



# CESARE III PROJECT

Interoperability of electronic fee collection systems in Europe

## D3.2 GUIDANCE TO MEMBER STATES ON IMPLEMENTING THE EUROPEAN ELECTRONIC TOLL SERVICE

Document version	Final
Document status	Validated by project Steering Committee
File name	D3.2 - Guidance to Member States - 9 October 2006 - Final.doc
Dissemination level	EC
Date	9 October 2006



**PROJECT CO-FUNDED BY THE EUROPEAN COMMISSION: DG TREN**



## TABLE OF CONTENTS

1. PURPOSE OF THE REPORT .....	3
2. AUTHORSHIP OF THE REPORT .....	3
3. THE EETS CONCEPT AND DEFINED ROLES .....	4
4. DEFINING THE EUROPEAN ELECTRONIC TOLL SERVICE .....	5
5. THE PROPOSED CONTRACTUAL FRAMEWORK .....	5
6. STRATEGIC IMPLICATIONS OF THE CESARE MODEL .....	6
7. REQUIRED CHANGES TO THE ORGANISATION OF TOLL OPERATIONS .....	7
8. IMPLEMENTATION OF THE EETS .....	8
9. PROPOSED APPROACH FOR MEMBER STATES TO SUPPORT THE EETS .....	12
10. MAJOR OUTSTANDING ISSUES.....	16
11. CONCLUSIONS.....	18



## 1. Purpose of the report

---

This report is a summary of more detailed analysis and guidance produced by the CESARE III project<sup>1</sup>. ANNEX A gives a brief description of the CESARE III project.

This report provides a high-level summary of the guidance prepared by CESARE to assist Member States in the implementation of the European Electronic Toll Service as required by Directive 2004/52/EC. In ANNEX B essential parts of the Directive are given.

This report is initially aimed at Member States which have toll schemes within the scope of the Directive, but which do not yet have a mechanism for signing the necessary legal agreements to participate in the interoperable toll service defined by the Directive. Countries with plans for future toll schemes may also find the document helpful.

While accepting of the EETS will be a legal obligation on all relevant toll schemes within the European Union, it is possible that other countries as well as other toll schemes may wish to accept EETS. For example, accession countries (e.g. Bulgaria, Croatia and Romania) and EEA countries not in the EU (e.g. Iceland, Liechtenstein and Norway) and Switzerland may decide to accept EETS.

## 2. Authorship of the report

---

The report has been prepared by the partners in the CESARE III project. These include representatives of motorway toll operators from across Europe drawn from Association Européenne des Concessionnaires d'Autoroutes et d'Ouvrages à Péage (ASECAP) and also the following Member States belonging to the Stockholm Group: -

- Germany
- Netherlands
- Sweden
- UK

Switzerland as a member of Stockholm Group is also a partner in the project. Finland cooperates through the Swedish partner.

The project is supported by the European Commission as part of the programme of work to support the implementation of the European Electronic Toll Service (EETS)

---

<sup>1</sup> D3.1 Report on national organisational arrangement for contractual interoperability



### 3. The EETS Concept and defined roles

---

Directive 2004/52/EC on the interoperability of electronic road toll schemes<sup>2</sup> in the Community was adopted in April 2004. This Directive defines a European Electronic Toll Service (EETS).

The concept is that toll scheme users will be offered a service for the payment of all tolls across Europe. The user will receive an in-vehicle device which will be guaranteed to communicate with any system offering EETS. It is intended that users will receive a single invoice covering all the tolls charges incurred in the period of the invoice.

One of the key issues concerns the nature of the delivery mechanism for EETS. The Directive is a legal instruction, addressed to Member States, requiring them to transpose it into national law. However, the Directive refers to a contractual framework between all operators and/or issuers. The process whereby a legal framework is translated into a commercial framework is not defined in the Directive.

This report is designed to assist Member States who at present have no suitable arrangements to enable them to fulfil the requirements of the Directive. It provides guidance to Member States and other countries on a process to move the responsibility for the delivery of the service from government level to the organisations who will actually operate the EETS.

CESARE III has proposed an EETS business model. This involves four roles: -

- Toll Charging
- EETS Provision
- Interoperability Management
- Service Usage

This report deals with implementation. We therefore refer to Toll Chargers and EETS Providers as the organisations which will undertake the defined roles. The EETS Provider provides the (EETS) service to the user and the Toll Charger accepts EETS.

There are many different organisations currently providing toll services. The organisation to be designated as the Toll Charger will have the assigned responsibility to collect tolls for road use. These will generally be existing organisations, some being private organisations and some

---

<sup>2</sup> Defined as collection of all types of electronic road fees, on the entire Community road network, urban and interurban, motorways, major and minor roads, and various structures such as tunnels, bridges and ferries.

being publicly owned and operated. These organisations will be obliged by national law to support the use of EETS in their toll scheme.

EETS Provision is a newly defined role. The organisations fulfilling this role will provide the EETS to users. Users will sign a contract with an EETS Provider which will enable them to use and pay for all toll schemes within the scope of the Directive. EETS Providers will have a contractual relationship with Toll Chargers which will provide a guarantee of payment of tolls arising from the use of tolled facilities by their users.

#### **4. Defining the European Electronic Toll Service**

---

The CESARE III project has defined the EETS service components. These are grouped under the following headings: -

- Governance and Certification
- Contract Issuing
- Service Use
- Service payment
- Service User support
- Enforcement
- Promotion

Most of these are components of current toll schemes. The EETS definition will define the additional interoperable service, assuming that all these services are already provided for local and/or national users.

#### **5. The proposed contractual framework**

---

Directive 2004/52/EC places obligations on Operators of toll schemes (defined in the widest terms and including tax schemes) to offer users an interoperable service. Member States are required to transpose the EU legal framework into a national legal framework which ensures that EETS is provided by toll operators in that country.

CESARE III has proposed that the service obligations to deliver EETS are achieved through a contractual framework involving Toll Chargers and EETS Providers. These two roles – the Toll Charger and the EETS Provider - are the generic names given by CESARE III to the parties who will sign the contracts being drafted by CESARE III. They will therefore need to be or act as commercial entities with contractual obligations.

The entities who will provide the roles of Toll Charger and EETS Provider will be determined partly by national governments and partly by commercial market.

There is no single organisational structure proposed for implementation in each country. Each country is left free to assign the role of the Toll Charger to whatever entity is most appropriate to sign the EETS contract.

## **6. Strategic implications of the CESARE model**

---

There are some strategic implications associated with the application of this organisational model for the delivery of the EETS. The terms Toll Charger and EETS Provider are specifically used in the context of the delivery of the EETS. These implications are as follows: -

- EETS is provided by two sets of roles – Toll Charging and EETS Provision. In this report, we use the terms “Toll Charger” and “EETS provider” to refer to those organisations entering into the contractual relationship defined by the Interoperability Management.
- The Toll Charging role can only be performed by organisations involved in operating toll systems. These are commissioned at a local (national) level. This in turn implies, that the directive has been transposed into national law beforehand.
- Once all preconditions are in place – namely a national law - organisations operating toll systems which are within the scope of the Directive are **obliged** to accept EETS users – these are referred to in this report as the Toll Chargers.
- The role of EETS Provision requires the provision of certified in-vehicle equipment which is accepted by **all EETS compliant Toll Schemes** across Europe. The organisations who undertake to provide this service are referred to in this report as “EETS Providers”
- All Toll Chargers are obliged to accept payment from **all** EETS Providers.
- The EETS provision role can potentially be performed by **any commercial organisation** that is willing to provide the service and meets the requirements of the Interoperability Manager.
- There will be an open market for the role of EETS provider.

*Note: Germany does not share the understanding that the directive aims to create a completely open market so that any organisation would be free to offer the EETS if it fulfils certain requirements. In any case it is necessary that EETS providers are only admitted as such if they fulfil the relevant national requirements for an actor performing a comparable role within the domestic system.*



## **7. Required changes to the organisation of toll operations**

---

Most existing toll operators could provide both the roles of a Toll Charger and of an EETS Provider defined by CESARE III. They provide in-vehicle equipment for use with the electronic charging and also collect the tolls.

CESARE III has proposed that these functions are split for the delivery of EETS, allowing different organisations to offer users equipment.

CESARE III proposes that any organisation fulfilling all the requirements for the EETS should be permitted to become an EETS Provider. These requirements will be defined and managed by the Interoperability Manager function.

This may cause problems in some Member States, such as Germany, where toll operators operate completely integrated systems under direct contractual arrangements with their government. Opening up such closed operations to the market involves complex contractual and technical modifications and may necessitate renegotiation of the present arrangements.

CESARE III has defined the contractual aspects of the EETS, including the obligations, requirements, rules and procedures involving the Toll Chargers and EETS Providers in delivering the service.

## 8. Implementation of the EETS

### 8.1 Entities involved in delivering EETS

In this section the various elements that may be involved in the governance are described and some of the implementation issues are mentioned.

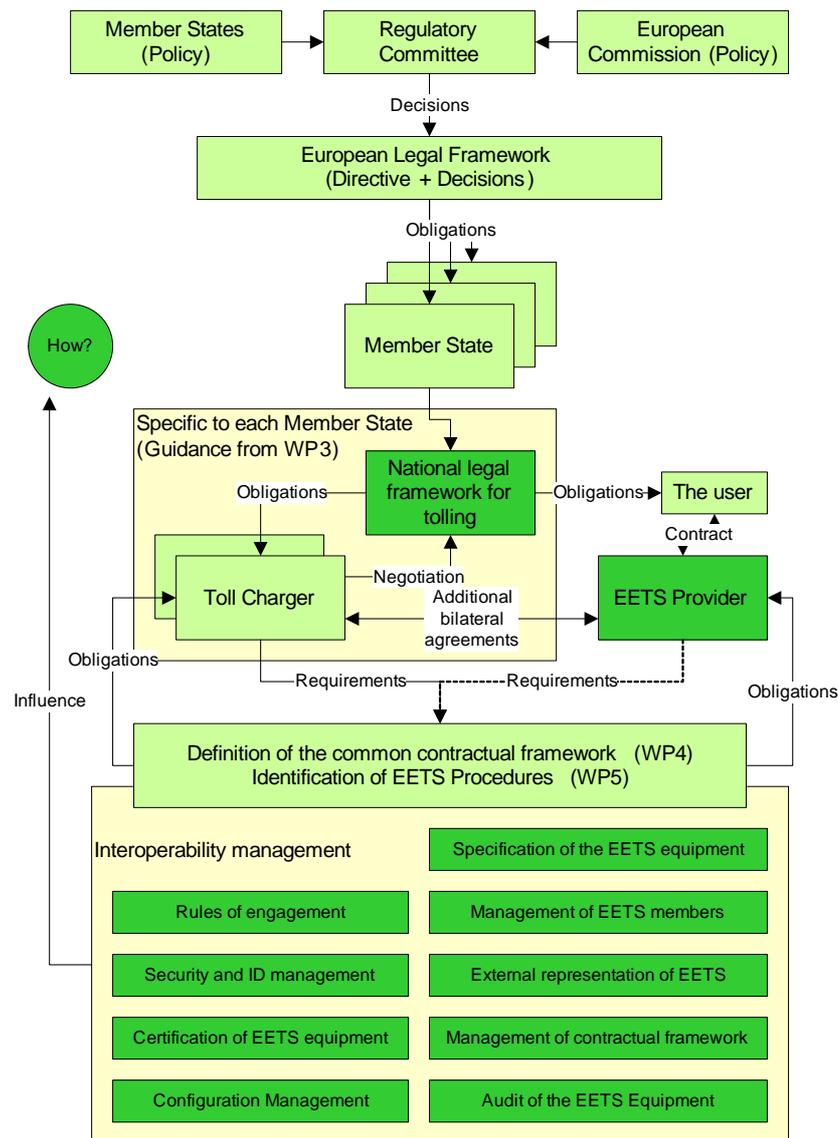


Figure 1: Governance of the EETS

Figure 1 shows the various entities involved in EETS and the legal and contractual interactions between them.

Member States and the European Commission are both involved in the Regulatory Committee which takes the formal decisions regarding EETS. These decisions then take the form of obligations on the Member States. The flow of obligations through the system is a key element of EETS, as it involves transfer of legal obligations to commercial agreements.

The obligations on the Member States in the provision of the EETS include, as a minimum, the transposition of the Directive. Each Member State will convert the obligations into a national context; some may need to create a national framework for tolling. In addition to the obligation to transpose the Directive, this may also include some specific national provisions relating to the obligations to be placed on national Toll Chargers in relation to the acceptance of EETS. It is expected that Toll Operators will negotiate with their governments to secure an acceptable outcome. For example, national Toll Operators may need to upgrade roadside equipment, back-office systems, marketing and operational procedures to accommodate EETS. The purpose of the national legal framework is to pass the EETS obligations in respect of acceptance of EETS to the Toll Operators within each nation. This includes the necessary arrangements for accepting on-board equipment provided by EETS Providers and for receiving payment from them (taking into account a possible increase in credit risk).

Once the national legal framework is in place, and any national changes to implement EETS are agreed, then Toll Chargers will be able to enter into commercial agreements with EETS Providers. Those contractual agreements will place obligations on the Toll Chargers which need to be in accord with their national legal framework. Given that the national legal frameworks will be specific to each country and therefore different, this may be a complex process.

CESARE III has prepared a common contractual framework for potential agreement by all Toll Chargers. Consultation with some potential EETS Providers has been undertaken to understand the requirements of EETS Providers.

The shapes shaded in dark green in Figure 1 do not yet exist. The EETS Provider is a completely new role. Formally speaking, the Toll Chargers do not yet exist as this business model has not yet been implemented. However, the Toll Chargers will be new roles for existing toll scheme operators.

Assuming that CESARE III completes the definition of the common contractual framework, there are three remaining elements to be established :-

- o National legal frameworks for tolling

- EETS Providers
- Interoperability Manager

## **8.2 National legal frameworks**

This report is intended to offer guidance to enable each Member State to undertake a process which will lead to the creation of a national legal framework in each of the Member States.

It may be appropriate for some Member States to work together on the development of these frameworks. Given the differences in current legal, commercial, operational and technical arrangements in each country, the development of the appropriate legal framework is left to each Member State. The aim will be the same in each case – to ensure that the obligations for the delivery of the EETS are transferred from Member States to Toll Chargers. Toll Chargers should then be in a position to enter into commercial agreements to accept the obligations of the common contractual framework.

## **8.3 EETS Provision**

The EETS Provider is a new role. There is some interest from the commercial world in offering such a service. However, commercial organisations are likely to require clarity on the precise obligations and powers of EETS Providers and appropriate remuneration for any services offered.

In the absence of any Interoperability Manager function, there is considerable uncertainty about the precise nature of all the elements shown in Figure 1 as the responsibility of Interoperability Manager. There cannot be any EETS Provider prior to the creation of the Interoperability Manager, as only this organisation can present the EETS Provider with an acceptable package.

## **8.4 Interoperability Management**

The aim of the CESARE III business model is to place all the responsibilities for managing EETS in the hands of an organisation with appropriate arrangements for ensuring that Toll Chargers and EETS Providers are properly represented.

However, as stated above, the involvement of the EETS Providers is essential to the establishment of the Interoperability Manager.

It is a CESARE III conclusion that the successful implementation of the EETS depends on the establishment of the Interoperability Management role.

Many of the processes will need to be in place, and Toll Charger commitment achieved before potential EETS Providers can be “signed up” for the EETS. These processes include the following: -

- Specification of the EETS equipment
- Rules of engagement
- Management of EETS members
- Security and ID management
- External representation of EETS
- Certification of EETS equipment
- Management of contractual framework
- Audit of EETS equipment
- Configuration management
- Ongoing maintenance and service provision
- Overall service quality
- Promotion

The Interoperability Manager functions require the involvement of a large number of stakeholders, as shown in the following table. All of these should be involved in the interim arrangements for the Interoperability Manager.

<b>Issue</b>	<b>Potential Stakeholders involved</b>
Technical specifications	Toll Chargers, Suppliers, EETS Providers, EC, Member States, CEN
Security	EC, Member States, Toll Chargers, EETS Providers
Identification of OBUs	Toll Chargers and EETS Providers
Management of EETS	Member States, Toll Chargers, EETS Providers , the EC
External representation	Toll Chargers and EETS Providers
Certification	Toll Chargers, EETS Providers, Certification Authorities
Contractual framework	Toll Chargers and EETS Providers
Audit	EC, Member States, Toll Chargers, EETS Providers

It is not yet clear how the Interoperability Manager role will be established, or who will be involved.



## **9. Proposed approach for Member States to support the EETS**

---

The Directive is aimed at Member States and is a legal instrument. However, the EETS is expected to be a commercial service offered by the market on commercial terms to users.

For some Member States, the EETS is an extension of services already offered nationally. The commercial frameworks for Toll Operators and Contract Issuers can be developed to offer the roles of Toll Chargers and EETS Providers, without undue disruption. The EETS can be added to the range of existing services which are already marketed to users.

For other Member States, the EETS poses significant problems. It is these Member States that the work of Work Package 3 within CESARE III in general, and this document in particular are aimed to help.

As has been mentioned previously, the CESARE III partners have concluded that there is no possible prescriptive approach which can be applied to Member States. Indeed the Directive specifically states that the toll collection using the EETS must not interfere with national charging policies.

Consequently, the approach is to recommend a generic process, which it is hoped can be followed by all, but which will address the particular issues arising from the national situations.

If this approach is acceptable to Member States, then it is proposed that they should each establish an implementation plan for EETS and should report progress on a regular basis to the EFC Expert Group and to the Regulatory Committee. The steps in the process will hopefully provide some common structure to the implementation programme, even though there are many national differences.

*[R 1] Member States are recommended to establish a national implementation plan for the EETS, based on the approach set out by CESARE III.*

CESARE III has defined what needs to be done by the Interoperability Manager. However, the task of setting up the necessary organisational arrangements is complex. It is not even clear who is able to establish the required organisation, given the current involvement of both Member State governments and commercial Toll Operators. Should this be a public, or private organisation, or some combination? The scope of Interoperability Manager is large and it will take time to set in motion. There may have to be interim arrangements put in place. This document aims to facilitate engagement by Member States in this process, at least until the necessary commercial arrangements are established.

This approach assumes that CESARE III and subsequent work defines all aspects of the EETS, including all the obligations, requirements, rules and procedures involved in delivering the service. This paper focuses on how to actually implement it in countries that currently have no means of addressing the national issues.

The proposed approach is as follows: -

1. Establish enabling legal framework in the best way applicable to the Member State's legal system (i.e. transpose directive)
2. Identify schemes which fall within the scope of the Directive
3. Identify current/new legal and commercial relationships
4. Establish a national governance process for the EETS.
5. Identify changes required to implement the legal, fiscal, commercial and contractual arrangements for EETS
6. Undertake the necessary actions to implement the changes
7. Facilitate and maintain the implementation of the EETS in the member state

These are explained in the following sections.

### **9.1 Establish enabling legal framework (transpose directive)**

There is a legal obligation on Member States to transpose the Directive into national law by November 2005. Some, but not all, Member States have done this. Others, and particularly those who do not yet know the implications of such a law, are reluctant to try establish a national law until the EETS is fully defined.

In particular there are countries which do not yet have any tolls schemes. How should they prepare for EETS?

Member States need to work on a solution to this issue. It might be helpful if some Member States got together to prepare a common text which might be used to provide a common starting point for Member States to introduce an enabling law, giving the required powers, subject to suitable safeguards and allowing for the issue of subsequent regulations.

The European Commission is pressing Member States who have not yet transposed the Directive to do so. Member States have different legal systems and hence a common basis would probably not work. However it might be feasible for Member States to work together, with assistance from the European Commission, on the issues faced in transposing the Directive



*[R 2] It is recommended that Member States who have not yet transposed the Directive consider some joint working arrangement to discuss and resolve any outstanding problems.*

## **9.2 Identify schemes which fall within the scope of the Directive**

It has already been mentioned that the Directive is not explicit in which schemes come within the scope of the Directive. It has not proved possible within CESARE III to determine the list of schemes within each country which come within the scope of the Directive, as this is considered to be a bi-lateral issue between the Member State and the European Commission. Uncertainty about this issue could lead to increased risk to the delivery of EETS and to unnecessary cost. The list of schemes within the scope of the Directive should be defined as soon as possible. This will facilitate work on the implementation plan and identify all the "Toll Charger" stakeholders.

*[R 3] Each Member State should determine which toll schemes come within the scope of the Directive and agree the list with the European Commission.*

## **9.3 Identify current/new legal and commercial relationships**

Where there are several different organisations which will be required to fulfil the role of Toll Charger, it will be important to establish what the current legal and commercial relationships between the government and these organisations are, as this will provide the basis for the development of an implementation plan and for the delegation of the legal responsibilities of government on to the commercial organisations who will be operating the toll schemes subject to EETS. The obligations remain with Member State governments until this is achieved.

The present arrangements may be a complex legacy of primary legislation; secondary legislation; statutory instruments; regulation; commercial contract; franchise and / or legal, fiscal and commercial issues not covered by the above list.

This could mean that the process of passing the EETS requirements to the commercial sector could be both legally and commercially complex as well as time consuming.

## **9.4 Establish a national governance process for the EETS**

It is clear from discussions in the EETS forum that there will be a need for some national 'organisations' in particular in Member States where there is more than one scheme within the scope of the Directive to co-ordinate matters relating to EETS. In some countries there are associations of toll operators which could function as the 'national' organisation. Of course, some countries may decide – like the Nordic countries - to have a common representation and approach covering several countries.

Member States who do not yet have any organisational arrangement will require some mechanism for communication between the commercial world of the Toll Chargers/EETS Providers and the legal world of the Regulatory Committee and national policy and law. One of the roles of such an organisation may be to decide how to promote an open market for EETS Providers. In France, work has begun on the establishment of separate Contract Issuers, who might in the future become EETS Providers. Such organisations could act as the focal point for dialogue between local schemes and the other European actors, but it is up to the Toll Chargers – in France the Concessionnaires – to decide whether or not they make use of such focal points.

In situations where the Contract Issuers are an integral part of Toll Operators, it is not clear how the role of EETS provider will be achieved.

Part of this function is to decide at the national level how the representation on the Interoperability Manager organisation will be arranged. Will each toll scheme be directly represented, or will national government seek to have a role in such an organisation?

*[R 4] Each Member State should consider to establish a governance organisation for facilitating the transition of the EETS obligations to enable the realization of an open market.*

*Note: See the German reservation made in chapter 6.*

### **9.5 Identify changes required to implement the legal, commercial and contractual arrangements for EETS and the creation of a focal point for contact between the national interests and the new EETS.**

The purpose of the preceding tasks is to develop an implementation plan for each Member State. This will involve identification of all the necessary changes, be they legal, commercial or contractual, and setting out a plan and timetable for achieving these.

### **9.6 Undertake the necessary actions to implement the changes**

The execution of any plan is likely to involve some changes at local and national level. At some point the Interoperability Manager function will take over responsibility for management of the EETS. There will be a need to ensure that all relevant schemes within the Member States implement common technical and procedural standards.

*[R 5] The European Commission should establish an EETS coordinator to liaise with Member States on progress made with the national implementation plans for EETS.*

### **9.7 Facilitate and maintain the implementation of the EETS in the Member State**

The final stage is to manage the transition of the EETS from a legal instrument to a commercial service operating in an open market.



## 10. Major outstanding issues

---

### 10.1 Lack of agreed requirements for schemes using new technologies

CESARE III is charged with taking account of the introduction of new technologies, specifically the use of satellite positioning and cellular communications.

This has proved to be difficult due to the lack of national requirements for equipment based on GNSS/CN technologies

Germany is the only Member State with a working toll system based on GNSS/CN technologies. Germany has a proprietary system owned and operated by a single organisation. The specification of this system is currently not available to the market. The requirements of the German government for equipment to be provided by an EETS Provider may be the same or different from those imposed on Toll Collect. In any case, they are not known. Certainly the requirements of other Member States are likely to differ from those of Germany

Other Member States expect to introduce toll schemes using the new technologies in the future. These systems have not yet been defined and therefore the requirements for equipment to be provided by an EETS Provider are not yet known.

It is currently not possible to specify, build or certify on-board equipment which is "suitable for use" with toll schemes in Germany and other future schemes using GNSS/CN technologies.

Various attempts have been made (by European Standards Organisations and the European Commission) to prepare appropriate standards and a specification for the EETS system. These have necessarily been largely theoretical. They have all lacked sufficient resources and progress has been slow as a result.

The EETS as currently conceived cannot be offered without an agreed technical specification.

*[R 6] The German and Swiss Authorities and other authorities with an interest should be asked to assist with the determination of requirements for EETS Providers from Toll Chargers using autonomous systems.*

The interoperability specification for microwave-based systems is almost complete.

*[R 7] The European Commission should consider early implementation of EETS based on the use of microwave technology. This will enable all the legal, contractual, commercial, operational and procedural aspects to be verified while the specification for the more advanced service is developed.*



Work on the technical specification has to date been largely undertaken by consultants and suppliers. This process cannot be expected to lead to a specification without the involvement of the Toll Chargers concerned.

*[R 8] Toll chargers expecting to use new technologies should be invited to play a full role in developing the full technical specification for the EETS, making appropriate use of emerging standards.*

### **10.2 Lack of organisational framework for implementing EETS**

Section 8 has highlighted the implementation issues for the EETS. The Interoperability Manager function is absolutely crucial. It is intended that the Interoperability Manager function will eventually be provided as part of the EETS commercial framework, with some input from Member States.

However, Member States have a strong interest in many of the aspects to be undertaken as part of the role of Interoperability Manager. It is therefore necessary for some Interoperability Manager organisation to be put in place which enables: -

- (a) the implementation of EETS
- (b) the smooth transition of the service from public law obligation to market provision

*[R 9] An Interoperability Manager organisation should be established to undertake the implementation of the EETS and transition to the market.*

### **10.3 There is no mechanism for ensuring that EETS Providers offer the required service.**

Governments are believed to be able to oblige Toll Chargers on their national territory to support the EETS.

However, no institution can be forced by any government to be an EETS Provider. The only way to have EETS Providers is to create appropriate conditions to incentives people/institutions to decide to become an EETS provider. These conditions are (above all) commercial conditions.



## 11. Conclusions

---

### 11.1 CESARE III deliverables

CESARE III provides: -

- o the business model for the EETS (WP1)
- o a definition of the service to be provided (WP2)
- o the contractual arrangements between Toll Chargers and EETS Providers (WP4)
- o identification of the procedures involved in the operation of EETS (WP5)

### 11.2 Fulfilling Member State obligations

This report provides Member States with a proposed approach for transferring the legal obligations in the Directive towards a commercial delivery of services to users. The precise arrangements are left to national governments.

Some support for national governments is proposed, both by teaming up with other governments on common issues, and in coordinating the national approaches to the implementation of EETS.

### 11.3 Need for an Interoperability Manager organisation

The key conclusion of this report is that there is a need to establish an organisational framework with executive power which will take forward the short-term implementation of the EETS and ensure the smooth transition to a commercial service.

Ideally, this organisation would be created as part of the commercial service delivery process provided by the Toll Chargers and EETS Providers who will together support EETS. However, there are some crucial reasons why action is required: -

- o the Interoperability Manager organisation will incur some initial investment cost – EETS providers are unlikely to enter into obligations for setting up the Interoperability Manager
- o Some aspects of the service depend on Member State and EC decisions and therefore are a source of risk to Commercial service providers
- o The acceptance of EETS is unlikely to be simultaneous across all EU countries and therefore some interim arrangements are necessary for potential EETS Providers under these circumstances.

An outline of the programme of work of the Interoperability Manager is given in the following table, in no particular order: -

- Agree on the terms of reference for an Interoperability Manager.
- Identify the organisations which will be involved in the Interoperability Manager organisation. This may need to include the EC, Member States, Toll Chargers and possibly other organisations
- Establish an implementation plan for the Interoperability Manager.
- Establish a budget for the Interoperability Manager.
- Establish the funding mechanism for the Interoperability Manager.
- Establish the necessary powers for the Interoperability Manager. It will be necessary for the Interoperability Manager to set up an office, procure services, make decisions, etc
- Establish the arrangements for resourcing the Interoperability Manager. Resourcing needs to be flexible and efficient. Current mechanisms used within the EC are inappropriate for an implementation organisation.
- Establish the relationship between the Interoperability Manager and the other stakeholders.
- Define and implement Security and ID Management
- Define and implement the arrangements for the certification of EETS equipment
- Setup proper procedures for the management of the Interoperability Manager, including configuration management
- Prepare and agree a specification for the EETS equipment and interfaces
- Define and implement arrangements for the auditing of EETS equipment
- Set up arrangements for the completion and management of the contractual framework
- Set up arrangements for management of the membership of the EETS
- Establish arrangements for the representation of EETS to other stakeholders
- Establish the membership and governance of the Interoperability Manager organisation
- Hand control to the Interoperability Manager organisation when appropriate

## 11.4 Stakeholder involvement

The Interoperability Manager functions require the involvement of a large number of stakeholders, as shown in the following table. All of these should be involved in the interim arrangements for the Interoperability Manager.

Issue	Potential Stakeholders involved
Technical specifications	Toll Chargers, Suppliers, EETS Providers, EC, Member States, CEN
Security	EC, Member States, Toll Chargers, EETS Providers
Identification of OBUs	Toll Chargers and EETS Providers
Management of EETS	Member States, Toll Chargers, EETS Providers , the EC
External representation	Toll Chargers and EETS Providers
Certification	Toll Chargers, EETS Providers, Certification Authorities
Contractual framework	Toll Chargers and EETS Providers
Audit	EC, Member States, Toll Chargers, EETS Providers



## **ANNEX A THE CESARE III PROJECT**

CESARE III is the third phase of the CESARE programme, which started in 1998. The overall aim of CESARE is to allow road users to make use of their on-board unit (OBU) for payment of road user charges throughout Europe.

The first phase of CESARE (1998-1999) defined the requirements for technical and operational interoperability between the tolled motorway operations across Europe. CESARE I was undertaken entirely by ASECAP members and was focused on the specific need of Tolled Motorway Operators.

The second phase (2001-2002) developed a Memorandum of Understanding defining all technical, organisational and operational rules upon which contractual interoperability among ASECAP members is going to be established. CESARE II involved several Member States in providing comments and input. A MoU was developed which defined the necessary commercial arrangements for interoperability.

CESARE III has taken place in the context of the implementation of the EFC Directive and therefore has taken full account of the other activities related to the European Electronic Toll Service (EETS) being coordinated by the European Commission.

The development of a business model for interoperability of electronic fee collection began in the MOVE-it project and has been developed further by CESARE and CESARE II, and CESARE III. Further relevant work has been done in other projects, such as CARDME, MANS, NORITS and MEDIA.

CESARE III consists of the following work packages:-

- WP1 Review and revise the CESARE business model
- WP2 Review and revise the service definition for EETS
- WP3 Propose organisational arrangements for contractual interoperability
- WP4 Review and revise the contractual documents
- WP5 Identify the relevant procedures

CESARE III is intended to broaden the approach developed in CESARE I and CESARE II to apply to all countries in Europe. Significant challenges which have been addressed by CESARE III are:-

- Involving new roles in the contractual framework
- Supporting equipment based on new technologies
- Dealing with new enforcement requirements
- Dealing with different types of service
- Supporting new European legislation.



## **ANNEX B OBLIGATIONS OF MEMBER STATES ARISING FROM DIRECTIVE 2004/52/EC - THE LEGAL FRAMEWORK FOR INTER-OPERABLE EFC**

The Directive applies to the electronic collection of all types of road fees, on the entire Community road network, urban and interurban, motorways, major and minor roads, and various structures such as tunnels, bridges and ferries.

The Directive does not apply to:

- road toll systems for which no electronic means of collection exists
- electronic road toll systems which do not require the use of on-board equipment
- small, strictly local road toll systems for which the cost of compliance with the requirements of this Directive would be disproportionate to the benefits.

Article 2 of the Directive defines a European Electronic Service (EETS) which encompasses the entire road network in the Community on which tolls and road usage fees are collected electronically.

Clause 2 of Article 2 states that "Operators shall make available to interested users on-board equipment which is suitable for use with all electronic toll systems in service in the Member States."

The EETS is expected to be established through: -

- A contractual framework
- Technical standards
- The offer of a single contract to users which will cover the use of all charging systems within the scope of the Directive
- On-board Equipment (OBE) which is suitable for use with all electronic toll systems within the scope of the Directive.

Clause 1 of Article 3 states:

"A European electronic toll service shall be set up which encompasses all the road network in the Community on which tolls or road usage fees are collected electronically. This electronic toll service will be defined by a contractual set of rules allowing all operators and/or issuers to provide the service, a set of technical standards and requirements and a single subscription contract between the clients and the operators and/or issuers offering the service. This contract shall give 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.



Clause 4 of Article 3 states:

“Where Member States have national systems of electronic toll collection, **they shall ensure that operators and/or issuers** offer the European electronic toll service to their customers in accordance with the following timetable:

- (a) for all vehicles exceeding 3,5 tonnes and for all vehicles which are allowed to carry more than nine passengers (driver + 8), at the latest three years after the decisions on the definition of the European electronic toll service, as referred to in Article 4(4), have been taken;
- (b) for all other types of vehicle, at the latest five years after the decisions on the definition of the European electronic toll service, as referred to in Article 4(4), have been taken.”

Article 6 states: -

“Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive”