

MODSafe

Modular Urban Transport Safety and Security Analysis

Final Conference

25 – 26 June 2012, Cologne

The future trends for standardisation

presented by Yves Amsler

UITP



THE PLAYFIELD

LEGISLATION

MANDATORY

EC
PARLIAMENT
COUNCIL

RESEARCH

ADVISORY

EC
PARLIAMENT
MEMBER STATES

STANDARDISATION

VOLUNTARY

CEN - CENELEC
ETSI

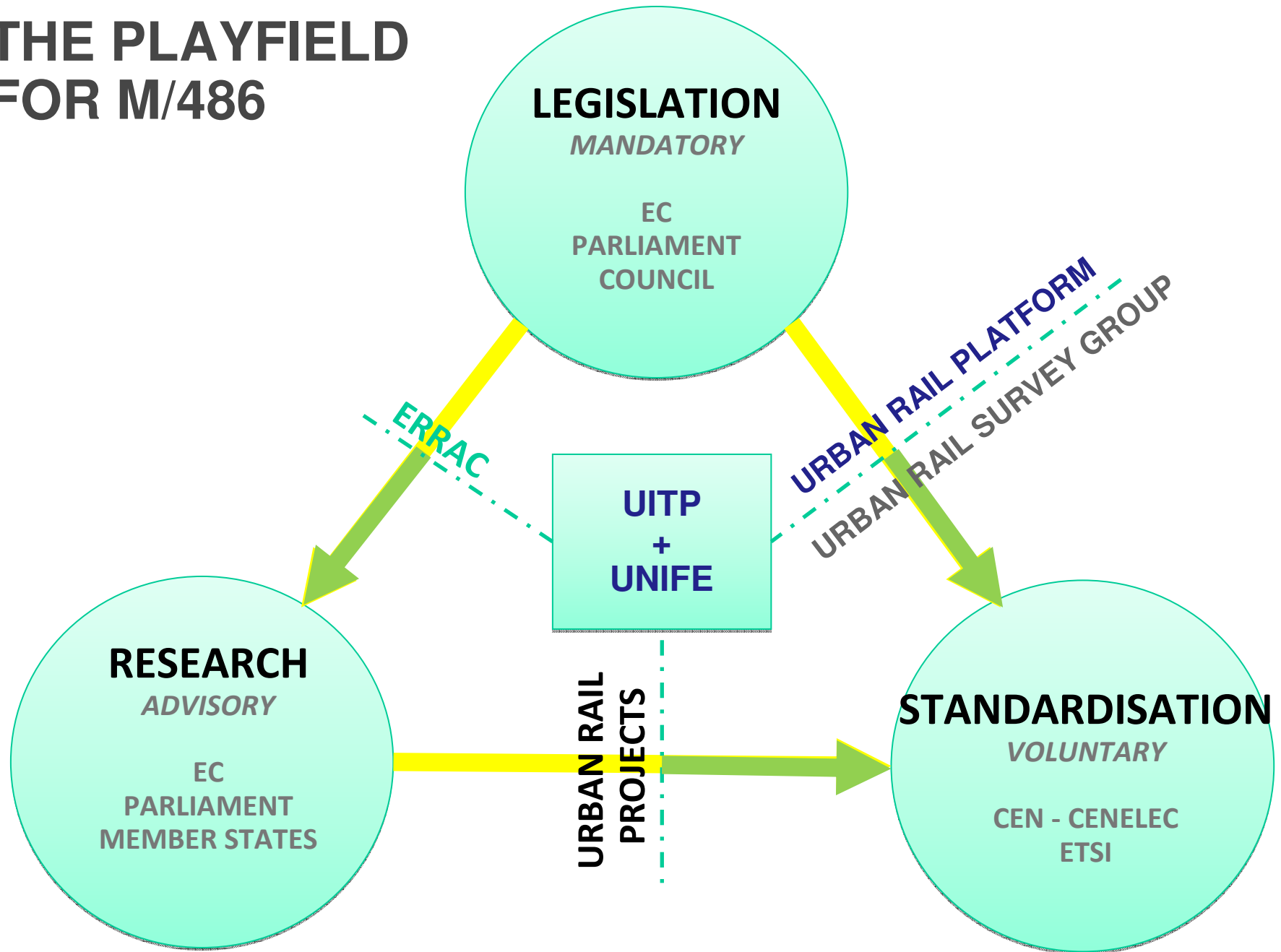
STANDARDISATION vs. LEGISLATION

- **Voluntary**
(if not made mandatory by legislation)
 - Consensus of stakeholders
 - Developed by independent private organisations
 - Revised regularly (~every 5 years)
 - Provide usually technical specifications and test methods for product, services and processes (interoperability, safety, quality, management, etc.)
 - **Harmonisation**
(but no contradiction with legislation)
- **Mandatory**
 - Imposed by Law
 - Established by public authorities
 - Revised when legislators so decide
 - Gives requirements to protect public interests
 - Can make use of standards by referencing to them
 - **Harmonisation (removal of barriers to trade)**

MANDATES

- requests from the EC addressed to the ESOs
 - invitations to carry out some standardisation work
 - support EU legislation or policies
 - a means for EU Member States to give political and technical acceptance to standardisation work
 - not legally binding – ESOs are free to respond
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- Currently **three mandates** impacting local public transport:
 - **EC Mandate M/483 EN** on a Standardisation Programme for the interoperability of the European rail system under Directive 2008/57/EC
 - **EC Mandate M/486 EN** for Programming & Standardisation in the field of Urban Rail
 - **Programming Mandate EC M/487 EN** to establish Security standards

THE PLAYFIELD FOR M/486



EC Mandate M/486 EN for programming and standardisation in the field of Urban Rail

Scope: Urban Rail systems which may be excluded by Member States when transposing the Interoperability Directive 2008/57/EC by application of Article 1.3 (a) & (b)

- a) ***metros, trams and other light rail systems;***
- b) *networks that are functionally separate from the rest of the railway system and intended only for the operation of local, urban or suburban passenger services, as well as railway undertakings operating solely on these networks;*

EC Mandate M/486 EN for programming and standardisation in the field of Urban Rail

- Phase 1, Programming, 8 months starting May 2011, slightly delayed
- Phase 2, Standardisation

ESOs created the Urban Rail Survey Group – URSG – for phase 1
(Convener Yves Amsler)

- **519 rail standards checked**
 - Standards not relevant for Tram/Light Rail: 155 & for Metro: 161
 - Standards directly applicable to Tram/Light Rail: 271 & to Metro: 277
- **54 new topics identified**
- **Proposals for standardisation currently under analysis by TC256/TC9X**

EC Mandate M/486 EN for programming and standardisation in the field of Urban Rail

- **Next step from end of 2012: Phase 2**

According to the mandate (section 3.2):

- After an assessment of the programme by the Commission, CEN, CENELEC and ETSI will be asked, where appropriate, to undertake to produce the standards identified in the first phase, in accordance with the agreed timetable.
- While developing standards for urban rail, where appropriate, principles, elements, concepts and technical specifications applied for conventional rail should be taken into account. Where appropriate, the results of the research projects such as "LibeRTiN" (FP5), "MODURBAN" (FP6), "URBAN TRACK" (FP6) and "MODSafe" (FP7) should be taken into account.

EC Mandate M/486 EN

for programming and standardisation in the field of Urban Rail

WP	Relevant deliverables	Classification
2	D2.2 Consistency Analysis and Final Hazard Analysis D2.3 Risk Analysis	Safety Deliverables
3	D3.2 Hazard Control and Safety Response Measures Analysis	
4	D4.2 Analysis of Common Safety Requirements Allocation for continuous safety measures and functions D4.3 Analysis of On Demand Functions and Systematic Failures	
5	D5.1 Urban Guided Transport Object Safety Model D5.2 Functional and Combined Object/Functional Guided Transport Model D5.3 Safety Attributes Allocation Matrix	
6	D6.3 Proposal of a common safety life cycle approach	Process Deliverables
7	D7.4 Proposal of generic Acceptance, Approval, Certification process	

MODSafe **Safety Deliverables**: recommended for use as “Support Material” in the sector

MODSafe **Process Deliverables**: recommended for consideration for standardization regarding:

- **Life Cycle Definition**
- **Process for Acceptance and Approval**

MODSafe AND EC Mandate M/486 EN

Proposed title	Proposed scope	Reference of the "Fiche of needs"	Recommended MODSafe Deliverables to be considered
Safety Requirements for Urban Rail	Generic hazard analysis on system level and assignment of possible safeguards and recommendations for the application of the life-cycle process according to EN 50126 for Urban Rail	URSG_SystemSafety_SYS_11117_V05.doc for Joint Working Group Urban Rail Systems	Safety Deliverables as Support Material Process Deliverables for application of life cycle and acceptance and approval
Signalling and other safety systems for trams, light rail and other non-metro Urban Rail systems	Specify functional requirements for signalling and other safety systems for Trams and Light Rail systems as well as category IV of railway applications to support train operations	URSG_Signalling (non-metro) _TF_SIG_111117_V05.doc for TC9X SC A	Safety Deliverables as Support Material with respect to functional and safety requirements
Recommendations regarding technical harmonization between bus and tram/Light Rail	Address elements facilitating at least compatibility between bus and tram/Light Rail. Check functional requirements of the Bus directive and analyse their transferability. Analyse the potential need for a new standard on stations & stopping places design applicable to both systems with different values for the various modes and special attention given to PRM access	URSG_Similarities_with_bus_TF_G&S_&_RSMech_120109_V03.doc for a Working Group to be defined	Process Deliverables for future standardisation with respect to cross acceptance and harmonization, acceptance and approval

Programming Mandate EC M/487 EN to establish Security standards

Scope: Security at large, including transport

Coordination by CEN/TC 391 ‘Societal and citizen security’

- Phase 1: 8 months, preparatory study and a list of sectors for priority treatment
- Phase 2: based on EC reaction, 6 months for ESOs to provide proposed standardisation work programmes and roadmaps

Outcomes of Phase 1 currently under analysis

No specific proposal for local public transport

Programming Mandate EC M/487 EN to establish Security standards

No MODSafe proposal under Mandate M/487

WP	Relevant deliverables	Classification
8	D8.3 Guiding principles for security and emergency prevention and management	Security Deliverables
9	D9.1 Threats to urban rail guided transport systems	
9	D9.3 Proposals for mitigating security risks and threats	

Domains for “**future standardisation**” supported by the UITP SEC Com:

- **Urban transport security terminology**
(Definition of terms, abbreviations, and multilingual glossary of such terms)
- **Typology of threats** to urban transport systems

Domains for use as “**Support Material**” in the sector:

- **Typology of offences** in urban transport systems
- **Risk analysis methodology** in urban transport systems
(no specific method is recommended)

MODSAFE Security Deliverables have a wider scope for future measures than above identified topics: Presentation on the 26th of June by Patrick Dillenseger (RATP)

MODSAFE Deliverables have been sent as input for the FP7 Project SECUR-ED

- Consolidate the on-going process of mapping security-related standards
- Contribute to the development of future security-related technical recommendations



- Call FP7-SEC-2010-1, Security in Mass transportation, ID = 261605
- SECured URban transportation – European Demonstration

Budget = 40M€, EC Funding = 25 M€

40 partners: 10 operators, 3 organising authorities, 8 suppliers, 10 R&D, 7 SMEs, UNIFE & UITP
Coordinator: THALES (T3S)

Starting date: 1st April 2011, duration: 42 months

- The main objective of the SECUR-ED project is to give **transport operators of large and medium European cities** the means to **enhance urban transport security**
- The second main objective is **to enlarge the mass transport security market for the European industry**

Deliver mission-oriented security solutions for mass transit nodes

Thank you for your attention

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