

EUROPEAN COMMISSION Directorate-General for Communications Networks, Content and Technology

Electronic Communications Networks and Services Radio Spectrum Policy Group RSPG Secretariat

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# **RADIO SPECTRUM POLICY GROUP**

Questionnaire on cross-border coordination issues

regarding 700 MHz spectrum clearance and migration

of broadcasting service below 694 MHz

# Questionnaire on cross-border coordination issues regarding 700 MHz spectrum clearance and migration of broadcasting service below 694 MHz

Please, respond to this questionnaire before 20<sup>th</sup> December 2016 to

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### Background

The 694-790 MHz frequency band ('700 MHz band') has been technically harmonised in Europe through an EU implementing decision<sup>1</sup> pursuant to the Spectrum Decision.

The Commission has proposed a Decision<sup>2</sup> of the European Parliament and of the Council in particular to define a timetable to make available the 700 MHz band in Europe for wireless broadband electronic communications services ('ECS'). The draft Decision is still under negotiation between the European Parliament, the Council and the Commission. However, there is a widespread interest to ensure timely implementation of the 700 MHz band for wireless broadband ECS and migration of broadcasting below 694 MHz. Therefore, the RSPG decided to extend the Good Offices programme of work to a new project, focusing on 700 MHz band re-planning and clearance, particularly to identify at an early stage where there are potential issues of cross-border co-ordination.

The objective of this questionnaire is to get information about:

- current status of national plan for clearance and details of the plan at a high level,
- up-to-date information on bilateral/multilateral negotiations with regard to replanning of broadcasting frequencies below 694 MHz.

In order to flag, in a proactive mode, any difficulties to RSPG and to recommend actions to overcome these difficulties in advance.

Further questionnaire will be regularly issued to update the information and to report progress on 700 MHz band re-planning and clearance to RSPG.

## Questions

- 1. What is the status of developing a national plan for the clearance of the 700 MHz band?
- 2. What is the expected or agreed timetable for the migration of television below 694 MHz and for the awards of the 700 MHz band?

<sup>&</sup>lt;sup>1</sup> Commission Implementing Decision (EU) 2016/687 of 28 April 2016 on the harmonisation of the 694-790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union <sup>2</sup> Proposal for a Decision of the European Parliament and of the Council on the use of the 470-790 MHz frequency bands in the Union, COM (2016) 43 final

- 3. Do you expect the 700 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services to be available by the date specified in the European Parliament and Council decision on the 700 MHz band? If not, please, explain.
- 4. What is the total number of DVB-T/T2 multiplexes in operation / licensed ? What are the expiration dates of current DVB-T/T2 licences?
- 5. What DTT transmission technology and video coding standard are used in your contry and do you expect an evolution of the DTT platform in order to allow the release of the 700 MHz band? If yes, do you expect:
  - a. an evolution of the technology (transmission and/or video coding standard)?
  - b. an evolution in the total number of programs and in the number of programs/ per mux ?
  - c. HD or UHD transmissions in future DTT platforms? Changing coverage of population/territory ?
  - d. an evolution in coverage by single SFN (e.g. SFN extension or SFNs merging)?

Explain the reasons for modifications, i.e. how does it help 700 MHz band clearance, and describe the transition period (time period, simulcast, part of the spectrum used...).

- 6. What are, in high-level description, your objectives for cross-border coordination in terms of planning principles for the band 470-694 MHz:
  - number of nationwide MUX/ number of local/regional MUX,
  - type of transmission / coding,
  - MFN, SFN or mixed SFN/MFN,
  - % population/territory coverage,
  - reception mode (fixed reception, portable, mobile),
  - assignment/allotment coordination and reference network,
  - others?

Please use the Table 1 to describe the objectives and provide additional elements as necessary. Table 1 can be completed with additional text, ie to cover "others".

	% of population	type of reception	Assignment/ Allotment	MFN, SFN or mixed	Type of transmission /
	/territory	mode	coordination	SFN/MFN	coding
	coverage,	(fixed,	and reference		0
	No of	portable,	network		
	stations	mobile)			
Nationwide MUX 1	90%/85%	Fixed	Assignment	Mixed	DVB-T2 (256 QAM, 32K) /
					MPEG-4
Nationwide	93%/-	Mob	Allotment	MFN	DVB-T2 (256
MUX 2			(RN 1)		QAM, 32K) /
					MPEG-4
Nationwide	-/80%	Portable	Allotment	SFN	DVB-T2 (256
MUX 3			(RN 2)		QAM, 32K) /

#### TABLE 1

					HEVC
Regional/ Local MUXs	45 stations	Fixed	Assignment	MFN	DVB-T2 (256 QAM, 32K) / HEVC

- 7. For each country (EU and non-EU) with which coordination is necessary (please, provide names of country), what is the current coordination status for the clearance of the 700 MHz band:
  - a) Not yet initiated
  - b) Coordination request but no response
  - c) Discussion on general principles
  - d) Discussion on the new plan
  - e) New plan generally agreed but further discussion on technical characteristics of transmitters
  - f) Coordination completed
  - g) Signed agreement

In addition, specify if the negotiation with this neighbour is covered by a regional cluster (WEDDIP, NEDDIF, SEDDIF, ...)

#### TABLE 2

Ex : Ireland					
Name of country	Status of coordination	Regional cluster			
United Kingdom	e)	WEDDIP			
France	f)	WEDDIP			

- 8. Is there any cross-border difficulty which may prevent your country to sign crossborder agreements before the end of 2017
  - a. In the case of an EU neighbour: does your county plan to submit a request to the 'good offices' group?
  - b. In the case of a non-EU neighbour: give the expected date for an effective agreement and indicate any need for EU-level assistance.
- 9. Could you provide any further information on the implementation of the 700 MHz band such as which 700 MHz national options (outside the 2x30 MHz) would be implemented and whether compensation mechanisms will be used to migration broadcasting below 694 MHz ?