain in his service right from the start, a (new) toll charger shall have his EETS toll domain statement with the domain specific adherence criteria ready in due time before starting operations.

As an EETS provider shall be capable to serve all EETS toll domains, he shall have to make an agreement with all the toll chargers before he is registered.

Legal rights

For reasons of legal certainty, the basic requirements for adhesion and withdrawal shall be included in the Decision required by directive 2004/52 to define the EETS. The toll charger specific requirements for the adhesion of an EETS provider shall be published in a public register.

A regulatory body should have sufficient means to enforce compliance to clearly defined adhesion and withdrawal rules and regulations.

As a toll charger is normally operating under a public mandate, withdrawal of a toll charger may not be an option. Therefore, a regulatory body should have sufficient other means, e.g. (financial) penalties, to enforce the compliance of a toll charger to the adherence and withdrawal rules for an EETS provider.

NOTE: This seems to contradict 'The criteria for ... withdrawal of TCs shall ...' in G-N018. However, as the TC may be a government, a public entity or a concessionaire, measures to ensure compliance are more appropriate than withdrawal measures.

The rules and regulations shall include provisions that a decision of a regulatory body regarding adhesion or withdrawal is subject to judicial review. (See also item 24)

Competition

Rules and regulations for the adherence and withdrawal of an EETS provider shall be non-discriminating.

Rules and regulations for the adherence and withdrawal of an EETS provider shall ensure a fair competition with other EETS providers and also in relation to the toll charger's service for the users of his local system.

A toll charger shall develop and maintain an EETS toll domain statement with the adhesion conditions for EETS providers for accessing his toll domain.

Consistency and Transparency

As rules and regulations for adherence and withdrawal shall ensure non-discrimination and a fair competition, these rules and regulations shall be transparent and consistent throughout the EU.

In order to promote consistency and transparency, national regulatory bodies shall exchange information about their decisions and decision-making principles regarding adhesion and withdrawal.

Market dynamics

In order to allow market dynamics and innovations, the rules and regulations for adherence and withdrawal shall not impose any unnecessary restrictions on the means deployed by an EETS provider.

More in particular, rules and regulations for adherence shall allow a toll charger and an EETS provider to deviate from any technical requirements as long as this has no demonstrable negative consequences for other parties or on the achievement of the purpose with EETS as expressed in article I.1 of the Decision.

Risks

While defining rules and regulations for adherence and withdrawal, the risk for a TC not to be paid shall be balanced against the risk of making the EETS too expensive for the user.

10.3. Conclusions and recommendations

The Decision required by directive 2004/52 to define the EETS shall allow Member States to nominate a toll charger for a toll domain. Although the Decision may impose requirement on a toll charger and could include provisions to ensure compliance with these requirements, the Decision shall refrain from any specific adhesion and withdrawal provisions for toll chargers.

The Decision required by directive 2004/52 to define the EETS shall thus only specify the basic requirements for adherence and withdrawal of an EETS provider.

The Decision required by directive 2004/52 shall establish for each Member State a regulatory body to ensure non-discrimination and fair competition for EETS providers.

A toll charger shall develop and maintain an EETS toll domain statement with the adherence conditions for EETS providers for accessing his toll domain. The national regulatory body shall audit this statement in order to ensure non-discrimination, fair competition and compliance with the directive and national law.

A national regulatory body shall monitor the adherence to requirements for, and shall settle disputes regarding the adhesion of an EETS provider between:

- a toll charger operating in this Member State
- an EETS provider registered in this Member State.

A national regulatory body shall be sufficiently empowered to enforce compliance to:

- adhesion and withdrawal rules for EETS providers
- the adhesion of an EETS provider by a toll charger within its jurisdiction

A decision of a regulatory body regarding adhesion or withdrawal shall be subjected to judicial review (see item 24 for details).

Item 11: Basic requirements for rules and regulations for adhesion and withdrawal of operators

WP1 conditions: no relevant condition for Item 11.

11.1. Benchmarking studies

This item was not explicitly addressed in any of the questions in the benchmark study. Nevertheless, some conclusion could be derived from the answers on other questions.

A clear distinction is made between the operator of the infrastructure and the commercial service provider who needs access to the infrastructure for providing his services.

Generally speaking, an infrastructure operator has to comply with laws and regulations but there are no explicit rules for the adherence and withdrawal of such an.

A service provider is usually a private company, which has to conclude a bilateral agreement with one or more monopolistic infrastructure operators. In none of the other sectors the service provider was required – as he is in the EETS – to enter into a contractual relation with every European infrastructure operator.

Rules and regulations for ensuring non-discrimination and fair competition exist in the investigated sectors.

11.2. Statement pros/cons

Time Factor

Clear rules will facilitate and expedite the adhesion process.

Legal rights

Due to their fundamental nature, the basic requirements for adhesion and withdrawal should be stated in the Decision required by directive 2004/52 to define the EETS.

An EETS toll domain statement with the adhesion conditions for EETS providers shall be non-discriminatory, shall allow fair competition and shall comply with the directive and national law.

Competition

The basic requirements for rules and regulations for adhesion and withdrawal should include requirements to ensure non-discrimination and fair competition between EETS providers and between an EETS provider and a toll charger.

Consistency and Transparency

Due to their fundamental nature, the basic requirements for adhesion and withdrawal shall be transparent and consistent throughout the EU.

The basic requirements shall be published in the Decision to define the EETS.

Market dynamics

In order to allow market dynamics and innovations, the basic requirements for rules and regulations for adherence and withdrawal shall not impose any unnecessary restrictions on the means deployed by an EETS provider.

More in particular, the basic requirements shall include the principle that a toll charger and an EETS provider may deviate from technical requirements as long as this has no demonstrable negative consequences for other parties or on the achievement of the purpose with EETS as expressed in the Decision.

Risks

The basic requirements shall balance the risk that a toll charger is not being paid against the risk of making the EETS too expensive for the user.

11.3. Conclusions and recommendations

Basic requirements with respect to the adhesion and withdrawal of a toll charger are:

- The nomination of a Toll charger is at the discretion of a Member State
- A toll charger shall comply with the provisions of the Decision required by directive 2004/52 to define the EETS.
- A toll charger shall except an EETS provider
- A toll charger shall accept an EETS provider who fulfils defined adhesion criteria.
- A toll charger shall accept a vehicle with certified OBE from a registered EETS provider.

Basic requirements with respect to the adhesion and withdrawal of an EETS provider are:

- The EETS provider shall be trustworthy (See the Decision Annex II, 2.2.2.)
- The EETS provider shall provide a payment guarantee and maintain a sufficient solvency margin
- The toll charger shall comply with the provisions of the Decision required by directive 2004/52 to define the EETS
- The EETS provider shall accept the published requirements for a contractual relation with a toll charger for all toll domain under the scope of Directive 2004/52
- The EETS provider shall use certified OBE.

Item 12: Definition of a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (3 items specified under the generic certification theme: certification of equipments, approval of interoperable operators, qualification of operators of the service to be paid within the interoperable service)

CIV WP1 ref.	Reference Condition	Duty/ Right
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS	D
C-N002	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements	D

12.1. Benchmarking studies

The external benchmarking shows major differences between the different sectors concerning a definition of a common set of test requirements and certification procedures for ensuring compliance with the common technical and functional requirements. In the energy sector the requirements for operation and their definition and maintenance as well as the monitoring procedures are defined by national legislation and national regulators:

- For the postal service, certification and associated procedures seem not to be an issue.
- For the railway sector it is stated that the responsibility for a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements is mainly done by the Member States, where a regulatory body is responsible for the economical implementation of the interoperability and a notified body is responsible for the technical implementation.
- Finally the benchmarking results for the telecommunication sector (fixed line network) confirm the necessity of technical requirements and an appropriate common set of test requirements and/or certification procedures for ensuring technical and functional compliance for certification of equipment and qualification & adherence of operators.

The internal benchmarking shows that it is essential for interoperability that technical and functional requirements are based on European standards. As a consequence a common set of test requirements and/or certification procedures for ensuring the technical and functional compliance with these requirements is needed. Especially the “EasyGo interoperable system” has a management function, which is responsible for the specification and auditing of the common set of test requirements.

The railway sector and the telecommunications sectors may be the closest ones to the EETS concept. Since the liberalisation activities from the European Commission on opening these sectors started, their experience showed clearly that standards for certification on technical, functional and contractual level are needed for maintaining interoperability without disturbances. As consequence a common set of test requirements and/or certification procedures and an appropriate regulatory or notified body on European and national level for specifying and auditing these standards is a necessity for EETS.

12.2. Statement pros/cons

Time Factor

The development of the EETS test and certification policy, based on international and European testing and certification standards is a fundamental condition for EETS. Based on the test and certification policies there must be a common set of test requirements and procedures as a prerequisite for starting any certification activities. Therefore the time factor is critical and the procedures must be in place in enough good time to verify compliance before the start of the operation of EETS.

Legal Rights

A common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the EETS requirements should ensure that the legal rights of the EPs and TCs are not infringed. Therefore the EETS test and certification policy partly based on international and European testing and certification standards for the EFC applications) must be binding for all EETS Stakeholders, especially the EPs and TCs are directly affected. In some cases, standards leave some room for interpretation. In such cases it is important as stated in C-N006 that the EPs or TCs or their representative organisations have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements. Is there the exceptional case, that standards leave room for interpretation, the TCs or EPs have the right to request clarification by the certification bodies..

Competition

Implementation of the EETS test and certification policies, (using international and European testing and certification standards for EFC applications) will improve the basis for a fair competition not only between the operators but also between the EETS technical equipment suppliers. Contracts between EPs and equipment suppliers will include test and certification procedures recognized for EETS service. Therefore standards and appropriate test and certification procedures are needed for the purpose of ensuring equal treatment of the equipment suppliers and objective access criteria for EPs.

Consistency & Transparency

A common set of test requirements and/or certification procedures for ensuring technical and functional compliance will contribute to consistency and transparency with respect to the technical, administrative and organisational aspects. This common set of test requirements and/or certification procedures is devoted to check the compliance of interfaces with EETS standards.

The EETS stakeholders and EETS equipment suppliers must be able to trust the common test requirements and/or certification procedures. Therefore it is very important to support the consistency throughout the whole EFC system (also valid for tests likely performed by individual TCs) from an end-to-end perspective.

Market Dynamics

Stable rules and procedures may imply restrictions on market dynamics. To establish interoperability, agreed standards are needed. The use of a common set of test requirements and/or certification procedures for ensuring compliance with the common technical and functional requirements is an overweighing factor in relation to market dynamics. Interim criteria or solutions for the introduction of new technologies or new standards have to be developed. Due to the fact that research and development activities are also continuing on EFC level, it is prerequisite that also new technologies and their benefits could be included in the EETS. A kind of transition period is needed therefore.

Risks

The use of a common set of test requirements and/or certification procedures for ensuring compliance with the common technical and functional requirements will reduce the risks for errors and mistakes that could result in extensive losses and damages.

12.3. Conclusions and recommendations

Organisation

The WP01 condition C-N001 states that the IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS. In addition other relevant WP1 conditions (C-N002, C-N003, C-N004, C-N005, C-N006) state that the IM is in charge regarding information, monitoring and establishing appropriate procedures to ensure that the EETS test and certification policy is properly implemented and operated.

The common set of test requirements and/or certification procedures is especially focusing on certification of equipment, approval and qualification of operators (EETS Provider and Toll Chargers) as well as on performance monitoring during the operation of EETS to ensure the defined quality level.

The experience shows that tests for certification of equipment (e.g. EETS OBU, Road Side Systems, central systems, etc.) are based on two levels:

- The first level is a technical verification of equipment against the valid standards and should be initiated by the equipment manufactures and performed by notified bodies. A defined standard is specified in the procurement process and compliant bids must meet the prescribed standard. A notified body should be in charge controlling that individual equipment manufacturers meet the defined standards.

The second level ("suitability for use") is compatibility check on system level for the purpose of showing that the complete system of hardware, software and procedures is compatible with EETS.

The successful certification of the equipment and the service is one of the basic issues for a well functioning EETS Service.

Summarising the analyses for Item 12 the following distribution of IM sub-roles and responsibilities could be given:

• **The European Commission shall:**

- define the rules via Directives, Decisions and Application Guide for EETS and the IM. Regarding the common set of test requirements and/or certification procedures the EC may request, where necessary, that the standards be drawn up by the European standards organisations.
- draw up and publish in the Official journal of the European Communities the common set of test requirements and/or certification procedures to serve as a basis for the implementation of EETS. A smooth transition from existing equipment to equipment certified according the standards for EETS have to be guaranteed.
- set up or approve independent notified bodies that could assist the stakeholders for the “1st level” certification
- monitor the relation between the independent notified bodies and the ENRAs in issues related to the common set of test requirements and/or certification procedures
- receive requests from EETS Stakeholders in case of problems between the ENRA and stakeholders regarding the common set of test requirements and certification procedures

• **The Member States shall**

- set up an EETS National Regulatory Authority (ENRA) in each Member state
- give the ENRA the mandate and power required for performing their tasks
- guarantee the independence of the ENRA with a view ensuring the impartiality of their decisions
- define a deadline after a request for certification at the ENRA have to be performed (maximum 3 months)

• **The independent notified bodies shall:**

- perform the 1st level certification procedures (according to defined timeframes)
- base all test requirements and/or certification procedures on transparency and consistency

• **The ENRA shall:**

- ensure the use of EETS common rules and procedures in EFC system implementation and operation within the national Member states
- Co-operate with the independent notified bodies in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of the EETS common rules and procedures for the common set for test requirements and/or certification procedures.
- be the only contact person for the EETS stakeholders to certify their equipment
- receive requests from EPs and TCs for 2nd level certification of their equipment after successful 1st level certification by the independent notified bodies.
- Receive requests in English language or in the national language, as selected by the stakeholder making the request.
- make available all necessary documentation needed for a successful certification of EETS equipment to all EETS Stakeholders
- guarantee consistency and transparency of the test and certification procedures for the operators on national level
- forward requests for additions in the available standards in case there is some room for interpretation
- make a complete documentation of the all certification procedures

• **The organisation for co-operation between ENRAs shall**

- ensure information exchange between ENRAs to ensure consistency between the decision taken by different ENRAs

The organisational recommendation described above requires the establishment of at least the ENRAs and the independent notified bodies. The ENRAs should be public organisations with the mandate and powers to fulfil responsibilities listed above based on legislation. The recommendation may also include the establishment of independent notified bodies and organisations for co-operation between ENRAs themselves.

Key success factors:

- All relevant standards are available and stable enough to be used as a basis for EETS specification enabling EC to fulfil their responsibilities as listed above (minimising of room for interpretation within standards)
- Published description and documentation for all required EETS test requirements and/or certification procedures
- Solely use the English language within the EETS certification and test policy
- The ENRA and European independent notified bodies are given the required mandate and power by the European and national legislation.

Item 13: Audit of the daily provision of the interoperable core service(s) concerning procedures, level of quality and compliance with the common set of technical and functional requirements

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N021	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D

13.1. Benchmarking studies

According to Necessary Condition G-N021 of WP01, Deliverable 1.2, the Interoperability Management shall audit the operation of EETS Providers and Toll Chargers and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.

The external benchmarking studies of the energy sector, postal services, telecommunications and the railway sector show that in the evaluated industries the auditing of stakeholders / operators and their equipment is performed by national regulatory bodies.

In the postal sector the member states are responsible to mandate a national regulatory body (i. e. Postcomm in the UK) with statutory powers in order to enable them to fulfil their tasks. On the European level there is a European Committee for Postal Regulation composed of representatives of the national regulatory authorities. This committee coordinates the national bodies but does not have any executive authority.

In the telecommunication sector it is also the national regulatory authority which performs the task of auditing. The national authority supervises the operators in the market and controls compliance with general regulations for all telecommunication operators in areas like consumer's rights and the quality of service. The auditing is based on standards set by the European Telecommunications Standards Institutes (ETSI). The national regulatory authorities are coordinated by the European Regulators Group (ERG). The ERG is therefore composed

of the heads of the relevant national authorities. Another organisation for cooperation is the Independent Regulators Group (IRG) which is an informal forum without representation of the European Commission.

In the railway sector the national regulatory bodies perform the task of auditing the daily provisions of the interoperable service. The European Commission coordinates the national authorities established by the member states. Currently the European Commission plans to establish a European regulatory body to deal with cross-national issues and improve coordination of the national regulators.

In the energy sector the national regulators perform the task of auditing stakeholders / operators. The grid operators have to support the competent national authority and fulfil certain monitoring and reporting obligations according to national law. The national regulatory bodies are coordinated by the European Regulators' Group for Electricity and Gas (ERGEG) which was created by a decision of the European Commission. Another (informal) European body for coordination is the Council of European Energy Regulators (CEER).

In the EasyGo system auditing of the daily provision is performed by the EasyGo management. Assumed or actual problems of the interoperable core service are investigated by the management with support of the issuers and operators.

13.2. Statement pros/cons

The external benchmarking studies reveal that other industries rely on national regulatory authorities for auditing interoperable services. At the same time there also seems to be a need for pan-European coordination of those activities. In the EasyGo system on the other hand the task of auditing is transferred to the EasyGo management.

Time Factor

The aim of auditing EETS Providers and Toll Chargers and their EETS related equipment on a day-to-day basis is to ensure compliance with EETS requirements at all times and to detect possible obstructions to the service as early as possible. Therefore the auditing has to be performed by an organisation which is on the one hand closely involved in the daily routines of the service and on the other hand capable of providing an immediate reaction to arising problems. As EETS is a complex system with many stakeholders involved obstructions in one area of the system may affect the service as a whole. This implies the need for the auditing organisation to react to obstruction without delay and with mandatory power.

Legal Rights

EETS Providers and Toll Chargers are directly affected to the work of the auditing authority. There will be some defined duties of cooperation with the authority (i. e. reporting duties, access to information) and the need to react to suggestions to avoid or solve obstructions to the interoperable service. As auditing will affect the legal rights of EETS Providers and Toll Chargers they should be informed about measures taken by the auditing authority and get consulted at any time. They should have the possibility to make petitions and appeal decisions that affect their legal rights.

Competition / Consistence & Transparency

An auditing authority must be independent from EETS Providers, Toll Chargers and also from political influence in order to guarantee the task of auditing being performed in a non-discriminating way. To achieve fair competition in the European Union auditing activities should be coordinated on a European level. This would also help to avoid a lack of consistency throughout the entire system. The procedure for auditing and the results should be transparent for stakeholders who are affected by it.

Market Dynamics

When performing the audits the auditing authority may detect possible improvements to the EETS requirements as the market develops. The authority should therefore be able to make suggestions for the optimisation of the EETS.

Risks

Auditing EETS Providers, Toll Chargers as well as their EETS related equipment is a crucial factor to the success of the interoperable service. The auditing authority should therefore be best qualified (equipment, knowledge and staff) to perform this task.

13.3. Conclusions and recommendations

- Similar to other related industries the task of auditing the operation of EETS Providers and Toll Chargers and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements should be performed by a national regulatory body. The member states should be free to establish a new organisation or allocate this task with an already existing authority.
- The audits should be performed by a public body which has the power to fulfil the assigned responsibilities with mandatory power.
- Duties and responsibilities of the national regulatory body in regards to auditing should be defined on a European level to ensure equal performances in each member state. Furthermore, independence of the national regulatory bodies from the stakeholders as well as political influence has to be guaranteed.
- The work of the national regulatory authorities should be coordinated on a European level.
- EETS Providers and Toll Chargers should be involved in the audits and contribute recommendations to the effectiveness of the audits.

Item 14: Organisation of overall monitoring and sharing of responsibilities between involved stakeholders and operators

WP1 conditions: no relevant condition for Item 14.

14.1. Benchmarking studies

The internal and external benchmarking studies do not include specific details on the issue of sharing of responsibilities between involved stakeholders and operators. From the list of conditions provided by WP01, D 1.2 the following conditions are relevant to this issue:

- G-022: EP and TC shall cooperate with IM while auditing the compliance of equipment according to the defined rules and standards.
- AS-N005: EP shall on request provide raw charging data to the TC for enforcement, monitoring and auditing purposes.

As for the organisation of overall monitoring it is referred to the analysis of the benchmarking studies provided in item 13. In addition to that, the following conditions of WP01, D 1.2 are relevant to the issue of monitoring:

- G-N003: IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.
- G-N004: IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.
- G-N017: IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on a non-discriminatory basis.
- G-N024: IM shall monitor that appropriate security lists (e. g. hot lists, black lists, white lists) are distributed according to proper standards.
- G-N025: IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.
- G-F002: IM may monitor relevant technical developments and initiate research and development activities as it deems fit.

14.2. Statement pros/cons

In regards to organisational issues it is referred to the statement made in item 13. The overall monitoring should be organised in the way that is proposed for the auditing for the same reasons.

Additionally it is necessary for the interoperability management to have access to all relevant information to accomplish the monitoring process. Therefore, EETS Providers and Toll Chargers are obliged to cooperate with the monitoring authority and provide the relevant information.

14.3. Conclusions and recommendations

In addition to the recommendations made for item 13, the following conclusion can be drawn:

- The monitoring authorities on national and pan-European level should be enabled to request the relevant information from EETS Providers and Toll Chargers in order to perform their tasks.
- The overall monitoring should as least include the following aspects:
 - Implementation and adhesion of defined test and certification policy.
 - Monitoring the adhesion and withdrawal of EPs to the service on a non-discriminatory basis.
 - Monitoring the distribution of appropriate security lists.
 - Monitoring of the implementation and adhesion of security policies.
 - Monitoring of relevant technical developments and initiating research and development activities.

Item 15: Development and implementation of new technology

CIV WP1 ref.	Reference Condition	Duty/ Right
G-F002	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

15.1. Benchmarking studies

The results of the external benchmark studies on this matter are summarized below.

Telecommunication

“The operators which develop and implement new technology under the interoperable standards defined by the international, European and/or national organizations. However, National Regulatory Authority continues to allocate scarce resources”

Railways

European Railway Agency (European Commission) is responsible for monitoring relevant technical development.

Energy:

The grid operator is responsible for the development and implementation of new technology.

Postal:

It is entirely a matter for the market players

EasyGo

The relevant actor based on the instruction from the EasyGo management.

The answers to this specific question in the external benchmarks were not very extensive. Beside the railways sector and the EasyGo System, where the task was assigned to the European Agency or the EasyGo Management respectively, the monitoring of technical development and the initiation of R&D activities is left to the operators or the market players. This seems to be a valid approach, since the operators of the service themselves are in the best position to improve the service and to evaluate advantages of new developments. Nevertheless it seems questionable, whether every operator can decide on its own on the introduction of new technologies. To ensure interoperability of the services, the usage of new technology is to be harmonised in the sector. As an example, a national postal service can decide on the introduction of 2D barcodes instead of traditional stamps for letters. If these letters are sent to a foreign country, this barcode needs to be accepted and validated by another postal operator. This requires harmonisation and regulation.

The current draft of the EETS decision picks up this approach and defines a procedure on testing and introducing of new technology: “In view to allow for EETS technical adaptation, Member States may temporarily (maximum 2 years) allow, on limited parts of their toll domain, pilot toll systems incorporating new technologies or new concepts which do not comply with one or more provisions of Directive 2004/52/EC and this Decision.” The current decision does not regulate at this point of time consultation of regulatory bodies nor does it describe the procedure how to incorporate a new technology, into the overall framework following successful pilot tests.

15.2. Statement pros/cons

Time Factor

Time is not considered to be a critical factor for monitoring the development of new technology.

Legal Rights

Evaluation of new developments and possible technical implementations shall as early as possible take into account any legal constraints, e.g. the allocation of scarce resources, like radio frequencies, in the telecommunication sector.

Competition

Monitoring of new technology developments is itself not considered critical for competition regulation. It becomes an issue, when the abilities of stakeholders in the framework are different and the adoption of new technology, if relevant for interoperability, is more complicated for some of them. Co-Operation between different stakeholders in R&D is upon their own decision and must not be forced or regulated.

Consistency & Transparency

Monitoring of new technology developments is itself not considered critical for consistency and transparency. However, the process for adoption and introduction of a new technology needs to be transparent to avoid disturbances in the system and discrimination of any stakeholder in the framework.

Market Dynamics

The capabilities of a stakeholder to monitor and adopt new technology development can lead to a substantial advantage in the competition. While monitoring itself is not critical, the introduction of new technology, as far as relevant for interoperability, in the framework can influence the market conditions of the stakeholders and must therefore be handled carefully in a non-discriminatory way.

Risks

Where the monitoring of new technology development does not influence the overall framework, the risks are limited to the affected stakeholder and therefore not relevant in this context. However, the process of introducing new technology into the framework is considered very critical since it requires harmonisation and coordination with all stakeholders and can be therefore very time and cost consuming.

15.3. Conclusions and recommendations

Organisation

Monitoring of new developments in technology and initiating R&D activities should be in the interest of every stakeholder. A transparent and efficient process needs to be defined, that regulates the introduction of new technology, which is relevant for interoperability, into the framework. This process needs to be coordinated by a pan-European body or a joint forum of national bodies and consultation of all relevant stakeholders including standardisation organisations should be a part of the process. The definition of the process and any decisions on the introduction of new technology should be made by a body with regulatory power.

Key Success Factors

The organisational framework of the service should not hinder the introduction of new technology if proven to enhance the services.

The process of introducing new technology should be transparent and non-discriminatory and should involve all relevant stakeholders.

The process should prohibit rapid and unproven technological changes, since the implementation of changes is time and cost consuming for all stakeholders.

Item 16: Responsibility/liability for checking conformity of equipments/stakeholders/operators to certification/approval/qualification specifications – Procedures in case of failure – Consequences (withdrawal of the concerned equipment/stakeholder/operator, financial damages, other consequence)

WP1 conditions: no relevant condition for Item 16.

16.1. Benchmarking studies

In the railway sector this responsibility is placed on the national regulatory body.

The telecommunications sector the range is very wide and there are many regulations. For example to check the conformity of telecommunications equipment the procedures are based on the European Directive 99/5/EC. The manufacturer has to elaborate a technical documentation and to sign a declaration of conformity. The manufacturer has to keep it for 10 years after the last equipment has been manufactured for an inspection at any time.

There are 4 agencies involved in implementing this Directive, one at the European level (TCAM) and 3 national agencies (the authorities of telecommunications responsible to keep watching the product and the market, the authorities of telecommunications responsible to manage the spectrum and the Notified Organizations).

The TCAM (Telecommunications Conformity Assessment and Market Surveillance Committee), the standing Committee assisting the Commission in the management of Directive 99/5/EC is composed by representatives of member states and chaired by a representative of the European Commission.

It is not possible to launch to the market, in any EU member country, any equipment that does not comply with the directive.

In the energy sector this item is not applicable.

In the postal sector this is not a major issue. In the UK, the statutory regulator Postcomm would address any disputes.

16.2. Statement pros/cons

Time Factor

For checking conformity time is less critical than due care. Nevertheless checking conformance shall be efficient in order not to jeopardise business opportunities unnecessarily.

However, a national regulation body shall not await complaints but shall upon its own initiative check an EETS toll domain statement for a toll domain within its jurisdiction with respect to non-discrimination and fair competition.

Legal rights

Conformity of equipment shall be checked by an independent and competent notified body. Decisions of a notified body are subjected to judicial review.

An EETS provider should have the right to rely on a certification for OBE issued by a notified body. Hence, unless the certificate states otherwise and apart from defaults attributable to the EETS provider or the notified body, the toll charger shall bear the risk for problems in the communication with OBE being duly certified.

Other conformity requirements shall be checked by an independent regulatory body. Decisions of a regulatory body are subjected to judicial review.

Competition

A notified body and regulatory body shall be independent of any toll charger, EETS provider and any other party involved in the design, manufacturing, supply, installation, maintenance, etc. of EETS related equipment including software.

Consistency and Transparency

In order to improve the consistency and transparency of decisions, a notified / regulatory body shall exchange their decisions with the other notified / regulatory bodies according to established procedures.

16.3. Conclusions and recommendations

For checking conformity a clear distinction should be made between checking the conformity of equipment and checking conformity of other requirements (e.g. administrative, procedural, and contractual). The first type of control should be performed by a notified body, the latter by a national regulatory body.

With respect to the conformance of equipment, especially OBE:

- A Member State may notify independent and competent notified body to check the conformity of OBE and, if applicable, other equipment.
- The notified body shall check the conformity of OBE and, if applicable, other equipment before it will be placed on the market and it shall issue a CE for compliant equipment
- A decision of a notified body is subject to judicial review.
- In case equipment of a particular type with a CE mark is demonstrable non-compliant, the responsible notified body shall withdraw this mark.
- Except in case of gross negligence, a notified body will not be liable for an erroneous CE mark
- An EETS provider may assume complete conformity of non-defect OBE bearing a CE mark.
- An EETS provider shall replace OBE for which the CE mark has been withdrawn in due time but shall not be liable for using this OBE before the withdrawal of the CE mark.

With respect of other conformance issues:

- A national regulatory body should check on a regular basis the conformance of:
 - a toll charger operating a toll domain in this Member State, and
 - an EETS provider registered in this Member state.
- A national regulatory body should investigate complaints on non-compliance from any party having a reasonable interest
- A regulatory body may decide, if applicable, to impose a fine, to require a party to compensate for losses, and/or to deregister an EETS provider.
- A decision of a regulatory is subjected to judicial review

NOTE: More detailed elaborations of these conclusions and recommendations may be found under other items in this document.

7. Gathering information on certified equipment and qualified operators

Item 17: Schemes, procedures and equipment enabling a unique numbering and proper registration (European and/or national level)

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N015	IM shall maintain and continuously update the register of authorised EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

17.1. Benchmarking studies

The external benchmarking studies for the energy and postal service sectors show no relevant information about numbering and registration of operators.

In the railway sector, several numbering schemes exist, especially for registration of different equipment. Data to the numbering schemes are filled in by Member States but the schemes are managed by a European level entity, the European Railway Agency (ERA). In the benchmarking study, no information was given about registration of train operators or infrastructure owners.

In the telecommunication sector, all member states maintain national numbering plans, complying with the requirements described in a recommendation from a worldwide organization, the ITU (International Telecommunication Union). There is an agreed international format for telephone numbers. In each member state, a NRA (National Regulatory Authority) controls the assignment of all national numbering resources and manages the national numbering plans. NRAs establish procedures for allocating national numbering resources that are objective, transparent, and non discriminatory.

17.2. Statement pros/cons

The external benchmarking studies reveal that other industries rely on both national authorities and pan-European coordination bodies for maintaining registers and numbering schemes. These examples may be applicable in the context of EETS for the numbering schemes regarding equipment. However, they seem less relevant for registration and numbering of operators.

Time Factor

The WP01 conditions G-N015 and G-N016 require two different schemes of registration, for which time frames are different. The first condition states that IM shall maintain and update a register of authorised EPs and TCs. The second one states that IM shall set up a numbering scheme for operators (EPs and TCs), but also for equipment (OBes, RSEs, etc.).

Authorization of EPs and TCs are long term procedures, and thus the updates in the registers can be foreseen weeks or months before they will come into force. Consequently, it may be easy for IM to update the registers in time without large means, thanks to the possible anticipation in movements.

Procedures, equipment and more generally toll data for EETS are much more numerous and it seems that they can evolve more rapidly than the actual actors involved. Thus, the numbering schemes stated by condition G-N016 needs more efficient updating to cope with changes, in order for the whole system to maintain technical consistency. The timeframe for this numbering scheme shall be on a daily basis.

Legal rights

Not seen as relevant for item 17.

Competition

In order to have a fair competition within the EETS market, all certified operators shall have the right to obtain registration by IM. Thus, equal access to registration in the registers of EPs and TCs shall be granted, and the procedures for registration shall be transparent and non discriminatory.

The numbering scheme applicable to equipment and procedures shall be maintained with sufficient efficiency to grant in due time access to any operator willing to register its material and data, irrespective of its origin or location in the EETS market.

Finally, it seems important that every operator has equal access to the data stored. Transparent and easy procedures should guarantee that every registered EETS actor can get access to all information regarding EPs, TCs, and their procedures and equipment. This could be done simply by a secured website. No competition parameters should be subject to access and communication.

Consistency & Transparency

The numbering scheme might be of major importance to secure the good operation of EETS. Indeed, mistakes in the registers could lead to major defaults in transactions, possibly involving great amounts of toll. Security and consistency of the data stored should be a major consideration for IM.

Market dynamics

Not seen as relevant for item 17, because technology evolutions only require marginal modifications of the numbering scheme already functioning. The structure of the databases should allow new equipment to be coped with.

Risks

The main risk of failure seems to be the case where no common shared numbering scheme exists at a European level. This could happen for example if no pan-European body is created and/or authorized to manage a common scheme.

In case of failure of the system (for example partial or complete loss of numbering data), the normal function of the system may be compromised but back-up facilities should preserve the stored data. Thus, it should be necessary to implement correct safeguarding functions of the data stored. Unavailability of the numbering system should also be limited in time. 24 hours of unavailability seem to be a maximum tolerance.

17.3. Conclusions and recommendations

The WP01 conditions G-N015 and G-N016 require two different schemes of registration.

The condition G-N015 states that IM shall maintain and update a register of authorised EP and TC.

- As the evolution of this register will be slow and predictable especially from a local point of view, it seems relevant that this duty shall be performed by national regulatory authorities covering their respective countries. In order to ensure efficient but cheap cross communication between local registers, NRAs should set up and maintain up to date information websites that will give secured access to the data stored.
- To avoid competition issues between companies, procedures for accessing the registers should be common and transparent. Thus, the Electronic Toll Committee, as part of the IM role, shall define precisely the procedures and conditions to access the registers.

The condition G-N016 states that IM shall set up and continuously update a numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation. Like in other sectors, (e.g. communications or railways), a unique scheme shall be set up to avoid discrepancies between countries.

- The Electronic Toll Committee shall set up a European level body responsible for managing a common register for numbering any operator, procedure, or material within the EETS context.
- This European level body shall maintain rules and procedures for registration that are transparent and compatible with the evolution of relevant technologies. To avoid discrimination or distortion of competition, this body shall not be linked with EPs and TCs, as such relation could lead to the favouring of certain operators.

Key success factors

The numbering scheme should be set up quickly enough to avoid concurrent private numbering schemes, which could develop in an uncontrolled way, and could thus threaten the required interoperability on a European level.

All actors should be involved in the elaboration of the scheme (including the procedures) to ensure that relevant operational needs are covered by the scheme.

Financial dimension

As the service is needed by every actor (TCs and EPs), they should all participate in financing the scheme and the financing should be administrated through the European level body. A financial contribution proportional to the amount of data stored seems to be relevant.

Item 18: Dissemination of official information on the interoperable service and certified/qualified stakeholders/operators

WP1 conditions: no relevant condition for Item 18.

18.1. Benchmarking studies

The external benchmarking studies show no relevant information about this item. The only given information is about the situation in the UK, where the postal regulatory authority is responsible for disseminating details of access agreements.

18.2. Statement pros/cons

Time Factor

Efficiently updated information about EETS to all stakeholders including limitations in access, operational disturbances, new features, special conditions etc. is a key factor for success.

Legal rights

Failure to inform may result in complaints and claims and access to information without delay is critical factor for each stakeholder not only for taking care of its commercial interest but also for reducing its legal exposure.

Competition

As the ability to provide updated information is a competitive parameter it is most important that all actors will be given information simultaneously and according to established procedures.

Consistency & Transparency

Dissemination of information about EETS must obviously meet high demands on consistency and transparency in order to create confidence among the operators and users and also for avoiding distortion of competition.

Market dynamics

Dissemination of information about EETS should be done with the use of the state-of-the-art methods and development of new technologies for efficient spreading of information should be adopted.

18.3. Conclusions and recommendations

There are several types of information flows between the different actors involved (EP, TC, SU and IM):

- IM shall communicate to TCs and EPs updated lists of eligible operators and certified equipment as well as new regulations concerning EETS.
- TCs shall communicate their conditions for cooperating with EPs and the applicable conditions for getting access to the local networks.
- EPs shall communicate their conditions for cooperating with TCs and their terms of service to SUs.
- The EPs shall inform the TCs of the valid OBU (whitelist) and invalidated OBUs (blacklist)
- All the operators shall inform each other about operational disturbances, developments, new features etc. affecting the current and future operation of EETS.
- A constant flow of information will take place between TCs and EPs with respect to transactions and payment settlements.
- Exchange of information will continue regarding complaints and claims between TCs, EPs, and SUs.

These different information flows imply different allocation of responsibilities in case of failure. In general terms, actors in charge of disseminating certain type of information shall be responsible for the accuracy and timeliness of the information they provide, as well as for damage caused by failures in disseminating such information timely and properly.

Appropriate arrangements (including financing) for efficient dissemination of information should be adapted in each case. Arrangements for general dissemination of information by a national regulatory authority and/or a pan-European forum of such local authorities should be publicly arranged and financed and certain compensation could possibly be collected from the different actors involved, as they all benefit from the information.

Information from EPs to SUs is part of the business model of the EPs, and should thus be arranged (and financed) by the EPs.

Dissemination of local information, from TCs to SUs, shall be the responsibility of each individual TC.

Exchange of information between TCs and EPs is part of the business operation of these actors and appropriate arrangements for ensuring proper flow of information for the purpose of maintaining their business models must be their collective responsibility. A certain forum for setting-up and maintaining a system of information between TCs and EPs ought to be established,

As TCs and EPs will commercially benefit from EETS, they should all participate financially and technically in the development and installation of dedicated information systems that will be used by all the stakeholders.

A key factor of success for EETS seems to be its ability to evolve with the evolution of technologies. This could be done by a responsive entity in charge of the promotion of EETS.

18.4. Conclusions and recommendations

The external benchmarking studies show no really applicable information within the scope of item 18. Dissemination of information does not seem to be a very difficult task, and this could be performed by the same entities already dealing with WP01 conditions G-N015 and G-N016. A single efficient website could be set up to promote EETS and disseminate legal and procedural information in each country.

- For this, a national regulatory body shall be responsible of the promotion and dissemination of information on the interoperable service in its home country.

8. Security policy and protection of users personal data

Item 19: Development and implementation of security policy (confidentiality, integrity and availability of data stored, etc.)

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N023	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N024	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N025	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

The conditions above cover a wide range of tasks, from the definition of a security policy framework, to the monitoring and auditing of proper implementation of the policy and the distribution of security objects.

19.1. Benchmarking studies

The results of the external benchmark studies on this matter are summarized below. Two external benchmarks did not give address the question of managing a security policy.

Energy

The operators who are dealing with the data are responsible for the development and the implementation of a security policy. It is mainly legislation but also decisions of the regulator that give some orientation concerning the obligation to guarantee the confidentiality of information.

Postal

N/A

Railway

N/A

Telecommunication

The European Directive reiterates the basic principle that Member States must, through national legislation, ensure the confidentiality of communications made over a public electronic communications network. About the data retention, the Directive stipulates that Member States may withdraw the protection of data only to allow criminal investigations or to safeguard national security, defence and public security. In several states, there are independent administrative authority with the task to protect privacy and personal data (In France, it's called CNIL)

ENISA (European Network and Information Security Agent) was set up by European Union to enhance the capability of the EU Member States and the business community to prevent, address and respond to network and information security problems.

EasyGo

The data stored must comply with local data protection legislation and each actor is responsible for its own databases. This rule also applies for the regional and central databases. The results of the benchmark studies show, that requirements on data security and privacy, is a subject of national legislation. This applies in particular to the data retention periods and the rules in terms of allowing usage of data for specific purposes, e.g. for criminal prosecution. The benchmark studies do not answer the question on regulations of the security framework if interfaces between different actors are involved or how security mechanisms support establishing trust between the different stakeholders.

It is most likely that requirements on protection of data will become more stringent in the future, not least due to the recent economical developments and some issues in public and private companies on misuse or loss of personal data. Therefore more detailed regulations at national and European level can be expected.

The current draft of the EETS decision (v7) contains the following sections on security:

"These interfaces (Interface of the EETS architecture build upon the RCI architecture) shall comprise functionalities ensuring fulfilment of security essential requirements described in Annex II.1.5:

EETS shall provide means to protect Toll Chargers, EETS Providers and EETS Users against fraud/abuse by the other EETS stakeholders.

EETS shall provide security features relative to the protection of data stored, handled and transferred between stakeholders in the EETS environment. The security features shall protect the interests of EETS stakeholders from harm or damage caused by lack of availability, confidentiality, integrity, authentication, non-repudiation and access protection of sensitive user data appropriate to a European multi-user environment."

19.2. Statement pros/cons

Time Factor

Time Factor is not relevant for the definition of the security framework and check of proper standards for distributing security objects. Significant lead time is necessary before changes to the security framework are made since such changes affect the architecture and interfaces of many stakeholders.

The IM should react in a short period of time in cases where the security framework is at risk or if the monitoring of the security arrangements is exposing breaches or shortcomings.

Legal Rights

Security requirements are mainly regulated under national law of the stakeholders. When a global security policy is to be defined, it must be checked that the policy is based on the appropriate standard and defines only necessary minimum requirements, which can be derived directly from European legislation.

The IM needs regulatory power to act in cases where the non-compliance is detected by any stakeholder.

Competition

The security and data protection requirements by the security framework should be non-discriminatory. Any measures to create trust between the stakeholders shall not limit competitive factors.

Consistency & Transparency

Definition of security framework and monitoring of proper implementation needs a very consistent and transparent approach. This applies in particular to any sanctions against stakeholders for being not compliant with the security policy.

Market Dynamics

The IM shall define and audit the security framework in a way involving a minimum of the necessary measures for establishing trust and confidence between the different actors.

Monitoring and auditing of the security arrangements of the stakeholders should be reasonable and comprehensible and should not adversely affect the systems and operations.

Risks

There is the risk of competing or contradicting regulations on a European and national level which must be resolved.

Too ambitious security policies impose the risk of creating a high barrier for entry into the market. A good balance has to be found between the security requirements of all stakeholders and the implementation and operation efforts.

19.3. Conclusions and recommendations

Organisation

Monitoring of compliance with the security policy should be done by national bodies with the appropriate technical expertise. Referring to the terms of the EETS decision, this could be a task of the notified bodies. A European coordination is needed for ensuring transparency and non-discrimination of the process. A coordination group of notified bodies could take this responsibility. A link has to be established to national bodies with regulatory power, in cases where decisions have to be made based on detection of non-compliance with the security policy, e.g. withdrawal of an EETS provider's license.

The exchange of security objects is part of ISO 12855, which is drafted currently and describes the data exchange between EETS Providers and Toll Chargers. The security policy comprises the definition of minimum security requirements and has to be organised and approved by a pan-European body, which could be established as a joint forum of the national regulatory bodies. The work of defining the security policy could be done by the notified bodies and a coordination group among the notified bodies. The definition of the security policy shall be developed with the involvement of the relevant stakeholders like notified bodies, standardisation organisations, EETS providers and toll chargers.

As a general guideline we could assume, that any technical regulation can be elaborated by the Notified Bodies and their corresponding Coordination Group, but needs approval by the national Regulatory Bodies and their respective Coordination Group.

Key Success Factors

- Definition of only the necessary minimum of security requirements.
- Clear delegation of responsibility for monitoring the compliance of the stakeholders to national bodies
- Definition of a transparent and non-discriminatory monitoring process
- Definition of clear escalation procedures and assignment of competent bodies with the relevant regulatory power to act

9. Access of users to interoperable service

Item 20: Conditions for the users to have access to interoperable service

WP1 conditions: no relevant condition for Item 20

20.1. Benchmarking studies

In all sectors the user's right to have access to the service is subject to certain defined conditions. Basically the users are requested to pay for the service and are denied further supply or service if they fail to fulfil the obligation to pay.

In the telecommunication sector and the energy sector the provider can discontinue any further use.

Mail services are only denied if the sender doesn't put on a stamp. The receiver might be met by a requirement like restricted location of mailbox or similar, but otherwise there is no requirement.

The customers of railway service providers include freight customers as well as train passengers. Only in the freight customer sector there is a real choice of railway service providers for the users (customers of railway service providers).

As grids in the energy sector are natural monopolies there is normally no alternative way of getting access for a user, but this might not prevent another supplier from delivering through the same network.

In the EasyGo system, the SU has the right to benefit from the service as long as he fulfils the terms of the contract. If a SU does not pay the invoice the EP will cancel the contract (after reminders) and the OBU will be blacklisted. The SU may find another EP and get the service from him, if possible, e.g. via prepayment. Due to the data protection act no exchange of information about dubious debtors is allowed which means that the information on the black-list cannot extend to the holder of the OBU.

20.2. Statement pros/cons

Time factor

As soon as an SU is allowed to circulate on the network with a valid OBU the equipment must work immediately on the entire network in order to prevent false violations. Likewise, denied access must become effective simultaneously throughout the entire network.

Legal Rights

Any SU is entitled to have an OBU on the commercial terms offered by the EP. The SU can shift to another EP at any time. In this respect there might be a need for common rules regarding the length of the notice period for the purpose of simplifying the transition.

Competition

Regarding access, all EETS providers are obliged to offer the same extent of coverage, i.e. full access throughout the entire European toll road network. Competition parameters may be the terms of payment, level and speed of information, WEB self-service, vehicle tracking in GPS based systems etc. If for any reason, the SU chooses to change EP the OBU must be exchanged as well. Unless the OBU is a simple DSRC battery powered device, the replacement must be dealt with by a certified garage. This may be a practical problem in the future, especially when two SU companies merge and wants to have one common EP. This will require that certified garages must be able to install or remove any type of OBU from any EP. The distribution of cost of installation, removal, stock-keeping, etc. in a secure way must be divided between the EPs having different types of OBUs according to established rules.

Consistency

The terms of service and the fee charged for driving on each local network must be clear to the SU. This requires cooperation among TCs with respect to signs at roadside informing of applicable fees at each local network. A special issue can be relevant in the future if the "Eurovignette directive" requires that the EETS provision should include special charging to reduce pollution and CO2 emissions. In order to achieve a change in the behaviour of the SUs it is necessary that the economical consequences of the driving pattern are clearly and consistently communicated.

Market Dynamics

To maintain market dynamics it is important that the service includes flexible online software update in order to allow for changing to GPS. The update facilities should to the largest extent possible be done without any need for sending the OBU to the EP. It could be e.g. GNSS or DSRC. Especially the discussion regarding "thin/thick" client has serious consequences for the need of updating the OBU.

In the case of a thick client, the OBU will contain map and tariff data for all TCs depending on the OBU in order to be able to calculate the fee inside the vehicle. Therefore, the OBU must be controlled and verified regarding map and tariff table whenever entering a new area.

The thin client will require considerably less updating, but the map and tariff data must be available at the EP's sever for all areas. At present, only one country has introduced GPS based road charging. Several countries are planning to introduce GPS based solution, but only some of them will be in operation when the first generations of EETS OBUs are issued. It may be costly to update the EETS OBUs every time a new TC is implementing GPS based charging if the process is not carefully described and planned.

Risks

Quality standards of the EETS OBUs are essential to prevent losses. This applies to both the ability to register data and to transmit data to the TCs. The EETS OBUs from different producers will most likely have different failure rates in different systems when certified and during use. Depending on the type and number of transactions the use of one specific type of OBU may lead to greater loss than another type of OBU. This issue must be dealt with by the IM. In the GPS based solutions, there is also a risk of loss of data in the central system at the EP before settling with the TC. In this case it is vital for the TC to have a complete record of expected revenues.

20.3. Conclusions and recommendations

The service must have high credibility in relation to SUs, TCs and EPs in order to gain acceptance and to avoid a large workload in terms of handling of false violation and lost registrations.

- The service must be easy to understand for the user
- The EP must charge the SU according to terms defined in the agreement
- OBUs must fulfil high QA requirements
- The OBU must be easily updated
- There must be a contract between the EP and the SU with a set of common EETS rules in addition to the terms covering local use. (see EasyGo example below)

The EasyGo experiences which only cover DSRC must be evaluated taking the complexity of the scaled-up EETS into account.

The relevant IM function will have an important task in terms of ensuring that the EETS is implemented and provided to the SU in the same way all over the entire network and that the interpretation of the legal framework and daily operation are carried out as planned. To ensure this a common set of operational conditions and procedures should be defined and used in the relations between the actors involved in EETS.

The IM function in these regards will extend to the establishment, communication and follow-up of efficient conditions and procedures to be followed in the daily interaction between the actors involved and such operational aspects are best handled by a private body set-up by the organisations of EPs and TCs.

Example of the EasyGo additional terms:

- Without prior notice, customers with a valid OBU are entitled to use their OBU as a means of payment using all available toll collection systems and other transport-related services linked to the EASYGO partnership. Information about infrastructure and other transport services linked to EASYGO can be obtained from defined sources. Customers are, at any time, entitled to opt out of using EASYGO by informing the OBE issuer in writing.
- While using the toll collection systems and other transport-related services within the EASYGO framework, special EASYGO conditions are applicable alongside the operator's normal terms with regard to fees, access and responsibilities. Payment by an OBU issuer to another operator within the EASYGO partnership
- Liability for a customer's use of toll collection systems or other transport-related services is done on behalf of the customer. The OBU issuer will only provide a payment service with regard to the use of toll collection systems and other transport-related services offered by any other party than the OBU issuer.
- The customer is responsible for payment for the use of an OBU received to every operator linked to the EASYGO partnership up to and including the return or reported loss of the OBU regardless of whether the customer uses the OBU for themselves or has authorised another party to do so. The limited possibility for avoiding payment for use of the OBU (e.g. lost equipment through criminal action) is stated in the agreement between the customer and the OBU issuer.
- Any complaints should be made to the operator that has provided the passage or service in question. The complaint should be presented no later than within 30 days from the day the customer was notified about the passage or service having taken place; although never later than 60 days from the date on which the passage

took place or the service was used. A dispute relating to a complaint will eventually be settled by a court in the country where the operator is registered.

(Operator = TC and Issuer = EP)

Item 21: Liability for users access to interoperable service (interoperable service providers or core service operators)

WP1 conditions: no relevant condition for Item 21.

21.1. Benchmarking studies

Access to the service in the energy sector is provided by the grid operators through one physical network. Operators in the telecom Operators' in the Telecommunication sector give access to the fixed and mobile network, either based on a mobile phone or a fixed net telephone. The railway service providers give the users access to the interoperable service. The national legislation/bodies regulating postal services ensure that all users can receive mail at their addresses. In the EasyGo the issuer is responsible for giving access to the service

21.2. Statement pros/cons

Time factor

As soon as a SU starts to circulate on the network with a valid OBU it must work immediately in order to prevent false violations. Changing the status of an OBU in terms of being valid/ invalid is also critical. The TC must, as fast as possible, know if a SU should be treated as violator or not. Regardless of the origin of the OBU or the domicile of the EP, the TC must be able to handle the blacklist in due time.

Legal Rights

It is important that there are clear rules for transfer of responsibility between EP and TC for handling an invalid OBU based on clear blacklist procedures. If the customer has a valid OBU he must be treated accordingly. If the EP or the TC is responsible for not handling the customer correctly, it is the failing party's responsibility to hold the customer harmless. If the customer is responsible for the failure there must be clear and balanced remedies for the suffering party.

Accurate distribution of responsibility depends on how the transaction can be recorded. Traditional video documentation may not be available in all systems. This will require other means of documentation in form of certified transaction and use of security keys.

Competition

Efficient update of valid/invalid OBU, low failure rate preventing the customer from being falsely charged, low risk of misuse in case of theft are factors equally important for all actors in EETS and should not be seen as competition parameters. .

Consistency

It is important that there is no uncertainty regarding the status of an OBU (valid/invalid) for both the TC and SU.

The distribution of information regarding not valid OBUs must be based on a clearly defined time periods. Such defined timetable is the key for distributing the responsibility between the EP, TC and SU both in case of a blacklisted OBU and a valid OBU. In a cross-border system the consistent use of the same rules is absolutely necessary.

Market Dynamics

N/A

Risks

Failure in the distribution of a blacklist can lead to large loss of revenue or improperly treating a SU as a violator.

It is important that there is clear distribution of responsibilities between the TC and the EP in case of use of an invalid blacklist. This requires unique identification of the valid blacklist information at all times.

The typical factors for distributing responsibility are:

- The information is distributed too late by the EP
- The available black-lists are used too late by the TC.

Example

In EasyGo, valid blacklists are distributed daily based on the following basic procedures:

- The EP must daily update the list from 00.00 to 23.59
- The lists are merged and distributed from 00.30 to 04.30
- The TC must use this list at roadside from 06.00 to 5.59.

Based on these procedures the responsibility between TC and EP is decided.

21.3. Conclusions and recommendations

It is important to have:

- An efficient IM service to distribute blacklist information and establish clear rules of responsibility on the basis of defined blacklist procedures
- Certified transactions which require no additional documentation in order to be valid for payment
- The IM function in these regards will be best handled by a private body, set-up by organisations of EPs and TCs, respectively.

Item 22: Alternative way for giving to a user access to interoperable service if denied

WP1 conditions: no relevant condition for Item 22.

22.1. Benchmarking studies

This item is not applicable regarding telecommunication, rail, post or energy for various reasons. Basically, there are no ways of using the service/getting a supply if you are not connected to the network

In the EasyGo service the user will have to pay in another way (as long as it is not possible to find an EETS provider who will deliver the service).

22.2. Statement pros/cons

Time factor

When a customer does not have a valid OBU, the TC must as fast as possible know if a SU should be treated as violator or not.

Legal Rights

If the SU does not have a valid OBU he has the right to use the local service instead on the terms applicable to that service. Denied access to EETS will not represent a major hindrance. If the SU fails to fulfil the obligation the SU will be treated as a violator and the available remedies will follow the law applicable with respect debt collection and criminal prosecution in serious cases.

Competition

N/A

Consistency

N/A

Market Dynamics

Development of more efficient cross-border enforcement rules should be encouraged for the purpose of reducing the amount of violations and reduce the efforts and resources spent on preventive measures.

Risks

N/A

22.3. Conclusions and recommendations

It is not the individual EPs responsibility to ensure payment facilities for a SU not fulfilling the objective and non-discriminatory requirements for having an EETS OBU.

Item 23: Procedures for the settlement of disputes regarding users access to interoperable service

WP1 conditions: no relevant condition for Item 23.

23.1. Benchmarking studies

In the energy sector the procedure is based on national regulator and national judiciary. The details depend on national legislation / regulation. In the post sector the access contract contains provisions relating to disputes resolution. If the dispute cannot be resolved between the parties, then there is provision for referring the dispute for determination by arbitration (or, either party can refer the dispute for determination by arbitration with the consent of the other party, without first attempting to resolve the dispute between them). The agreement also provides that the dispute resolution provisions do not prevent either party from applying to the court for interim relief pending the resolution of a dispute in accordance with the provisions of the agreement.

The telecommunication sector may differ from member state to member state, but it should as a minimum be possible to refer disputes to an inexpensive consumer dispute mechanism, prior to court procedures.

The national regulatory bodies are responsible for the settlement of disputes regarding the access of railway service providers to the interoperable service

If a SU in the EasyGo service denies to have used the service the EP must refund the transaction and inform the TC that the transaction has been rejected. The TC informs the SU that unless payment for the passage has not been done in another way the TC will treat the passage as a violation. This will usually be much more expensive for the SU. If the SU and the EP cannot agree on the terms, the SU may enter into an agreement with another EP. In general, private SUs are protected by consumer laws. Disputes involving companies will be handled by civil courts.

23.2. Statement pros/cons

Time factor

It is important that a dispute is solved as soon as possible in order to clarify if the SU should be denied access or if he can continue to use the service.

Legal Rights

If the SU has a valid OBU he must be treated as such. If the EETS provider or the TC is responsible for not treating the SU correctly it is their responsibility to hold the SU harmless. If the SU is responsible for the failure he will be responsible according to the applicable rules for debt collection and criminal prosecution in serious cases. The remedies will vary depending on the type of violation (fraud, inability to pay, etc.) and the status of the SU (consumer or company). Depending of the type of dispute the OBU may be blacklisted.

Competition

The EP can compete on the degree of efficiency in resolving disputes and how the SU is treated while a dispute is ongoing.

Consistency

The SU contract must comprise common rules for information regarding complaints. There ought to be an

EETS complaints panel dealing with cross-border issues.

Market Dynamics

N/A

Risks

The risk of loss of revenue must be balanced against the risk of preventing SU from the service on the wrong basis. The cross-border dimension with language barriers and different procedures for dispute resolution is calling for an EETS complaints panel.

23.3. Conclusions and recommendations

Disputes can be divided into three different groups which are handled differently.

1. SU does not fulfil contract terms (payment)
2. SU has provided wrong declaration of parameters
3. TC/EP technical failure

In case 1, the SU will usually be denied further use of the service.

In case 2 the SU will in some cases be denied use of the service and other not. At some TC this doesn't matter as they don't use the specific wrong parameter where it at other TC results in loss of revenue. There must be clear rules for this to ensure the TC revenue.

In case 3 the SU clearly must not be prevented from further use.

Example

In EasyGo, disputes of the type referred to under item 3 above account for more than 95 % of the disputes, normally because an OBU and/or a beacon fails. Even though this is less than 1% of the total number of transactions at the TCs without barriers it gives rise to a number of cases to be handled by the TC administration. In order to handle disputes based on false violations it is important that the TC has a facility where it is easy to change a violation to an ordinary transaction with a minimum of effort at TC.

To facilitate the TC work in EasyGo there has been included daily distribution of a status list for frequent users where the TC has access to information regarding EP, OBU number, licence plate number and nationality. This allows the TC to use the local standard solution in free flow Toll Plazas where the OBU are validated on the basis of the licence plate connected to the OBU in case of no reading.

This could be considered for EETS in general. If we are talking trucks only, the list will be considerable smaller than the blacklist used for payment cards.

- One positive experience of EasyGo is that the SU prefers a service which ensures payment every time and fraud is a small issue in the daily interaction between the actors involved.

10. Settlement of disputes

Item 24: Procedures for settling disputes between operators

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	D
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	D

24.1. Benchmarking studies

In all the studied industrial sectors disputes between operators are referred to a national dispute resolution mechanism. The mechanism could be based on ordinary court procedures, determination by regulatory body or referral to specially designated arbitration panels (or combinations of such procedures). The benchmark studies do not make a clear distinction between (a) ordinary commercial disputes within the scope of an existing contract, and (b) pre-contract disputes concerning denied or obstructed access and it seems that both types of disputes are to some extent subject to the same mechanism. The mechanism is either directly regulatory by the fact that a designated regulatory body or court is in charge of settling the dispute or indirectly regulatory in the sense that a certain arbitration procedure is identified by the legislator. One may assume that the right to appeal is dealt with differently depending on the applicable mechanism; resolutions by courts or regulatory bodies would normally be subject to appeal whereas the opposite would normally apply for arbitration awards. Several benchmark studies are pointing out the need for coordination between the national systems in cases of cross-border disputes but it seems that the mechanisms in these respects are fairly undeveloped at this stage. With respect to post office interoperable systems the parties may apply to the ordinary court for interim relief pending final resolution but such an opportunity is not specifically mentioned in the other benchmark reports.

24.2. Statement pros/cons

Time factor

As a fundamental condition for EETS is that the system should be operational throughout the whole of Europe, a local dispute between a toll charger and an EETS provider could be devastating for the entire system. Hence, the dispute resolution mechanism must be efficient. An interim solution should be available in view of the prolonged time required for protecting the legal rights in the final resolution.

Legal rights

As the resolution of a dispute clearly affects the rights and duties of an individual operator, the procedures must entail appropriate rules for protecting legal rights such as (a) proper identification and communication of the subject issue, (b) the right to explain its position, (c) full reasoning behind a decision, and (d) the right to appeal a decision (unless otherwise has been agreed).

Consistency & transparency

The point in having a harmonised system must be secured in the dispute resolution mechanisms. Deviating conditions between the national systems will cause efficiency losses and make EETS difficult to comprehend and use by the consumers and all parties concerned. As the establishment of a pan-European dispute resolution body might be complicated for a number of reasons (including the fact that a dispute may involve national regulations), there is a need to for a pan-European coordination unit to which the national dispute resolution bodies could turn for seeking advice on how similar issues have been settled in other countries.

Competition law

A dispute could involve claims by an individual operator of more favourable terms than those obtained by its competitors or claims, which could have the effect that the competition is prevented or restricted. A dispute resolution body must have the competence to ensure ex officio that a resolution of a dispute would not infringe national or EC competition laws.

24.3. Conclusions and recommendations

In each country, the dispute resolution mechanism ought to extend to situations where the parties cannot reach consensus on the commercial terms to apply. Disputes of a pure commercial nature under a contract such as collection of debts could be referred to ordinary courts or an alternative dispute resolution mechanism agreed upon between the parties.

In each country, there ought to exist a possibility for interim solutions of issues, which possibly could jeopardize the proper functioning of EETS as long as they remain unresolved.

IM Conditions (D1.2) seen as not relevant

Quest. No.	Possible question	CIV WP01 ref.	Reference Condition	Duty/ Right
	N/A	PR-N002	EP and TC shall implement the EETS PR scheme defined by IM.	R
	N/A	PR-N001	IM shall provide and continuously update an EETS PR scheme.	D
	N/A	G-F001	IM may identify cross border enforcement issues and develop/promote proposals for solutions in relation to authorities/legislators.	D

ANNEX 3: External benchmark studies

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1. Energy

1.1. Studied sector description

In the energy sector, the main stakeholders can be roughly categorized as

- (a) owners and operators of storage and transportation infrastructure (grids),
- (b) producers of energy and distributors as users of the grids,
- (c) the sellers of electricity / gas,
- (d) and finally the consumers of energy (individuals or companies).

As energy is traded and transported through the EU, a pan-European trading system has been established.

Electricity and gas grids are natural monopolies. The owner/operator of the infrastructure is obliged to allow third parties to use its infrastructure in order to transport electricity / gas throughout the EU. The owner/operator of the grid receives a fee for the use of its infrastructure. This fee is preliminary fixed by the national regulator or by another body (i.e. energy ministry). This is why we speak about a regulated third party access. The fee grid owners / operators receive for the use of their infrastructure is a percentage of the invoice consumers pay for receiving gas or electricity. The percentage is regulated on a national level by the competent authority / regulator.

In the energy trading system there are various contractual relationships. Producers and distributors as users of the grids have contracts with the grid owners / operators as well as with the consumers. The sellers have contractual relations to the producers / distributors on the one and the consumers on the other end. In some countries, producers, grid owners and sellers belong to the same legal entity. This is an issue addressed in the so called Third Liberalisation Package of the European Commission. To establish more competition in the energy sector, plans are to completely separate the production of energy from the ownership of grids.

The contracts between producers and distributors on the one hand and grid owners / operators on the other hand are affected by the fact that energy is a good that cannot or only hardly be stored. Therefore contracts have to incorporate details on the capacity of gas / electricity supplied into the grids and the time when this is done. To balance the capacity is one of the major tasks of the grid operators as both the amount of gas / electricity produced and the amount needed by the final consumer may vary tremendously. The European Commission has identified the lack of cross-border intersections on transport grids as one factor restricting the European energy market.

To establish cooperation between the independent national energy regulators from the Member States of the EU the CEER (Council of European Energy Regulators) and the ERGEG (European Regulators' Group for Electricity and Gas) have been founded. While CEER is an informal body with national regulators as member, ERGEG is set up as an advisory group of the European Commission. The Third Liberalisation package of the EC seeks to strengthen the power of the national and pan-European authorities.

The Commission proposes to set up an Agency for the Cooperation of Energy Regulators to close perceived gaps on cross-border regulatory issues. Especially the so called grid codes on national level (technical rules that energy companies operate under) should undergo a process of convergence and harmonisation. The Commission has evaluated different options for organising the required tasks and decided on the agency model with all national regulators being part of the Regulatory Board. The main tasks of the planned agency can be summarised as providing a framework for national regulators to cooperate, overseeing the cooperation between grid operators, individual decision powers, when infrastructure assets of European interest are con-

cerned and a general advisory role.

At the same time, the powers of national regulatory authorities are to be strengthened, in particular in the areas of monitoring compliance with regulations on access, balancing and interconnection management, reviewing investment plans of grid operators, monitoring transparency obligations and the level of market opening and competition.

1.2. Possible common questions

A. Description of involved stakeholders and operators

Quest. 1:

Are stakeholders/operators of the service to be provided at principal identified as private or public entities? Are, at the same time, some of these stakeholders/operators private entities and other stakeholders/operators public entities? In case of privatization of stakeholders/operators (e.g. telecommunications), was coexistence of different entities (private and public) identified as a constraint for interoperable management questions/issues?

Answer:

There are both public and private grid operators in the EU. The choice of the legal form usually has a historical background in each country. In some member states, privatizations took place during the last years. The operation of grids is often linked to the ownership of the grids.

Coexistence of public and private stakeholders was not really identified as a restraint. The only problem with public grid operators might be the potential lack of independence from the national governments. However, the lack of separation between operation and ownership has been seen as a restraint for competition by the European Commission. Therefore, plans of separation between operation and ownership of grids ("ownership unbundling") have been proposed by the EC.

Quest. 2:

Is there any other relevant information regarding the status of these stakeholders/operators (e.g. private companies)?

Answer:

The private or public status of an operator is not considered as an issue in the energy sector. It can however become an issue in the implementation of the unbundling obligations on the operators. Ownership unbundling might prove to be difficult when the owner / operator of grids are a public entity.

Quest. 3:

Is there any relevant information regarding the financial resources of these stakeholders/operators (e.g. public subsidies)? How would you qualify users' payment: do users pay a price or a fiscal tax for the service provided at principal?

Answer:

The grid operators are mainly funded by the grid users. The grid user has to pay a fee to the grid operator for the using his infrastructure, based on a tariff regulated by the national authorities.

In the energy sector cross-subsidies between activities that are not open to the market (natural monopoly) and liberalised activities are a potential problem to a liberalised and free market.

Quest. 4:

At national level, are there national bodies/entities for regulation/standardization of the service?

Answer:

National energy regulators are responsible for regulation but not for standardization. Still, standard supply contracts for final consumers are, for example, drafted under the responsibility of the national regulators.

Quest. 5:

In case yes is answered to question 4, is there any European/international coordination of these national bodies/entities? How would you describe this coordination (decision-making process with unanimity or majority rule, supranational body)?

Answer:

There are two main European bodies regrouping the energy regulators at EU Level:

1. Informal body = CEER (Council of European Energy Regulators): a private association created under Belgian law located in Belgium and coordinating the activities of the national regulators. Issuing non binding documents: guidelines, position papers and opinions. CEER is a not-for-profit association.
2. Formal body = ERGEG (European Regulators' Group for Electricity and Gas): created by a decision of the European Commission and composed of the European regulators. ERGEG gives advice (on its own initiative or upon request) to the Commission on specific questions related to the regulation of the energy market. The stakeholders are involved through public consultations.

Decisions of the CEER are made by majority rule with weighted votes. Those decisions however are not binding for the stakeholders or the commission.

B. Definition, drawing up and modification of contractual and non contractual documentation (including standards)

Quest. 6:

Who is responsible for defining and maintaining the interoperable core service, including its technical, functional, and service quality specifications? How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N002	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D

Answer:

Such questions are still addressed at national level and defined in national grid codes. The Pan-European groups (CEER/ERGEG) of regulators are not competent to define services and standards for now. However, the plans of the European Commission presented in the Third Liberalisation Package contain the creation of a new Energy Agency. Questions of standardisation may be addressed to this new body (see Studied Sector Description).

Quest. 7:

Who is responsible for defining and drawing up the documentation that will be partly governing the relationship between the stakeholders and/or operators, i.e. that will constitutes the common elements of their relationship? In case this documentation comes from both legislation and contract, please specify. How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

Answer:

The relationships are mainly governed by national legislation and the decisions of the national regulator. The different stakeholders/operators are involved in the process through consultation and audition.

Quest. 8:

To what extent are the technical and functional requirements for the interoperable core service(s) and the daily operation of the system(s) providing the interoperable core service(s) based on international and/or European standards?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D

Answer:

There are very few European standards so far. Most of the standards are national requirements.

Quest. 9:

Who is responsible for defining the common rules and procedures for data exchange between the stakeholders/operators and how are the different stakeholders/operators involved in the definition and implementation process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N007	IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service.	D

Answer:

Common rules and procedures for data exchange are defined by national legislation and national regulators. The stakeholders are involved through consultation.

C. Certification of equipments, agreement of interoperable service providers, qualification of main service

Quest. 10:

Are there defined rules and regulations for adhesion and withdrawal of operators and who is responsible for the definition, maintenance and monitoring of such rules and regulations?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N017	IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on non-discriminatory basis.	D
G-N018	IM shall develop procedures for and assist in the adhesion of new TCs to the service. The criteria for the incorporation, maintenance and withdrawal of TCs shall also be established and managed by IM.	D

Answer:

Rules and Regulations are defined in national legislation. The national regulators are responsible for the definition, maintenance and monitoring of these rules and regulations.

Quest. 11:

Is there a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (3 items may be specified under the generic certification theme: certification of equipments, agreement of interoperable operators, qualification of operators of the service to be paid within the interoperable service)

CIV WP1 ref.	Reference Condition	Duty/ Right
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS	D
C-N002	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements	D

Answer:

Grid operators must have an authorization or a license to operate a grid. The requirements are defined in national legislation.

Quest. 12:

Who has the responsibility and are there procedures for auditing the daily provision of the interoperable core service(s) concerning procedures, level of quality and compliance with the common set of technical and functional requirements? How this overall monitoring is organised and how is the responsibility shared between the involved stakeholders and operators?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N021	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D

Answer:

The grid operator is constantly controlled by the regulators and/or the national authorities competent for this. There are monitoring and reporting obligations to be fulfilled by the grid operators which differ from country to country.

Quest. 13:

Who is responsible for the development and implementation of new technology in the systems(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-F002	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

Answer:

The grid operator is responsible for the development and implementation of new technology.

Quest. 14:

Who is responsible for checking the conformity of equipments/stakeholders/ operators to certification/agreement/qualification specifications? How could this responsibility be engaged? What consequences could follow this engagement of responsibility (withdrawal of the concerned equipment/stakeholder/operator, financial damages, other consequence)

Answer:

n. a.

D. Identification of operators/stakeholders and information on certified equipments, agreed interoperable service providers, qualified operators and list-keeping

Quest. 15:

Are there any numbering schemes for entities, procedures and equipment enabling a unique numbering and proper registration of these objects in European or nationwide registers and who is responsible for such numbering schemes and registers?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N015	IM shall maintain and continuously update the register of authorised EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

Answer:

n. a.

Quest. 16:

Who is responsible for disseminating official information on the interoperable service and certified/qualified stakeholders/operators?

Answer:

There is no regulated way for disseminating information.

E. Security policy and protection of users personal data

Quest. 17:

Who is responsible for the development and implementation of the security policy covering amongst others the confidentiality, integrity and availability of data stored and transferred in the system(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N023	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N024	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N025	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

Answer:

The operators who are dealing with the data are responsible for the development and the implementation of a security policy. It is mainly legislation but also decisions of the regulator that give some orientation concerning the obligation to guarantee the confidentiality of information.

F. Access of the users to the interoperable service

Quest. 18:

Do the users benefit from a general right to have access to the interoperable service (e.g. banker services or car insurance) and/or do they have to conform to a set of conditions to be eligible to the interoperable service (e. g. solvency criteria)?

Answer:

Today, consumers have a general right of access. At the beginning of the market opening in the energy sector the eligibility of the energy consumers was bound to an amount of energy consumption. Eligible clients were the clients consuming a predefined amount of electricity. Since 2004 the energy markets are fully open which means that every energy consumer in Europe is free to choose his energy supplier.

Quest. 19:

Who gives the users access to the interoperable service, operators of the interoperable service or operators of the service to be provided at principal?

Answer:

Access to the service is provided by the grid operators.

Quest. 20:

In case, access to the interoperable service is denied to a user, is there an alternative way for giving him access to the interoperable service that could rely to a duty for an operator to assume the provision of a minimum service (e.g. car insurance)?

Answer:

As grids are natural monopolies there usually is no alternative way of getting access for a user.

Quest. 21:

Who is responsible for the settlement of disputes regarding the access of users to the interoperable service?

Answer:

National regulator and national judiciary. The details depend on national legislation / regulation.

G. Settlement of disputes

Quest. 22:

What are the procedures in case any of the stakeholders/operators reports a perceived breach, who is responsible for settling disputes between operators and who has defined the procedures for settling of such disputes?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	D
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	D

Answer:

National regulator or national courts, it depends on the issue concerned.

H. Status, financial framework and membership

Quest. 23:

Is there a legal body to be in charge of interoperable management tasks?

Answer:

n. a.

Quest. 24:

How is interoperable management tasks supported? In particular, what is the financial scheme for certification/agreement/qualification tasks?

Answer:

n. a.

Quest. 25:

Who participates in interoperability management tasks (plenary members, associated members, other participants)?

Answer:

n. a.

IM Conditions (D1.2) seen as not relevant

Quest. No.	Possible question	CIV WP01 ref.	Reference Condition	Duty/ Right
	N/A	PR-N002	EP and TC shall implement the EETS PR scheme defined by IM.	R
	N/A	PR-N001	IM shall provide and continuously update an EETS PR scheme.	D
	N/A	G-F001	IM may identify cross border enforcement issues and develop/promote proposals for solutions in relation to authorities/legislators.	D

2. Postal Service

2.1. Studied sector description

Liberalisation of postal services

The liberalisation of postal services in Europe has been undertaken against a background of an industry which has traditionally been state-run, to ensure that users have a minimum degree of access, but where changes in the market structure and a history of under-investment have led to the breaking-down of traditional monopolies. Against the background of

Universal service obligation: European background

EC Directive 97/67/EC on postal services lay down a minimum standard for the universal postal service. Article 3 of the Directive requires that the universal service comprises a daily collection and a daily delivery to every address except at the discretion of the national regulatory authority. This applies to letters up to 2kg, packages up to 10kg (rising to 20kg at the discretion of the national regulatory authority) and to registered and insured items.

This Directive was amended by Directive 2002/39, which provides that certain items of correspondence should be exempt from competition, and agrees in principle the full liberalisation of the internal postal market by 1 January 2009.

The Commission has published a proposal to open EU postal markets fully to competition by 2009, in line with the target date set out in the current Postal Directive. The proposal has been submitted to European Parliament and Council for adoption in accordance with the co-decision procedure (Article 251 EC) and transmitted to the European Economic and Social Committee and the Committee of the Regions for their opinion.

Postal services – UK

Within the UK the legal framework for postal services is established by the Postal Services Act 2000. Entrants to the market can operate in one of two ways:

- 1) They can provide an end-to-end service, with their own sorting and delivery operations;
- 2) They have a statutory right of access to sorting and distribution facilities operated by the former national monopoly operator, Royal Mail.

Access has been understood as a crucial issue for new entrants as they are unlikely to deal with the volumes of mail that would make a dedicated sorting and delivery network viable.

Royal Mail is therefore required to negotiate access agreements with licensed operators. These agreements are negotiated on a commercial basis but in the event of a failure to agree a price, the statutory UK regulator, Postcomm has powers to intervene. There has been an expectation that Royal Mail would develop an Access Code as guidance to potential operators, but to date this has not happened. Postcomm's view – expressed in a recent consultation document¹ on access conditions - is that the Access Code should govern the following items:

- Full details on prices for each access service;
- Full details on how physical and operational features will be developed, including compensation and service levels;
- Dispute resolution procedures;
- A mechanism for changing the Access Code when necessary;
- Process for obtaining new services.

In December 2007 the UK Government announced an independent review of the postal services sector, to assess:

- The impacts to date of liberalisation;
- The likely future trends in the postal market;
- The maintenance of the universal service obligation in the light of these trends.

That review is ongoing. Postcomm's response argues that further liberalisation is essential to preserve the universal service obligation.

Sweden

Sweden has achieved full liberalisation since 1993, although by 2000 the former monopoly supplier still controlled around 95% of postal volume. During that period volumes were static but prices rose significantly. In April 2008 Sweden and Denmark announced that they would merge their national postal services, with a view to eventual stock-market flotation, while retaining their national identities

Finland

Postal services in Finland have been fully liberalised since 1994, but the requirement for new entrants to make a significant contribution to a Universal Service Fund has prevented any real competition from taking place.

Germany

Germany has seen gradual liberalisation of postal services but the market was opened fully on 1 January 2008. Entrants to the sector are licensed, with regulation being undertaken alongside the telecommunications industry.

Netherlands

Full liberalisation of the Dutch postal market was postponed from December 2007 to July 2008 following concerns. Entrants to the sector are licensed, again with regulation being managed through the body that regulates telecommunications.

¹ http://www.psc.gov.uk/postcomm/live/policy-and-consultations/documents-by-date/2008/2008_01_Access_review_consultation_document.pdf

2.2. Possible common questions

A. Description of involved stakeholders and operators

Quest. 26:

Are stakeholders/operators of the service to be provided at principal identified as private or public entities? Are, at the same time, some of these stakeholders/operators private entities and other stakeholders/operators public entities? In case of privatization of stakeholders/operators (e.g. telecommunications), was coexistence of different entities (private and public) identified as a constraint for interoperable management questions/issues?

Answer:

The provision of postal services has stakeholders in both the private and public sectors. However much of the pressure for liberalisation has been driven by commercial users of the sector, such as magazine distributors and bulk mailing operations; within the UK 87% of items are sent by commercial undertakings.

The postal sector now operates as part of a highly competitive communications market, in which it has moved from being an effective monopoly to a situation in which it is in competition with telephone, fax, and, in particular, the electronic media. In the UK there are now 22 licensed postal operators. This contrasts with the outcome of liberalisation in other countries where there have been rather fewer entrants into the liberalised postal markets.

Quest. 27:

Is there any other relevant information regarding the status of these stakeholders/operators (e.g. private companies)?

Answer:

N/A

Quest. 28:

Is there any relevant information regarding the financial resources of these stakeholders/operators (e.g. public subsidies)? How would you qualify users' payment: do users pay a price or a fiscal tax for the service provided at principal?

Answer:

The monopoly of the traditional postal service provider has in the UK been supported by considerable public funding. Moreover, the former monopoly provider Royal Mail enjoys a competitive advantage in that its services are exempt from VAT, while users of competing services are obliged to pay VAT. The UK industry and the regulator, Postcomm, have been pressing for this imbalance to be changed.

Quest. 29:

At national level, are there national bodies/entities for regulation/standardization of the service?

Answer:

Yes. In the UK the Postal Services Commission (Postcomm) is responsible for, amongst other tasks, the regulation of the postal service. Postcomm licences providers of postal services and regulates pricing structures against a background of perceived under-investment in postal services in the years before liberalisation, in particular in new technologies. At the same time it is responsible for ensuring that the Universal Service Obligation (USO) is met and for investigating and acting against anti-competitive behaviour in the postal sector

Quest. 30:

In case yes is answered to question 4, is there any European/international coordination of these national bodies/entities? How would you describe this coordination (decision-making process with unanimity or majority rule, supranational body)?

Answer:

Member states are responsible for ensuring that the provisions of the governing Directives are met. There is a European Committee for Postal Regulation which is made up of representatives of postal regulatory authorities, but it does not appear to exercise any executive authority.

B. Definition, drawing up and modification of contractual and non contractual documentation (including standards)

Quest. 31:

Who is responsible for defining and maintaining the interoperable core service, including its technical, functional, and service quality specifications? How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N002	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D

Answer:

The core service is defined in statute – most notably in the governing European Directives, although as the market matures there may be pressure to redefine the core service.

Quest. 32:

Who is responsible for defining and drawing up the documentation that will be partly governing the relationship between the stakeholders and/or operators, i.e. that will constitutes the common elements of their relationship? In case this documentation comes from both legislation and contract, please specify. How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

Answer:

Access agreements are managed by Postcomm in the UK. Postcomm has set out the following list of items to be included in agreements:

- Specified volume and frequency of mailings
- Minimum geographical coverage of mailings
- Handover slot
- Forecasting
- Specification of size, weight etc of mailing items
- Addressing standards and return arrangements

Quest. 33:

To what extent are the technical and functional requirements for the interoperable core service(s) and the daily operation of the system(s) providing the interoperable core service(s) based on international and/or European standards?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D

Answer:

None

Quest. 34:

Who is responsible for defining the common rules and procedures for data exchange between the stakeholders/operators and how are the different stakeholders/operators involved in the definition and implementation process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N007	IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service.	D

Answer:

Data exchange is not an issue in this environment

C. Certification of equipments, agreement of interoperable service providers, qualification of main service

Quest. 35:

Are there defined rules and regulations for adhesion and withdrawal of operators and who is responsible for the definition, maintenance and monitoring of such rules and regulations?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N017	IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on non-discriminatory basis.	D
G-N018	IM shall develop procedures for and assist in the adhesion of new TCs to the service. The criteria for the incorporation, maintenance and withdrawal of TCs shall also be established and managed by IM.	D

Answer:

In the UK, Postcomm is responsible for managing the adhesion of new operators

Quest. 36:

Is there a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (3 items may be specified under the generic certification theme: certification of equipments, agreement of interoperable operators, qualification of operators of the service to be paid within the interoperable service)

CIV WP1 ref.	Reference Condition	Duty/ Right
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS	D
C-N002	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements	D

Answer:

Certification is not an issue in the postal sector

Quest. 37:

Who has the responsibility and are there procedures for auditing the daily provision of the interoperable core service(s) concerning procedures, level of quality and compliance with the common set of technical and functional requirements? How this overall monitoring is organised and how is the responsibility shared between the involved stakeholders and operators?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N021	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D

Answer:

National regulatory bodies undertake this work (in the case of the UK, Postcomm)

Quest. 38:

Who is responsible for the development and implementation of new technology in the systems(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-F002	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

Answer:

It is entirely a matter for the market players

Quest. 39:

Who is responsible for checking the conformity of equipments/stakeholders/ operators to certification/agreement/qualification specifications? How could this responsibility be engaged? What consequences could follow this engagement of responsibility (withdrawal of the concerned equipment/stakeholder/operator, financial damages, other consequence)

Answer:

Not a major issue in this sector, but any disputes would be addressed by Postcomm in the UK.

D. Identification of operators/stakeholders and information on certified equipments, agreed interoperable service providers, qualified operators and list-keeping

Quest. 40:

Are there any numbering schemes for entities, procedures and equipment enabling a unique numbering and proper registration of these objects in European or nationwide registers and who is responsible for such numbering schemes and registers?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N015	IM shall maintain and continuously update the register of authorised EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

Answer:

No

Quest. 41:

Who is responsible for disseminating official information on the interoperable service and certified/qualified stakeholders/operators?

Answer:

Postcomm is responsible for issuing details of access agreements

E. Security policy and protection of users personal data

Quest. 42:

Who is responsible for the development and implementation of the security policy covering amongst others the confidentiality, integrity and availability of data stored and transferred in the system(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N023	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N024	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N025	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

Answer:

N/A

F. Access of the users to the interoperable service

Quest. 43:

Do the users benefit from a general right to have access to the interoperable service (e.g. banker services or car insurance) and/or do they have to conform to a set of conditions to be eligible to the interoperable service (e. g. solvency criteria)?

Answer:

No

Quest. 44:

Who gives the users access to the interoperable service, operators of the interoperable service or operators of the service to be provided at principal?

Answer:

Right of access is set out in statute in the UK, with Royal Mail being obliged to negotiate in good faith and to enter into agreements.

Quest. 45:

In case, access to the interoperable service is denied to a user, is there an alternative way for giving him access to the interoperable service that could rely to a duty for an operator to assume the provision of a minimum service (e.g. car insurance)?

Answer:

Not applicable

Quest. 46:

Who is responsible for the settlement of disputes regarding the access of users to the interoperable service?

Answer:

The access contract contains provisions relating to disputes resolution. The Access Agreements contain provision for the resolution of disputes by either party. If the dispute cannot be resolved between the parties, then there is provision for referring the dispute for determination by arbitration (or, either party can refer the dispute for determination by arbitration with the consent of the other party, without first attempting to resolve the dispute between them). The agreement also provides that the dispute resolution provisions do not prevent either party from applying to the court for interim relief pending the resolution of a dispute in accordance with the provisions of the agreement.

G. Settlement of disputes

Quest. 47:

What are the procedures in case any of the stakeholders/operators reports a perceived breach, who is responsible for settling disputes between operators and who has defined the procedures for settling of such disputes?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	

Answer:

See answer to Q21 above

H. Status, financial framework and membership

Quest. 48:

Is there a legal body to be in charge of interoperable management tasks?

Answer:

Yes – Postcomm in the UK

Quest. 49:

How is interoperable management tasks supported? In particular, what is the financial scheme for certification/agreement/qualification tasks?

Answer:

Not applicable

Quest. 50:

Who participates in interoperability management tasks (plenary members, associated members, other participants)?

Answer:

In the UK, the national regulator

IM Conditions (D1.2) seen as not relevant

Quest. No.	Possible question	CIV WP01 ref.	Reference Condition	Duty/ Right
	N/A	PR-N002	EP and TC shall implement the EETS PR scheme defined by IM.	R
	N/A	PR-N001	IM shall provide and continuously update an EETS PR scheme.	D
	N/A	G-F001	IM may identify cross border enforcement issues and develop/promote proposals for solutions in relation to authorities/legislators.	D

3. Telecommunications

3.1. Studied sector description

In 2002, the European Union adopted a regulatory framework for electronic communications networks and services, covering all forms of fixed and wireless telecoms, data transmission and broadcasting. The regulation of the content carried by such services is, however, dealt with under separate rules.

This framework is currently being updated, to take account of developments in this fast-moving field. The Commission's review proposals, adopted in November 2007, will bring the EU's rules up to date.

The actual regulatory framework consists of this Directive and six specific Directives: Authorization Directive, Access Directive, Universal Service Directive and the Directive concerning the processing of personal data and the protection of privacy in the telecommunications sector.

The EU's regulatory framework aims to promote free and fair competition, which will boost Europe's economy by supporting every area of activity which relies on telecoms, and create a strong telecoms industry in Europe. Consumers will be the ultimate beneficiaries.

The European Commission defines the rules however in each country the National Regulatory Authority (NRA) has to cooperate with each other and with the Commission in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of this Directive and the Specific Directives.

The NRAs also shall promote competition in the provision of electronic communications networks, electronic communications services and associated facilities and services, they shall contribute to the development of the internal market and they shall promote the interests of the citizens of the European Union.

Member States should guarantee the independence of the National Regulatory Authority (NRA) with a view to ensuring the impartiality of their decisions.

The European Regulators Group for electronic communications networks and services has been set up by the Commission to provide a suitable mechanism for encouraging cooperation and coordination between National Regulatory Authorities and the Commission. The ERG is composed of the heads of the relevant national authorities.

In the review proposed in November 2007 the Commission plans to establish a European regulator, based in Brussels, to serve as its main advisor on all European regulatory affairs. It is not supposed to replace national regulators, but it is supposed replace the ERG and work in coordination with the NRAs and the European Commission. The actual ERG members do not agree.

About the technical standardization the Commission shall draw up and publish in the Official Journal of the European Communities a list of standards and/or specifications to serve as a basis for encouraging the harmonized provision of electronic communications networks, electronic communications services and associated facilities and services. Where necessary, the Commission may request that standards be drawn up by the European standards organizations (European Committee for Standardization (CEN), European Commit-

tee for Electrotechnical Standardization (CENELEC), and European Telecommunications Standards Institute (ETSI)).

Member States shall encourage the use of the standards and/or specifications for the provision of services, technical interfaces and/or network functions, to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.

As long as standards and/or specifications have not been published by the Commission Member States shall encourage the implementation of standards and/or specifications adopted by the European standards organizations.

In the absence of such standards and/or specifications, Member States shall encourage the implementation of international standards or recommendations adopted by the International Telecommunication Union (ITU), the International Organization for Standardization (ISO) or the International Electrotechnical Commission (IEC).

Where international standards exist, Member States shall encourage the European standards organizations to use them, or the relevant parts of them, as a basis for the standards they develop, except where such international standards or relevant parts would be ineffective.

About contractual documentation with other operators and the users, the operators have to include the legal considerations that the Directive marks.

3.2. Possible common questions

A. Description of involved stakeholders and operators

Quest. 51:

Are stakeholders/operators of the service to be provided at principal identified as private or public entities? Are, at the same time, some of these stakeholders/operators private entities and other stakeholders/operators public entities? In case of privatization of stakeholders/operators (e.g. telecommunications), was coexistence of different entities (private and public) identified as a constraint for interoperable management questions/issues?

Answer:

For decades, telecommunications' services have been universal services. These services were in the hands of national monopolies. In almost all countries, monopolies were from the Administration or under concession (to a private company, this was the case in Spain).

However, after the liberalization in 1998, in all countries of the European Commission, the telecommunication companies have tended to the privatization. European Union (EU) legislators agreed upon a regulatory package in 2002 and every EU country has an independent National Regulatory Authority (NRA), which is legally distinct from and functionally independent of all organizations providing electronic communications networks, equipment or services.

Currently, there are EU private operators and/or EU private/public operators (but in these cases public participation is under 50%). There are no constraints for interoperable management issues.

Quest. 52:

Is there any other relevant information regarding the status of these stakeholders/operators (e.g. private companies)?

Answer:

The NRA should regularly analyze the market to determine whether one or more operators have significant power on the market, the NRA can impose the following requirements to significant operators:

- Transparency: in order to make the information public on interconnection, accounting, technical specifications or network characteristics.
- Non-discrimination: the operators may to adopt a position equivalent in similar circumstances to other companies that provide equivalent services.
- Maintain separate accounts in respect of certain activities related to interconnection and/or access, especially for the company which held monopolies (i.e.: France Telecom).
- Access to specific network resources and their use.
- Price control and cost accounting, including obligations orientation of prices according to cost.

Quest. 53:

Is there any relevant information regarding the financial resources of these stakeholders/operators (e.g. public subsidies)? How would you qualify users' payment: do users pay a price or a fiscal tax for the service provided at principal?

Answer:

In general there is any public subsidy. However, in order to compensate for the net costs to which the provision of universal service might give rise, compensation mechanisms for operators with universal service obligations may be provided for. This may involve the introduction of a mechanism to compensate from public funds and/or a mechanism to share costs between providers of electronic communications networks and services.

For example, the Europe 2005 action plan specifically advocates the use of EU structural funds to facilitate broadband access in remote and rural areas.

The users pay a price for the service to operator and this price is charged with a fiscal tax (VAT - each country applies a different % over the service cost).

Quest. 54:

At national level, are there national bodies/entities for regulation/standardization of the service?

Answer:

Yes, every country has their NRA. Some of the national regulatory authorities' tasks are:

- encouraging investment in infrastructure and promoting innovation;
- encouraging efficient use and management of radio frequencies and numbering resources;
- encouraging the establishment and development of trans-European networks and the interoperability of pan-European services;
- cooperating with each other and with the European Commission to ensure the development of consistent regulatory practice and application of the new regulatory
- encouraging the exercise of fair and effective competition to the benefit of users.

It could be possible several national entities making these tasks. For example, CMT (Comisión del Mercado de las Telecomunicaciones), Secretaria del Estado de Telecomunicaciones, SETSI and Comisión Nacional de la Competencia are working on these tasks in Spain.

In France, there are also different bodies dealing with these issues:

- L'Autorité de Régulation des Communication Electroniques et Postales (ARCEP) which is in charge of telecommunication market regulation,
- L'Association Française pour la Normalisation (AFNOR), and CF-ETSI which main tasks are standardization

Quest. 55:

In case yes is answered to question 4, is there any European/international coordination of these national bodies/entities? How would you describe this coordination (decision-making process with unanimity or majority rule, supranational body)?

Answer:

Yes, the ERG. The European Regulators Group for electronic communications networks and services has been set up by the Commission to provide a suitable mechanism for encouraging cooperation and coordination between National Regulatory Authorities and the Commission, in order to promote the development of the internal market for electronic communications networks and services, and to seek to achieve consistent application, in all Member States, of the provisions set out in the Directives of the new regulatory framework. The ERG is composed of the heads of the relevant national authorities. The NRA must to cooperate between them.

Also it exist the IRG (Independent Regulators Group), an Informal forum where the Commission is not present. There is not standardized decision-making process. It is based on the good disposition of entities involved.

B. Definition, drawing up and modification of contractual and non contractual documentation (including standards)

Quest. 56:

Who is responsible for defining and maintaining the interoperable core service, including its technical, functional, and service quality specifications? How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N002	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D

Answer:

The regulatory framework has been defined by the EU and specific bodies which produce globally-applicable standards (ETSI, CEN). However, the NRAs are the entities that have to ensure their application in every country. The stakeholders/operators have to follow the NRA regulations.

There is no single contract for all; there are rules and laws that must be observed. There is no generic contract for interoperability; there are bilateral agreements between companies.

When it was necessary to guarantee the whole services interoperability, the EU members have to coordinate their national positions in the international organizations and forums where can to take decisions.

NRAs usually consult the expertise of the operators before they impose new regulations (and this is operator's implication in this process), but is NRA's responsibility implant this regulations.

Quest. 57:

Who is responsible for defining and drawing up the documentation that will be partly governing the relationship between the stakeholders and/or operators, i.e. that will constitutes the common elements of their relationship? In case this documentation comes from both legislation and contract, please specify. How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

Answer:

Member States (and NRA) must ensure that there are no restrictions which prevent undertakings in the same Member State or in different Member States from negotiating between themselves agreements on access and/or interconnection.

Moreover, the Directive establishes a fundamental rule regarding interconnection to the effect that all network operators have rights and obligations as regards interconnection agreements. Thus, operators of public communications networks have a right and, when requested by other undertakings so authorized, an obligation to negotiate interconnection with each other for the purpose of providing publicly available electronic communications services.

So, bilateral agreements between operators should follow NRAs regulations. NRAs could review contracts between operators looking for their conformity with NRAs regulations and could settle disputes between operators (see below).

Quest. 58:

To what extend are the technical and functional requirements for the interoperable core service(s) and the daily operation of the system(s) providing the interoperable core service(s) based on international and/or European standards?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D

Answer:

For interoperability is essential that technical requirements are based on international and/or European standards defined by specific bodies (ITU, ETSI, etc.).

Quest. 59:

Who is responsible for defining the common rules and procedures for data exchange between the stakeholders/operators and how are the different stakeholders/operators involved in the definition and implementation process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N007	IM shall ensure that common rules and procedures for data exchange between EP and TC are established, as necessary to operate the service.	D

Answer:

About the harmonization procedures, Member States shall ensure that national regulatory authorities take the utmost account of European Commission recommendations in carrying out their tasks. Where a national regulatory authority chooses not to follow a recommendation, it shall inform the Commission giving the reasoning for its position.

Where the Commission finds that divergence at national level in regulations creates a barrier to the single market, the Commission may take the appropriate technical implementing measures.

Usually, operators work on definitions under NRAs request and NRAs are responsible to define them as rules.

C. Certification of equipments, agreement of interoperable service providers, qualification of main service

Quest. 60:

Are there defined rules and regulations for adhesion and withdrawal of operators and who is responsible for the definition, maintenance and monitoring of such rules and regulations?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N017	IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on non-discriminatory basis.	D
G-N018	IM shall develop procedures for and assist in the adhesion of new TCs to the service. The criteria for the incorporation, maintenance and withdrawal of TCs shall also be established and managed by IM.	D

Answer:

Yes, there are. The operators have to obtain the general authorization from NRA. The general authorization gives undertakings the right to provide electronic communications networks and services and to negotiate interconnection with other providers in the European Community.

The NRAs may require the undertakings concerned to provide information necessary to verify compliance with the conditions of the general authorization or of rights of use.

Where an undertaking does not comply with one or more of these conditions, the NRA must give it a reasonable opportunity to state its views or remedy any breaches within a period agreed with the undertaking or specified by the NRA. If the undertaking concerned does not remedy the breaches within the set period, Member States may empower the relevant authorities to impose financial penalties where appropriate. In cases of serious and repeated breaches, the NRAs may prevent an undertaking from continuing to provide electronic communications networks or services or suspend or withdraw rights of use.

Quest. 61:

Is there a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (3 items may be specified under the generic certification theme: certification of equipments, agreement of interoperable operators, qualification of operators of the service to be paid within the interoperable service)

CIV WP1 ref.	Reference Condition	Duty/ Right
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS	D
C-N002	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements	D

Answer:

Yes, there is a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (for the 3 items).

Quest. 62:

Who has the responsibility and are there procedures for auditing the daily provision of the interoperable core service(s) concerning procedures, level of quality and compliance with the common set of technical and functional requirements? How this overall monitoring is organized and how is the responsibility shared between the involved stakeholders and operators?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N021	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D

Answer:

Every year the NRA supervises the operators in the market. The NRA controls the observation of general regulation applied to all telecommunications operators in areas like the right of consumers and users, and the quality of service.

For example, in Spain the objective measurement of quality of service is done through the set of parameters that we can find in Annex I of the Order of Quality, whose definition and measurement method has been developed by the European Telecommunications Standards Institute (ETSI).

ETSI produces technical specifications that support European policies and directives that may be listed by the European Commission in their Official Journals.

Quest. 63:

Who is responsible for the development and implementation of new technology in the systems(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-F002	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

Answer:

The operators which develop and implement new technology under the interoperable standards defined by the international, European and/or national organizations.

However, NRA continues to allocate scarce resources

Quest. 64:

Who is responsible for checking the conformity of equipments/stakeholders/ operators to certification/agreement/qualification specifications? How could this responsibility be engaged? What consequences could follow this engagement of responsibility (withdrawal of the concerned equipment/stakeholder/operator, financial damages, other consequence)

Answer:

The Telecommunications range is very wide and there are many regulations. For example to check the conformity of telecommunications equipments the procedures are based on the European Directive 99/5/EC. The manufacturer has to elaborate a technical documentation and to sign a declaration of conformity. The manufacturer has to keep it for 10 years after the last equipment has been manufactured for an inspection at any time.

There are 4 agencies involved in implementing this Directive, one at the European level (TCAM) and 3 national agencies (the authorities of telecommunications responsible to keep watch the product and the market, the authorities of telecommunications responsible to manage the spectrum and the Notified Organizations).

The TCAM (Telecommunications Conformity Assessment and Market Surveillance Committee), the standing Committee assisting the Commission in the management of Directive 99/5/EC is composed by representatives of member states and chaired by a representative of the European Commission.

It is not possible launch to market, in any EU member country, any equipment that does not comply with the directive.

D. Identification of operators/stakeholders and information on certified equipments, agreed interoperable service providers, qualified operators and list-keeping

Quest. 65:

Are there any numbering schemes for entities, procedures and equipment enabling a unique numbering and proper registration of these objects in European or nationwide registers and who is responsible for such numbering schemes and registers?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N015	IM shall maintain and continuously update the register of authorized EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

Answer:

In the Telecommunications world there is, for example, the National telephone numbering plan, which complies with the requirements described in Recommendation E.164 of the International Telecommunication Union (ITU), where every country has an international format for the telephone number.

Member States shall ensure that NRAs control the assignment of all national numbering resources and managing the national numbering plans. Member States shall ensure the provision numbers and sets of numbers for all electronic communications services available to the public. National regulatory authorities establish procedures for allocating national numbering resources that are objective, transparent and non discriminatory.

Quest. 66:

Who is responsible for disseminating official information on the interoperable service and certified/qualified stakeholders/operators?

Answer:

The official information that all operators have to apply is European or national laws that they have to know. However, the local NRA also distributes this information and their own regulations. The NRA keeps the registry of all certified/qualified stakeholders/operators.

E. Security policy and protection of users personal data

Quest. 67:

Who is responsible for the development and implementation of the security policy covering amongst others the confidentiality, integrity and availability of data stored and transferred in the system(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N023	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N024	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N025	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

Answer:

The European Directive reiterates the basic principle that Member States must, through national legislation, ensure the confidentiality of communications made over a public electronic communications network. About the data retention, the Directive stipulates that Member States may withdraw the protection of data only to allow criminal investigations or to safeguard national security, defense and public security. In several states, there are independent administrative authority which aims to protect privacy and personal data (In France, it is called CNIL)

ENISA (European Network and Information Security Agent) was set up by European Union to enhance the capability of the EU Member States and the business community to prevent, address and respond to network and information security problems.

F. Access of the users to the interoperable service

Quest. 68:

Do the users benefit from a general right to have access to the interoperable service (e.g. banker services or car insurance) and/or do they have to conform to a set of conditions to be eligible to the interoperable service (e. g. solvency criteria)?

Answer:

The Telecommunications are a universal service. The Member States must ensure that the telecommunications services are made available to all users in their territory, regardless of their geographical location, at a specified quality level and an affordable price. The user has right to benefit from public pay telephones, special measures for disabled users, quality of service and affordability of tariffs. The Member States shall ensure that consumers with low incomes have access to special tariff arrangements or are given special assistance to enable them to have access to the telephone service and to use it.

Quest. 69:

Who gives the users access to the interoperable service, operators of the interoperable service or operators of the service to be provided at principal?

Answer:

Two options are possible, operators of the interoperable service and operators of the service to be provided at principal.

Quest. 70:

In case, access to the interoperable service is denied to a user, is there an alternative way for giving him access to the interoperable service that could rely to a duty for an operator to assume the provision of a minimum service (e.g. car insurance)?

Answer:

By law the access can not be denied.

Quest. 71:

Who is responsible for the settlement of disputes regarding the access of users to the interoperable service?

Answer:

The access can not be denied but if there are disputes about the quality of service or another problem, simple, transparent and inexpensive out-of-court procedures must be made available to users for dealing with unresolved disputes relating to universal service obligations. Where appropriate and warranted, the Member States may adopt a system of reimbursement and/or compensation.

G. Settlement of disputes

Quest. 72:

What are the procedures in case any of the stakeholders/operators reports a perceived breach, who is responsible for settling disputes between operators and who has defined the procedures for settling of such disputes?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	D
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	D

Answer:

Disputes between providers of electronic communications networks or services in the same Member State are resolved by the national regulatory authority, which is required to issue a binding decision within four months.

In the event of a cross-border dispute between parties in different Member States, any party may refer the dispute to the national regulatory authorities concerned, which must coordinate their efforts in order to settle it.

H. Status, financial framework and membership

Quest. 73:

Is there a legal body to be in charge of interoperable management tasks?

Answer:

NRAs are legal bodies in charge of interoperability at national levels.

Quest. 74:

How is interoperable management tasks supported? In particular, what is the financial scheme for certification/agreement/qualification tasks?

Answer:

Operators pay taxes.

Quest. 75:

Who participates in interoperability management tasks (plenary members, associated members, other participants)?

Answer:

In France, it has been decided, to ensure regulation to be fair, that members of the local NRA must be independent of all operators present on the market.

The regulator's independence is guaranteed by the means by which the members of the Authority's Executive Board are appointed (3 of them are appointed by the President of the Republic, 2 by the President of the National Assembly and 2 by the President of the Senate).

The members are appointed for a term of six years, and their terms are irrevocable and non-renewable.

IM Conditions (D1.2) seen as not relevant

Quest. No.	Possible question	CIV WP01 ref.	Reference Condition	Duty/ Right
	N/A	PR-N002	EP and TC shall implement the EETS PR scheme defined by IM.	R
	N/A	PR-N001	IM shall provide and continuously update an EETS PR scheme.	D
	N/A	G-F001	IM may identify cross border enforcement issues and develop/promote proposals for solutions in relation to authorities/legislators.	D

4. Railways

4.1. Studied sector description

The services to be provided covers freight and passenger transport in the European railway sector. The infrastructure operator on one hand offers the railway infrastructure whereby the railway service provider on the other hand is responsible for offering the service to their customers. The interoperability issues in the railway sector are related to technical standardisation and access to the network.

Technical standardisation

The technical standardisation is a major issue, covering a wide range of subjects:

- Signalling systems
- Voltage
- Track conditions
- Rail wagons
- Braking systems
- etc.

There are major differences between the Member States regarding which standards are used. Some standards are practically valid European wide; others are specific to a country or region. The technical standardisation is not considered further in this context on the national network

Network access

Regarding access to the network it should be explained that in the past there were typically national state-owned railway operators, constructing the tracks and infrastructure, operating the infrastructure and also operating the railway services, offering the freight and passenger transport.

Meanwhile these national administrations have been split into organisations in-charge of the railway infrastructure (infrastructure operator) and organisations operating the railway services (railway service provider). In some cases the infrastructure and railway service organisations are under a common ownership.

Most of the infrastructure organisations are public, but also some private organisations exist. The infrastructure operators provide access to the rail network.

The companies providing railway services are partly privatised parts of the old railway administrations, partly they are still in public ownership. Additionally there are other railway service providers who have been founded privately.

The railway service providers (in this context comparable to the EETS Providers) buy network access from the infrastructure operators (in this context comparable to the Toll Chargers).

The certification from a technical point of view is handled by notified bodies.

Regulatory bodies

A major part of the regulatory tasks are performed by national regulatory bodies, which differ from country to country. Prerequisites required by the European Commission are the following:

- arbitration board
- “competition authority”

The regulatory body is a kind of arbitral court and could use several juridical means for taking its decision (interpretation of contracts, etc.).

On top is the European Commission who is currently working for establishing an European Regulatory Body to handle cross-national disputes and improve coordination of the national regulatory bodies.

More focused on the technical aspects of the interoperability is the European Railway Agency (<http://www.era.europa.eu>), which was set up (under EC Regulation No 881/2004) to help create an integrated railway area by reinforcing safety and interoperability. The Agency has been established to provide the EU Member States and the Commission with technical assistance in the fields of railway safety and interoperability. The agency is funded by the EC.

Changes of specifications on a national level have to be discussed within European Railway Agency which has a coordination role. Recommendations will be given to the European Commission for a final decision/approval.

Additionally the European organisation RailnetEurope (<http://www.railneteurope.com>) was set up on a voluntary basis in January 2004 to establish a common organisation to shape the business of European rail infrastructure. The initiators were infrastructure operators and railway service providers, and RailnetEurope do not have any regulatory power. RailnetEurope operates an office in Vienna.

4.2. Possible common questions

A. Description of involved stakeholders and operators

Quest. 76:

Are stakeholders/operators of the service to be provided at principal identified as private or public entities? Are, at the same time, some of these stakeholders/operators private entities and other stakeholders/operators public entities? In case of privatization of stakeholders/operators (e.g. telecommunications), was coexistence of different entities (private and public) identified as a constraint for interoperable management questions/issues?

Answer:

The stakeholders operating the railways infrastructure are public as well as private entities (see also description).

In Austria the main infrastructure operator is the publicly owned ÖBB Infrastruktur Betrieb GmbH responsible for operating the backbone infrastructure network. Additional there are some regional railway infrastructure operators (9) mainly organised also as public stakeholders. To allow the liberalisation of the market, there was no privatisation, only a division of the roles (infrastructure provider/operators and train service companies).

The Austrian regulatory body is called "Schienen Control GmbH" (www.scg.gv.at).

The Dutch regulatory body is called 'Office of Transport Regulation' and is part of the 'The Netherlands Competition Authority' a public organization.
(<http://www.nmanet.nl/engels/home/Index.asp>)

Quest. 77:

Is there any other relevant information regarding the status of these stakeholders/operators (e.g. private companies)?

Answer:

see above

Quest. 78:

Is there any relevant information regarding the financial resources of these stakeholders/operators (e.g. public subsidies)? How would you qualify users' payment: do users pay a price or a fiscal tax for the service provided at principal?

Answer:

not applicable

Quest. 79:

At national level, are there national bodies/entities for regulation/standardization of the service?

Answer:

Yes, see question 5.

Quest. 80:

In case yes is answered to question 4, is there any European/international coordination of these national bodies/entities? How would you describe this coordination (decision-making process with unanimity or majority rule, supranational body)?

Answer:

Besides the main prerequisites (arbitration board and “competition authority”) required by the European Commission, the national regulatory bodies differ from country to country.

E.g. the Austrian regulatory body (Schienen Control GmbH) employs 10 to 15 people. This regulatory body is organised by Austrian private company law and is a limited company totally owned by the public. In contrary the Portuguese regulatory body has about 100 employees and a wider scope of work. The decisions of the regulatory body are subject to appeal the public courts of justice in the last instance.

B. Definition, drawing up and modification of contractual and non contractual documentation (including standards)
Quest. 81:

Who is responsible for defining and maintaining the interoperable core service, including its technical, functional, and service quality specifications? How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N002	IM shall develop and continuously update the EETS core service definition and procedures for interoperability from a technical, functional, contractual and service quality perspective.	D
G-N006	IM shall inform EP and TC about changes of the EETS procedures, process and documentation, e.g. standard contracts	D
G-N010	IM shall inform EP and TC without delay about EETS core definitions and rules, inclusive their evolution and updates	D
G-N004	IM shall involve EP and TC in the definition of EETS core rules and regulations. IM shall in particular establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made.	D

Answer:

On a European level the TSIs, the Technical Specifications for Interoperability, are drawn up by the European Railway Agency and to be approved by the Commission. The Agency ensures coordination between the development of TSIs and the development of the relevant European standards.

If changes of the specifications on a national level are necessary, these changes have to be requested to the European Railway Agency which gives recommendations. A final decision about any change will be made by the European Commission.

Quest. 82:

Who is responsible for defining and drawing up the documentation that will be partly governing the relationship between the stakeholders and/or operators, i.e. that will constitute the common elements of their relationship? In case this documentation comes from both legislation and contract, please specify. How are the different stakeholders/operators involved in this definition process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

Answer:

In order to be certified as a railway service provider a “traffic certificate” (“Verkehrsgenehmigung”) approved by the ministry is necessary. This license is obligatory for concluding a network statement. This network statement is a contract between an infrastructure provider and the railway service provider. The real access to the network is only possible via a bilateral contract on private level between the infrastructure provider and the railway company.

NOTE:

A major difference with the EETS is that a railway service provider is not required to have access to all infrastructures.

Quest. 83:

To what extent are the technical and functional requirements for the interoperable core service(s) and the daily operation of the system(s) providing the interoperable core service(s) based on international and/or European standards?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N005	IM shall base the technical and functional requirements on international and European standards for the EFC application and different types of communication used by the EETS.	D

Answer:

National standards and ‘permissive’ UIC agreements are gradually replaced by European directives and decision (TSIs) of the Commission based on these Directives.

Quest. 84:

Who is responsible for defining the common rules and procedures for data exchange between the stakeholders/operators and how are the different stakeholders/operators involved in the definition and implementation process?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N003	IM shall provide a set of standard EETS terms and conditions to be taken into account by the EETS actors in their respective contractual relationship.	D

Answer:

The European Railway Agency in co-operation with the European standardisation bodies.

C. Certification of equipments, agreement of interoperable service providers, qualification of main service

Quest. 85:

Are there defined rules and regulations for adhesion and withdrawal of operators and who is responsible for the definition, maintenance and monitoring of such rules and regulations?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N017	IM shall develop procedures and monitor the adhesion and withdrawal of EPs to the service on non-discriminatory basis.	D
G-N018	IM shall develop procedures for and assist in the adhesion of new TCs to the service. The criteria for the incorporation, maintenance and withdrawal of TCs shall also be established and managed by IM.	D

Answer:

A pre-examination of an infrastructure operator through the regulatory body is possible (Audits etc.) according to regulatory law. The regulatory body is responsible for the economical implementation of the interoperability independent of the Notified Body who is responsible for the technical implementation. The notified body is an accredited authority/body which can be nominated by every Member State and is chosen according to some prerequisites for accreditation, which are harmonised and notified European wide. The railway service provider will be certified by the national regulatory bodies. Hereby it's important to mention, that this certification needs to be done by every country where the service provider intends to use the railway infrastructure. In contrary the technical implementation done by the notified body is only necessary in one country as this is valid European wide.

Quest. 86:

Is there a common set of test requirements and/or certification procedures for ensuring technical and functional compliance with the common technical and functional requirements (3 items may be specified under the generic certification theme: certification of equipments, agreement of interoperable operators, qualification of operators of the service to be paid within the interoperable service)

CIV WP1 ref.	Reference Condition	Duty/ Right
C-N001	IM shall be responsible for the development of the EETS test and certification policies, based on international and European testing and certification standards for the EFC applications and the different types of communication used for the EETS	D
C-N002	IM shall inform TC and EP of any changes of the EETS test and certification policy.	D
C-N003	IM shall monitor that the defined test and certification policy is properly implemented and adhered to by the EPs and TCs.	D
C-N004	IM shall monitor test and certification procedures and make recommendations to the appropriate bodies to ensure the operation of EETS.	D
C-N005	IM shall establish appropriate procedures ensuring that EP and TC are given the opportunity to express their opinions before any major decisions are made with respect to certification and testing.	D
C-N006	TC and EP have the right to request IM to investigate that the processes and procedures of a certification body are compliant with EETS requirements	D

Answer:

Only partial, e.g. since 2007 a locomotive may be tested once against the requirements of all 27 Member States (in stead of being tested in every individual country).

Quest. 87:

Who has the responsibility and are there procedures for auditing the daily provision of the interoperable core service(s) concerning procedures, level of quality and compliance with the common set of technical and functional requirements? How this overall monitoring is organised and how is the responsibility shared between the involved stakeholders and operators?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N021	IM shall audit the operation of EP and TC and the status of their EETS related equipment for the purpose of ensuring compliance with the EETS requirements.	D

Answer:

The national regulatory bodies have the possibility to execute audits of the daily provisions.

Quest. 88:

Who is responsible for the development and implementation of new technology in the systems(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-F002	IM may monitor relevant technical development and initiate Research and Development activities as it deems fit.	D

Answer:

European Railway Agency (European Commission)

Quest. 89:

Who is responsible for checking the conformity of equipments/stakeholders/ operators to certification/agreement/qualification specifications? How could this responsibility be engaged? What consequences could follow this engagement of responsibility (withdrawal of the concerned equipment/stakeholder/operator, financial damages, other consequence)

Answer:

see above, national regulatory body

D. Identification of operators/stakeholders and information on certified equipments, agreed interoperable service providers, qualified operators and list-keeping

Quest. 90:

Are there any numbering schemes for entities, procedures and equipment enabling a unique numbering and proper registration of these objects in European or nationwide registers and who is responsible for such numbering schemes and registers?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N015	IM shall maintain and continuously update the register of authorised EP and TC.	D
G-N016	IM shall provide and continuously update a single European numbering scheme enabling a unique identification and a proper registration of entities, procedures and equipment needed for the EETS operation.	D

Answer:

There are several numbering schemes which have to be filled in by the Member States and are managed by the ERA (European Railway Agency). The numbering schemes are mainly related to equipment (rolling stock, etc.).

Quest. 91:

Who is responsible for disseminating official information on the interoperable service and certified/qualified stakeholders/operators?

Answer:

no information

E. Security policy and protection of users personal data

Quest. 92:

Who is responsible for the development and implementation of the security policy covering amongst others the confidentiality, integrity and availability of data stored and transferred in the system(s) providing the interoperable core service(s)?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N023	IM shall develop and continuously update an EETS security policy framework to secure the interest of the EETS users as well as assisting EPs and TCs in their efforts to avoid any economical loss and/or loss of credibility	D
G-N024	IM shall monitor that appropriate security lists (e.g. hot lists, black lists, white lists) are distributed according to proper standards.	D
G-N025	IM shall monitor that the security policy is properly implemented and adhered to by EPs and TCs.	D
ES-N007	The EP shall provide timely information concerning security keys, blacklisting etc. for access by TCs and IM to the extent required.	R

Answer:

no information

F. Access of the users to the interoperable service

Quest. 93:

Do the users (customers of railway service providers) benefit from a general right to have access to the interoperable service (e.g. banker services or car insurance) and/or do they have to conform to a set of conditions to be eligible to the interoperable service (e. g. solvency criteria)?

Answer:

In general the customers of railway service providers benefit from a general right to have access to the interoperable service as far as the market is developed.

The customers of railway service providers include freight customers as well as train passengers. Only in the freight customer sector there is a limited choice of railway service providers for the users (customers of railway service providers).

Quest. 94:

Who gives the users access to the interoperable service, operators of the interoperable service or operators of the service to be provided at principal?

Answer:

The railway service providers give the users access to the interoperable service.

Quest. 95:

In case, access to the interoperable service is denied to a user, is there an alternative way for giving him access to the interoperable service that could rely to a duty for an operator to assume the provision of a minimum service (e.g. car insurance)?

Answer:

not applicable

Quest. 96:

Who is responsible for the settlement of disputes regarding the access of railway service providers to the interoperable service?

Answer:

The national regulatory bodies are responsible for the settlement of disputes regarding the access of railway service providers to the interoperable service.

G. Settlement of disputes

Quest. 97:

What are the procedures in case any of the stakeholders/operators reports a perceived breach, who is responsible for settling disputes between operators and who has defined the procedures for settling of such disputes?

CIV WP1 ref.	Reference Condition	Duty/ Right
G-N011	EP and TC have the right to ask for clarifications of the EETS rules by IM in particular concerning perceived breaches of the EETS rules.	D
G-N019	IM shall develop procedures for settling of disputes between any of the EP and TC.	D

Answer:

The “arbitration board” (“Schienenkontrollkommission”) appointed by the national regulatory body is responsible for settling disputes. This regulatory body is acting like an independent court according to Austrian statutory law.

Cross-national disputes are not regulated so far and are just to be discussed within the EC, as cooperation in these cases is absolute necessary.

H. Status, financial framework and membership

Quest. 98:

Is there a legal body to be in charge of interoperable management tasks?

Answer:

-

Quest. 99:

How is interoperable management tasks supported? In particular, what is the financial scheme for certification/agreement/qualification tasks?

Answer:

The regulatory body is financed through a fee fixed to a certain profiled rate to be paid by the infrastructure operators.

The notified bodies are paid by the companies which are utilizing the notified bodies to become accredited.

The ERA is financed by the European Budget, which means by all Member States according to the budgeted requirements.

The organisation RailNetworkEurope is financed through member fees.

Quest. 100:

Who participates in interoperability management tasks (plenary members, associated members, other participants)?

Answer:

IM Conditions (D1.2) seen as not relevant

Quest. No.	Possible question	CIV WP01 ref.	Reference Condition	Duty/ Right
	N/A	PR-N002	EP and TC shall implement the EETS PR scheme defined by IM.	R
	N/A	PR-N001	IM shall provide and continuously update an EETS PR scheme.	D
	N/A	G-F001	IM may identify cross border enforcement issues and develop/promote proposals for solutions in relation to authorities/legislators.	D

