

**Position Paper**

Brussels, 6 February 2017

# European Electronic Communications Code (Recast)

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# Background

Digitalisation is one of the top priorities for the rail sector. Connectivity is therefore seen as a foundation allowing the full realisation of the European Single Digital Market and the digitalisation of railways. Reliable and better connectivity will namely provide safe, efficient and attractive railways both for customers and staff.

With this position paper, CER would like to support the main objectives of the Commission's Communication 'Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society' (COM(2016) 587 final) aimed at delivering high-performance internet connectivity for the Digital Single Market and in particular for digitalised railways.

Careful attention is paid to the proposal for a 'Directive establishing the European Electronic Communications Code (Recast)' (COM(2016) 590 final/2). The paper also highlights the special requirements of rail services, which need to be ensured for the purpose of guaranteeing safe and efficient operations by enabling coexistence of the railway radio application in particular with public telecommunications application.

## CER's position

CER welcomes the Commission's objectives to deliver high-performance internet connectivity for, among others, all major terrestrial transport paths. In general, proper coverage is essential in order to make further digitalisation of railways possible.

CER's objective, as defined in the 'Roadmap for Digital Railways' presented by the railway community (CER, CIT, EIM and UIC) in April 2016, is to provide connectivity across the entire rail network and to enable internet access on all the different railway lines.

- (1) From the operational perspective, there is a need for highly available, reliable and stable network connectivity, while meeting the technical, operational and functional requirements of the railway system, such as coverage in tunnels and protection of radio application for control command and signalling (i.e. the so called GSM-R system as part of the Harmonised European Traffic Management System, ERTMS), avoiding or mitigating any form of interference and cyber-threats.

CER sees the Commission proposal as an important step forward as it clearly addresses the need to avoid harmful interference. Nevertheless, it is absolutely necessary to meet the rail-specific requirements on connectivity in order to provide safe operations in the rail system. The Directive should explicitly mention the need to ensure the coexistence of GSM and other systems, such as terrestrial systems, and the necessity to protect the continued operation of GSM systems from harmful interference (as addressed in the Commission's decision 2009/766/EC). Technical parameters should be established in such a way that the impact on existing radio and non-radio services and equipment will be avoided or minimised.

Interferences affecting the railway-specific GSM-R communication system can obstruct important safety features, such as emergency calls and emergency braking, thus threatening the safety of the train crew and passengers and causing traffic disruptions more and more frequently.

- (2) A certain level of connectivity is also required in order to improve the quality of services by providing dependable information, such as train schedules, availability of tickets, travel planners, etc. to the customers and beneficial tools for staff thus contributing to better maintenance effectiveness.

The development of a new 5G network will offer a great opportunity for railways by enabling, among others, the internet of things. The increased deployment of different 5G applications will not only improve the quality of services and safety but can optimise costs and energy consumption. It will also move towards predictive maintenance, real-time and enhanced network supervision and equipment monitoring thus increasing railway reliability and performance.

- (3) Furthermore, there is an increased demand from customers to have internet on-board trains and in stations for entertainment and work purposes. This is becoming an essential requirement for customers, who are asking that internet is consistently available throughout the rail network. Railways are progressively boosting access to internet to fulfil customers' wishes and to create an interconnected and 'always-on' digital rail network. To achieve this goal, consistent policy for railway line coverage in dense and rural areas should be further investigated. On the one hand, it is challenging to provide good coverage quality and speed in dense areas due to interferences and a very high number of passengers. On the other hand, the business case for deployment

of good coverage in rural areas remains highly questionable due to high costs compared to the number of users.

- (4) CER welcomes the European Commission's connectivity objectives for 2025, which include the coverage of all major roads and railways with uninterrupted 5G. CER would nevertheless emphasise that this objective should still benefit from concrete follow-up action. The European Commission, supported by the European Parliament and the Council, should establish a legislative framework providing mandatory coverage and performance requirements to ensure robust voice calls and high speed data transfer on railway lines, as it is already the case in the road sector in some European countries, so as to avoid discriminatory technical and policy regimes.

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**About CER**

The Community of European Railway and Infrastructure Companies (CER) brings together more than 70 railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 73% of the rail network length, 80% of the rail freight business and about 96% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe. For more information, visit [www.cer.be](http://www.cer.be) or follow us via Twitter at @CER\_railways.

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