



**EUROPEAN COMMISSION**  
 DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT  
 DIRECTORATE D - Inland Transport  
**D.2 - Rail Transport and Interoperability**

Brussels, 4<sup>th</sup> February 2011  
**M/486 EN**

**MANDATE FOR PROGRAMMING AND STANDARDISATION  
 ADDRESSED TO THE EUROPEAN STANDARDISATION BODIES  
 IN THE FIELD OF URBAN RAIL**

**1. BACKGROUND**

The majority of GHG emissions now come from urban areas and urban transport emissions are on the increase, especially from the developing world.

Transport related CO<sub>2</sub> emissions are expected to increase by 57% worldwide in the period 2005 – 2030, much more than in other sectors. In contrast to this, global GHG emissions must be reduced by more than 80% by 2050 from 1990 levels in order to avoid a dangerous climate change.

Furthermore, urban population is estimated to increase up to 50% by 2050, meaning that to rationalise urban space integrated mobility policies and planning are needed in terms of mobility.

The transport sector needs to contribute more to mitigation efforts and expanding public transport to double its market share is one of targets to achieve in the next decades.

In order to achieve this target, urban rail (tramway, light rail, metro and all other rail guided urban transport systems) could play a prominent role if it became attractive enough<sup>1</sup>: the technical standardisation of urban rail could support a modal shift from private car and increasing demand for public transport thanks to the economies of scale and to the administrative simplification.

In addition, since the European rail industry is a world leader, the technical harmonisation of urban rail would be beneficial not only from the environmental point of view but also from the competitiveness point of view.

Actions in the field of operational and technical standards for rail guided urban transport could help in reducing the number of individual solutions, in offering a larger market base to its products and in reducing some of the remaining barriers to trade:

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<sup>1</sup> According to EEA report “Transport at a cross-road” issued on 31 March 2009:

Page 10: Fifty per cent of all trips are shorter than 5 km and, particularly in urban areas, can often be made by public transport, walking or cycling.

Page 17: Transport sector greenhouse gas emissions increased by 28 % over the period 1990–2006. This compares with a reduction of 3 % in emissions across all sectors. The increase has occurred even though fleets have generally improved their energy efficiency and therefore reflects increased transport volume.

- Although more than 100 existing European standards are also applicable to urban rail systems, the existing standardisation process in the rail sector based on mandates to CEN, CENELEC and ETSI in the field of High Speed and Conventional Rail systems may not sufficiently address the need for standardisation for urban rail systems.
- In addition, the variety of national or local standards, technical approvals or technical specifications relating to the design, calculation and execution of the works and use of the urban rail products can constitute technical barriers to trade. Although such requirements may be justified on the basis that they satisfy mandatory requirements such as safety, in practice they are not always proportionate with the aims. Urban rail systems are often innovative, sometimes forced by the variety of local conditions calling for new and creative solutions. Necessarily such innovations or local conditions have to be verified and validated against safety related requirements. However, if such a procedure has to be reapplied each time, the resulting costs can be very significant. The lack of cross acceptance and sometimes non-transparent rules add additional burdens to both operators and suppliers. For example fire protection, structural strength etc., could potentially be the subject of technical standardisation, provided no site-specific restrictions or operational characteristics require a customised solution.
- Public Transport stakeholders are conscious of the need for standards and some of them are actively participating in the elaboration of such standards at the national, European or even world wide level. In Germany for example VDV, the Association of German Transport Companies has developed 'Recommendations' covering both operational and technical requirements. Similar approaches can be found in several other Member States like Italy, France or UK. In most cases these recommendations or national rules take into account European Standards as far as they are applicable to urban public transport systems, but leave urban rail operators and technical/safety supervisory authorities the freedom to take decisions at their own risk and responsibility. Up to now, no similar approach has been developed at the European level for the urban rail sector.

## **2. SCOPE AND APPLICABLE REQUIREMENTS**

The scope of Directive 2008/57/EC on the interoperability of the Community rail system, which has to be transposed into national legislation by 19 July 2010, is described in very broad terms in annex I to that Directive.

However Article 1(3) gives Member States the option to exclude from the measures they adopt in implementation of the directive:

*"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;*

*c) privately owned railway infrastructure and vehicles exclusively used on such infrastructure that exist solely for use by the owner for its own freight operations;*

*d) infrastructure and vehicles reserved for a strictly local, historical or touristic use".*

The Commission discussed the question whether urban rail systems should be considered to be part of the scope of the interoperability directive with Member States representatives at a meeting of the Railway Interoperability and Safety Committee (RISC), in which the following two steps were approved:

- Firstly, Member States were invited, when transposing the directive, to exclude the rail systems mentioned in Article 1(3)(a) and (b) ;
- Secondly, the Commission would issue a mandate to the relevant European standardisation bodies in order to develop voluntary standards for rail systems referred to under article 3(1) (a) and (b);

Consequently, the scope of this mandate are the systems referred to under article 1(3)(a) and (b) of Directive 2008/57/EC.

As the essential requirements set out in Annex III to that Directive were not intended to cover urban and local rail systems and even if a majority of those essential requirements are applicable as well to urban and local rail systems due to the fact that they were expressed in very generic terms, there is a need to assess the essential requirements of the interoperability directive against the scope of this mandate. The representative rail associations of the sector UITP and UNIFE (coordinated through their joint Urban Rail Platform, URP) are currently defining a set of “fundamental requirements” which shall be used as a basic reference for the execution of this mandate.

### **3. DESCRIPTION OF THE MANDATED WORK**

The European standardisation bodies (CEN, CENELEC and ETSI) – supported by the URP - are asked to carry out the work in two phases.

#### **3.1. Programming**

In the first phase, CEN, CENELEC and ETSI – in cooperation with UPR and the joint programming committee for railways (JPC-R) - are asked to draw up a common standardisation programme in consideration of the motivations expressed in section 1 and the scope specified in section 2.

The work will start with a gap analysis of CEN, CENELEC and ETSI standards, as well as ISO and IEC standards already existing and under development, including the assessment of their revision. On the basis of this analysis, developed with the support of qualified urban rail experts and complemented if possible by relevant documents coming from existing national legal technical rules across Europe, the European standardisation bodies will formulate the terms of reference for developing a coherent minimum set of standards for voluntary use in the field of urban rail.

The programme should give a clear description of the work to be done, which is necessary to meet the scope of this mandate, with indication of deliverables, milestones, priorities, timetables, justifications and, where appropriate, proposals for its execution in phases which should include the relevant timetables.

#### **3.2. Standardisation**

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.

Where items fall within the scope of other Directives, existing or known to be in preparation, the standards elaborated under this mandate should not overlap with aspects mandated under other Directives. However, the standards should take account of, and where necessary make reference to, other European standards in the field, either existing or in preparation. Account should be taken of the implications for other aspects of EU policy - for example environmental, health and safety questions.

CEN, CENELEC and ETSI will report to the Commission each year after the acceptance of the mandate on the state of advancement of the work and make recommendations in case potential difficulties arise.

#### **4. BODIES TO BE ASSOCIATED**

Co-operation with UITP and UNIFE (coordinated through their joint Urban Rail Platform) and with organisations such as local, regional and, where applicable, national competent authorities, CER (Community of European Railways and Infrastructure Managers), EIM (European Rail Infrastructure Managers), ETF (European Transport Workers' Federation), the European Railway Agency, ANEC (European association for the co-ordination of consumer representation in standardisation), ECOS (European Environmental Citizens Organisation for Standardisation), NORMAPME (European Office of Crafts, trades and Small and Medium-sized Enterprises for Standardisation), ETUI (European Trade Union Institute) and other interested parties such as individual manufacturers is considered relevant. CEN, CENELEC and ETSI are also requested to consult with the European Commission DG Joint Research Centre in order to explore if the Commission's research institutes dispose of specific competence to support the standardisation work.

#### **5. EXECUTION OF THE MANDATE**

5.1. The tasks included in the first phase of this Mandate shall be completed within eight months of its acceptance. They will result in a Standardisation Programme in the field of urban rail. Once accepted by the competent Commission services, the Standardisation Programme will be presented for opinion to the Committee on Standards and Technical Regulations after consultation of the Rail Interoperability and Safety Committee.

In the case of favourable opinions, the tasks included in the second phase of this Mandate shall be carried out according to the programme and the timetables as agreed in the previous phase.

5.2. This mandate could be amended later, if necessary, after consultation with the above-mentioned Committees. The European standards bodies will transmit possible amendments to the programme to the Commission, which will, where appropriate, present them to the Committee on Standards and Technical Regulations after consultation of the Rail Interoperability and Safety Committee.

5.3. CEN, CENELEC and ETSI will have to present the draft standards mentioned above by the agreed dates. The European standards will have to be adopted by the agreed dates. On these dates, the three linguistic versions (DE, EN, FR) must be available as well as the correct titles in the other official EU languages.

5.4. The acceptance of this standardisation mandate by CEN, CENELEC and ETSI will open the standstill period referred to in Article 7 of the amended Directive 98/34/EC<sup>2</sup> of 22 June 1998 (ex 83/189/EEC of 28 March 1983).

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<sup>2</sup> OJ L204 of 21.07.98