GSM-R Long-term Support Statement

Statement from the members of the UNITEL Committee on the railway telecommunications supply industry’s long-term support of GSM-R

28 July 2021
About the UNITEL Committee of UNIFE

The UNITEL Committee of UNIFE, set up in 2018, brings together UNIFE members with significant telecommunications experience with a focus on building consensus for the development and implementation of the future interoperable railway communication system (FRMCS/Next Generation), the inherent successor of GSM-R, as part of the future ERTMS.

This statement has been prepared by the members of the UNITEL Committee of UNIFE to confirm their commitment to the long-term support of GSM-R during the migration to FRMCS. This statement reflects the views of the individual signatories and places no obligation on UNIFE or other UNIFE members.

Introduction

With the work on the future communication system and discussions on the migration timeline currently taking place, the question was raised on how long the existing deployed GSM-R networks can be supported and maintained. Furthermore, uncertainty around long-term support timelines for a 2G technology and the risk of product obsolescence and expertise has become a concern for rail infrastructure managers and other stakeholders, where guidance and further planning details from the railway telecommunication supply industry is needed.

The members of the UNITEL Committee of UNIFE, representing the European railway telecommunications supply industry and hereinafter referred to as ‘the signatories’, have jointly assessed how GSM-R communication services can be supported until the migration to the Future Railway Mobile Communication System (FRMCS) has been successfully finalised (currently expected for beyond 2030) and the co-existence between GSM-R and FRMCS becomes no longer needed.

Challenge and Support Statement

In 2019, the signatories have renewed the support statement from the Railway Operation Communication Industry Group (ROC IG) during various public events and conferences. As such, they have committed to provide support for GSM-R at least until 2030 on a general basis and beyond 2030 on a per contract basis (subject to individual contracts and maintenance agreements) which covers:

- New software maintenance releases (incl. security/bug fixes & work arounds)
- Communication of dates for last orders
- Stock management covering maintenance of equipment and replacement of parts
- Technical support
The signatories are committed to support communication solutions for ERTMS and rail digitalisation today and in the future. It is essential to highlight that support until 2030 and even beyond framed by individual contracts requires the reciprocal commitment by all involved parties, mainly the signatories, the rail infrastructure managers and railway undertakings in terms of:

- Full alignment in terms of long-term planning between the contractual partners
- Focus on the timely Game Changer introduction to support the European Commission’s priorities
- Ongoing network and on board equipment modernisation to update and renew products or components (software/hardware)
- Reliable planning of GSM-R features enhancements and extension projects, as well as FRMCS preparation, upgrade and migration activities
- Anticipation of deployment and integration of new products and solutions to enable and smoothen the transition towards FRMCS, which includes, but is not limited to, the introduction of modern IP backbone technology, IP network redesign as well as GPRS deployment
- Maintaining the existing GSM-R know-how and expertise (product knowledge, implementation details, customisations, ...) within supplier and customer organisations by continuing project executions
- Financial budgeting and timely investment into hardware-buy programs to build up hardware stock for bridging or resolving possible hardware obsolescence issues
In detail it is expected that the complexity and as such the implicated costs will be driven by new development of replacement products, related modernization and upgrade activities. However, over time these areas will shrink and a shift in the relative costs is foreseen, where more attention will be required to manage the necessary hardware stock and secure the GSM-R technology and product know-how. Beyond 2030, the signatories have identified the ability to maintain replacement hardware components and source equipment from the grey market as high-risk, especially if the spare management was initiated late in the process. Likewise, caused by the ageing work force, the maintenance of GSM-R knowledge and understanding of how products and solutions are implemented in networks represents a major challenge for the railway infrastructure managers and industry suppliers in the years to come.

GSM-R long-term support from the signatories can only be guaranteed if bilateral contracts are in place and all involved parties fulfil their respective responsibilities and commitments to ensure a stable and healthy business environment.

All signatories remain prepared to discuss the long-term support for GSM-R systems in detail within the related customer projects context.

**Statement Signatories:**

![Signatories Logos](image-url)