COUNCIL OF
THE EUROPEAN UNION

Brussels, 21 September 2010

Interinstitutional File:
2010/0252 (COD)

13872/10

TELECOM 91
AUDIO 26
MI 314
CODEC 872

PROPOSAL

from: COMMISSION
dated: 21 September 2010
Subject: Proposal for a Decision of the European Parliament and of the Council establishing the first radio spectrum policy programme

Delegations will find attached a proposal from the Commission submitted under a covering letter from Mr Jordi AYET PUIGARNAU to Mr Pierre de BOISSIEU, Secretary-General of the Council of the European Union.

Encl.: COM(2010) 471 final
Proposal for a

DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

establishing the first radio spectrum policy programme

{SEC(2010) 1034}
{SEC(2010) 1035}
EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

- Grounds for and objectives of the proposal


The RSPP is based on Article 114 of the Treaty on the Functioning of the European Union (TFEU), given the importance of the availability and efficient use of spectrum for the establishment of an internal market for electronic communications and for other EU policy areas. The RSPP will determine until 2015 how spectrum use can contribute to EU objectives and optimise social, economic and environmental benefits. It builds on EU regulatory principles for electronic communications and on the Radio Spectrum Decision No 676/2002/EC (the RSD), reaffirms principles to be applied to all types of spectrum use, establishes objectives for EU initiatives and lists actions to be launched.

- General context

Spectrum is essential for the digital society, fast wireless services, economic recovery, growth, high-quality jobs and long-term EU competitiveness. Spectrum policy initiatives are also key to the Digital Agenda for Europe and to the Europe 2020 strategy for smart, sustainable and inclusive growth. Inputs for the RSPP came from the Spectrum Summit hosted by Parliament and Commission, a Commission public consultation and the RSPG Opinion.

- Existing provisions in the area of the proposal

With regard to electronic communications spectrum policy is covered by the Framework Directive 2002/21/EC and the Authorisation Directive 2002/20/EC as amended by Directive 2009/140/EC, which introduced significant enhancements to ensure efficient use of spectrum, remove rigidity in spectrum management and deliver easier access to spectrum. Furthermore, the RSD already allows for the harmonisation of technical conditions for the use of spectrum relevant to existing EU policies involving the use of spectrum.

- Consistency with the other policies and objectives of the Union

Spectrum use has an increasing influence on sustainable growth, competitiveness and productivity in the internal market in relation to important EU sectoral policies. Since spectrum is scarce, priorities are needed to ensure that spectrum is allocated and used efficiently and effectively, taking into account EU policy objectives for electronic communications and broadband for all and for transport, research, Earth observation, Galileo, environmental protection and the fight against global warming.
2. CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

- **Consultation of interested parties**

*Consultation methods, main sectors targeted and general profile of respondents*

Interested parties were given several opportunities to comment:

- The Spectrum Summit in March 2010 revealed a clear understanding among EU institutions, Member States and stakeholders of the need for more spectrum for applications with a high social and economic impact. The Summit results are summarised in Annex 1 of the impact assessment, and the relevant documents are available at http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/rspp/index_en.htm.


- Before finalisation, the draft RSPG opinion was subject to a separate public consultation – the responses received are available at http://rspg.ec.europa.eu/consultations/responses_rspp2010/index_en.htm.

- **Collection and use of expertise**

*Scientific/expertise domains concerned*

In addition to the RSPG opinion and to the large number of responses received to the public consultations and summit, the following studies are also relevant:

- "Exploiting the digital dividend – a European approach" (Analysys Mason, DotEcon and Hogan & Hartson) 2009.

- "Optimising the Public Sector's Use of Radio Spectrum in the EU" (WIK-Consult) 2008.


- “Preparing the next steps in regulation of electronic communications — a contribution to the review of the electronic communications regulatory framework” (Hogan & Hartson, Analysys), 2006.

*Means used to make the expert advice publicly available*

Impact assessment

Given the RSPP’s high level strategic nature, the impact assessment identifies options and assesses whether EU intervention would add value compared to national or regional action. It identifies the strategic direction necessary for spectrum policy at EU level. It highlights the need for a global EU spectrum policy approach given the impact of spectrum on a number of sectors with varying degrees of EU competence. The Impact Assessment Board's opinion on the impact assessment was issued on 2 July 2010.

3. LEGAL ELEMENTS OF THE PROPOSAL

- Summary of the proposed action

The proposed programme sets out policy orientations and objectives for the strategic planning and harmonisation of spectrum use in order to achieve the internal market. It supports the Europe 2020 Strategy and the Digital Agenda for Europe and promotes other EU policies concerned with spectrum. It will ensure the application of principles and define policy orientations for all aspects of spectrum policy with an EU dimension. It sets concrete priority initiatives for enhanced coordination, flexibility, and availability of spectrum for wireless broadband communications and other specific EU policies; it requires an inventory of existing uses and emerging spectrum; it identifies improvements to safeguard EU interests in international negotiations, and to assist Member States in bilateral negotiations; it calls for improved cooperation between technical bodies and it requests the Commission to report by 2015.

- Legal basis

Article 114 TFEU.

- Subsidiarity principle

The proposed action entails amendment of the existing EU regulatory framework and thus concerns an area in which the EU has already exercised its competence. The proposal therefore complies with the subsidiarity principle as set out in Article 5 of the Treaty on European Union (TEU).

- Proportionality principle

The proposal complies with the proportionality principle as it sets a minimum level of harmonisation, leaving the definition of implementing measures to national regulatory authorities (NRAs) or Member States. Proposed amendments do not go beyond what is necessary for achieving better regulation of the sector. They thus comply with the principle of proportionality set out in Article 5 TEU.
• **Choice of instrument**

This is a legislative measure as Article 8a3 of the Framework Directive calls for a legislative proposal to Parliament and Council. A non-binding measure such as a Parliament and Council recommendation would neither make EU coordination obligatory nor require action from Member States. Parliament and Council Decisions No 128/1999/EC, No 626/2008/EC and No 676/2002/EC were adopted in the past to impose similar obligations and actions.

4. **BUDGETARY IMPLICATIONS**

The proposal has no additional implications for the EU budget.

5. **ADDITIONAL INFORMATION**

• **Simplification and reduction of administrative costs**

The proposal aims to lower administrative burdens by increasing spectrum flexibility and easing administrative procedures for spectrum use. It is part of both the Commission’s rolling programme for updating and simplifying the *acquis* and its Work Programme under reference 2010/INFSO/002.

• **Review/revision/sunset clause**

The Decision establishes a programme to be implemented by 2015 and calls on the Commission to conduct a review before preparing the next programme.

• **Information from Member States**

Member States are to inform the Commission on the implementation of their obligations.

• **European Economic Area**

The proposed act is of relevance to the EEA.

• **Detailed explanation of the proposal**

**Article 1 Subject matter and scope**

This states the general objective of the programme and its scope.

**Article 2 Application of General Regulatory Principles**

This aims to ensure consistent application of general regulatory principles by Member States including: efficient use and management of spectrum, encouraging technology and service neutrality, applying the lightest authorisation system and guaranteeing the internal market and competition.
Article 3 Policy objectives

Policy objectives to be implemented by Member States and the Commission include: ensuring sufficient availability of spectrum; maximising spectrum flexibility; enhancing the efficient use of spectrum through general authorisations and spectrum flexibility; avoiding competition distortions; avoiding harmful interference and disturbance; harmonising technical conditions; and ensuring health protection.

Article 4 Enhanced efficiency and flexibility

This sets policy orientations to be translated into actions by Member States and Commission, including better flexibility in spectrum authorisation to bridge the digital divide; creating technical conditions for broadband services; enhancing collective spectrum use; developing standards; and preserving and promoting effective competition and the internal market.

Article 5 Competition

This aims to promote competition by listing various remedies that Member States could adopt against possible distortions resulting from flexibility, trading and hoarding or other accumulation of spectrum rights.

Article 6 Spectrum for wireless broadband communications

Steps are to be taken: to attain specific targets for wireless broadband and to ensure availability of spectrum designated for this purpose; to mandate the freeing of the 800 MHz digital dividend band by 2013; to ensure coverage of rural areas and access for less favoured citizens; to make certain bands tradable and ensure spectrum for ubiquitous satellite access.

Article 7 Spectrum needs for specific Union policies

Commission and Member States are to cooperate to meet spectrum needs for the internal market in relation to several EU policies, including space policy, environmental protection, public safety and protection, civil protection and disaster relief, as well as research and scientific activity.

Article 8 Inventory - monitoring of existing uses of and emerging needs for spectrum

In cooperation with the Member States, the Commission is to organise an inventory of existing spectrum uses and possible future spectrum needs.

Article 9 International negotiations

This sets out steps to raise the EU's profile in international negotiations and to protect EU interests. The EU is to offer support to Member States in their negotiations with third countries for the implementation of EU obligations. In the World Radio Communications Conference in 2012, the Union should promote results that, amongst other things, enable full use of the 800 MHz and the 3.4-3.8 GHz bands for broadband in the Union; ensure that sufficient amount of appropriately protected spectrum is available for Union sectoral policies, such as the European Space Policy and the Single European Sky; and ensure that changes in the ITU Radio Regulations support and complement the relevant principles of the Union regulatory framework.
Article 10 Cooperation among various bodies

The Commission and the Member States are to cooperate to enhance the current institutional setting and foster co-ordination of the management of spectrum, and to improve the cooperation between standardisation bodies, CEPT and the Joint Research Centre to better link spectrum management and standardisation.

Article 11 Public consultation

The Commission and Member States are to consult the public whenever necessary.

Article 12 Reporting

The Commission is required to report by 2015 to the European Parliament and the Council.

Articles 13, 14 and 15: Implementation, Notification, Entry into force, Addressees

These contain obligations on the Member States to implement the provision of the decision by 2015 if not specified otherwise in the preceding articles and to inform the Commission, along with the standard provisions.
Proposal for a

DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

establishing the first radio spectrum policy programme

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union (TFEU), and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee¹,

Having regard to the opinion of the Committee of the Regions²,

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) Article 8a(3) of the Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive)³ provides that the Commission may submit a legislative proposal to the European Parliament and Council for establishing multiannual radio spectrum policy programmes setting out policy orientations and objectives for the strategic planning and harmonisation of the use of spectrum in accordance with the directives applicable to electronic communications networks and services. These policy orientations and objectives should refer to the availability and efficient use of spectrum necessary for the establishment and functioning of the internal market. This Decision is without prejudice to existing EU law, in particular Directives 1999/5/EC and Directives 2002/20/EC and 2002/21/EC, as well as Decision No 676/2002/EC. It is also without prejudice to measures taken at national level, in compliance with EU law, to pursue general interest objectives, in particular relating to content regulation and audio-visual policy and to the right of Member States to organise and use their spectrum for public order and public security purposes and defence.

(2) Spectrum is a key resource for essential sectors and services, including mobile, wireless broadband and satellite communications, television and radio broadcasting,

¹ OJ C , , p. .
² OJ C , , p. .
transport, radiolocation, and applications such as alarm, remote controls, hearing aids, microphones, and medical equipment. It supports public services such as security and safety services, including civil protection, and scientific activities, such as meteorology, Earth observation, radio astronomy and space research. Regulatory measures on spectrum therefore have economic, safety, health, public interest, cultural, scientific, social, environmental and technical implications.

(3) The strategic planning and harmonisation of spectrum use at Union level should enhance the single market for wireless electronic communications services and equipment as well as other Union policies requiring spectrum use, thus creating new opportunities for innovation and contributing to economic recovery and social integration across the Union, while at the same time respecting the important social, cultural and economic value of spectrum. To this end, the Union therefore needs a policy programme that covers the internal market in all Union policy areas involving the use of spectrum such as electronic communications, research and development, transport and energy.

(4) This first programme should in particular support the Europe 2020 Strategy for smart, sustainable and inclusive growth given the huge potential of wireless services to promote an information-based economy, develop and assist sectors relying on information and communications technologies and overcome the digital divide. It is also a key action in the Digital Agenda for Europe\(^4\) which aims to deliver fast broadband internet in the future network-based knowledge economy, with an ambitious target for universal broadband coverage with speeds of at least 30 Mbps for all Europeans by 2020, thereby achieving the sustainable economic and social benefits of a digital single market. It should also support and promote other Union sectoral policies such as a sustainable environment and economic and social inclusion for all Union citizens. Given the importance of wireless applications for innovation, this programme is also a key initiative in support of Union policies on innovation.

(5) The first programme should specify guiding principles and objectives up to 2015 for Member States and Union institutions, and set out specific implementation initiatives. While spectrum management is still largely a national competence, it should be exercised in compliance with existing Union law and allow for action to pursue Union policies.

(6) The programme should also take into account Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision)\(^5\) and the technical expertise of the European Conference of Postal and Telecommunications Administrations (CEPT) so that Union policies which rely on spectrum and were agreed by Parliament and Council can be implemented by technical implementing measures, noting that such measures can be taken whenever necessary to implement already existing Union policies.

(7) Ensuring the optimal use of spectrum may require innovative authorisation solutions such as collective use of spectrum, general authorisations or infrastructure sharing. The application of such principles in the Union might be facilitated by the definition of

---


certain common or converging conditions for spectrum usage. General authorisations, which are the least onerous authorisation system, are of particular interest where interference does not risk hampering the development of other services.

(8) Spectrum rights trading combined with flexible usage conditions should substantially benefit economic growth. Therefore, bands where flexible use has already been introduced by Union law should be immediately made tradable pursuant to the Framework Directive. In addition, common principles for the format and content of such tradable rights as well as common measures to prevent accumulation of spectrum which may create dominant positions as well as undue failure to use acquired spectrum, would facilitate the coordinated introduction by all Member States of these measures and facilitate acquisition of such rights anywhere in the Union.

(9) As underlined in the Digital Agenda for Europe, wireless broadband is an important means to boost competition, consumer choice and access in rural and other areas where deployment of wired broadband is difficult or economically unviable. However, spectrum management may affect competition by changing the role and power of market players, for example if existing users receive undue competitive advantages. Limited spectrum access, in particular when appropriate spectrum becomes scarcer, can create a barrier to entry for new services or applications and hamper innovation and competition. Acquisition of new usage rights, including through spectrum trading or other transactions between users, and the introduction of new flexible criteria for spectrum use can have an impact on the existing competitive situation. Member States should therefore take appropriate ex ante or ex post regulatory measures (such as action to amend existing rights, to prohibit certain acquisitions of spectrum rights, to impose conditions on spectrum hoarding and efficient use such as those referred to in Article 9 paragraph 7 of the Framework Directive, to limit the amount of spectrum for each operator, or to avoid excessive accumulation of spectrum) to avoid distortions of competition in line with the principles underpinning Article 5(6) of Directive 2002/20/EC (the "Authorisation" Directive) and Article 1(2) of Directive 87/372/EEC (the "GSM" Directive).

(10) Optimal and efficient spectrum use requires continuous monitoring of developments, and up-to-date transparent information on spectrum use throughout the Union. While Commission Decision 2007/344/EC on harmonised availability of information regarding spectrum use within the Community requires Member States to publish information on usage rights, a detailed inventory of existing spectrum use together with an effective review and assessment methodology are necessary in the Union to improve the efficiency of spectrum and radio equipment use, in particular between 300 MHz and 3 GHz. This would help to identify inefficient technologies and usages in both the commercial and public sectors, as well as unused assignments and sharing opportunities, and to evaluate future consumer and business needs.

(11) Harmonised standards under Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity are essential to achieve efficient spectrum use and should take account of legally defined sharing conditions. European standards for non-radio electric and electronic equipment and networks

---

should also avoid disturbance to spectrum use. The cumulative impact of the increasing volume and density of wireless devices and applications combined with the diversity of spectrum use challenges current approaches to interference management. These should be examined and reassessed together with receiver characteristics and more sophisticated interference avoidance mechanisms.

(12) In line with the objectives of the Commission's flagship initiative "Digital Agenda for Europe", wireless broadband could contribute substantially to economic recovery and growth if sufficient spectrum is made available, usage rights are awarded quickly and trading is allowed to adapt to market evolution. The Digital Agenda calls for all Union citizens to have access to broadband of at least 30 Mbps by 2020. Therefore, spectrum that has already been designated should be authorised by 2012 for terrestrial communications to ensure easy access to wireless broadband for all, in particular within spectrum bands designated by Commission Decisions 2008/477/EC, 2008/411/EC and 2009/766/EC. To complement terrestrial broadband services and ensure coverage of most remote Union areas, affordable satellite broadband access could be a fast and feasible solution.

(13) The 800 MHz band is optimal for the coverage of large areas by wireless broadband services. Building on the harmonisation of technical conditions under Decision 2010/267/EU, and on Commission Recommendation of 28 October 2009 calling for analogue broadcasting to be switched off by 1 January 2012, and given rapid national regulatory developments, this band should in principle be made available for electronic communications in the Union by 2013. In the longer term, additional spectrum below 790 MHz could also be envisaged, depending on experience and the lack of spectrum in other bands adequate for coverage. Considering the capacity of the 800 MHz band to transmit over large areas, coverage obligations should be attached to rights.

(14) Since a common approach and economies of scale are key to developing broadband communications throughout the Union and preventing competition distortion and market fragmentation among Member States, certain authorisation and procedural conditions could be defined in concerted action among Member States and with the Commission. Conditions could include coverage obligations, spectrum block size, the timing of granting rights, access to mobile virtual network operators (MVNOs) and the duration of rights of use. Reflecting the importance of spectrum trading for increasing efficient use of spectrum and developing the internal market for wireless equipment and services, these conditions should apply to spectrum bands that are allocated to wireless communications, and for which rights of use may be transferred or leased.

(15) Additional spectrum may be needed by other sectors such as transport (for safety, information and management systems), R&D, public protection and disaster relief, e-health and e-inclusion. Optimising synergies between spectrum policy and R&D activities and carrying out studies of radio compatibility between different spectrum users should help innovation. The Commission's Joint Research Centre should help in developing the technical aspects of spectrum regulation, notably by providing testing facilities to verify interference models relevant to Union legislation. Moreover, results of research under the Seventh Framework Programme require the examination of the spectrum needs of projects that may have a large economic or investment potential, in particular for SMEs, e.g. cognitive radio or e-health. Adequate protection against harmful interference should also be ensured to sustain R&D and scientific activities.
The Europe 2020 Strategy sets environmental objectives for a sustainable, resource efficient and competitive economy, for example by improving resource efficiency by 20%. The information and communication technology (ICT) sector has a key role to play as stressed in the Digital Agenda for Europe. Proposed actions include acceleration of the Union-wide deployment of intelligent energy management systems (smart grids and smart metering) using communication capabilities to reduce energy consumption, and the development of Intelligent Transport Systems and intelligent traffic management to reduce carbon dioxide emissions by the transport sector. Efficient use of spectrum technologies could also help reduce energy consumption by radio equipment and limit the environmental impact in rural and remote areas.

Protection of public health against electromagnetic fields is essential for citizens' well-being and for a coherent approach to spectrum authorisation in the Union; while subject to Council Recommendation 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields, it is essential to ensure constant monitoring of the ionising and non-ionising effects of spectrum use on health, including the real-life cumulative effects of spectrum use in various frequencies by an increasing number of equipment types.

Essential public interest objectives such as safety of life call for coordinated technical solutions for the interworking of safety and emergency services between Member States. Sufficient spectrum should be made available on a coherent basis for the development and free circulation of safety services and devices and innovative pan-European or interoperable safety and emergency solutions. Studies have already shown the need for additional harmonised spectrum below 1 GHz to deliver mobile broadband services for public protection and disaster relief, across the Union in the next 5 to 10 years.

Spectrum regulation has strong cross-border or international dimensions, due to propagation characteristics, the international nature of markets dependent on radio-based services, and the need to avoid harmful interference between countries. Moreover, the references to international agreements in Directives 2002/21/EC and 2002/20/EC as amended means that Member States shall not enter into international obligations that prevent or constrain the fulfilment of their Union obligations. Member States should, in accordance with the case-law, undertake all necessary efforts to enable appropriate representation of the Union in matters under its competence in international bodies in charge of spectrum coordination. Moreover, where Union policy or competence is at stake, the Union should politically drive the preparation of negotiations and play a role in multilateral negotiations, including in the International Telecommunications Union that corresponds to its level of responsibility for spectrum matters under Union law.

To evolve from current practice and building on the principles defined in the Council Conclusions of 3 February 1992 on procedures to be followed at the World Administrative Radio Conference of 1992, and where the World Radio communications Conferences (WRC) and other multilateral negotiations touch upon principles and policy issues with an important Union dimension, the Union should be able to establish new procedures to defend its interests in multilateral negotiations, in

---

addition to the long-term objective of becoming a member of the International Telecommunications Union alongside the Member States; to this end, the Commission, taking into account the opinion of the Radio Spectrum Policy Group (RSPG), may also propose common policy objectives to the European Parliament and the Council, as set out in Directive 2002/21/EC.

(21) The 2012 WRC includes specific issues of Union relevance such as the digital dividend, scientific and meteorological services, sustainable development and climate change, satellite communications and the use of spectrum for GALILEO (established by Council Regulation (EC) No 876/2002\(^9\) setting up the Galileo Joint Undertaking and Council Regulation (EC) No 1321/2004\(^10\) on the establishment of structures for the management of the European satellite radio-navigation programmes), as well as the Global Monitoring for Environment and Security European programme\(^11\) for the improved use of Earth observation data.

(22) Member States may also need support on frequency coordination in bilateral negotiations with non-Union neighbouring countries, including accession or candidate countries, to meet their Union obligations on frequency coordination issues. This should also help avoid harmful interference and improve spectrum efficiency and spectrum use convergence even beyond Union borders. Action is particularly pressing in the 800 MHz and 3.4-3.8GHz bands for the transition to cellular broadband technologies and for the harmonisation of spectrum necessary for the modernisation of air traffic control.

(23) To realise the objectives of this Programme it is important to develop an appropriate institutional framework for the co-ordination of spectrum management and regulation at Union level, while taking full account of the competence and expertise of national administrations. This can also assist in putting spectrum co-ordination between Member States in the context of the internal market. Cooperation and coordination are also essential between standardisation bodies, research institutions and the CEPT.

(24) The Commission should report to the European Parliament and the Council on the results achieved under this Decision, as well as on planned future actions.

(25) In drawing up its proposal the Commission has taken utmost account of the opinion of the RSPG.

HAVE ADOPTED THIS DECISION:

\textit{Article 1}

\textit{Aim}

This Decision establishes a radio spectrum policy programme for the strategic planning and harmonisation of the use of spectrum to ensure the functioning of the internal market.

\textsuperscript{10} OJ L 246, 20.7.2004, p. 1
\textsuperscript{11} COM(2009) 589.
Article 2

Application of general regulatory principles

Member States shall cooperate with each other and with the Commission in a transparent manner, in order to ensure the consistent application of the following general regulatory principles across the Union:

(a) encouraging efficient use of spectrum to best meet the increasing demand for use of frequencies;

(b) applying technology and service neutrality in the use of spectrum for electronic communications networks and services, in accordance with Article 9 of Directive 2002/21/EC (Framework Directive), and where possible for other sectors and applications, in such a way as to promote efficiency of spectrum use, in particular by fostering flexibility, and to promote innovation;

(c) applying the least onerous authorisation system possible in such a way as to maximise flexibility and efficiency in spectrum usage;

(d) guaranteeing the functioning of the internal market, in particular by ensuring effective competition.

Article 3

Policy objectives

In order to focus on the priorities of this first Programme, Member States and the Commission shall cooperate in order to support and implement the following policy objectives:

(a) make sufficient appropriate spectrum available in a timely manner to support Union policy objectives;

(b) maximise flexibility in the use of spectrum, to promote innovation and investment, through the application of the principles of technology and service neutrality, the opening of spectrum to new services, and the possibility to trade spectrum rights;

(c) enhance the efficient use of spectrum by harnessing the benefits of general authorisations and increasing the use of such types of authorisation;

(d) maintain and develop effective competition, in particular in electronic communication services, by preventing ex ante, or remedying ex post, excessive accumulation of radio frequencies by certain economic operators which results in significant harm to competition;

(e) reduce the fragmentation of the internal market by enhancing coordination and harmonisation of technical conditions for the use and availability of spectrum, as appropriate, including the development of transnational services, and by promoting economies of scope and scale at Union level;

(f) avoid harmful interference or disturbance by other radio or non-radio devices by facilitating the development of standards allowing for flexible and efficient use of spectrum, and increasing immunity of receivers to interference, taking particular
account of the cumulative impact of the increasing volumes and density of radio devices and applications;

(g) in defining the technical conditions for the allocation of spectrum, take full account of the results of research certified by the relevant international organisations into the potential effects on human health of electromagnetic field emissions.

Article 4
Enhanced efficiency and flexibility

1. Member States shall adopt by 1 January 2013 authorisation and allocation measures appropriate for the development of broadband services, in conformity with Directive 2002/20/EC of the European Parliament and of the Council on the authorisation of electronic communications networks and services (Authorisation Directive)\(^\text{12}\), such as allowing relevant operators, where possible and on the basis of consultations in accordance with Article 11, direct or indirect access to contiguous blocks of spectrum of at least 10 MHz.

2. Member States shall foster, in cooperation with the Commission, the collective use of spectrum as well as shared use of spectrum.

3. Member States and the Commission shall cooperate to develop and harmonise standards for radio equipment and telecommunications terminals as well as for electric and electronic equipment and networks based where necessary upon standardisation mandates from the Commission to the relevant standardisation bodies.

4. Member States shall ensure that selection conditions and procedures promote investment and efficient use of spectrum.

5. In order to avoid possible fragmentation of the internal market due to divergent selection conditions and procedures for harmonised spectrum bands allocated to electronic communication services and made tradable in all Member States pursuant to Article 9b of Directive 2002/21/EC, the Commission, in cooperation with Member States, shall develop guidelines on authorisation conditions and procedures for such bands, in particular on infrastructure sharing and coverage conditions.

6. Whenever necessary in order to ensure the effective use of spectrum rights and avoid spectrum hoarding, Member States shall take appropriate measures including financial penalties or the withdrawal of rights.

Article 5
Competition

1. Member States shall maintain and promote effective competition and avoid distortions of competition in the internal market or in a substantial part of it.

2. In order to implement fully the obligations of paragraph 1, and in particular to ensure that competition is not distorted by any accumulation, transfer or modification of

rights of use for radio frequencies, Member States may adopt inter alia the following measures, which are without prejudice to the application of competition rules:

(a) Member States may limit the amount of spectrum for which rights of use are granted to any economic operator or may attach conditions to such rights of use, such as the provision of wholesale access, in certain bands or in certain groups of bands with similar characteristics, for instance the bands below 1 GHz allocated to electronic communication services;

(b) Member States may refuse to grant new rights of use or to allow new spectrum usages in certain bands, or may attach conditions to the grant of new rights of use or to the authorisation of new spectrum usages, when this would lead to an accumulation of spectrum frequencies by certain economic operators which is likely to result in significant harm to competition;

(c) Member States may prohibit or impose conditions on transfers of spectrum usage rights, not subject to national or Union merger control, when this is likely to result in significant harm to competition;

(d) Member States may amend the existing rights in accordance with Article 14 of Directive 2002/20/EC when this is necessary to remedy ex-post excessive accumulation of spectrum frequencies within certain economic operators which significantly harms competition.

3. Member States shall ensure that authorisation and selection procedures avoid delays and promote effective competition.

**Article 6**

*Spectrum for wireless broadband communications*

1. Without prejudice to the principles of service and technology neutrality, Member States, in cooperation with the Commission, shall take all steps necessary to ensure that sufficient spectrum for coverage and capacity purposes is allocated within the Union, in order to ensure that wireless applications contribute effectively to achieving the target for all citizens to have access to broadband of a speed of at least 30 Mbps by 2020.

2. Member States shall, by 1 January 2012, authorise the use of all the spectrum designated by Commission Decisions 2008/477/EC (2.5–2.69 GHz), 2008/411/EC (3.4–3.8 GHz) and 2009/766/EC (900/1800 MHz), under conditions that provide consumers with easy access to wireless broadband services.

3. Member States shall, by 1 January 2013 make the 800 MHz band available for electronic communications services in line with the harmonised technical conditions laid down pursuant to the Decision No 676/2002/EC. In Member States where exceptional national or local circumstances would prevent the availability of the band, the Commission may authorise specific derogations until 2015. In accordance with Article 9 of Directive 2002/21/EC, the Commission, in cooperation with the Member States, shall keep under review the use of the spectrum below 1GHz and assess whether additional spectrum could be freed and made available for new applications.
4. Member States, in cooperation with the Commission, shall ensure that the provision of access to broadband content and services using the 790-862 MHz (800MHz) band is encouraged in sparsely populated areas, in particular through coverage obligations; in doing so, they shall examine ways and, where necessary, take appropriate measures to ensure that the freeing of the 800 MHz band does not adversely affect programme making and special events (PMSE) users.

5. The Commission is invited to adopt, as a priority, appropriate measures, pursuant to Article 9b(3) of the Directive 2002/21/EC, to ensure that Member States allow trading within the Union of spectrum usage rights in the harmonised bands 790–862 MHz (the "800 MHz band"), 880–915 MHz, 925–960 MHz, 1710–1785 MHz, 1805–1880 MHz, 1900–1980 MHz, 2010–2170 MHz, 2.5–2.69 GHz, and 3.4–3.8 GHz.

6. If necessary, the Commission shall ensure the availability of additional spectrum bands for the provision of harmonised satellite services for broadband access that will cover the whole territory of the Union including the most remote areas with a broadband offering enabling Internet access at a comparable price to terrestrial offerings.

Article 7
Spectrum needs for specific Union policies

1. Member States and the Commission shall ensure spectrum availability and protect the radio frequencies necessary for monitoring the Earth's atmosphere and surface, allowing the development and exploitation of space applications and improving transport systems, in particular for the global civil navigation satellite system GALILEO, for the Global Monitoring for Environment and Security programme GMES, and for intelligent transport safety and transport management systems.

2. In cooperation with the Member States, the Commission shall conduct studies and examine the possibility to design authorisation schemes which would contribute to a low-carbon policy, by saving energy in the use of spectrum as well as by making spectrum available for wireless technologies with a potential for improving energy saving, including smart energy grids and smart metering systems.

3. If necessary, the Commission shall ensure that sufficient spectrum is made available under harmonised conditions to support the development of safety services and the free circulation of related devices as well as the development of innovative interoperable solutions for public safety and protection, civil protection and disaster relief.

4. Member States and the Commission shall review the spectrum needs of, and collaborate with, the scientific community; identify a number of research and development initiatives and innovative applications that may have a major socio-economic impact and/or potential for investment and prepare for the allocation of sufficient spectrum to such applications under harmonised technical conditions and the least onerous administrative burden.
Article 8
Inventory and monitoring of existing uses of and emerging needs for spectrum

1. The Commission, assisted by the Member States, which shall provide all appropriate information on spectrum use, shall create an inventory of existing spectrum use and of possible future needs for spectrum in the Union, in particular in the range from 300 MHz to 3 GHz.

2. The inventory referred to in paragraph (1) shall allow the assessment of the technical efficiency of existing spectrum uses and the identification of inefficient technologies and applications, unused or inefficiently used spectrum and spectrum sharing opportunities. It shall take into account future needs for spectrum based on consumers' and operators' demands, and of the possibility to meet such needs.

3. The inventory referred to in paragraph (1) shall review the various types of spectrum usage by both private and public users, and help identify spectrum bands that could be assigned or re-allocated in order to increase their efficient use, promote innovation and enhance competition in the internal market, to the benefit of both private and public users, while taking into account the potential positive and negative impact on existing users of such bands.

Article 9
International negotiations

1. The Union shall participate in international negotiations relating to spectrum matters to defend its interests, acting in accordance with Union law concerning, among other things, the principles of internal and external competences of the Union.

2. Member States shall ensure that international agreements to which they are a party in the context of the International Telecommunications Union (ITU) are in conformity with existing Union legislation, and in particular with the relevant rules and principles of the Union regulatory framework on electronic communications.

3. Member States shall ensure that international regulations allow the full use of frequency bands for the purposes for which they are designated under Union law, and that a sufficient amount of appropriately protected spectrum is available for Union sectoral policies.

4. The Union shall provide, upon request, political and technical support to Member States in their bilateral negotiations with non-Union neighbouring countries including candidate and acceding countries, to resolve spectrum coordination issues that prevent Member States from implementing their obligations under Union law regarding spectrum policy and management. The Union shall also support efforts by third countries to implement spectrum management that is compatible with that of the Union, so as to safeguard Union spectrum policy objectives.

5. When negotiating with third countries, Member States shall be bound by their obligations under Union law. When signing or otherwise accepting any international obligations regarding spectrum, Member States shall accompany their signature or any other act of acceptance by a joint declaration stating that they shall implement
such international agreements or commitments in accordance with their obligations under the treaties.

**Article 10**

**Cooperation among various bodies**

1. The Commission and the Member States shall cooperate to enhance the current institutional setting, in order to foster co-ordination at Union level of the management of spectrum, including in matters directly affecting two or more Member States, with a view to developing the internal market and ensuring that Union spectrum policy objectives are fully achieved. They shall seek to promote Union spectrum interests outside the Union in accordance with Article 9.

2. The Commission and Member States shall ensure that standardisation bodies, CEPT and the Commission's Joint Research Centre closely cooperate in any technical issue whenever necessary to ensure the efficient use of spectrum. To this end, they shall maintain a coherent link between spectrum management and standardisation in such a way as to enhance the internal market.

**Article 11**

**Public consultation**

Wherever appropriate, the Commission shall organise public consultations to collect the views of all interested parties as well as the views of the public in general on the use of spectrum in the Union.
Article 12
Reporting

By 31 December 2015, the Commission shall conduct a review of the application of this radio spectrum policy programme and report to the European Parliament and the Council on the activities developed and the measures adopted pursuant to this Decision.

Article 13
Notification

Member States shall apply these policy orientations and objectives by 1 July 2015 unless otherwise specified in the preceding articles.

They shall provide the Commission with all information necessary for the purpose reviewing the application of this Decision.

Article 14
Entry into force

This Decision shall enter into force on the 20th day following that of its publication in the Official Journal of the European Union.

Done at Brussels,

For the European Parliament
The President

For the Council
The President