



- Interoperability of electronic road toll systems
European Electronic Toll Service
Framework for ITS Deployment

Directive 2004/52/EC
Decision 2009/750/EC
Directive 2010/40/EU

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● Directive 2004/52/EC Scope

- All electronic road toll systems requiring an on-board equipment
- Collection of all types of road fees on the entire Community road network and various structures [tunnels, bridges, ferries...]
- Allows two electronic tolling technologies
 - » Satellite: GNSS + Mobile Communication (recommended)
 - » Micro-waves: DSRC (CEN and UNI)

● Directive 2004/52/EC Requirements

- Setting up a European Electronic Toll Service, complementary to national/local toll systems
- To be defined by the European Commission assisted by the Toll Committee

- Decision 2009/750/EC
EETS definition
- Lays down rights and obligations
- Entered into force the 8 October 2009
 - » After 3 years at the latest : EETS available for vehicles >3,5 tonnes or > 9 persons (driver + 8).
Mid-term review.
 - » After 5 years at the latest : EETS available for all vehicles categories.

● European Electronic Toll Service (EETS) Essential elements: General

- EETS shall meet requirements on
 - » safety/health
 - » reliability/availability
 - » environmental protection
 - » technical compatibility
 - » security/privacy (protection of freedoms and fundamental rights of individuals requirements)

European Electronic Toll Service (EETS) Essential elements: Users

● EETS Users

- » may subscribe to EETS through their EETS Provider of choice regardless of nationality, state of residence or vehicle's registration
- » are responsible for correct declaration of variable tolling parameters (trailer, weight...)

- European Electronic Toll Service (EETS)
Essential elements: Toll Chargers
- Toll Chargers shall
 - » publish EETS Domain Statement/Toll Context data
 - » charge EETS users not more than corresponding national/local tolls
 - » collaborate in assessing “suitability for use” of EETS Providers’ equipment and procedures
 - » contract with EETS Providers on a non discriminatory basis

- European Electronic Toll Service (EETS)
Essential elements: EETS Providers
- EETS Providers shall
 - » be registered (subject to conditions) in a Member State where they are established
 - » reach full European coverage within 2 years
 - » guarantee toll payment to Toll Chargers

- European Electronic Toll Service (EETS)
Interoperability Management
 - National **Conciliation Body** empowered to examine whether conditions imposed by a Toll Charger on different EETS Providers are non-discriminatory
 - **Standards Organisations:**
CEN / CENELEC / ETSI

- **European Electronic Toll Service (EETS) Interoperability Management**
 - **Notified Bodies:** independent 3rd party assessment of “compliance to specifications” and “suitability for use” of equipment and procedures. NB-EETS Coordination Group.
 - **Toll Committee**
 - **Platforms** (not in the legislation)

● EETS & Intelligent Transport Systems (ITS)

ITS

Use of information and communication technologies in transport

Safer, cleaner and more efficient transport

Road Transport ITS

- » electronic toll collection
- » dynamic traffic management
- » real-time traffic information
- » satellite navigation, tracking & tracing
- » in-vehicle safety systems (eCall)
- »



● EU Policies on ITS

Action Plan for the Deployment of Intelligent Transport Systems (ITS) in Europe (Dec 2008)



Directive 2010/40/EU: Framework for the Coordinated and Effective Deployment and Use of Intelligent Transport Systems

Road transport and interfaces with other modes

- » Ensure road transport sustainability



● Directive 2010/40/EU Potentials of road transport ITS

- **Congestion:** ↘ 5-15%
 - » electronic toll collection, dynamic traffic management & navigation
- **Fatalities:** ↘ 5-15% and **Injuries:** ↘ 5-10%
 - » speed alert, eCall, lane keeping support, ESC
- **CO₂ Emissions:** ↘ 10-20%
 - » road charging, access management, eco-driving support, multi-modality

● ITS Priority Areas

Optimal Use of
Road, Traffic and
Travel Data

1

Continuity of
Traffic and
Freight Management

2

Road Safety
and Security

3

Integration of Vehicle
into Transport
Infrastructure

4

Data Protection
and Liability

5

European
ITS Coordination

6

● Action 4.1: Open In-Vehicle Platform

- Adoption of “Open In-Vehicle Platform Architecture” to provide ITS services and applications
- Decision 2009/750/EC: In addition to tolling, the EETS on-board equipment should enable implementation of future other location-based services without interfering with toll operations
- Study underway. Report will be submitted to standardisation bodies, possibly with a mandate.

● More information



Electronic road tolling

http://ec.europa.eu/transport/its/road/application_areas/electronic_pricing_and_payment_en.htm

ITS Directive and Action Plan

http://ec.europa.eu/transport/its/road/action_plan_en.htm

Thank you for your attention !