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Serbia Spectrum Policy and Regulation

CNECT B4 - Spectrum

European Commissior

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> > * Disclaimer: the views expressed are those of the author and cannot be regarded as stating an official position of the European Commission.

1



The EU Spectrum Policy Setting

- Spectrum increasing socio-economic importance
 - ✓ wireless applications & services pervasive through society
 - ✓ related markets typically transnational if not global
 - ✓ spectrum availability and management → growth & competitiveness

• Spectrum is managed at national level

✓ allocation, assignment, monitoring usage

• EU coordination where EU interests are at stake

- ✓ internal market (economies of scale, interoperability)
- ✓ **sector policies** (broadband, transport, health, environment, space)
- ✓ public services (broadcasting, PPDR, security, defence)
- ✓ efficient spectrum use to maximise benefits at EU level
- coordination of EU position in international negotiations
- ✓ Single market Regulation Proposal

EU priorities in wireless

- Authorisation of EU harmonised spectrum for ECS
 - ✓ spectrum availability and effective usage

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• Incentives for wireless network roll-out

✓ Cost reduction, stimulating investment and demand

• Identification of new spectrum resources

✓ EU target of 1200 MHz for WBB by 2015

• Coherent EU position on the 700 MHz band

- ✓ Ongoing work of the high level group, RSPG and CEPT
- ✓ Long-term perspective: future of DTT and WBB, and convergence

• R&D at the heart of EU spectrum policy

The Radio Spectrum Policy Programme (RSPP)

Establishes strategic principles and objectives

- Fostering the internal market
- Promoting competition and wireless innovation
- Efficient use of spectrum

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- Technology and service neutrality !
- Least burdensome authorisation procedures

Sets specific targets:

"Sufficient and timely available spectrum resources for EU policies"

- Authorisation of EU harmonised spectrum for ECS by end 2012 (already ~ 1000 MHz below 4 GHz)
- Bringing total to at least 1200 MHz for wireless broadband by 2015 (i.e. at least 200 MHz more to be found)
- Promoting shared use of spectrum
- Addressing audio-visual, PMSE, PPDR, energy efficiency ('non-ECS' needs)



Spectrum inventory

- established by RSPP (Art. 9)
- covers existing uses of spectrum for commercial and public purposes in the range 400 MHz – 6 GHz
- methodology for the analysis of technology trends, future needs and demand for spectrum in EU policy areas
- **Goal**: identify bands where efficiency of uses can be improved, identify bands for reallocation and sharing opportunities

- Inputs:

1) data provided directly by MS to the Commission (JRC's data analysis tool) in accordance with Decision 2013/195/EU

- 2) EFIS database
- 2) Commission Studies
- RSPG deliverables_
- 4) EC Mandates to CEPT
- First delivery: Report to EP and Council on spectrum inventory (2014)

RSPP Specific obligations for MS

- By 31.12.2012: allow the use of
 - 3.4-3.8 GHz
 - 2.5-2.69 GHz
 - 900 MHz
 - 1800 MHz
- By 1.1.2013:
 - 800 MHz : implies analogue switch off and freeing of digital broadcasting
 - except derogation for exceptional circumstances or military use.
- By 2015:
 - allow tradability of WBB spectrum (art.6.8)
 - apply RSPP principles and objectives



Decisions to be implemented

- RSC review of implementation for each decision
- Explanatory document:
- RSCOM08-84 Final of 23 June 2009.
- More details about entry into force, obligations, concept of designating and making available a frequency band', possibility of options in harmonisation decisions, relation with CEPT instruments, etc.



Decision	Deadline
14.5.2014 Dec. 2014/276 amending 2008/411on 3.4-3.8 GHz	30.6.2015
11.12.2013 Dec.2013/752 amending 2006/771-short range devices	1.7.2014
12.11.2014 Dec.2013/654 amending Dec. 2008/294 on MCA services	14.6.2014
23.4.2013 Dec. 2013/195 on spectrum inventory	permanent
5.11.2012 Dec. 2012/688/EU - 2 GHz band	30.6.2014
8.12.11 Dec.2011/829/EU amending 2006/771 - short-range devices	1.6.2012
29.7.2011 Dec. 2011/485 amending 2005/50 - 24 GHz range radio spectrum for automotive short-range radar	1.6.2013
18.4.2011 Dec. 2011/251 amending 2009/766 - 900 and 1800 MHz	31.12.11
6.5.2010 Dec. 2010/267/EU on 790-862 MHz	1.1.2013 (RSPP)
19.3.2010 Dec. 2010/166 mobile communications on board vessels	20.3.2011



Decision	Deadline
21.4.2009 Dec. 2009/343/EC amending Dec. 2007/131/EC on ultra-wideband technology	30.6.2009
13.8.2008 Dec. 2008/673/EC amending Dec. 2005/928/EC on 169,4-169,8125 MHz	31,10,2008
5.8.2008 Dec. <u>2008/671/EC</u> on 5875-5905 MHz for safety related applications of Intelligent Transport Systems	5,3,2009
13.6.2008 Dec. 2008/477/EC on 2.5-2.7 GHz	14,1,2009
21.5.2008 Dec. 2008/411/EC on 3.4-3.8 GHz	24,10,2008
7.4.2008 Dec. <u>2008/294/EC</u> on spectrum for mobile communication services on aircraft	30,10,2008



Decision	Deadline
16.5.2007 Dec. 2007/344/EC on information regarding spectrum use EFIS	1,1,2008
14.2.2007 Dec.2007/98/EC on 2 GHz for mobile satellite services	1,7,2007
12.2.2007 Dec. 2007/90/EC amending Dec. 2005/513/EC on 5 GHz for WAS/RLANs	2,3,2007
23.11.2006 Dec. 2006/804/EC on RFID in UHF	13,7,2007
8.7.2004 Dec. 2004/545/EC on 79 GHz for automotive short-range radar	1,1,2005



International aspects – 700 MHz

WRC-12 co-allocated the 700 MHz band to WBB

- Challenge for EU spectrum policy
- Opportunity for both broadcasting and wireless broadband

Political priorities

- Development of the broadcasting sector
- Spectrum demand for rapidly growing WBB traffic
- Fostering the single market (economies of scale, roaming)
- Opportunity for nearly global harmonisation

Coordinated EU action needed

- We are well advanced on technical harmonisation by WRC-15
- Developing a long-term strategy for the broadcasting sector taking into account technology advance, trends in consumer behavour, and the likelihood of BC-WBB convergence



Communication of 3 Sept, 2012 "Promoting shared use of radio spectrum resources in the internal market"

Objective: *starting a process of change*

- Establishing a common understanding of economical, technical and regulatory aspects of spectrum sharing
- Strategy to promote shared access to meet spectrum demand
- Clear signal to innovators EU moving towards regulatory environment supporting wireless innovations through shared use

What?

- Unlicensed use: SRD, ITS, RFID, SRR, WiFI, small cells, RLAN in 5 GHz., UWB.
- Licensed shared access: RSPG opinion 2.3 GHz



For Wireless broadband in harmonised spectrum. Covers assignment in complement to allocation Coordinated regulatory principles, conditions and criteria to be applied by MS Harmonisation of assignment timelines Coordination and peer review mechanims of assignment processes Improved access to RLAN Promotion of small cells Ensure coordination of the use of spectrum between MS.



• Further information: EU Wireless Europe website

http://ec.europa.eu/digital-agenda/en/wireless-europe