To the kind attention of **Andreas GEISS**
RSC Chairman and Head of Unit Radio Spectrum Policy, DG CNECT, European Commission
Cc: Representatives of EU28 Member States to the Radio Spectrum Committee

Brussels, 26 June 2018

Dear Mr Geiss,

RE: smartEn recommendations to the proposed "Mandate to CEPT on spectrum for the future railway mobile communication system"

The key to a decarbonised, flexible and decentralized energy market is the widespread availability of production, storage, and consumption data. In many cases, these data sources are located "behind the meter" and connected via privately owned IoT networks. However, it is only economically feasible for such IoT networks to operate in unlicensed bands. The availability of sufficient radio spectrum dedicated to IoT applications, enabling the data availability in future decentralized energy system operations, is critical in reaching the EU carbon emission objectives.

We understand that the European Commission is now preparing a mandate to CEPT (European Conference of Postal and Telecommunications) for the communication needs of railway operators which considers the following spectrums:

- 874.4-880 MHz MHz and 919.4-925 MHz
- 1900-1920 MHz

The number of players and use cases involved in railway communication is inherently limited, and establishing a new technology ecosystem to operate on these bands would be a questionable investment.

At the same time, it is critical to create investment security for future energy solutions and affordable access to flexibility data.

This is why smartEn strongly supports initiatives for new, European wide, harmonized spectrum to be made available for solely IoT applications, in ISM (industrial, scientific and medical) Radio Band like terms.

smartEn would recommend that this mandate should be divided, and that the service and business requirements should be studied separately for each band. The 1900-1920 MHz band can be harmonized all across Europe and could be very valuable for various IoT applications, including future energy systems. In this way, the 1900-1920 MHz spectrum can have a significantly higher value for the European economy, because harmonization enables the free circulation of equipment and allows for the economy of scales for business. Importantly, this spectrum is also available globally and other regions might follow.

Justification

As opposed to other regions in the world, the EU is lacking a harmonized, unlicensed spectrum for IoT applications. This poses a risk for European industry, as it hampers innovation and decreases the willingness for private sector investment. This severely impacts the future competitiveness of markets that rely on data generated in privately owned IoT networks. Multiple analysis and studies unanimously agrees that the amount of equipment and data is increasing much faster in unlicensed bands in 2.4 GHz and 5 GHz spectrum, clearly showing the potential effect that new business and innovation in these lightly licenced frequencies can have. Europe should take their part of this development driving 1900-1920 MHz spectrum use for commercial IoT applications.

We are at your disposal to provide further clarifications before the adoption of a final decision.

Your sincerely,

Frauke Thies, Executive Director, smartEn

About smartEn - Smart Energy Europe

smartEn is the European business association for digital and decentralised energy solutions, focussing on the interaction of demand and supply in an integrated system.

Our **vision**:
The digitally enabled interaction of demand and supply is an integral part of an increasingly decentralised, decarbonised energy system.

Our **mission**:
- **Promote system efficiency** through the advanced management and integration of electricity demand and supply in homes and buildings, transportation, businesses and decentralised energy projects.
- **Empower energy users** by enabling them to participate in the energy market through flexible demand, storage, self-generation and the participation in community projects, and giving them control of their energy data.
- **Encourage innovation and diversity** by enabling new market players and service offers that provide attractive choices for consumers and allow for healthy competition.
- **Drive the decarbonisation of the energy sector** through the cost-effective integration of renewable sources and the electrification of heating, cooling and transport.

Industrial membership

smartEn - Smart Energy Europe
Rue d'Arlon, 69-71
BE-1040 Brussels

+32 (0) 2 58 88 992
www.smarten.eu
@smartEnEU