March 25, 2026

EUTC Response – RSPG Consultation on 6G Spectrum Roadmap

The European Utilities Telecom Council (EUTC) represents the telecommunication interests of European electricity and gas generation, transmission, and distribution companies. EUTC welcomes the opportunity to contribute to the Draft RSPG Opinion on a 6G spectrum roadmap. Vertical sectors and private networks will have an increasing role to play in 6G networks, and therefore, their requirements need to be incorporated into the roadmap.

We note that the global vision and timeline for 6G development is to enable the launch of 6G networks by 2030, thus we have set our comments on this timescale.

We limit our comments to the spectrum requirements for terrestrial networks. Utilities are major and increasing users of satellite technology, but we believe leadership in this area is currently best left to the non-terrestrial network (NTN) sector, as any dedicated utility use of the space segment is at too early a stage for EUTC to formulate firm views on a spectrum strategy for the NTN sector.

EUTC's 6G Strategic Vision

EUTC has recently revised its Spectrum Strategy to encompass more spectrum options for private networks as 6G standards develop, specifically:

- In the sub 1GHz bands for highly resilient wide area networks; and
- In the 1-5 GHz region for critical industrial sites such as substations and power generation facilities.

EUTC SPECTRUM PROPOSAL	
Less Intense Applications	• **VHF Spectrum (50-200 MHz)** For resilient voice comms & distribution automation, monitoring and remote control.
Anchor Band	• **Lower UHF Spectrum (410-470 MHz)** For SCADA, automation, smart grids and smart meters.
Low Band	• **Middle UHF Spectrum (470-791 MHz)** Similar usage as 'Anchor Band', but for areas where spectrum in the 410-470 MHz range is not available and future developments in critical communications connectivity.
More Intensive Applications	• Lightly regulated or deregulated shared Spectrum (below 1 GHz) For basic smart grid, dense smart metering and mesh networks. • Mid-Band Spectrum (1-5 GHz) For bandwidth intensive smart grids, on-site and point-to-multipoint applications
Common Bands	• Shared Fixed Link Bands (1400 MHz – 58 GHz) For access to utilities' core fibre networks, strategic resilient backhaul and dedicated protection links. • Shared Satellite Bands To complement terrestrial services for resilience and access to remote locations, positioning, timing & location services and remote sensing.

Vertical markets have different motivations for their telecoms investments compared to mobile operators. Vertical players can therefore bring much-needed capital investment to the 6G market to supplement investment by network operators. This will help to plug the investment gap, which has been a significant challenge for the rollout of commercial 5G.

Sub 1-GHz Low bands

For highly resilient, wide-area mission-critical networks such as those required by utilities to manage their operations, sub-1 GHz spectrum is essential to be able to provide the required geographical coverage, penetration below ground, and resilience as society becomes increasingly dependent on a reliable, sustainable, and cost-effective supply of electricity. Although ultimately we would envisage 6G being deployed for the 400 MHz bands (380-400 MHz, 410-430 MHz, and 450-470 MHz), the ideal target band may well be spectrum in the 470-694 MHz region as it is progressively transitioned from Digital Terrestrial Television to mobile on a timescale compatible with the introduction of 6G technology.

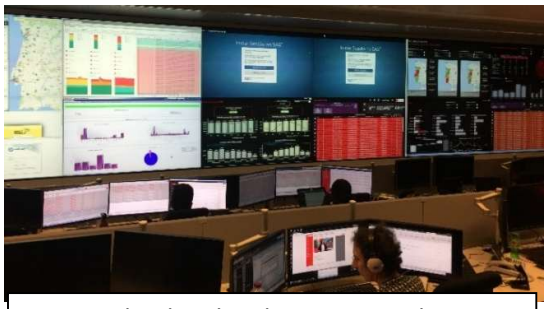
Utilities' view is that the identification of 2 x 10 MHz of this low-band spectrum for mission-critical industries would enable the introduction of harmonized spectrum on a European-wide basis to facilitate development of the specialized ecosystem required by utilities, and provide a secure home market for European vendors from which to build on their successful position in global markets.

1-5 GHz Mid bands

The midbands identified in the RSPG 6G spectrum roadmap could all have the potential for medium and large private sites for utilities for substations and energy production facilities. This spectrum would be sharable amongst all private users as these large industrial facilities cannot occupy the same physical area.

The European Utilities Telecom Council (EUTC)

The European Utilities Telecom Council (EUTC) is the leading European Utilities trade association dedicated to informing its members and influencing policies on how telecommunication solutions and associated challenges can support the future smart infrastructures and the related policy objectives through the use of innovative technologies, processes, business insights, and professional people.



Typical utility distribution control room

This is combined with sharing best practices and learning from across the EUTC and the UTC global organization of telecommunication professionals within the field of utilities and other critical infrastructure environments, and associated stakeholders.