Many technologies and applications that use the radio spectrum are highly innovative, and essential for economic growth. The EU needs the best regulatory framework to ensure appropriate spectrum is available for new and existing users - while avoiding potential interference between applications, and supporting innovation.

Fair spectrum allocations for emerging technologies

The management of radio spectrum in Europe is complex. Adequate spectrum must be made available to support important emerging technologies: and this requires the fair allocation and reallocation of frequencies.

Supporting a fully functioning internal market requires coordination between 27 or more national regulatory bodies; as well as collaboration between European and global radio spectrum bodies. EU policy-makers are currently addressing a number of key topics:

Reallocation of spectrum: [1] as demand for radio spectrum increases, we must manage and use this scarce and valuable commodity as efficiently as possible - for the maximum benefit to society, across Europe. The 'Digital Dividend [2]' that results from the switchover of European television broadcasting from analogue to digital systems makes a significant impact here.

Wireless broadband: [3] electronic communications services (ECS) cover access to wireless high-speed internet, advanced mobile communications and other information and communication technologies; in particular ensuring wireless broadband connectivity for all communities - given that the Digital Agenda for Europe [4] sets the target of 100% coverage by 30 Mbps broadband by 2020. A flexible, market-sensitive approach is required in this dynamic, rapidly evolving innovative sector.

Shared use of spectrum: [5] This area covers the unlicensed use of spectrum that allows a large number of independent users to access the same frequency spectrum at the same time, under well-defined conditions and regulations. Short-range devices (SRD) [6] are one good example, but not the only one. Increasingly, next-generation radio access technologies such as Cognitive Radio (CR) and/or Software Defined Radio (SDR) promise to improve the opportunities to share spectrum access efficiently.

Public use of spectrum: [7] the public sector is a substantial user of spectrum

– with assignments representing 40-50% of the valuable frequencies below 15 GHz.

Transport: [8] radio spectrum has a major role in future transport systems. Like technologies that help vehicles communicate, or sensing systems for increased safety.

Public Protection and Disaster Relief (PPDR): emergency services today rely more and more on wireless communication capabilities. Especially in emergency situations, for dealing with serious disruptions - whether they are caused by accidents, natural disasters or human acts.

Tags:

- radio spectrum policy [9]
- wireless [10]
- PPDR [11]
- public use of spectrum [12]
- SRD [13]

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