

Realizing Interoperability in Europe J.W. Tierolf ASECAP, 23 October 2009



- Stockholm Group
- Cesare
- EETS
- Issues
- Ways Forward, incl other interoperability
- Views and Conclusions

#### Stockholm Group Partners

Country	Company / Organisation
AT	ASFINAG
FI	Ministry of Transport and
	Communications
FR	MEEDDM
DE	BMVBS
PL	Ministry of Infrastructure
SV	Ministry of Transport
SE	Swedish Road Administration
CH	Eidgenössische Zollverwaltung EZV
NL	Ministry of Transport, Public Works
	and Water Management
UK	Department for Transport
Chair	Janwillem.tierolf@rws.nl
Secretaria	t maria.simmins@its-sweden.se



3

#### Why Cesare ?

- 2002 Stockholm group established to get interoperability in purely national free flow ETC projects in DE, AT, NL, UK
- 2003 ASECAP en StoGro started co-operation regarding the interoperability directive
- 2004 EC granted Cesare 3 to have organisational, procedural EETS defined by the major stakeholders
- End 2007 Cesare 4 started to define Interoperability Management of the EETS
  - Original goal of regulatory IM European body impossible, so change of approach

## **Interoperability Management**

- It is a distributed function
- European level
  - EC/Comité Télépéage (application guide, decisions)
  - Co-ordination Group of NoBo's (certification)
- National Level
  - MS (dispute resolution, registration)
- No European organisation

#### **Obligations of Member States**

- May Notify a certification institute for EETS
- Must keep register of Toll systems
- Must keep register of EETS providers established in MS
- Must install a national dispute resolution body
  - To see after non-discrimination and fair pricing re contract negotiations and disputes resulting from operations between TC and EP
- Must oversee registration for European EP status of any SP established on their territory whoeasks so

# **Obligations of Toll Charger**

- Toll system itself can be almost fully independent of EETS requirements as long as EETS users are facilitated in a non-discriminatory way
- Adapt system for EETS users:
  - Backoffice (interfaces & data streams from EETS providers)
  - Enforcement of EETS
- Toll domain statement (conditions, info for EETS providers)
- Toll context data (tariffs, classes, domain)
- Contracting EETS providers, non-discriminatory, fair
- Maintain list of EETS providers with contract

#### **EETS** provider

- Enterprise registered in EU
- Registration as EETS provider by one Member State:
  - Must fulfil requirements:
    - (financial, ISO 9001, competence)
  - Must use CE marked OBE
- Based on registration, right to negotiate contracts for all (EETS) toll domains with TCs or their representatives
- Must achieve full European coverage in 2 years
- Suitability for use field tests may be required by TC

#### Outstanding issues

- Specifications,
- EETS Providers
- Governance

# **Specifications: EETS** Interfaces

- Toll Charger RSE OBE
  - DSRC charging transactions
  - Real-time compliance checking transactions
  - Localisation augmentation
- Backoffice Toll Charger EETS provider
  - Exchange of toll declaration data
    - Submission and validation of claims for toll payment
    - Invoicing / settlement
  - Exchange of information to support exception handling
  - Exchange of EETS blacklists
  - Exchange of trust objects
  - Sending Toll Context Data from Toll Chargers to EETS Providers.

#### Specification requirements

Specifications are required input for CE marking:

- CEN made Toolbox standards (DSRC charging)
- Toolbox standards still needed for satellite and security
- Still to be finetuned into Specifications for the EETS
- Compliance checking most urgent,
  - based on "non-trusted parties" as between banks
  - Cardme IV not sufficient for pan-European EETS
  - Need for secure monitoring, Trusted Element, asymmetric keys
- Also test standards required

Start certification 2012 ?

#### **EETS** Providers

Will they come in the market ?

- Minimum business cases required
- Volumes and Revenu limited (certainly first years)
  - Mainly some million international trucks and coaches ?
- Therefore Costs should be low
  - Limited number of field tests
  - Harmonization where possible
- Income from users and Toll Chargers ?
  - User benefits: one OBU, one contract, administration
  - TC benefits: lower costs for secondary system, occasional user

#### **EETS Providers Business View**

General view of EETS Providers

- Start in high volume countries
- Covering Europe within 2 years difficult
- Each covering all of Europe poor business case,
  - Only few driving far away from their core area
  - Where contracting costs would be the same: negative C/B ratio
- For EU-wide coverage would have contracts between EPs covering different areas too (could be overlapping)
- Is that possible within EETS?

#### Governance

- Original idea of European Organisation for mandatory
  Interoperability Management not possible
- Most mandatory functions now at MS level and at their disgression
  - Concilation body, registration
- Some functions at EU level
  - Cté Télépéage, co-ordination group of NoBo's (certification)
- Any European interoperability management would be on voluntary basis
  - Who would organize it, pay for it?

#### **EETS Follow-up**

- Develop Specifications and standards
  - Stockholm Group, CEN, Comité T
  - A.o. secure monitoring standard essential
- Develop Application guide
  - Cesare 4, MS, Stockholm Group, Comité T (wg)
- Involve EETS providers
  - EC platform?
- Set up certification circuit
  - MS, EC, Comité T
- Organise Interoperability Management (Governance/Co-ordination?)
  - MS, Stockholm Group, Comité T, EC, Private stakeholders
- 18 months review
  - EC, Comité T

#### Ways forward

#### EETS:

- Reduction of
  - Field tests
  - Diversity of contracts, parameters, interfaces
- Basically on voluntary basis by:
- Clusters of TCs (Scandinavian, FR, etc.) for one stop shopping
- Harmonize back-office interfaces (voluntary)

Non-EETS partial interoperability is emerging too

# PLATFORMS

- European Commission
- Comité Telépéage (27 MS)
  - Decisions, application guide, co-ordination group NoBo's
- Cesare projects
  - C3 EETS organisation model
  - C4 Interoperabilty Management
    - Advisory Forum
- ASECAP (TCs)
- Stockholm Group (9 MS + CH)
- CEN/ETSI/CENELEC
- ? EPs ?

#### View and Conclusions

- Cesare 3 and 4 have been the continuous basis for cooperation between MS and Toll Chargers
  - Much practical knowledge and proposals for operation generated
- Implementation of EETS requires much further work,
  - Both outside the area of the Cesares and follow-up within
- Continued co-operation MS, TC, EP necessary
- Follow-up decision (normal "maintenance") required
- Regulation already generated many initiatives for interoperability, mainly national and regional (non-EETS)
- Regional steps (a.o. clustering) likely (EETS)



#### Thank you!