

The CESARE Project

CESARE is a project set up by ASECAP with the intention of specifying, designing, developing, promoting and implementing a common interoperable Electronic Fee Collection System (EFC) on European toll roads.

The objective is allowing European users to travel through the overall network and pay for tolls with a unique technical and contractual means, obtained by signing a contract with one of the possible providers, under an agreement signed by toll road operators referred to as Memorandum of Understanding.

Users will have a unique interface to the service, referred to as payment mean issuer, providing a contractual and a technical instrument (the on-board terminal) to access the service. The user shall be able to use such instrument throughout the network, receiving then a periodical statement of the transits performed and an invoice from the same issuer, which will charge him on behalf of all operators.

Electronic fee collection interoperability is characterised by the following three aspects:

- Technical interoperability, intended as a standardisation of the technical characteristics of both the roadside and the on-board equipment;
- Operational interoperability, intended as the standardisation of all procedures involved by the toll payment through an electronic means, from the distribution to the use of the on-board terminal, from the charging of the user to the crediting of transport service operators;
- Contractual interoperability, intended as the establishment of a contractual instrument binding signatory parties to provide a service to users along a standardised behaviour.

The overall project can be considered as constituted by 4 different phases:

- **Phase I:** Service definition, technical and operational interoperability
- **Phase II:** Contractual interoperability and feasibility validation

- **Phase III:** Tenders and system implementation
- **Phase IV:** Service roll-out

Phase I closed by the end of 1999 with the result of achieving the basic definition of the technical and of the operational interoperability.

Phase II started in the year 2001 and ended in February 2002. This second phase touched the different interoperability levels (technical, procedural and contractual) and provided a whole framework for interoperability of the EFC systems based on DSRC (Dedicated Short-Range Communications). The main achievements of Phase II are the following:

- Provision of a Memorandum of Understanding (MoU) that defines the behaviour to be respected by all actors involved (operators, payment mean issuers – being them the same operators of financial institutions – and users);
- Preparation of necessary contractual documents attached to the MoU;
- Definition of an EFC transaction model and the technical specifications for the equipment needed to perform it
- Investigation of the compatibility between the ASECAP designs and the requirements of non-ASECAP countries interested in EFC

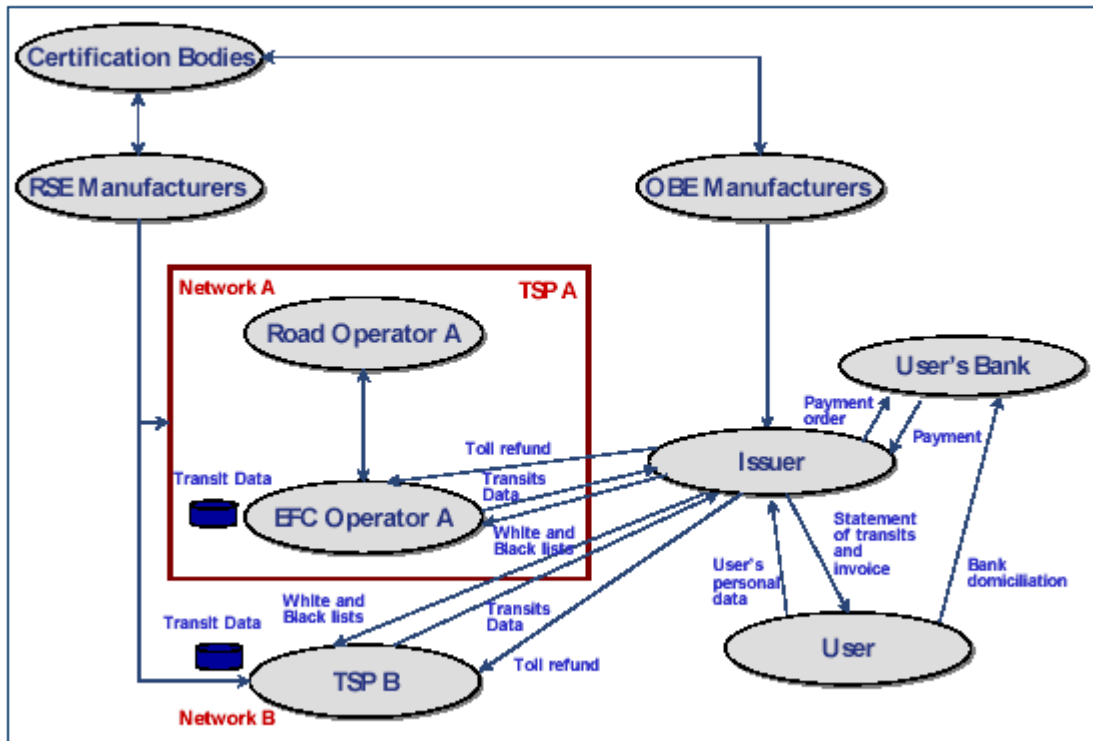
CESARE is currently in **Phase III**, which started in April 2005 and is expected to have a 18-month duration. CESARE III's main objective is to study the modifications made to the contractual and organisational set of documents drawn up in phase II. This needs to take into account the new actors, which for the first time may include States which have confirmed their participation in a national road toll system, road toll in urban areas and the EFC European directive. Some of these modifications will be implemented as part of the project CESARE III framework.

The project is made up of 7 Work Packages, 5 of which being of technical nature and the remaining 2 being dissemination and project management.

The total budget of the CESARE project amounts to 1,4 M€ and is co-financed by the European Commission/DG TREN.

CESARE

Study for a Common EFC (Electronic Fee Collection) system for an ASECAP Road Tolling European Service.



Abbreviations used:

TSP: Transport Service Provider
EFC: Electronic Fee Collection
RSE: Road Side Equipment
OBE : On-Board Equipment