



? Why Redknee

Enabling GSM-R network to be fully compliant with GSM-R standards and legal regulations

Enhanced Operational Safety by features far beyond the current standardizations

Outstanding flexibility for Railway Network Operator specific extensions

Advanced Geographical Redundancy solution available in active-active and hot-standby configurations

High Availability guaranteed by the latest Unified Charging platform architecture

Redknee Railway

Next Generation Intelligent Network Solution for GSM-R

> The market demands a fully standard compliant GSM-R solution featuring the international railway traffic

Due to the high degree of GSM-R standardization and the low degree of competition in the railway community, Railway Network Operators (RNOs) demand a uniform GSM-R solution which:

- > Fulfills the latest international standards and legal requirements
- > Offers a low cost but flexible product solution
- > Provides outstanding flexibility for RNO specific extensions.

Since the co-operation between RNOs is rather close and their information exchange is relatively high (i.e. significantly more intensive than otherwise in the telecommunication industry), RNOs have a common requirement set and a strong emphasis on interoperability. Due to excellent European references with train speeds in the 350 km/h range there is a broad market for GSM-R solutions worldwide.

The success is significantly owed to value-added service features as an integral part of a comprehensive GSM-R end-to-end solution. As the GSM-R market is far from being saturated, a uniform standardized platform will furnish with a multitude of potentials to further optimize railway operations. What counts for suppliers is the experience to provide turn-key solutions, the ability to customize and implement additional features addressing the specific RNO needs, and the flexibility to integrate with the very individual RNO environments. Vice versa, smart optional value-added service features far beyond the current standardization will substantially contribute to the RNOs' success and satisfaction.

> Redknee Railway

Redknee Railway is an embedded part of GSM-R end-to-end solution consisting of radio network, switching network, next generation Intelligent Network (ngIN) components, location processing systems, end terminals (such as cab and general purpose radios), administration systems, and others.



Redknee's Railway solution features are used in GSM-R networks for the realization of the functions defined in the EIRENE (European Integrated Railway radio Enhanced Network) standards which specify the functional characteristics as well as the necessary interoperability for GSM-R networks.

The latest release of Redknee Railway offers a leading GSM-R end-to-end solution fully compliant with the latest EIRENE standards and 0 extends the functions defined by EIRENE with a large number of non-standardized functions such as:

- > Enhanced Location Dependent Addressing based on TrackID routing and GPS coordinates
- > Acknowledgement Center
- > Enhanced Automatic Conference
- > Delayed Deregistration
- > Expiration Date Handling
- > and many more...

> A Proven Solution for Service Control in GSM-R Networks

Redknee's Railway solution guarantees a fully standard compliant GSM-R solution including featuring the international railway traffic and offering a rich set of product features. The solution supports RNO services with flexible service specific extensions, adaptation to local infrastructure and operation rules and operational ease of use. Redknee Railway ensures uninterrupted railway traffic control by high availability at affordable costs, advanced GSM-R network geographical redundancy architecture supported in active-active and hot-standby configurations and flexible service specific extensions. .