

Digital Single Market

Easier access to radio spectrum: the EU's electronic communications framework

The EU has put in place a regulatory framework for electronic communications to boost European competitiveness - and support world-class communications and broadcasting infrastructure. Wireless communications are an integral part of this infrastructure: and so Radio Spectrum Policy supports and complements the legal framework.

Main objectives of the regulatory framework

The [electronic communications regulatory framework](#) [1] put in place in 2002 (revised in 2009) is based on the general principles underlying the European Union. It establishes a regulatory environment for electronic communications which:

- Allows the **development of a fully-fledged internal market** for telecommunications networks and services that benefits EU citizens;
- Is based on **technology and service neutrality**, reflecting the growing convergence of technologies, products and services in telecommunications;
- Provides the **increased legal certainty** needed for investment in the sector - with sufficient flexibility to respond to dynamic market developments and innovative technologies.

The regulatory framework was [updated in 2009](#) [1] to give the rules an even more effective impact, and "future-proof" them; especially given how rapidly markets and services are continually evolving.

Effective radio spectrum regulation is essential in particular to ensure that services and devices do not cause harmful interference to each other, to ensure efficient use of spectrum and a level playing field for all operators. Two key Directives, the [Framework Directive](#) [2] and [Authorisation Directive](#) [3] on electronic communications, establish common general rules for the right to use spectrum for electronic communications.

The EU's regulatory framework for electronic communications

The revised [EU's telecoms package](#) [1] was adopted on 25 November 2009 to amend the regulatory framework for electronic communications and was due to be implemented in all Member States by 25 May 2011. It invited the Commission to draft a multi-annual [Radio Spectrum Policy Programme](#)

(RSPP) [4] to further enhance cooperation and coordination between Member States on EU spectrum policy. This programme sets out policy orientations and objectives for the strategic planning and harmonising of radio spectrum use in the EU; and allows decision makers to agree on a general spectrum policy. Proposed by the European Commission in 2010, the first **EU Radio Spectrum Policy Programme (RSPP)** [4] was agreed by the European Parliament and the Council on **14 March 2012** [5].

Authorisation and Flexibility

Under the Authorisation Directive, the use of spectrum should be governed by general authorisation unless justified for the avoidance of harmful interference, technical quality of service, safeguarding efficient use of spectrum or fulfilling general interest objectives. In practice, due to the remaining technological limitations of interference management, spectrum use is often subject to individual exclusive usage rights. Furthermore, the need to ensure efficient use of scarce radio spectrum may justify limiting the number of rights of use in certain situations.

In this case, the best outcome is generally to ensure that spectrum is made available to service operators and providers in a flexible manner: to allow the optimum use of this scarce resource, and to avoid spectrum regulations increasing scarcity. The Framework Directive sets the principles of technology and service neutrality as a rule, but exceptions are still possible where properly justified, for example to avoid harmful interference (for technology neutrality); or to promote social, regional or territorial cohesion or avoid inefficient use of spectrum (for service neutrality).

Therefore, within the limits of the neutrality principles, public authorities have a critical role in balancing various types of spectrum allocations, to best satisfy current and future needs. For example, by facilitating a transition from obsolete or less spectrally efficient technologies to the most modern and most efficient ones; or by reviewing any uses which are clearly declining and which do not bring sufficient societal or economic value. This can avoid an excessive allocation of valuable spectrum, beyond what is reasonably justifiable with regards to other potential uses.

Based on the EU's regulatory framework for electronic communications, a positive transition can be aided by allowing **spectrum trading** [6] and **flexible conditions of use of spectrum** [7] - as well as by introducing more efficient or intelligent technologies that can **share frequencies** [8]. In other cases, strategic **re-allocation/re-purposing** [9] of spectrum may be needed at EU level.

More information

- **Consolidated legal texts** [10] of the electronic communications regulatory framework (December 2009)
- **Regulatory framework for electronic communications in the EU today** [1]
- **Directive 2002/21/ EC** [11] on a common regulatory framework for electronic communications networks and services
- **Directive 2002/20/ EC** [3] on the authorisation of electronic communications networks and services
- **Get involved** [12]

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Links

- [1] <https://ec.europa.eu/digital-single-market/en/telecoms-rules>
- [2] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0037:0069:EN:PDF>
- [3] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0020:EN:NOT>
- [4] <https://ec.europa.eu/digital-single-market/en/radio-spectrum-policy-programme-roadmap-wireless-europe>
- [5] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32012D0243:EN:NOT>
- [6] <https://ec.europa.eu/digital-single-market/en/content/improving-access-radio-spectrum-through-market-mechanisms>
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- [9] <https://ec.europa.eu/digital-single-market/en/content/reorganising-eus-spectrum>
- [10] https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/regframeforec_dec2009.pdf
- [11] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0021:EN:NOT>
- [12] <https://ec.europa.eu/digital-single-market/en/how-get-involved-eu-radio-spectrum-policy>
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