The public sector is a substantial user of radio spectrum – like for public safety and defence.

Public sector bodies are substantial users of spectrum – representing 40-50% of the valuable frequencies below 15 GHz. They were often the first to deploy radio technologies (for example, for public safety and defence) and they continue to be high priorities for governments. These public sector bodies deliver services at national, regional and local/municipal levels. The most important public sector users of spectrum are defence, public broadcasting, scientific services, public transport (notably transport safety communications), public safety and the emergency services (police, fire brigade, ambulance, search and rescue, disaster relief, etc.). Typically, assignments of spectrum for public use are implemented through administrative decisions which are often taken by the administrative bodies responsible for providing the public service. In this manner, public sector bodies act as both regulators and spectrum users.

International negotiations

For a number of sectors - such as civil aviation, maritime, space and satellites, meteorology and scientific services - the allocation of spectrum is considered and negotiated at global level within the United Nations' specialised organizations and agencies (under the umbrella of the ITU with sector specific organisations as influential negotiating parties, e.g. ICAO, IMO or WMO). Decisions on allocating spectrum take the form of changes to the Radio Regulations which require a consensus at the ITU World Radiocommunication Conferences (WRC).

EU spectrum policy and the public use of spectrum

The Commission plays a key role in achieving the single market. On this basis, the role and competencies of the European Commission in spectrum policy are laid down in the **Radio Spectrum Decision 676/2002/EC** [1]. The purpose of this Decision was to establish a policy and legal framework in the European Union to coordinate and support the harmonisation of radio spectrum use where this is needed at EU level. Harmonisation measures are adopted via the comitology process involving the Radio Spectrum Committee. This includes supporting the objectives of EU policies and initiatives necessary for the functioning of the internal market in areas such as electronic communications, transport, or research and development.

In addition, the **regulatory framework for Electronic Communications Services** [2] [3](ECS) lays down a number of principles governing spectrum management such as technology neutrality, the obligation for technically efficient spectrum use, and non-discriminatory access to radio spectrum resources. Such principles apply to all spectrum users including public sector bodies.

In 2002, the Commission set up the **Radio Spectrum Policy Group** [4] (RSPG): a high-level group of experts from Member States. The RSPG assists and advises the Commission on strategic aspects of spectrum policy.

The public sector's use of spectrum is often linked to general interest objectives and thereby falls primarily under national competence. However, in many cases of public use of spectrum, EU sectorial policies are relevant: especially when public services need to be organised in a coordinated manner across borders. Examples can be found in the sectors of communication (e.g. public broadcasting, information society), transport (Single European Sky, road safety, satellite navigation), space (European Space Policy), environment (Earth observation, civil protection), health (eInclusion, eHealth), security (border control) and scientific services.

More generally, the overall objective of spectrum policy is to maximise the social and economic value which Europe derives from spectrum. A balanced EU spectrum policy requires considering the public sector's spectrum needs, even if in practice a lot of public sector uses (especially defence and national security) fall outside of the EU's legal and institutional competences. Achieving greater operational performance and enhancing the economic and social value of spectrum could potentially improve public service delivery, and boost the overall European economy. As the public sector is a significant user of spectrum, an important goal is to make its use of spectrum more socio-

economically efficient.

To what extent the public use of spectrum is covered by the EU legislation governing spectrum management has to be decided case by case. Some harmonisation measures adopted in the past have been prepared to support the public use of spectrum (e.g. in the case of spectrum for road safety related applications of intelligent transport systems).

Furthermore, in 2009, the RSPG adopted its **Opinion on best practices regarding the use of spectrum by some public sectors** [5].

Issues for further consideration:

- Increasing transparency of public sector use of spectrum by conducting periodic surveys of current spectrum use and evaluating future needs of public sectors. Development of long-term strategic plans for public sector spectrum allocations.

- Evaluation of spectrum needs related to the delivery of public services and applications linked to specific EU policies: air transport (Single European Sky initiatives around air traffic management), rail transport (European Rail Traffic Management System - ERTMS), road transport (Intelligent Transport Systems - ITS), emergency and public safety communications (PPDR), etc.

- Given that spectrum is a limited and scarce resource, it is important to make choices between spectrum allocations for public sector and non-public sector use (private or commercial) and to set mechanisms to find a realistic balance.

- Reallocation/reassignment of spectrum to uses/users which generate a higher socio-economic value – between public sector users or between public and non-public sector users. Changes in spectrum use should be implemented in a timely and cost effective manner.

- Procurement processes used by public sector bodies to purchase wireless equipment and services have an impact on spectrum needs, both in terms of efficient use of spectrum and interoperability. Procurement of equipment and technology choices should be conducted in line with good spectrum management practices.

- Harmonisation of spectrum use for public sectors to achieve: (i) cross-border (pan-European) service provision, (ii) economies of scale for equipment production and (iii) the minimum possible level of interference between national systems.

- Developing long term strategic plans for the harmonisation of public sector allocations at European and global (WRC) levels.

- Sharing frequency bands between public sector users and between public sector and non-public sector users in order to optimise the use of spectrum. Identifying promising opportunities for spectrum sharing.

- Technological improvements as a result of investment and innovation to achieve a more efficient use of spectrum, greater sharing of frequency bands, enhanced interoperability and economies of scale at European level. Identify frequency bands where introducing new, spectrally efficient technologies for use by the public sector (and phasing out outdated ones)

could lead to further "digital dividends".

More information

- RSPG Opinion [5] on Best practices regarding the use of spectrum by some public sectors

- Get involved [6]

Tags:

- radio spectrum policy [7]
- wireless [8]
- PUS [9]
- public use of spectrum [10]

Source URL: http://ec.europa.eu/digital-agenda/en/public-use-spectrum

Links:
[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002D0676:EN:NOT
[2] https://ec.europa.eu/digital-agenda/node/550
[3] https://ec.europa.eu/digital-agenda/en/content/telecoms-european-union
[4] http://rspg.ec.europa.eu/index_en.htm
[5] http://rspg.ec.europa.eu/_documents/documents/opinions/rspg09_258_rspgopinion_pus_final.pdf
[6] https://ec.europa.eu/digital-agenda/en/content/how-get-involved-eu-radio-spectrum-policy
[7] http://ec.europa.eu/digital-agenda/en/tags/radio-spectrum-policy
[8] http://ec.europa.eu/digital-agenda/en/tags/wireless
[9] http://ec.europa.eu/digital-agenda/en/tags/pus
[10] http://ec.europa.eu/digital-agenda/en/tags/public-use-spectrum