

Paris UIC, 17/May/2017

UIC 3rd Conference on Rail Radio Telecommunications

Session 1 - Speech of Jean-Pierre Loubinoux

Dear Ladies and Gentlemen,

I'm pleased to welcome all of you at the 3rd World Conference on Rail Telecommunications. It will be the first one where we will address in depth both GSM-R and New Generation of Railway Radio system, which is now in full development under the UIC project that we call FRMCS – i.e. Future Rail Mobile Communication System. Indeed FRMCS is just the name of the project, whereas we have still to find a suitable name for the future system itself, once it'll be defined thanks to the work of UIC technicians and other technical actors.

As you know the UIC-International Union of Railways has been leading the development of GSM-R from the Users' point of view since the beginning, in the nineties of last century, and has contributed as a member of ETSI in the standardization of the system with the set of "Advanced Speech Call Items". It was at the time the first Digital Professional Mobile Radio for Railways.

Cooperation with Industry and Railways within the frame of ETSI to set the most appropriate standard features for Railway Operation continued over years. This teamwork is still in place today to answer the need for standardization of New Generation of Railway Radio system, within the UIC - FRMCS project, aiming at answering rail transport needs in the decades to come, after the end of technical life of GSM-R.

UIC is fully determined to pursue the success story started with the introduction of GSM-R as the common bearer for all rail applications. Main technical challenges are at present directed towards the roadmap for evolution and strategy for the future of Rail Telecoms. UIC is again leading this evolution and having in mind that GSM-R has been born in Europe but it's largely adopted worldwide, we're now managing the development for the New Generation of Railway Radio system via a worldwide approach. It means, for instance:

1. our direct presence and collaboration with the **International standardization body "3GPP"**;
2. the liaison we established with the worldwide **TCCA – Tetra and Critical Communication Association**, looking forward and together to a common standard system for all the **Critical Communications**;
3. finally: since January 2017 our FRMCS project (started a few years ago as European project only) is open to ALL UIC members.

I'm sure this Conference will be an essential milestone at enabling open, relevant and comprehensive exchange of information, in order to:

- Inform on GSM-R present status, its technical evolution and the strategy for the future
- Promote the open debate among all stakeholders on GSM-R and the evolution towards the New Generation of Railway Radio system
- Provide a clear vision on achievements and development trends; costs and benefits; opportunities and threats, in short: Asset Management and Safety & Security Management

For the setting of the new Radio system, UIC and especially the Rail System Department directly support the European Union Agency for Railways (ERA), in particular for all what is needed to

guarantee the radio bearer for ERTMS Level 2 as well as for the well emerging new Level 3, whose official development will start in September (care of ERA).

Worth to note: the **FRMCS “Users Requirements Specification”** is available since last year for free download in a new section of UIC web site. The work at UIC on FRMCS is pursuing on aspects of Functionality, Architecture and Technology, Migration and Spectrum; new deliverables will be published very soon.

OPTION_Details on the Third Edition

Further to the previous conference editions, this third conference GSM-R/FRMCS will notably provide room for an open and comprehensive exchange of information on how to:

- Address the conditions for managing Railways Telecom Assets;
- Promote an open debate among all stakeholders on the future of Rail Radio Telecoms, including new technologies as the satellite communications;
- Discuss System evolution from a Network to Applications based radio system;
- Understand the convergence with Urban Rail Telecoms;
- Analyze the synergy with other Critical Communications Users;
- Protect the Railway Assets and a specific frequency band to allow for the transition towards the New Generation of Railway Radio system;
- Ensure proper Cyber Security and Safety, within the new “all IP” architecture;
- Finally, discuss the future EU legal framework to achieve it in Europe.

I wish you a fruitful participation at this stimulating Conference !

Jean-Pierre LOUBINOUX

UIC Director General