Original Proposal from the	EP amendments as adopted in Plenary	Hungarian Presidency proposal
Commission	<b>* *</b>	frungariun Problemey proposar
	Recital 1	
(1) Article 8a(3) of the Directive	(1) Article 8a(3) of the Directive 2002/21/EC of the	
2002/21/EC of the European Parliament	European Parliament and of the Council of 7 March	
and of the Council of 7 March 2002 on a	2002 on a common regulatory framework for	
common regulatory framework for	electronic communications networks and services	
electronic communications networks and	(Framework Directive) provides that the Commission	
services (Framework Directive) provides	may submit a legislative proposal to the European	
that the Commission may submit a	Parliament and Council for establishing multiannual	
legislative proposal to the European	radio spectrum policy programmes setting out policy	
Parliament and Council for establishing	orientations and objectives for the strategic planning	
multiannual radio spectrum policy	and harmonisation of the use of spectrum in	
programmes setting out policy orientations	accordance with the directives applicable to	
and objectives for the strategic planning	electronic communications networks and services.	
and harmonisation of the use of spectrum	These policy orientations and objectives should refer	
in accordance with the directives	to the availability and efficient use of spectrum	
applicable to electronic communications	necessary for the establishment and functioning of	
networks and services. These policy	the internal market. The radio spectrum policy	
orientations and objectives should refer to	programme supports the goals and key actions outlined in	
the availability and efficient use of	the EU2020 Strategy and the Digital Agenda, and is included	
spectrum necessary for the establishment	among the 50 priority actions of the Single Market Act. This	
and functioning of the internal market.	Decision is without prejudice to existing EU law, in	
This Decision is without prejudice to	particular Directives 1999/5/EC of the European	
existing EU law, in particular Directives	Parliament and of the Council of 9 March 1999 on radio	
1999/5/EC and Directives 2002/20/EC and	equipment and telecommunications terminal equipment and	
2002/21/EC, as well as Decision No	the mutual recognition of their conformity <sup>1</sup> , 2002/19/EC of	
676/2002/EC. It is also without prejudice	the European Parliament and of the Council of 7 March 2002	
to measures taken at national level, in	on access to, and interconnection of, electronic	
compliance with EU law, to pursue general	communications networks and associated facilities (Access	
interest objectives, in particular relating to	Directive), 2002/20/EC of the European Parliament and of	
content regulation and audio-visual policy	the Council of 7 March 2002 on the authorisation of	
and to the right of Member States to	electronic communications networks and services	
organise and use their spectrum for public	(Authorisation Directive) <sup>3</sup> , <b>2002/21/EC</b> and 2009/140/EC	
order and public security purposes and	of the European Parliament and of the Council of 25	
defence.	November 2009 amending Directives 2002/21/EC ,	
	2002/19/EC, and 2002/20/EC <sup>4</sup> , as well as Decision No	
	676/2002/EC of the European Parliament and of the	

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	Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision). 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.	
	Devite la	
(2) Spectrum is a key resource for essential	Recital 2 (2) Spectrum is a key <i>public</i> resource for essential	
(2) Spectrum is a key resource for essential sectors and services, including mobile, wireless broadband and satellite communications, television and radio broadcasting, 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.	(2) Spectrum is a key public resource for essential sectors and services, including mobile, wireless broadband and satellite communications, television and radio broadcasting, 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. An efficient use of spectrum also plays a role in the universal access to electronic communications, in particular for citizens and businesses located in less populated or remote areas, such as rural areas or islands. Regulatory measures on spectrum therefore have economic, safety, health, public interest, cultural, scientific, social, environmental and technical implications.	
-	Recital 2 a (new)	
	(2a) A renewed economic and social approach with regard to the management, allocation and usage of spectrum should be adopted, whereby particular focus is directed towards the formulation of regulation which ensures greater spectrum efficiency, better frequency planning and safeguards against anti-competitive behaviour and the taking of anti-social measures with regard to the usage of spectrum. Recital 3	
(3) The strategic planning and harmonisation of spectrum use at Union level should enhance the single market for	(3) The strategic planning and harmonisation of spectrum use at Union level should enhance the single market for wireless electronic communications	

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wireless electronic communications	services and equipment as well as other Union	
services and equipment as well as other	policies requiring spectrum use, thus creating new	
Union policies requiring spectrum use,	opportunities for innovation, employment creation, and	
thus creating new opportunities for	simultaneously contributing to economic recovery and	
innovation and contributing to economic	social integration across the Union, while at the same	
recovery and social integration across the	time respecting the important social, cultural and	
Union, while at the same time respecting	economic value of spectrum. The harmonisation of	
the important social, cultural and	spectrum use is also essential to ensure the quality of the	
economic value of spectrum. To this end,	services provided by electronic communications and to create	
the Union therefore needs a policy	economies of scale lowering both the cost of deploying	
programme that covers the internal market	wireless networks and the cost of wireless devices for	
in all Union policy areas involving the use	consumers. To this end, the Union therefore needs a	
of spectrum such as electronic	policy programme that covers the internal market in	
communications, research and	all Union policy areas involving the use of spectrum	
development, transport and energy.	such as electronic communications, research and	
	development, transport, culture and energy. Any delay	
	of the necessary reform by current right holders should be	
	avoided at all costs.	
	Recital 3 a (new)	
	(3a) This first programme should promote competition,	
	introduce a pan-European level playing field and lay the	
	foundation for a genuine single digital market. In order to	
	secure the full potential and consumer benefits of this radio	
	spectrum programme and of the single market, the	
	programme should be supplemented by upcoming and new	
	proposals that will enable the development of the online	
	economy such as on data protection and on a European	
	licence system for online content.	
	Recital 4	
(4) This first programme should in	(4) This first programme should in particular support	
particular support the Europe 2020	the Europe 2020 Strategy for smart, sustainable and	
Strategy for smart, sustainable and	inclusive growth given the huge potential of wireless	
inclusive growth given the huge potential	services to promote an information-based economy,	
of wireless services to promote an	develop and assist sectors relying on information and	
information-based economy, develop and	communications technologies and overcome the	
assist sectors relying on information and	digital divide. The explosion of, in particular, audiovisual	
communications technologies and	media services and online content is driving demand for	
overcome the digital divide. It is also a key	speed and coverage. It is also a key action in the Digital	
action in the Digital Agenda for Europe	Agenda for Europe which aims to deliver fast	
which aims to deliver fast broadband	broadband internet in the future network-based	
internet in the future network-based	knowledge economy, with an ambitious target for	

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	and another than the second providing the birt of	
knowledge economy, with an ambitious	universal broadband coverage. Providing the highest	
target for universal broadband coverage	possible broadband speeds and capacity, ensuring not less	
with speeds of at least 30 Mbps for all	than 30 Mbps for all by 2020 with at least half of European	
Europeans by 2020, thereby achieving the	households having broadband access at a speed of at least	
sustainable economic and social benefits of	100 Mbps, is important for fostering economic growth and	
a digital single market. It should also	global competitiveness, thereby achieving the	
support and promote other Union sectoral	sustainable economic and social benefits of a digital	
policies such as a sustainable environment	single market. It should also support and promote	
and economic and social inclusion for all	other Union sectoral policies such as a sustainable	
Union citizens. Given the importance of	environment and economic and social inclusion for	
wireless applications for innovation, this	all Union citizens. Given the importance of wireless	
programme is also a key initiative in	applications for innovation, this programme is also a	
support of Union policies on innovation.	key initiative in support of Union policies on	
	innovation.	
	Recital 4 a (new)	
	(4a) The first programme must lay the foundations for a	
	development whereby the Union can take the lead regarding	
	broadband speeds, mobility, coverage and capacity. Such	
	leadership is essential in order to establish a competitive	
	digital single market working as a spearhead to open up the	
	internal market for all Union citizens.	
(=) The first are measured should are sife	Recital 5	
(5) The first programme should <u>specify</u>	(5) The first programme should lay down the	
guiding principles and objectives up to	principles and objectives up to 2015 for Member	
2015 for Member States and Union	States and Union institutions, and set out specific	
institutions, and set out specific	implementation initiatives. While spectrum	
implementation initiatives. While	management is still largely a national competence, it	
spectrum management is still largely a	should be exercised in compliance with existing	
national competence, it should be	Union law and allow for action to pursue Union	
exercised in compliance with existing	policies.	
Union law and allow for action to pursue		
Union policies.		
	Recital 7	
(7) Ensuring the optimal use of spectrum	(7) Ensuring the optimal and productive use of	
may require innovative authorisation	<b>spectrum</b> as a public good <b>may require</b> the Commission	
solutions such as collective use of	and Member States to put in place innovative	
spectrum, general authorisations or	authorisation solutions such as collective use of	
infrastructure sharing. The application of	spectrum, general authorisations or infrastructure	
such principles in the Union might be	sharing, besides traditional solutions like auctions. The	
facilitated by the definition of certain	application of such principles in the Union might be	
common or converging conditions for	facilitated by identifying best practices and encouraging	

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spectrum usage. General authorisations,	information sharing, as well as the definition of certain	
which are the least onerous authorisation	common or converging conditions for spectrum	
system, are of particular interest where	usage. General authorisations, which are the most	
interference does not risk hampering the	appropriate and least onerous authorisation system,	
development of other services.fem	are of particular interest where interference does not	
	risk hampering the development of other services,	
	and most appropriate in accordance with Article 5 of	
	Directive 2002/20/EC.	
	Recital 7 a (new)	
	(7a) While technologically still in development, so-called	
	"cognitive technologies" should already be further explored	
	and implemented through geolocalised information on	
	spectrum usage, which should be mapped in the inventory.	
	Recital 8	
(8) Spectrum rights trading combined with	(8) Spectrum rights trading combined with flexible	
flexible usage conditions should substantially	usage conditions should substantially benefit	
benefit economic growth. Therefore, bands where	economic growth. Therefore, bands where flexible	
flexible use has already been introduced by Union	use has already been introduced by Union law should	
law should be immediately made tradable	be immediately made tradable pursuant to the	
pursuant to the Framework Directive. In addition,	Framework Directive. In addition, common	
common principles for the format and content of	principles for the format and content of such tradable	
such tradable rights as well as common measures	rights as well as common measures to prevent	
to prevent accumulation of spectrum which may	accumulation of spectrum which may create	
create dominant positions as well as undue failure	dominant positions as well as undue failure to use	
to use acquired spectrum, would facilitate the	acquired spectrum, would facilitate the coordinated	
coordinated introduction by all Member States of	introduction by all Member States of these measures	
these measures and facilitate acquisition of such	and facilitate acquisition of such rights anywhere in	
rights anywhere in the Union.	the Union. In addition, with a view to achieving the	
	objectives of the Digital Agenda for Europe, part of the	
	proceeds from the auctioning of spectrum rights ('digital	
	dividend') should be used to speed up the expansion of	
	broadband coverage.	
	Recital 9	
(9) As underlined in the Digital Agenda for	(9) As underlined in the Digital Agenda for Europe,	
Europe, wireless broadband is an	wireless broadband is an important means to boost	
important means to boost competition,	<b>competition</b> , a pan-European level playing field,	
consumer choice and access in rural and	consumer choice and access in rural and other areas	
other areas where deployment of wired	where deployment of wired broadband is difficult or	
broadband is difficult or economically	economically unviable. However, spectrum	
unviable. However, spectrum management	management may affect competition by changing the	
may affect competition by changing the	role and power of market players, for example if	

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Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
role and power of market players, for	existing users receive undue competitive advantages.	
example if existing users receive undue	Limited spectrum access, in particular when	
competitive advantages. Limited spectrum	appropriate spectrum becomes scarcer, can create a	
access, in particular when appropriate	barrier to entry for new services or applications and	
spectrum becomes scarcer, can create a	hamper innovation and competition. Acquisition of	
barrier to entry for new services or	new usage rights, including through spectrum trading	
applications and hamper innovation and	or other transactions between users, and the	
competition. Acquisition of new usage	introduction of new flexible criteria for spectrum use	
rights, including through spectrum trading	can have an impact on the existing competitive	
or other transactions between users, and	situation. Member States should therefore conduct a	
the introduction of new flexible criteria for	thorough analysis of competition effects prior to new	
spectrum use can have an impact on the	spectrum allocations as well as taking <b>appropriate ex ante</b>	
existing competitive situation. Member	or ex post regulatory measures (such as action to	
States should therefore <i>take</i> appropriate	amend existing rights, to prohibit certain acquisitions	
ex ante or ex post regulatory measures	of spectrum rights, to impose conditions on spectrum	
(such as action to amend existing rights, to	hoarding and efficient use such as those referred to in	
prohibit certain acquisitions of spectrum	Article 9 paragraph 7 of the Framework Directive, to	
rights, to impose conditions on spectrum	limit the amount of spectrum for each operator, or to	
hoarding and efficient use such as those	avoid excessive accumulation of spectrum) to avoid	
referred to in Article 9 paragraph 7 of the	distortions of competition in line with the principles	
Framework Directive, to limit the amount	underpinning Article 5(6) of Directive 2002/20/EC	
of spectrum for each operator, or to avoid	(the 'Authorisation' Directive) and Article 1(2) of	
excessive accumulation of spectrum) to	Council Directive 87/372/EEC of 25 June 1987 on the	
avoid distortions of competition in line	frequency bands to be reserved for the coordinated	
with the principles underpinning Article	introduction of public pan-European cellular digital land-	
5(6) of Directive 2002/20/EC (the	based mobile communications in the Community (the 'GSM'	
"Authorisation" Directive) and Article 1(2)	<b>Directive).</b> Member States may also take steps to achieve a	
of Directive 87/372/EEC (the "GSM"	more even allocation of spectrum between economic	
Directive).	operators by reserving spectrum for new entrants to a	
	frequency band or group of bands with similar	
	characteristics. Recital 10	
(10) Optimal and efficient spectrum use	(10) Optimal and efficient spectrum use requires	
requires continuous monitoring of	continuous monitoring of developments, and up-to-	
developments, and up-to-date transparent	date transparent information on spectrum use	
information on spectrum use throughout	throughout the Union. While Commission Decision	
the Union. While Commission Decision	2007/344/EC on harmonised availability of	
2007/344/EC on harmonised availability of	information regarding spectrum use within the	
information regarding spectrum use within	Community <sup>6</sup> requires Member States to publish	
the Community requires Member States to	information on usage rights, a detailed inventory of	
publish information on usage rights, a	existing spectrum use and the efficiency of such use,	

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detailed inventory of existing spectrum use	following a common review and assessment	
together with an effective review and	methodology, is necessary in the Union to improve	
assessment methodology are necessary in	the efficiency of spectrum and radio equipment use,	
the Union to improve the efficiency of	in particular between 300 MHz and 6 GHz, but also	
spectrum and radio equipment use, in	from 6 GHz to 70 GHz as these frequencies will become	
particular between 300 MHz and 3 GHz.	increasingly important following rapid technological	
This would help to identify inefficient	developments. The inventory should be sufficiently detailed	
technologies and usages in both the	to identify inefficient technologies and usages in both	
commercial and public sectors, as well as	the private and public sectors, as well as unused	
unused assignments and sharing	assignments and sharing opportunities, and to	
opportunities, and to evaluate future	evaluate future consumer and business needs. In	
consumer and business needs.	addition, taking into account the continuous growth of the	
	number of applications using wireless data, Member States	
	should promote the efficient use of spectrum for user	
	applications.	
	Recital 11	
(11) Harmonised standards under Directive	(11) Harmonised standards under Directive	
1999/5/EC of the European Parliament and	1999/5/EC of the European Parliament and of the	
of the Council of 9 March 1999 on radio	Council of 9 March 1999 on radio equipment and	
equipment and telecommunications	telecommunications terminal equipment and the	
terminal equipment and the mutual	mutual recognition of their conformity <sup>7</sup> are essential	
recognition of their conformity are	to achieve efficient spectrum use and should take	
essential to achieve efficient spectrum use	account of legally defined sharing conditions.	
and should take account of legally defined	European standards for non-radio electric and	
sharing conditions. European standards	electronic equipment and networks should also avoid	
for non-radio electric and electronic	disturbance to spectrum use. The cumulative impact	
equipment and networks should also avoid	of the increasing volume and density of wireless	
disturbance to spectrum use. The	devices and applications combined with the diversity	
cumulative impact of the increasing	of spectrum use challenges current approaches to	
volume and density of wireless devices and	interference management. These should be examined	
applications combined with the diversity of	and reassessed together with receiver characteristics	
spectrum use challenges current	and more sophisticated interference avoidance	
approaches to interference management.	mechanisms, with the aim of avoiding harmful interference	
These should be examined and reassessed	or disturbance to existing and future spectrum use.	
together with receiver characteristics and	Moreover, Member States may, where appropriate,	
more sophisticated interference avoidance	introduce, in accordance with national law, compensatory	
mechanisms.	measures related to the direct cost of resolving interference	
	issues and migration costs.	
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	Recital 12	
(12) In line with the objectives of the	(12) In line with the objectives of the Commission's	

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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.	flagship initiative "Digital Agenda for Europe", wireless broadband <i>services</i> 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 <i>harmonised</i> 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.	
	Recital 12 a (new)	
	(12a) According to multiple converging studies, mobile data traffic is increasing rapidly and is currently being doubled every year. At this pace, which is likely to continue in the coming years, mobile data traffic will have increased nearly 40 fold between 2009 and 2014. In order to manage this exponential growth, a number of actions will be required by regulators and market players including increased spectrum efficiency across the board, possible further harmonised spectrum allocations for wireless broadband, and traffic offload onto other networks via multi-mode devices.	
	Recital 12 b (new)	
	(12b) More flexible arrangements governing spectrum use should be introduced in order to foster innovation and high- speed broadband connections which enable firms to reduce their costs and increase their competitiveness and make it possible to develop new interactive online services, for example in the fields of education and health and services of general interest.	

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	Recital 12 c (new)	
	(12c) A European market with nearly 500 million people connected to high-speed broadband would act as a	
	spearhead for the development of the internal market,	
	creating a globally unique critical mass of users exposing all	
	regions to new opportunities and giving each user increased	
	value and the Union the capacity to be a world-leading	
	knowledge-based economy. A rapid deployment of	
	broadband is crucial for the development of European	
	productivity and for the emergence of new and small	
	enterprises that can be leaders in different sectors, for	
	example healthcare, manufacturing and the services	
	industry.	
	Recital 12 d (new)	
	(12d) The International Telecommunications Union (ITU) has	
	estimated the future spectrum bandwidth requirements for	
	the development of International Mobile	
	Telecommunications-2000 (IMT-2000) and IMT-advanced	
	systems (i.e. 3G and 4G mobile communications) as	
	amounting to between 1280 and 1720 MHz in 2020 for the	
	commercial mobile industry for each ITU region including	
	Europe. Without the freeing up of additional spectrum,	
	preferably harmonised at global level, new services and	
	economic growth will be hindered by capacity constraints in mobile networks.	
	Recital 13	
(13) The 800 MHz band is optimal for the	(13) In addition to a timely and pro-competitive opening up	
coverage of large areas by wireless	of the 900 MHz band in accordance with the "GSM" Directive	
broadband services. Building on the harmonisation of technical conditions	2009/114/EC of the European Parliament and of the Council of 16 September 2009 <sup>1</sup> , the <b>800 MHz band</b> can be used in	
under Decision 2010/267/EU, and on	an optimal way for the coverage of large areas by	
Commission Recommendation of 28	wireless broadband services. Building on the	
October 2009 calling for analogue	harmonisation of technical conditions under	
broadcasting to be switched off by 1	Commission Decision 2010/267/EU of 6 May 2010 on	
January 2012, and given rapid national	harmonised technical conditions of use in the 790-862 MHz	
regulatory developments, this band should	frequency band for terrestrial systems capable of providing	
in principle be made available for	electronic communications services in the European Union <sup>2</sup> ,	
electronic communications in the Union by	and on Commission Recommendation 2009/848/EC of	
2013. In the longer term, additional	<b>28 October 2009</b> facilitating the release of the digital	
spectrum below 790 MHz could also be	dividend in the European Union <sup>3</sup> , calling for analogue	

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envisaged, depending on experience and the lack of spectrum in other bands	broadcasting to be switched off by 1 January 2012, and given rapid national regulatory developments,	
adequate for coverage. Considering the	this band should in principle be made available for	
capacity of the 800 MHz band to transmit	electronic communications in the Union by 2013.	
over large areas, coverage obligations	Speedy implementation in respect of that band is needed to	
should be attached to rights.	avoid technical disturbances, particularly in the border	
	regions between Member States. Considering the capacity of the 800 MHz band to	
	transmit over large areas, coverage obligations	
	achieved through the principles of technical and service	
	neutrality <b>should be attached to rights.</b> Additional	
	spectrum for wireless broadband services in the 1.5 GHz	
	band (1452-1492 MHz) and the 2.3 GHz band (2300-2400	
	MHz) should be freed up to meet the increasing demand for	
	mobile traffic and should ensure a level playing field between	
	different technological solutions and support the emergence	
	of pan-European operators within the Union. Further mobile	
	service spectrum allocations, such as the 700 MHz band	
	(694-790 MHz), should be evaluated depending on future	
	capacity requirements for wireless broadband services and	
	terrestrial TV. Recital 13 a (new)	
	(13a) Increased mobile broadband opportunities are crucial	
	to provide the cultural sector with new distribution	
	platforms, thereby paving the way for the successful future	
	development of the sector. It is essential that terrestrial TV	
	services and other actors be able to maintain existing	
	services when an additional part of the spectrum is freed up	
	for wireless services. Migration costs, resulting from the	
	opening up of additional spectrum, may be covered through	
	licence fees, making it possible for broadcasters to have the	
	same opportunities as are enjoyed today in other parts of the	
	spectrum.	
	Recital 13 b (new)	
	(13b) Wireless access systems, including radio local access	
	networks, are outgrowing their current allocations on an	
	unlicensed basis at 2.4GHz and 5GHz. The feasibility of	
	extending the allocations of unlicensed spectrum for wireless	
	access systems, including radio local area networks, established by Decision 2005/513/EC, should be assessed in	
	relation to the inventory of existing uses of, and emerging	
	relation to the inventory of existing uses of, and enterging	

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	needs for, spectrum, and depending on use of spectrum for	
	other usages.	
	Recital 13 c (new) (13c) While broadcast will remain an important distribution	
	(13c) while broadcast will remain an important distribution platform for content, as it is still the most economical platform for mass-distribution, broadband, fixed and mobile, and other new services provide new opportunities for the cultural sector to diversify its range of distribution platforms, to deliver on-demand services and to tap into the economic potential of the major increase in data traffic.	
	Recital 13 d (new) (13d) Similar to the "GSM" standard, which was successfully taken up around the world thanks to an early and decisive pan-European harmonisation, the Union should aim to set the global agenda for future spectrum re-allocations especially for the most efficient part of the spectrum. Agreements in the World Radio Conference (WRC) 2016 will be pivotal to ensure global harmonisation and co-ordination with neighbouring third countries.	
	Recital 13 e (new)	
	(13e) Wireless access systems, including radio local access networks, are outgrowing their current allocations on an unlicensed basis at 2.4GHz and 5GHz. In order to accommodate the next generation of wireless technologies, wider channels are required, enabling speeds in excess of 1Gbps.	
	Recital 14	
(14) Since a common approach and	(14) Since a common approach and economies of	
economies of scale are key to developing broadband communications throughout	scale are key to developing broadband communications throughout the Union and	
the Union and preventing competition	preventing competition distortion and market	
distortion and market fragmentation	fragmentation among Member States, certain	
among Member States, certain	authorisation and procedural conditions should be	
authorisation and procedural conditions	defined in concerted action among Member States	
could be defined in concerted action	and with the Commission. Conditions should primarily	
among Member States and with the	ensure new entrants' access to lower bands through auctions	
Commission. Conditions could include	or other competition procedures. Conditions <b>could</b> also	
coverage obligations, spectrum block size,	include coverage obligations, spectrum block size, the	
the timing of granting rights, access to mobile virtual network operators (MVNOs)	timing of granting rights, access to mobile virtual network operators (MVNOs) and the duration of	

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and the duration of rights of use. Reflecting	rights of use. Reflecting the importance of spectrum	
the importance of spectrum trading for	trading for increasing efficient use of spectrum,	
increasing efficient use of spectrum and	facilitating the emergence of new pan-European services <b>and</b>	
developing the internal market for wireless	developing the internal market for wireless	
equipment and services, these conditions	equipment and services, these conditions should	
should apply to spectrum bands that are	apply to spectrum bands that are allocated to wireless	
allocated to wireless communications, and	communications, and for which rights of use may be	
for which rights of use may be transferred	transferred or leased.	
or leased.		
	Desitel 1-	
(15) Additional spectrum may be needed by	Recital 15 (15) Additional spectrum may be needed by other	
other sectors such as transport (for safety,	sectors such as transport (for safety, information and	
information and management systems),	management systems), R&D, culture, e-health, e-	
R&D, public protection and disaster relief,	inclusion and public protection and disaster relief	
e-health and e-inclusion. Optimising	(PPDR), the latter in view of its increased use of video and	
synergies between spectrum policy and	data transmission for quick and more efficient service.	
R&D activities and carrying out studies of	<b>Optimising synergies</b> and direct links <b>between</b>	
radio compatibility between different spectrum users should help innovation.	spectrum policy and R&D activities and carrying out	
The Commission's Joint Research Centre	studies of radio compatibility between different	
	spectrum users should help innovation. <i>Relevant</i>	
should help in developing the technical	research organisations should help in developing the	
aspects of spectrum regulation, notably by	technical aspects of spectrum regulation, notably by	
providing testing facilities to verify interference models relevant to Union	providing testing facilities to verify interference models relevant to Union legislation. Moreover,	
	results of research under the Seventh Framework	
legislation. Moreover, results of research		
under the Seventh Framework Programme	Programme require the examination of the spectrum	
require the examination of the spectrum	needs of projects that may have a large economic or	
needs of projects that may have a large economic or investment potential, in	investment potential, in particular for SMEs, e.g.	
-	cognitive radio or e-health. Adequate protection against harmful interference should also be ensured	
particular for SMEs, e.g. cognitive radio or	to sustain R&D and scientific activities.	
e-health. Adequate protection against	to sustain K&D and scientific activities.	
harmful interference should also be		
ensured to sustain R&D and scientific		
activities.	Recital 17	
(17) Protection of public health against	(17) Protection of public health against	
electromagnetic fields is essential for	electromagnetic fields is essential for citizens'	
citizens' well-being and for a coherent	wellbeing and for a coherent approach to spectrum	
approach to spectrum authorisation in the	authorisation in the Union; while subject to Council	
Union; while subject to Council	Recommendation 1999/519/EC on the limitation of	
Recommendation 1999/519/EC on the	exposure of the general public to electromagnetic	
Ketoninienuation 1999/519/EC on the	exposure of the general public to electromagnetic	

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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.	fields, it is essential to attain a better understanding of the responses of living organisms to electromagnetic fields and 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. While achieving appropriate public safety, Member States should ensure protective measures are technology and service neutral.	
(18) 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.	Recital 18 (18) 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 in a coordinated pan-European block of radio spectrum 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. Any additional harmonised allocation of spectrum for PPDR below 1GHz should also include a review of potential to free up or share other PPDR-held spectrum.	
(19) 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 <sup>8</sup> 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	Recital 19 (19) 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 <sup>8</sup> 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	

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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.	charge of spectrum coordination. Moreover, where Union policy or competence is at stake, the Union should politically drive the preparation of negotiations and ensure the Union speaks with one voice in multilateral negotiations to create global synergies and economies of scale in the use of spectrum, including in the International Telecommunications Union that corresponds to its level of responsibility for spectrum matters under Union law.	
	Recital 21	
(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 <sup>9</sup> setting up the Galileo Joint Undertaking and Council Regulation (EC) No 1321/2004 <sup>10</sup> 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 <sup>11</sup> for the improved use of Earth observation data.	(21) To avoid the growing pressure on frequency band reserved for satellite navigation and satellite communication their bandwidth must be secured in the new planning of spectrum use. 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 setting up the Galileo Joint Undertaking and Council Regulation (EC) No 1321/2004 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 <sup>11</sup> for the improved use of Earth observation data.	
	Recital 22	
(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	(22) Member States are encouraged to continue bilateral negotiations with neighbouring third countries, including candidate and potential candidate countries, to meet their Union obligations on frequency coordination issues and to try to find agreements which can set a positive precedent for other Member States. The Union should assist Member States with technical and political support in their bilateral and multilateral negotiations with third countries, in particular neighbouring countries including candidate and potential candidate countries. This should also help	

Original Proposal from the Commission 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.	EP amendments as adopted in Plenary 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	Hungarian Presidency proposal
	modernisation of air traffic control.	
(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.	Recital 24 (24) The Commission should report <i>annually</i> to the European Parliament and the Council on the results achieved under this Decision, as well as on planned future actions.	
-	Recital 25 a (new)	
	(25a) This Decision is without prejudice to the protection afforded to market players by Directive 2009/140/EC;	
	Article 1	
Aim	Aim and Scope	Aim and Scope
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	<ol> <li>This Decision establishes a multi-annual radio spectrum policy programme for the strategic planning and harmonisation of the use of spec- trum to ensure the functioning of the internal market.</li> <li>This Decision covers the internal market in all Union policy areas involving the use of spectrum such as, but not limited to, electronic communications, re- search, development and innovation, transport, ener- gy and audio-visual policy.</li> <li>This Decision is in accordance with existing Union law, in particular Directives 2002/19/EC, 2002/20/EC, 2002/21/EC and 1999/5/EC, as well as Decision No 676/2002/EC, and also with measures taken at national level in compliance with Union law and with specific international agreements, taking into account the ITU Radio Regulation.;</li> <li>This Decision is without prejudice to measures taken at national level in full compliance with Union law, which pursue general interest objectives, in particu- lar relating to content regulation and audiovisual po-</li> </ol>	<ol> <li>This Decision establishes a multi-annual (2011-2015) radio spectrum policy programme for the strategic planning and harmonisation of the use of spectrum to ensure the functioning of the internal market in the Union policy areas involving the use of spectrum such as electronic communications, research, technological development and space, transport, energy and audio-visual.</li> <li>This Decision is without prejudice to existing EU law, in particular Directives 2002/20/EC and 2002/21/EC, as well as Decision No 676/2002/EC and Directive 1999/5/EC, and also to measures taken at national level, in compliance with EU law</li> <li>This Decision is without prejudice to measures taken at EU or national level, in compliance with EU law, to pursue general interest objectives, in particular relating to content regulation and audio-visual policy.</li> <li>This Decision is without prejudice to the right of Member States to organise and use their</li> </ol>

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	licy.	spectrum for public order and public security purposes and defence. Where this Decision affects spectrum used by a Member State exclusively and directly for its public security and defence purposes to the extent necessary, the Member State may continue to use this spectrum band for public security and defence purposes until the systems existing in the band at the date of the notification of the harmonisation measure are phased out. That Member State shall duly notify the Commission of its decision.
	Article 2	
Application of general regulatory principlesMember 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;	General regulatory principles 1. 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, reflecting the important social, cultural and economic value of spectrum; (b) applying the most appropriate, non-discriminatory and least onerous authorisation system possible in such a way as to maximise flexibility and efficiency in spectrum usage;	Application of gGeneral regulatory principles         1.       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;
<ul> <li>(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;</li> </ul>	<ul> <li>(c) guaranteeing the development of the internal market and digital services by ensuring effective competition, a pan-European level playing field and by promoting the emergence of future pan-European services;</li> <li>(d) promoting innovation;</li> <li>(e) taking full account of the relevant Union law on effects on human health of electromagnetic field emissions when defining the technical conditions of the use of spectrum;</li> </ul>	(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;

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(c) (d)	applying the least onerous authorisation system possible in such a way as to maximise flexibility and efficiency in spectrum usage; guaranteeing the <i>functioning</i> of the internal market, <i>in particular</i> by ensuring effective competition.	<ul> <li>(f) promoting technology and service neutrality in the use of the spectrum.</li> <li>1a. For electronic communications, the following specific principles apply, in accordance with Articles 8a, 9 and 9b of Directive 2002/21/EC and with Decision No 676/2002/EC:</li> <li>(a) applying technology and service neutrality in the use of spectrum for electronic communications networks and services and the transfer or lease of individual rights to use radio frequencies;</li> </ul>	<ul> <li>(a)(e) applying the least onerous authorisation system possible in such a way as to maximise flexibility and efficiency in spectrum usage;</li> <li>(b)(d) guaranteeing promoting the functioning of the internal market, in particular by ensuring fostering effective competition;</li> </ul>
		<ul> <li>(b) promoting the harmonisation of use of radio frequencies across the Union, in a way that is consistent with the need to ensure effective and efficient use;</li> <li>(c) facilitating increased mobile data traffic and broadband services, in particular by fostering flexibility, and to promote innovation, taking account of the need to avoid harmful interference and ensure technical quality of service;</li> <li>(d) maintaining and developing effective competition by preventing, through ex ante or ex post measures, the excessive accumulation of radio frequencies which results in significant harm to competition</li> </ul>	<ul> <li>(c) promoting innovation;</li> <li>(d) in defining the technical conditions of the use of spectrum, take full account of the relevant EU law, including on the limitation of the exposure of the general public to electromagnetic fields;</li> <li>(e) promoting technology and service neutrality in the right of use of spectrum, where possible.</li> </ul>
			<ul> <li>2. For electronic communications, in addition to the general regulatory principles defined in paragraph 1, the following specific principles shall apply: <ul> <li>(a) applying technology and service neutrality in accordance with Article 9 of Directive 2002/21/EC and, where possible, the transfer or lease of individual rights to use radio frequencies in accordance with Article 9b of Directive 2002/21/EC in such a way as to promote efficiency of spectrum use;</li> <li>(b) promoting in accordance with Articles 8a and 9 of Directive 2002/21/EC and with the Decision 676/2002/EC the harmonisation of use of radio</li> </ul> </li> </ul>

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		frequencies across the Union, consistent with the need to ensure effective and efficient use thereof.
	Article 3	
(ab) en sec (b) maximise flexibility in the use of	(a) make sufficient and appropriate spectrum allocated for mobile data traffic, amounting to at least 1200 MHz by 2015, unless specified otherwise in the Radio Spectrum Policy Programme, to support Union policy objectives, to best meet the increasing demand for mobile data traffic, thereby allowing the development of commercial and public services, while taking into account important general interest objectives such as cultural diversity and media pluralism; dge the digital divide and realise the objectives of the Digital Agenda for Europe, ensuring that all Union citizens have access to broadband, not less than 30 Mbps by 2020 and making it possible for the Union to have the highest possible broadband speed and capacity; able the Union to take the lead in wireless electronic communication broadband services by opening up sufficient additional spectrum in the most cost-efficient bands for these services to be widely available; ure opportunities for both the commercial sector as well as public services by means of increased mobile broadband capacities;	Policy objectives         In order to focus on the priorities of this first multi-annual Programme, Member States and the Commission shall cooperate in order to support and implement reach the following policy objectives: <ul> <li>(a) encourage efficient management and use of spectrum to best meet the increasing demand for use of frequencies;</li> </ul>
spectrum, to promote innovation and investment, through <i>the</i> application of the applicat	ximise flexibility in the use of spectrum, to promote innovation and investment, through a consistent application across the Union of the principles of	(b)(a) make work together toward securing sufficient and appropriate spectrum available in a timely manner to
services, and the possibility to trade spectrum rights;	<b>technology and service neutrality</b> so as to ensure a pan- European level playing field between the technological solutions that may be adopted and through adequate regulatory predictability, <b>the opening</b> up <b>of</b> harmonised <b>spectrum to new</b> advanced technologies, <b>and the</b>	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

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(c) enhance the efficient use of spectrum by harnessing the benefits of	<b>possibility to trade spectrum rights,</b> thereby creating opportunities for future pan-European services to be developed;		<del>spectrum to new services, and the</del> <del>possibility to trade spectrum rights;</del>
(d) maintain and develop effective competition, in particular in electronic	ourage passive infrastructure sharing where this would be proportionate and non-discriminatory, as envisaged in Article 12 of Directive 2002/21/EC; intain and develop effective competition, in particular	(c)	enhance the efficient use of facilitate easy access to spectrum by harnessing the benefits of general authorisations for electronic communications in accordance with Article 5 of Directive 2002/20/EC (Authorization Directive) and increasing the use of such types of authorisation;-
<ul> <li>ante, or remedying ex post, excessive accumulation of radio frequencies by certain economic operators which results in significant harm to competition;</li> <li>(e) reduce the fragmentation of the internal market by enhancing coordin<b>(tr)ore</b> d 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</li> </ul>	<ul> <li>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 by means of withdrawal of frequency rights or other measures, or by assigning frequencies in ways that correct market distortions;</li> <li>uce the fragmentation and fully exploit the potential of the internal market in order to establish a pan-European level playing field in order to foster economic growth and economies of scope and scale at Union level by enhancing coordination and harmonisation of technical conditions for the use and availability of spectrum, as</li> </ul>	(d)	maintain and develop effective competition, in particular in electronic communication services, by preventing seeking to avoid through ex ante, or remedying ex post, remedies, excessive accumulation of radio frequencies by certain economic operators which results in significant harm to competition;
<ul> <li>taking particular account of the cumulative impact of the increasing volumes and density of radio devices and applications;</li> <li>(g) in defining the technical conditions for the allocation of spectrum, take full</li> </ul>	appropriate; lefining 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 and apply them in a way that is technology and service neutral; suring the accessibility of new consumer products and	<b>(e)</b> (f)	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- ceonomics of scope and scale at Union level;

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into the potential effects on human health of electromagnetic field emissions. (gb) rec	transition to digital technology and efficient use of the digital dividend; luce the Union's carbon footprint by enhancing the technical efficiency of wireless communication networks and applications.	<ul> <li>(g)(f) avoid harmful interference or disturbance by other radio or non- radio devices, inter alia, 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.</li> <li>(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 clectromagnetic field emissions.</li> </ul>
	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), 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	<ol> <li>Mude 4</li> <li>Member States shall adopt by 1 January 2013         authorisation and allocation measures that are similar to each other and 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), 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, thereby allowing the highest possible capacity and broadband speeds to be achieved, as well as making effective competition possible.     </li> <li>Member States shall foster, in cooperation with the Commission, the collective use of spectrum as well as shared and unlicensed use of spectrum. They shall also foster current and new technologies such as geolocation</li> </ol>	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), 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.

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collective use of spectrum as well as shared use of spectrum.	databases and cognitive radio to develop for example in white spaces following a proper impact assessment. That impact assessment shall be issued within twelve months of the entry into force of this Decision.	1 <b>2.</b>	Member States shall foster, in cooperation with the Commission and where appropriate, 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	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. Special attention shall also be given to standards for equipment to be used by disabled people, without, however, depriving them of the	2.	Member States and the Commission shall cooperate to enhance flexibility in the use of spectrum, to promote innovation and investment, through the possibility to use new technologies and the trading of spectrum rights;
standardisation bodies.	right to use non-standardised equipment if that is their preference. Efficient coordination of spectrum harmonisation and standardisation will be particularly important in this regard so that consumers can use appliances that depend on radio spectrum without restriction and throughout the internal market. 3a. Member States shall intensify R&D on new technologies such as cognitive technologies as their development could represent an added-value in the future in terms of efficiency	3.	Member States and the Commission shall cooperate to foster the development and harmonisatione of 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
4. Member States shall ensure that	of spectrum use.		Commission to the relevant
selection conditions and procedures	4. Member States shall ensure that selection		standardisation bodies.
promote investment and efficient use of spectrum.	<b>conditions and procedures promote</b> <i>competition and a</i> <i>pan-European level playing field</i> , <b>investment and</b> <b>efficient use of spectrum</b> <i>as a public good, as well as co-</i> <i>existence between new and existing services and devices. In</i> <i>addition, Member States shall promote the ongoing efficient</i>		
5. In order to avoid possible	use of spectrum for both networks and user applications.		
fragmentation of the internal market due	5. In order to avoid possible fragmentation of the		
to divergent selection conditions and	internal market due to divergent selection conditions	cognitive	2
procedures for harmonised spectrum	and procedures for harmonised spectrum bands	4.	Member States shall endeavour to
bands allocated to electronic	allocated to electronic communication services and		ensure that selection conditions and
communication services and made	made tradable in all Member States pursuant to		procedures promote investment and
tradable in all Member States pursuant to	Article 9b of Directive 2002/21/EC, the Commission,		

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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;	<b>in cooperation with Member States</b> and in accordance with the principle of subsidiarity, <b>shall</b> identify best practices and encourage sharing of information for such bands and <b>develop guidelines on authorisation</b> <b>conditions and procedures for such bands</b> , for example <b>on infrastructure sharing and coverage conditions</b> , to ensure a pan-European level playing field, achieved through the principles of technology and service neutrality.		efficient use of spectrum.
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.	<ul> <li>6. In order to ensure the effective use of spectrum rights and avoid spectrum hoarding, Member States shall, where necessary, take appropriate measures including financial penalties, use of incentive fees tools and withdrawal of rights.</li> <li>6a. The measures that Member States are to adopt pursuant to paragraph 1 shall be taken in addition to the opening of the 900 MHz band in the near future, in line with the "GSM" Directive and in such a manner as to promote competition. Such measures shall be taken in a non-discriminatory manner and may not distort competition to the advantage of operators already dominant in the market.</li> </ul>	5 <del>6</del> .	Wherener necessary in order to en- sure the effective use of spectrum rights and avoid spectrum hoarding, Member States shall may take appro- priate measures, including such as fi- nancial penalties or the withdrawal of rights. These measures shall be established and applied in a proportionate, non-discrimi- natory and transparent manner.
		6.	For electronic communications services, Member States shall adopt by 1 January 2013 allocation and authorisation 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).
		7 <b>5</b> .	In order to avoid possible fragmentation of the internal market due to divergent selection conditions and procedures for harmonised

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		<ul> <li>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 share best practice on authorisation conditions and procedures for such bands., in particular on infrastructure sharing and coverage conditions;</li> <li>Whenever necessary in order to ensure the effective use of spectrum rights and avoid spectrum hoarding, Member States shall take appropriate measures including financial penaltics or the withdrawal of rights.</li> </ul>
	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.	<b>1. Member States shall maintain and promote</b> <b>effective competition and avoid distortions of</b> <b>competition in</b> both <b>the internal market</b> and specific national markets.	Competition 1. Member States shall maintain and promote effective competition and avoid distortions of competition in the internal market for electronic
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:	2. In order to <i>fully</i> implement the obligations of paragraph 1, and in particular to ensure that competition is not distorted by any assignment, accumulation, transfer or modification of rights of use for radio frequencies, Member States shall, prior to a planned spectrum assignment, carefully examine whether the assignment is likely to distort or reduce competition in the mobile markets concerned, taking into account existing spectrum rights held by relevant market operators. If the spectrum assignment is likely to distort or reduce competition, Member States shall <b>adopt the</b> most appropriate measures to promote effective competition, and	<ul> <li>communications services or in a- substantial part of it. in accordance with Directives 2002/20/EC and 2002/21/EC, as well as decision No 676/2002/EC.</li> <li>In order to implement fully the obligations of paragraph 1, and in particular to ensure that promote effective competition for electronic communications services is not distorted by any accumulation, transfer or modification of rights of use for radio frequencies, Member States may</li> </ul>

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(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	at least one of 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 operator or may attach conditions to such rights of use, such as the provision of wholesale access, national or regional roaming, in certain bands or in certain groups of bands with similar characteristics, for instance the bands below 1 GHz allocated to electronic communication services;	adopt inter alia the following measures, which are without prejudice to the application of competition rules and to the measures adopted by Member States in order to achieve a general interest objective in accordance with Article 9(4) of Directive 2002/21/EC:
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;	<ul> <li>communication services;</li> <li>(aa) Member States may reserve a certain part of a spectrum band or group of bands to be assigned to new entrants that have not previously been assigned any spectrum or that have been assigned considerably less spectrum to ensure a level playing field between early entrants to the mobile market and new entrants by securing access to lower spectrum bands on equal terms;</li> <li>(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, in cases where such accumulation is likely to result in significant harm to competition;</li> </ul>	(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;
<ul> <li>(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;</li> <li>(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</li> </ul>	(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 is likely to distort competition.	(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 in order to avoid an accumulation of spectrum frequencies by

Original Proposal from the		
<b>.</b>	EP amendments as adopted in Plenary	Hungarian Presidency proposal
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.	EP amendments as adopted in Plenary 2a. Where Member States wish to adopt any such measures as are referred to in paragraph 2, they shall do so by imposing conditions in conformity with the procedures for the imposition or variation of such conditions on the rights to use spectrum laid down in Directive 2002/20/EC. 3. Member States shall ensure that authorisation and selection procedures avoid delays, are non- discriminatory and promote effective competition by preventing any potential anti-competitive outcomes, for the benefit of EU citizens and consumers.	<ul> <li>Hungarian Presidency proposal</li> <li>certain economic operators- which is likely to result in significant harm to competition; the distortion of competition by any transfer or accumulation of rights of use of radio frequencies;</li> <li>(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;</li> <li>(d) Member States may amend the existing rights in accordance with Ar- ticle 14 of Directive 2002/20/EC when this is necessary to remedy ex-post ex- cessive accumulation of spectrum fre- quencies within certain economic ope- rators which significantly harms com- petition the distortion of competition by any transfer or accumulation of rights of use of radio frequencies.</li> </ul>
		3. Member States shall ensure that authorisation and selection procedures for electronic communications services avoid delays and promote effective competition for the benefit of EU citizens, consumers and businesses.
	Article 6	
Spectrum for wireless broadband		Spectrum for wireless broadband
communications		communications
1. Without prejudice to the principles of service and technology neutrality,	1. Without prejudice to the principles of service and technology neutrality, Member States, in cooperation	

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
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.	<ul> <li>coverage and capacity purposes is allocated within the Union, enabling the Union to have the fastest broadband speed in the world in order to ensure that wireless applications and European leadership in new services contribute effectively to economic growth, achieving the target for all citizens to have access to broadband speeds of not less than 30 Mbps by 2020.</li> <li>2. Member States shall, by 1 January 2012, make the</li> </ul>	Member States, in cooperation with the Commission, shall take all steps necessary to ensure that sufficient spectrum for coverage and capacity purposes is available allocated for electronic communications services within each Member State of the Union, in order to ensure enable that wireless
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	<i>bands</i> 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), available, in order to promote wider availability of wireless broadband services for the benefit of EU citizens and	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.
(900/1800 MHz), under conditions that provide consumers with easy access to wireless broadband services.	consumers, without prejudice to the existing and future deployment of other services that have equal access to this spectrum under the conditions specified in those Commission Decisions.	<ul> <li>In order to promote wider availability of wireless broadband services for the benefit of EU citizens and consumers, Member States shall, by 1 January 2012, carry out the authorization process for the bands</li> </ul>
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	<ul> <li>2a. Member States shall promote the ongoing upgrade by providers of electronic communications of their networks to the latest, most efficient technology, in order to create their own dividends.</li> <li>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 exceptional cases duly</li> </ul>	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) <del>under- conditions that provide consumers- with casy access to wireless- broadband services.</del>
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.	justified for technical and historical reasons, the Commission may authorise specific derogations until the end of 2015 in response to a duly motivated application from the Member State concerned. If cross-border frequency coordination problems with one or more third countries further prevent the availability of the band, the Commission may authorise exceptional annual derogations until such obstacles are removed. 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	3. Member States shall, by 1 January 2013 carry out the authorization process in order to make the 800 MHz band available for electronic communications ser- vices in line with the harmonised tech- nical conditions laid down pursuant to the Decision No 676/2002/EC. In Mem- ber States where exceptional national or local circumstances or cross-border frequency coordination problems would prevent the availability of the band, the Commission shall authorise specific

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
	3a. The Commission is invited to take action, in	ponse to a duly motivated application from
	cooperation with Member States, at the appropriate	the Member State concerned.
	levels to achieve further harmonisation and a more	If cross-border frequency coordination problems with
	efficient use of the 1.5 GHz band (1452-1492 MHz)	one or more countries, including acceding
	and the 2.3 GHz band (2300-2400 MHz) for wireless	or candidate countries, persist after the end
	broadband services.	of 2015 and prevent the availability of the
	The Commission shall continuously monitor the	800 MHz band, the Commission may
	capacity requirements for wireless broadband	authorise exceptional derogations on an
	services and, in cooperation with Member States,	annual basis until such obstacles are
	asses, no later than 1 January 2015, the need for	removed. This paragraph shall also apply to
	action to harmonise additional spectrum bands,	the spectrum co-ordination problems in the
	such as the 700 MHz band (694-790 MHz). This	Republic of Cyprus arising from the fact
	assessment shall take into account the evolution of	that the Government of Cyprus is prevented
	spectrum technologies, market experiences with new	from exercising effective control in part of
	services, the possible future needs of terrestrial	its territory.
	radio and television broadcasting and the lack of	its territory.
4. Member States, in cooperation with	spectrum in other bands adequate for wireless	Where the derogation referred to in the first
the Commission, shall ensure that the	broadband coverage.	and second subparagraphs has been
provision of access to broadband content	Member States may ensure that, where appropriate,	granted, the Member State concerned shall
and services using the 790-862 MHz	the direct cost of migration or reallocation of	ensure that the use of the 800 MHz band
(800MHz) band is encouraged in sparsely	spectrum usage is adequately compensated in	shall not prevent the availability of that
populated areas, in particular through	accordance with national law.	band for electronic communications
coverage obligations; in doing so, they shall	4. The Commission, in cooperation with Member	services other than broadcasting in the
examine ways and, where necessary, take	States, shall ensure that the provision of access to	neighbouring Member States. In-
appropriate measures to ensure that the	broadband services using the 790-862 MHz	accordance with Article 9 of Directive
freeing of the 800 MHz band does not	(800MHz) band is encouraged in sparsely populated	2002/21/EC , the Commission, in
adversely affect programme making and	areas, for example through coverage obligations	cooperation with the Member States,
special events (PMSE) users.	achieved in accordance with the principles of	shall keep under review the use of the
	technology and service neutrality.	spectrum below 1GHz and assess
	Member States, in cooperation with the Commission,	whether additional spectrum could
	shall examine ways and, where <i>appropriate</i> , take	be freed and made available for new-
	technical and regulatory measures to ensure that the	applications.
	freeing of the 800 MHz band does not adversely affect	TI T
	programme making and special events (PMSE) users.	4. Member States, in cooperation with
	4a. The Commission shall, in cooperation with	the Commission, shall <del>ensure that the</del>
	Member States, assess the feasibility of extending	provision of promote access to
<b>5.</b> The Commission is invited to adopt,	the allocations of unlicensed spectrum for wireless	broadband <del>content and</del> services using
as a priority, appropriate measures,	access systems including radio local area networks	the 790-862 MHz (800MHz) band <del>is</del>
pursuant to Article 9b(3) of the Directive	established by Decision 2005/513/EC <sup>1</sup> to the entire	encouraged in sparsely populated
2002/21/EC, to ensure that Member States	5GHz band.	areas <del>, in particular through coverage</del>
allow trading within the Union of spectrum	The Commission is invited to pursue the adopted	obligations; in doing so, they shall

<ul> <li>usage rights in the harmonised bands 790- BGe MHz (the "800 MHz harmonised bands 780- 805-MBZ (the "800 MHz, 2010- 2025 MHz, 2110-2170 MHz, 2.5-2.69 GHz, and 3.4-3.8 GHz.</li> <li>G. If necessary, the Commission shall ensure the availability of additional spectrum bands for the provision of harmonised satellite services for harmonised satellite services for harmonised and the edocument to Decision Net adjuta services that bands 790-860 MHz, 2100-2025 MHz, 2110-2170 MHz, 2.5-2.69 GHz, and 3.4-3.8 GHz.</li> <li>Fine Commission shall ensure the availability of additional spectrum bands for the provision of harmonised satellite services for harmonised satellite services for harmonised method and for the services that have equal and future edologment to Decision Net G. If necessary, the Commission shall ensure the availability of additional spectrum bands for the provision of harmonised satellite services for harmonised satellite services for harmonised satellite services for harmonised satellite services for harmonised satellite services for the commission decisions addopted pursuant to Decision Ne digital services enabling Internet access at a comparable price to terrestrial offerings.</li> <li>G. In order to ensure that dl citizens have access to advanced digital services enabling Internet access. <i>au Advancella the possibility of spreading the availability of subject usand</i>, 880 -915 MHz, 923-960 MHz, 1900-1980 MHz, 2010-2025 MHz, 2100-2175 MHz, 805-1880 MHz, 1900-1980 MHz, 2010-2025 MHz, 2100-2170 MHz, 2010-2025 MHz, 2100-2170 MHz, 2010-2025 MHz, 2100-2175 MHz, 805-2-2.69 GHz, and 3.4-3.8 GHz.</li> <li>Hereessery, Member States and the Com- mission may consider should be basis for wireless mesh networks, which can play a key role in bridging the digital divide.</li> </ul>	Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
	<ul> <li>862 MHz (the "800 MHz band"), 880–915 MHz, 925–960 MHz, 1710–1785 MHz, 1805–1880 MHz, 1900–1980 MHz, 2010– 2025 MHz, 2110–2170 MHz, 2.5–2.69 GHz, and 3.4–3.8 GHz.</li> <li>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</li> </ul>	<ul> <li>fora, notably the ITU World Radiocommunication Conferences</li> <li>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, 2010–2025 MHz, 2110–2170 MHz, 2.5–2.69 GHz, and 3.4–3.8 GHz and in other additional parts of the spectrum freed up for mobile services, without prejudice to the existing and future deployment of other services that have equal access to this spectrum under the conditions specified in the Commission decisions adopted pursuant to Decision No 676/2002/EC.</li> <li>6. In order to ensure that all citizens have access to advanced digital services including broadband, in particular in remote and sparsely populated areas, Member States and the Commission may explore the availability of sufficient spectrum for the provision of broadband satellite services enabling Internet access.</li> <li>6a. Member States, in cooperation with the Commission, shall examine the possibility of spreading the availability and use of picocells and femtocells. They shall take full account of the potential of those cellular base stations and of shared and unlicensed use of spectrum to provide the basis for wireless mesh networks, which can play a key role in bridging the</li> </ul>	<ul> <li>5. The Commission, in close cooperation WHz band does not adversely affect programme making and special events (PMSE) users.</li> <li>5. The Commission, in close cooperation with Member States, 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 transferring or leasing trading within the Union of spectrum usage rights in one or more of 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, 2010–2025 MHz, 2110–2170 MHz, 2.5–2.69 GHz, and 3.4–3.8 GHz.</li> <li>6. If necessary, Member States and the Com- mission may consider shall ensure the availability of additional sufficient spec- trum bands for the provision of har- monised satellite services, including for broadband access that will cover the whole territory of the Union including the most remote areas with a broad- band offering enabling Internet access at a comparable price to terrestrial of-</li> </ul>

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
	Spectrum needs for other wireless communication policies	White sp
	In order to support the further development of innovative	
	audiovisual media and other services to European citizens,	
	taking into account the economic and social benefits of a	
	digital single market, Member States, in cooperation with the	
	Commission, shall ensure sufficient spectrum availability for	
	satellite and terrestrial provision of such services.	
	Article 7	
Spectrum needs for specific Union policies	Spectrum needs for other specific Union policies	Spectrum needs for specific Union policies
<b>1.</b> Member States and the Commission		1. Member States and the Commission
shall ensure spectrum availability and		shall ensure spectrum availability
protect the radio frequencies necessary for		and protect the radio frequencies
monitoring the Earth's atmosphere and		necessary for monitoring the Earth's
surface, allowing the development and		atmosphere and surface, allowing the
exploitation of space applications and		development and exploitation of
improving transport systems, in particular		space applications and improving
for the global civil navigation satellite	2. In cooperation with the Member States, the	transport systems, in particular for
system GALILEO, for the Global	Commission shall conduct studies and examine the	the global civil navigation satellite
Monitoring for Environment and Security	possibility to design authorisation schemes which	system GALILEO, for the Global
programme GMES, and for intelligent	would contribute to a low-carbon policy, by saving	Monitoring for Environment and
transport safety and transport	energy in the use of spectrum as well as by making	Security programme GMES, and for
management systems.	spectrum available for wireless technologies with a	intelligent transport safety and
	potential for improving energy savings and efficiency of	transport management systems;
2. In cooperation with the Member	other distribution networks such as water supply, including	
States, the Commission shall conduct	smart energy grids and smart metering systems.	2. In cooperation with the Member
studies and examine the possibility to		States, the Commission shall conduct
design authorisation schemes which would	3. The Commission shall ensure that sufficient	studies and examine the possibility to
contribute to a low-carbon policy, by saving	spectrum is made available under harmonised	design authorization schemes which
energy in the use of spectrum as well as by	conditions and in harmonised bands for PPDR and to take	would contribute to a low-carbon
making spectrum available for wireless	actions to support the development of safety services	policy, by saving energy in the use of
technologies with a potential for improving	and the free circulation of related devices as well as	spectrum as well as by consider
energy saving, including smart energy	the development of innovative interoperable	making spectrum available for
grids and smart metering systems.	solutions for PPDR. To ensure the efficient use of spectrum,	wireless technologies with a potential
	the Commission shall examine the possibility of PPDR using	for improving energy saving,
3. If necessary, the Commission shall	military frequencies.	including smart energy grids and
ensure that sufficient spectrum is made	4. Member States and the Commission shall review	smart metering systems;
available under harmonised conditions to	the spectrum needs of, and collaborate with, the	
support the development of safety services	scientific and academic community; identify a number	<b>3. If necessary, the Commission shall</b> , in cooperation with the Member States <b>ensure</b>
and the free circulation of related devices	of research and development initiatives and	foster <b>that sufficient spectrum is made</b>
as well as the development of innovative	innovative applications that may have a major socio-	available under harmonised conditions
interoperable solutions for public safety	economic impact and/or potential for investment and	to support the development of safety

Original Proposal from the	EP amendments as adopted in Plenary	Hungarian Presidency proposal
Commission	- · ·	
<ul> <li>and protection, civil protection and disaster relief.</li> <li>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.</li> </ul>	prepare for the allocation of sufficient spectrum to such applications under harmonised technical conditions and the least onerous administrative burden. 4a. Member States shall, in cooperation with the Commission, seek to find a minimum set of harmonised core bands for programme making and special events (PMSE) in the Union, according to the Union's objectives to improve the integration of the internal market and access to culture. These harmonised bands shall be of the frequency 1GHz or higher. 4b. Member States and the Commission shall ensure spectrum availability for radio-frequency identification (RFID) and other Internet of Things (IOT) wireless communication technologies and shall work towards standardisation of spectrum allocation for IOT communication across Member States.	<ul> <li>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;</li> <li>4. Member States and the Commission shall review the spectrum needs of, and collaborate with, the scientific community; to 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 consider the spectrum needs of such applications and prepare for the allocation of sufficient spectrum to such applications under harmonised technical conditions and the least oncrous administrative burden.</li> </ul>
	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.	<b>1. The Commission</b> shall create an inventory of the entire existing radio spectrum use, for which purpose Member States <b>shall provide all</b> necessary factual data. The information provided by the Member States shall be sufficiently detailed to allow for the inventory to assess the efficiency of the spectrum use as well as identify <b>possible future</b> opportunities <b>for spectrum</b> harmonisation in order to support Union policies. As an initial step, the inventory shall include frequencies <b>in the range from 300 MHz to</b> 6 GHz, to be followed by frequencies from 6 GHz up to 70 GHz. If necessary, the Member States shall supply information on a licence-specific basis both including commercial and public sector users without prejudice to the withholding of business-sensitive and confidential information.	<ul> <li>Inventory and monitoring of existing uses and monitoring of emerging needs for spectrum</li> <li>The Commission, assisted by the Member States, which On the basis of the information provided by the Member States pursuant to the Commision Decision on harmonised availability of information regarding spectrum use within the Community (Decision 2007/344/EC), shall provide all appropriate information on spectrum., 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. the Commission shall</li> </ul>
2. The inventory referred to in paragraph (1) shall allow the assessment of the technical efficiency of existing	<i>2. The inventory referred to in paragraph 1 shall, on</i>	in cooperation with the Member States develop a methodology for establishing an

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
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	the basis of clearly defined and transparent criteria and methods, 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, based on	inventory of existing uses of spectrum, pursuant to the Radio Spectrum Decision 676/2002/EC, <b>taking utmost account of</b> <b>the opinion of the Radio Spectrum</b> <b>Policy Group (RSPG).</b>
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	transparent, clear and jointly defined assessment criteria and methodologies. It shall also ensure that, where spectrum use is not optimal, the necessary measures are taken in order to maximise efficiency. It shall take into account future needs, including long-term needs, for spectrum based on consumers', communities', businesses' and operators' demands, and of the possibility to meet such needs.	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 shall help to identify spectrum bands that could be suitable for refarming and spectrum sharing opportunities in order to support Union policies set out in this decision. It This assessment shall
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.	3a. The inventory shall also include a report of the measures taken by the Member States in order to implement decisions at Union level regarding the harmonisation and use of the specific frequency bands.	<ul> <li>take into account future needs for spectrum based on consumers' and operators' demands, and of the possibility to meet such needs.</li> <li>3. The inventory referred to in paragraph (1) shall review the variou types of spectrum usage by both private and public users, and where applicable help to identify spectrum bands that could be assigned or reallocated designated in order to increase their efficient use, promote</li> </ul>
		innovation and enhance competition in the internal market, explore new ways for dynamic spectrum access, 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.

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
International negotiations		
1. The Union shall participate in	1. The Union shall participate in international	Intermetional reservicions
international negotiations relating to	negotiations relating to spectrum matters to defend	International negotiations
spectrum matters to defend its interests,	its interests and to ensure the Union has a single position,	1. The Union shall participate in
acting in accordance with Union law	acting in accordance with Union law concerning,	1. The Union shall participate in international negotiations relating to
concerning, among other things, the	among other things, the principles of internal and	spectrum matters to defend its
principles of internal and external	external competences of the Union.	interests, acting in accordance with
competences of the Union.		Union law concerning, among other
		things, the principles of internal and
2. Member States shall ensure that		external competences of the Union.
international agreements to which they are		_
a party in the context of the International	a Mamban States shall answer that intermedianal	2. Member States shall ensure that
Telecommunications Union (ITU) are in	3. Member States shall ensure that international regulations allow the full use of frequency bands for	international agreements to which
conformity with existing Union legislation, and in particular with the relevant rules	the purposes for which they are designated under	they are a party in the context of the
and principles of the Union regulatory	Union law, and that a sufficient amount of	International Telecommunications
framework on electronic communications.	appropriately protected spectrum is available for the	Union (ITU) are in conformity with
3. Member States shall ensure that	implementation of Union sectoral policies.	existing Union legislation, and in
international regulations allow the full use	implementation of emon sector at ponetes.	particular with the relevant rules and
of frequency bands for the purposes for		principles of the Union regulatory
which they are designated under Union	<b>4.</b> In order to resolve spectrum coordination issues that	framework on electronic
law, and that a sufficient amount of	would otherwise prevent Member States from implementing	<del>communications.</del>
appropriately protected spectrum is	their obligations under Union law regarding spectrum policy	3. Member States shall ensure that
available for Union sectoral policies.	and management, the Union shall assist Member States	3. Member States shall ensure that international regulations allow the
-	with political and technical support in their bilateral	full use of frequency bands for the
4. The Union shall provide, upon	and multilateral <b>negotiations with</b> third countries, in	purposes for which they are
request, political and technical support to	particular non-Union neighbouring countries	designated under Union law, and that
Member States in their bilateral	including candidate and acceding countries. The	a sufficient amount of appropriately
negotiations with non-Union neighbouring	Union shall also support efforts by third countries to	protected spectrum is available for-
countries including candidate and acceding	implement spectrum management that is compatible	Union sectoral policies.
countries, to resolve spectrum	with that of the Union, so as to safeguard Union	L
coordination issues that prevent Member	spectrum policy objectives.	14 The Union shall an and a
States from implementing their obligations		14. The Union shall <del>provide</del> , upon
under Union law regarding spectrum		request, assist Member States with
policy and management. The Union shall		legal, political and technical support
also support efforts by third countries to		to Member States in their bilateral
implement spectrum management that is compatible with that of the Union, so as to		ncgotiations with non-Union
safeguard Union spectrum policy		neighbouring countries including
objectives.		
		<del>candidate and acceding countries,</del> to
		resolve spectrum coordination issues

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
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.		<ul> <li>that prevent Member States from implementing their obligations under- Union law regarding spectrum policy- and management, with Union neighbouring countries including candidate and acceding countries in such a way that the Member States concerned can respect their obligations under Union law.</li> <li>In the provision of such assistance, the EU shall use all its legal and political powers to promote the implementation of EU policies. 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.</li> <li>25. When negotiating with third countries in a bilateral or multilateral environment, 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.</li> </ul>
	Article 10	
Cooperation among various bodies		
1. The Commission and the Member		Cooperation among various bodies

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
<ul> <li>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.</li> <li>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.</li> </ul>		<ol> <li>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.</li> <li>The Commission and Member States shall ensure that encourage standardisation bodies, CEPT, and- the Commission's Joint Research Centre and all relevant parties to closely cooperate in any technical issues whenever necessary to promote 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.</li> </ol>
	Article 11	
Public consultation Wherever appropriate, the Commission shall organise public consultations to		Public consultation
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.		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	

Original Proposal from the Commission	EP amendments as adopted in Plenary	Hungarian Presidency proposal
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.	By 31 December 2015, the Commission shall conduct a review of the application of this radio spectrum policy programme. The Commission shall report annually to the European Parliament and the Council on the activities developed and the measures adopted pursuant to this Decision.	<i>Reporting</i> 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.		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 Lemma of the European Union		Entry into force
the Official Journal of the European Union.		This Decision shall enter into force on the 20 <sup>th</sup> day following that of its publication in the <i>Official Journal of the European Union</i>