



ITS, ERTMS railway: presentation of studies recently launched by SEETO

Code: CONNEXA-TRA-CRM-REG-03
 Area: Connectivity Transport Reform Measures
 Title: Strategic Framework for implementation of ITS on TEN-T Core/Comprehensive Network



Intelligent Transport Systems sub-project

- **Strategic Framework for implementation of ITS on TEN-T core/comprehensive networks in Western Balkans**
- **Status**
 - Initiated 9-6-2017 (KoM at 26-6-2017)
 - IR submitted 3-7-2017 (draft) and 2-8-2017 (final) - Agreed
 - Ongoing missions and data collection
- **Indicative Plan**
 - Duration 15 months (expected completion September 2018)
 - Interim Report (needs assessment - scoping) due till end 2017
 - Team of 9 NKEs, most are international experts
 - PM: Marios Miltiadou



ITS sub-project

Scope – Components – Results (2/2)

- **Activities (cont.)**
 - Estimate costs and benefits from ITS deployment (infrastructure, operational, institutional)
 - Carry out impacts assessment from introduction of ITS in WB6
 - Develop regional ITS strategic framework as well as road maps and deployment plans for each RP and transport mode and in accordance with national strategies
 - Provide guidance and assistance to RPs for preparation of national ITS strategies including capacity building



ConnecTA contributes in filling the gaps of project preparation and transport reform measures in WB6 in the frame of Connectivity Agenda.

ConnecTA will support specific reform actions, mostly by preparing plans and strategies at regional level (in line with EU Directives and standards) but also by assisting RPs to develop their own.

Its purpose is:

- **Bringing high priority energy and transport infrastructure projects to maturity for investment co-financing; and**
- **Supporting the preparation and implementation of short and medium term regional reform measures in the transport sector**

ITS sub-project

Scope – Components – Results (1/2)

- **Covers all transport modes and their interfaces and mostly concerns ITS road applications, ERTMS, VTMS and RIS as well as ICT applications**
- **Activities**
 - Identify user's needs and specific objectives at national level
 - Assess ITS status, needs and priorities for specific services in WB6
 - Develop regional ITS vision and key strategic directions to ensure harmonized regional development
 - Recommend EU standards and specifications relevant to specific ITS applications for WB6
 - Recommend necessary legal approximation with EU



ITS sub-project – Work plan

Task TOR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
Initiation - Inception period (start on June 12, 2017)																						
INCEPTION REPORT																						
I Identification of user needs																						
II Assessment of IT requirements - Scoping																						
REPORT 2: Scoping and Needs Assessment																						
III Legal approximation of regional ITS and recommendations																						
IV Assessment of EU standards and specifications including recommendations																						
REPORT 3: Assessment of Standards and Specifications - Legal approximation																						
V Comparison of costs and benefits for ITS introduction (infrastructure, institutional, operational)																						
VI Impact Assessment for ITS introduction																						
REPORT 4: Costs estimation and Impacts Assessment																						
VII Development of regional ITS vision and key strategic directions for harmonized development																						
VIII Development of regional strategic framework and deployment plans per RP and transport mode																						
IX Assistance to RPs in preparation of national ITS strategies (including capacity building)																						
REPORT 5: Strategic Framework for ITS deployment and Results per RP																						
Preparation of Draft Final Report (consolidation of key findings from all activities)																						
DRAFT FINAL REPORT																						
Review and comments by stakeholders																						
Finalization of Report (incorporation of comments)																						
FINAL REPORT																						
Approved by Contracting Authority																						
Progress Reports																						



ITS – Rail ITS/ERTMS approach, progress status and issues

➤ Status:

- Only few completed projects with ERTMS deployment
- Several ERTMS projects are foreseen, not coordinated at regional level – no coherency and consistency in the relevant legislation in WB6

➤ Approach:

- Interoperability Directive and Technical Specifications as main reference + Specifications of Regulation for Control Command and Signaling + SUBSET-026 of System Required Specifications
- Mapping of existing situation (deployment, standards, investments and KPIs)
- Gap analysis, impacts assessment and rough cost-benefits analysis
- Identification of managers, operators and users needs and expectations as the base for vision and strategic planning



RAIL ITS sector main issues

- Project will give an answer to main questions:

- A. INSTITUTIONAL, LEGAL & ORGANIZATIONAL ASPECTS
- B. TECHNICAL ASPECTS
- C. ECONOMIC & FINANCIAL ASPECTS



RAIL ITS sector main issues

- **INSTITUTIONAL, LEGAL & ORGANIZATIONAL ASPECTS** main questions:

- analysis or comparison on differences/gaps of the existing regulatory laws and by laws in comparison to the EU Directive
- other relevant standard is applied in country railways
- Is the country involved interoperability, and application of EU directive for ITS/ERTMS systems, current situation and development plans
- legal adjustments of existing procedure initiated by business parties foreseen
- any kind of activities in terms of relevant data exchange
- Is the country opened to development of a joint ERTMS manual with other neighbouring countries?
- Would the country be open to a select alignment being equipped with experimental ETCS level 3 for a period of time



RAIL ITS sector main issues

- **TEHNICAL ASPECTS** main questions:

- analysis of technical documents on relevant frequency bandwidths for GSM-R and balises
- documents for the further development of ERTMS, generally and/or particularly for each alignment
- are there any (and which are) obstacles in ERTMS operation
- cost of implementation and of regular maintenance of the ERTMS system
- are there any (and which are) obstacles in the implementation of intermobility
- who are actually the users of the railroad infrastructure network in the country
- what is the status of a current infrastructure, is it able to support ERTMS systems



RAIL ITS sector main issues

- **ECONOMIC & FINANCIAL ASPECTS** main questions:

- are there annual and/or long-term analysis/plans for ERTMS development
- is there cost benefit analyses/ business plans/ proposals for future activities
- is there any incentive, loan, grant or technical assistance provided, relevant to ERTMS/ ITS development?



CONNECTA Project team

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