O INESS PROJECT

A new European project, INESS (INtegrated European Signalling System) was born, aiming at accelerating the implementation and use of ERTMS compliant signalling systems in Europe. The project started in October 2008 and it is scheduled to be developed during the next three years. In total, 30 partners including infrastructure managers, industries and universities form the consortium.

The International Union of Railways replied to the 7th Framework Programme of EC, on the topic "Delivering ERTMS compliant interlockings" and submitted, together with UNIFE, a proposal based on the Euro-Interlocking legacy, entitled "INESS". The kick-off meeting bringing together the whole Consortium (manufacturers, railways, universities, EC officials and UIC) was organised in October and in December 2008, the grant agreement was signed between the EC and UIC.

To achieve the project's goals, INESS Consortium will gather financial and technical information emerging from the railway infrastructure signalling market and formalise it in the most appropriate and practical oriented way. Therefore, state of the art methodologies like formal methods will be used to model the basics requirements for the future interoperable interlocking systems. For the financial aspects, relevant business criteria and methodologies will drive the way through the most appropriate and efficient future technical implementations. Finally, a common interpretation of the safety rules and regulations will be incorporated in the project, taking into account any relevant interoperable and safety issues present on infrastructures.

UIC is responsible for Project Management, Dissemination of results and it will provide a major input to the so-called workstream "D: Generic requirements".

The workstream D – led by the Dutch Rail Infrastructure Manager "ProRail" – will provide the project with a common kernel of validated standardised functionalities for future interlockings, including functionalities specially required by ERTMS/ETCS levels 2 and 3. For broad acceptance at European level, fourteen IMs (six directly involved in the consortium and eight participating via UIC) will agree on the common kernel. Common method and tooling for verification and validation of the functional requirements will also be produced.

Rail sector stakeholders are very satisfied with the EC supporting the project. INESS has the potential to redefine and reengineering various key issues concerning ERTMS trackside equipment which will enable full implementation of this new technology.

