

ETSI TS 103 792 V1.1.1 (2026-01)



**Rail Telecommunications (RT);
Future Railway Mobile Communication System (FRMCS);
Interworking with GSM-R**

Document Preview

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Railway Telecommunications (RT).

Modal verbs terminology

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Introduction

GSM-R has been a great success not only in Europe, where more than 100 000 km of railway tracks are daily operated through GSM-R, but also worldwide, and this number will double within the next years due to the on-going installations of this technology all over the world.

As the needs of the railways are constantly evolving, in particular in the context of the digitalisation of rail operation that is pursued in many countries and considering the upcoming obsolescence of GSM-R technology, UIC launched in 2012 the first studies for a successor to GSM-R, pertinently named Future Railway Mobile Communication System (FRMCS). The UIC project then concretely delivered the FRMCS Functional Requirements Specifications (FRS) [1] and FRMCS System Requirement Specifications (SRS) [2] focusing mainly on rail communication needs - as a basis for the development of the GSM-R successor.

The present document has been written to satisfy the identified need for interworking between GSM-R and the FRMCS Mission Critical applications specified by 3GPP, to enable communications between users and groups operating on the two system technologies. It provides solutions to the considerations documented in ETSI TR 103 768 [i.1], which studied the issues for interworking between the two technologies.

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