

### CALL FOR CONTRIBUTION AND INTERACTION

Following the long successful history of ERTMS Conferences (Brussels Feb-Mar 2016, Istanbul Apr 2014, Stockholm Mar 2012, Malaga Mar-Apr 2009....), the International Union of Railways (UIC), in close cooperation with Ferrovie dello Stato Italiane (FS Group), is organizing **the 1st UIC Global Conference on Signaling**, focused on "The Evolution of ERTMS" in Milan, on 26<sup>th</sup> – 28<sup>th</sup> March 2018

It will be a worldwide open place for stakeholders, professionals, local authorities, Research Institutes and every person interested to understand the current trends of modern railway signaling and how the ERTMS system is evolving in the world.

The key features of this conference are:

- Estimated number of participants: 600-800
- Venue: Congress Center "MiCo" Gate n.13, Via Gattamelata 5, 20149 Milano, Italy Technical visits to Milano and Bologna (Italy)
- Stand exhibition
- Working languages: English, Italian, French (other language is possible if the speaker provides an interpreter)
- All the presentations will be in English

The conference program includes 7 different Themes/Sessions:

#### SESSION 1 "ERTMS in the world: the Funding Challenges"

**Rationale**: taking advantage of the presence of political authorities and main representatives of the sector, this session will provide an overview of the challenges for financing the installation of ERTMS, the main adopted strategies worldwide and the new opportunities.

SESSION 2 - "ERTMS today, the return of 20 years long experience worldwide"

Rationale: in this session the main worldwide ERTMS users will present the status of the



implementation in their countries/region, along with most important returns of experience on Tendering/Contractual management, Certification and Authorization processes, Operation and Training of experts, drivers, maintenance stuff; critical issues/decisions and general hints.

## SESSION 3 - "The EU regulatory context for ERTMS and Global opportunities for CCS deployment and development"

**Rationale**: Purpose of this session is let EU and non-EU members to learn from each other and share knowledge about:

- -the EU legal environment with related obligations and leadership on the ERTMS development by EC, ERA, UNIFE, ERTMS Users' Group...
- -the opportunities offered in extra-EU environments with the corresponding threats to the global standardisation and market scale advantages

#### SESSION 4 – "Game Changer: ATO & ATS integration"

**Rationale**: This session will provide the status of the development and integration of ERTMS with the Automatic Train Operation system (ATO), looking to higher level of optimisation of the train run by reducing the human weight and responsibility, as well as the integration with the Automatic Train Supervision (ATS), which aims to optimise the rail traffic, in particular in the most congested nodes

### SESSION 5 – "Game Changer: the Future Railway Mobile Communication System"

Rationale: This session will provide an overall update on the master plan, the achieved results and remaining tasks needed to define, test and put in practice the successor of the GSM-R, whose lifetime is expected to last till ~2030. The UIC master project FRMCS, the relationship with most involved standardisation bodies (ETSI and 3GPP) and other Critical Communication users (TCCA) as well as the evolution of legal domain in Europe will be duly afforded.

# SESSION 6 – "Game Changer: The synergy between Level 3 and Satellite integration"

**Rationale**: There's a common target strictly linking together Level 3 and Satellite integration: the cost reduction in the trackside. In this session the current technical trends and main projects for the development of Level 3 will be discussed, together with the opportunities and constraints of the parallel



integration of Satellite based facilities, for both geo-localisation (in addition/substitution of Eurobalise) and data transmission (with/without other terrestrial data radio).

#### SESSION 7 - "Cybersecurity" & "Safety" issues

**Rationale**: Each advanced train control system (ERTMS makes no exception) relies on an exchange of safety related data, and more and more the radio is the chosen carrier. The security of such data exchange is essential. In the session the most advanced researches and adopted techniques to guarantee the security against the cyber attacks will be showed and commented

The proposed presentations shall strictly refer to subjects in accordance with one of the 7 themes above.

The applicant is invited to provide **Mr. Marc Antoni** (antoni@uic.org) and **Mr. Piero Petruccioli** (petruccioli@uic.org) the following elements to take into consideration the submission:

- Speaker's short biography: 10 lines, with photo
- Speaker's complete contact data: Postal address, Phone number, Email address
- Abstract of the proposed presentation: 1 to 2 pages, exclusively in English.
- Indication of the desired Session

Please note the **Deadline of submission**: **08/December 2017, 12:00 CET** (Central Europe Time, GMT + 1)

Selection of papers will be done just afterward and will be communicated by 15/01/2018, directly to the applicant. The list of speakers and the proposed topics will also be published on the Conference web site.

In case the lecture is approved, the final presentation (in Power Point 2016 or compatible versions) will have to be provided by 31 January 2018, exclusively in English and according to the guideline/template that will be provided in due time by UIC.

The proposals not selected for oral presentation but estimated of high relevance could be presented as **written Posters** and will be included in the conference proceedings.

The registration for the speakers is free of charge; the speakers will be allowed to attend all the Sessions. UIC will provide all the needed information on the Conference website.



We hope, on behalf of UIC and FS, that you will be able to support this important event and we look forwards to receive your proposal.

Should you need any further information concerning this event, you may want to contact:

Dr. Marc Antoni, Director of UIC Rail System Dept.: controller general, <a href="mailto:antoni@uic.org">antoni@uic.org</a>

Mr. Piero Petruccioli, Coordinator of UIC CCS&Tlc Sector: program, technical contents, technical visits, petruccioli@uic.org

Mrs. Barbara Mouchel, General Coordinator of the event: venue, registration, sponsoring packages, overall organization, <a href="mouchel@uic.org">mouchel@uic.org</a>

We will be pleased to welcome you in Milan!