



**BELGIAN INSTITUTE FOR POSTAL SERVICES AND
TELECOMMUNICATIONS**

B I P T

**SUMMARY OF THE CONTRIBUTIONS RECEIVED FOLLOWING
THE CONSULTATION ORGANISED BY THE BIPT COUNCIL
OF 21 MARCH 2012
ON
THE 800 MHz BAND
(PUBLIC VERSION)**

1. Introduction

On 21 March 2012 BIPT published a public consultation on the 800 MHz band. The initial deadline for answers was 27 April 2012. That deadline was modified twice before the date of 11 May 2012 became final.

By 11 May 2012 BIPT had received 15 contributions to the public consultation. The different contributors are¹:

- Astrid;
- Belgacom;
- Communauté française;
- CSA;
- Deutschsprachigen Gemeinschaft;
- Ericsson;
- KPN Group Belgium;
- Medienrat;
- Mobistar;
- Norkring;
- PMSE.be;
- RTBF;
- Sennheiser;
- Telenet Tecteo Bidco;
- Vlaamse Gemeenschap.

The contributions from PMSE.be and Sennheiser regard the use of the 470-862 MHz band for wireless microphones and not directly the use of the 790-862 MHz band for wireless broadband services.

Astrid's contribution concerns the provision of spectrum to sustain the development of innovative interoperable solutions regarding security and therefore do not directly regard the use of the 790-862 MHz band for wireless broadband services.

2. Compatibility with broadcasting

Contributions from the broadcasting sector mention interference problems impacting broadcasting and caused by the mobile services.

The contributions mention tests performed by the ANFR in France and OFCOM in the United Kingdom. These tests show that there was a real risk of saturation of the DVB-T receiving channels of the high power LTE base stations and that this type of interference did not only apply to channel 60 but might also impact channel 57 or even lower channels for installations with active elements. This type of problem, caused by insufficient selectivity of the current DVB-T receivers, may be solved by adding a filter at the DVB-T receiver level. The matter of who will pay the corresponding costs is raised.

¹ In alphabetical order

Attention is also paid to issues of interference impacting broadcasting, caused by mobile terminal equipment.

The contributions from the broadcasting sector also mention the possibility for the Commission to allow divergences to the obligation to implement the authorisation process by 1 July 2013 at the latest in order to allow the use of the 800 MHz band for electronic communications services in conformity with Article 6.4 of decision no [243/2012/UE](#).

Problems regarding compatibility with broadcasting and compensations with regard to broadcasting will have to be discussed with the Communities that are in charge of broadcasting, and not in the consultation of 21 March 2012.

3. Answers to specific questions of the public consultation

1. Are you in favour of drawing up a single royal decree for the rights of use granted in the 800, 900, 1800, 2000 and 2600 MHz bands and of repealing the four existing royal decrees (GSM, DCS, 3G and 4G)?

Belgacom and KPN GB do not fundamentally object but Belgacom cannot state a final opinion before an actual detailed draft is submitted for consultation.

Mobistar finds that the legal framework is sufficiently clear and that there is no significant added value in rewriting the terms for exercising the existing user rights while the disadvantages in doing so are obvious.

Bidco finds that the differences in terms for the different bands do not allow aiming at a single royal decree. Bidco believes however that the different royal decrees have to be adapted in order to encourage competition.

The CSA is in favour of drawing up a single royal decree.

2. Do you think an auction of the SMRA type is the appropriate mechanism to grant rights of use for the 800 MHz band? If not, what other mechanism do you recommend?

Belgacom and KPN GB do not object to an auction of the SMRA type being used for the 800 MHz band.

Mobistar believes that an auction of the SMRA type should allow obtaining an efficient long-term result but that other approaches should not necessarily be excluded. Mobistar stresses the importance of a correct evaluation of the opening bids for the auctions.

Bidco is in favour of a two-phased auction just like the auction for the 2 GHz band organised in 2011. The first phase of the auction would be reserved for candidates who do not yet dispose of spectrum that they can use in the 900 MHz and 1800 MHz bands. Bidco feels that the 800 MHz band has to correct the imbalance it suffers in the other frequency bands.

3. What do you think of the changes proposed to the auction procedure for the 2.6 GHz band? Do you see any other advisable changes?

Belgacom and Mobistar are a priori in favour of the modifications proposed, subject to a more detailed description of the actual modifications. KPN GB does not object to the modifications proposed.

Bidco thinks that the opening bids should also be as low as possible and is not in favour of the deposit of a security. Bidco is in favour of the possibility to replace a bid.

4. What is your opinion about assigning the 800 MHz band based on six lots of 5 MHz duplex? Do you think another division would be more appropriate?

Belgacom feels that a 5 MHz duplex lot is too narrow to provide services of a sufficient quality and that it would be more appropriate to offer 10 MHz duplex lots.

KPN GB and Ericsson are in favour of 5 MHz duplex lots.

5. Are you in favour of setting a spectrum cap for the 800 MHz band? If so, what would be in your opinion the maximum quantity of spectrum an operator should be allowed to have in the 800 MHz band?

Belgacom and KPN GB propose a 10 MHz duplex spectrum cap.

Bidco feels that a spectrum cap for the 800 MHz band should take into account the user rights in the 900 MHz and 1800 MHz bands. Bidco feels that a newcomer should be allowed to obtain a reserved block in the 800 MHz band so as to be able to compete with the existing operators.

6. Are you in favour of setting a cumulated spectrum cap for the 800 MHz and 900 MHz bands? If so, what would be in your opinion the maximum quantity of spectrum an operator should be allowed to have in the 800 MHz and 900 MHz bands combined?

Belgacom and KPN GB are opposed to such a spectrum cap. They invoke the following reasons:

- The two bands do not offer the same potential. Indeed, the 900 MHz band is currently completely reserved for the provision of 2G and 3G services and cannot be released for the provision of 4G services.
- The 3G operators who are not 2G operators (in practice Telenet Voo Bidco) are entitled to national roaming for the 2G services provided in the 900 MHz band. These operators would therefore be able to use another operator's 900 MHz frequencies without this being taken into account for their own spectrum caps.

Bidco is in favour of a cumulated spectrum cap for the 800 MHz, 900 MHz and 1800 MHz bands.

7. Are you in favour of a 60 dBm/5 MHz limit as the in-block EIRP limit for base stations?

Belgacom, Mobistar and KPN GB are opposed.

Belgacom is opposed because this would have a negative impact on the coverage provided.

Mobistar is opposed as most of the manufacturers provide base stations with powers up to 2 x 40 W.

Bidco feels that this limit is reasonable but that the use of new technologies might lead to an increase of the EIRP.

Ericsson feels that the possibility to use more power should be considered case by case.

8. Can you estimate the extra costs caused by an out-of-block EIRP limit of 0 dBm/8 MHz (case A) or 10 dBm/8 MHz (case B) compared to the 22 dBm/8 MHz limit (case C) for channels 60, 59, 58, ... ?

Belgacom estimates the costs for installation of the filters necessary for scenarios A and B at 4500 EUR per site.

9. Are you in favour of relaxing the in-block power limit of 23 dBm for terminal stations for specific applications? If so, for what applications and what should the power limit be?

Belgacom, KPN GB and Bidco do not think it necessary to relax the power limit but are not opposed either.

Ericsson does not think it necessary to relax for use with mobile terminal equipment.

10. What do you think about a coverage obligation with a minimum bit rate of 30 Mbps for the 800 MHz band?

Belgacom considers it justified to impose coverage obligations for the 800 MHz band. Belgacom does believe however that the 30 Mbit/s obligation should regard the maximum bitrate and not the average bitrate.

KPN GB does not object to imposing a minimum bitrate, provided that an appropriate measurement method is used, taking into account the specific characteristics of mobile broadband. KPN GB however is not in favour of coverage obligations. If there have to be obligations, KPN GB suggests obligations regarding the means and taking into account the very strict environmental standards.

Bidco considers the 30 Mbit/s bitrate to be too high and not realistic. Bidco mentions the situation in the United States where the bitrates are situated between 5 and 12 Mbit/s. Bidco feels that the imposition of a minimum bitrate constitutes micro regulation and that the market should be allowed to play.

Ericsson is in favour of a minimum bitrate depending on the bandwidth granted and points out that 30 Mbit/s is just 5 MHz duplex short of the maximum bitrate. Ericsson also feels that it should be specified whether it regards a maximum bitrate and not an average bitrate.

Medienrat is in favour of a coverage obligation with a bitrate of at least 30 Mbit/s.

11. Do you think this obligation should be fulfilled exclusively by means of the 800 MHz band or should it be allowed to be fulfilled by way of all available bands, as recommended by BIPT?

Belgacom and KPN GB are in favour of the coverage obligation being able to be fulfilled by means of all available bands.

If coverage obligations were to be imposed (something KPN GB does not recommend) for the 800 MHz band, KPN GB would be in favour of the coverage obligation being able to be fulfilled thanks to all the available bands.

Medienrat believes that the coverage obligation with a bitrate of at least 30 Mbit/s has to be fulfilled exclusively by means of the 800 MHz band.

12. What is your opinion about the roll-out schedule proposed by BIPT?

Belgacom does not object to the schedule proposed. Belgacom feels however that the 90% obligation is not feasible taking into account the 3 V/m standard that is currently imposed at Brussels. Belgacom asks BIPT to confirm that its proposition consists of "outdoor" coverage levels.

KPN GB is not in favour of coverage obligations. Should coverage obligations have to be imposed, KPN GB feels that these obligations have to regard the means. KPN GB feels that the level of coverage that has to be attained, could be reviewed for reasons such as delays due to the strict legislation on radiation standards or the difficulties to obtain building permits. KPN also feels that, by analogy with the measurements carried out to verify 3G coverage, the coverage obligations should consist of "outdoor" coverage levels.

Bidco states that major investments are already being made to meet the 3G coverage obligations and that the periods of validity should be at least doubled for these coverage obligations for the 800 MHz band.

Ericsson finds that the roll-out schedule depends on the nature of the obligations and limitations (environmental standards).

Medienrat suggests the following roll-out schedule:

- 30% of the population after 2.5 years;
- 70% of the population after 4 years;
- 100% of the population after 6 years.

13. Are you in favour of imposing more binding coverage obligations for priority roll-out areas? If so, how would you define those priority roll-out areas?

Belgacom considers this unnecessary as broadband coverage is completely guaranteed by the fixed infrastructure. Belgacom feels that such an obligation would have a negative impact on the business case.

KPN GB and Bidco are not in favour of this.

Ericsson is in favour but states that these areas have to be clearly identified before the auction.

The CSA is in favour and suggests sending us a study on this topic as soon as it is finished.

The Medienrat is in favour of the rural zones where only one cable operator broadcasts television programs and where there is only one electronic communications base network. This definition includes 9 municipalities of the German-speaking Community.

14. Are you in favour of lifting in the longer term the coverage obligations for frequency bands that do are not optimal for the coverage of large areas by wireless broadband services? If so, which are, according to you, the frequency bands that are optimal for the coverage of large areas by wireless broadband services?

Belgacom deduces that this proposal only regards the 3G coverage obligations of KPN GB and Telenet Tecteo Bidco in the 2 GHz band. Belgacom feels that lifting these obligations would go against the principles of equality and non-discrimination as the other operators were, themselves, obligated to meet all their obligations.

KPN GB reminds us of the investments that it was obliged to make to fulfil its 3G coverage obligation of 85%.

Bidco is in favour, even at short term.

Ericsson is in favour of withdrawing - in the long run - the obligations that are not economically viable.

Medienrat is not in favour.

15. Are you in favour of obligations regarding service quality and availability in the 800 MHz band? If so, what obligations?

Belgacom suggests fixing obligations covering the following aspects: service availability, service accessibility, mobility, service retainability, service integrity.

KPN GB is not in favour.

Bidco finds such obligations acceptable but they have to be independent of the band used.

Ericsson finds that parameters such as the error margin, latency, bitrate or the signal-noise ratio could be taken into account.

Medienrat is in favour.

16. Are you in favour of authorising frequency sharing between operators in the 800 MHz band?

Belgacom is not opposed to the principle of sharing frequencies provided that it is not imposed but authorised on a strictly voluntary basis and cannot be used to by-pass the existing spectrum caps. Belgacom is thus opposed to BIPT's point of view in which it allows the common use of a 20 MHz duplex block in spite of a spectrum cap lower than 20 MHz duplex. Belgacom feels that, taken into account the numerous matters that are still unresolved and the non-existence of a clear regulatory framework at European level ad hoc, an authorisation to share frequencies would be premature and would create a considerable level of uncertainty for the auction candidates.

KPN GB is not opposed to the principle of sharing frequencies for the 800 MHz band as the use of 20 MHz blocks allows optimal band use.

Bidco is in favour of sharing frequencies in order to be able to provide maximum quality services.

Medienrat is not in favour.

17. Are you in favour of authorising frequency sharing between operators in other frequency bands?

Belgacom: idem 16

As for the other frequency bands the locks granted to the operators are sufficiently large, KPN GB is not in favour of sharing frequencies for these bands.

Bidco is in favour of sharing frequencies for all bands in order to be able to provide maximum quality services.

18. In case of frequency sharing, what criteria could be used to ensure the operators' independence is not compromised?

Belgacom believes that clear limits have to be defined for sharing infrastructure so as not to reduce operators' autonomy. Belgacom also fears that frequency sharing will reduce the possibilities to differentiate and therefore reduce competition.

KPN GB feels that in the context of frequency sharing, each operator should share the same quantity of spectrum to avoid one operator to become excessively dependent. KPN GB also thinks that each operator should maintain the possibility to differentiate in the level of quality of service offered to its clients.

Bidco finds that the technological evolution allows operators to differentiate.

Ericsson proposes non-interference criteria as well as rules ensuring that a minimum bitrate per user may be obtained when there is interference.

19. Are you in favour of the obligation to offer national roaming to a new entrant? If so, for which services should national roaming be obliged and how long should this obligation last?

The CSA is in favour.

Belgacom points out that such an obligation already exists for the fourth 3G operator and that nothing justifies the extension of this obligation. Belgacom, as well KPN GB, remind us that there are many MVNO operators in Belgium and that this type of agreement constitutes an alternative to the international roaming agreements. The very recent extension of the MVNO contract between Mobistar and Telenet confirms this.

Should an obligation to provide national roaming be nonetheless imposed, Belgacom and KPN GB feel that the terms should be similar to those for Article 5 of the 3G Royal Decree.

20. Are you in favour of dividing the 2520-2535/2640-2655 MHz frequency block into three blocks of 5 MHz duplex?

KPN GB is in favour.

Bidco is not in favour of a new auction for the 2.6 GHz band in the short run.

21. Are you in favour of raising the spectrum cap for the 2.6 GHz band to 30 MHz duplex?

Belgacom is not opposed but feels that it would be premature to put the 2.6 GHz frequencies up for auction in the short run.

KPN GB finds that increasing the spectrum cap for the 2.6 GHz band up to 30 MHz duplex might prevent one of the three existing FDD operators from obtaining additional spectrum and is therefore not in favour.

22. Do you have any other comments on the use of the 800 MHz band for wireless broadband services?

- Radiation standards

Mobistar thinks it necessary to have certain guarantees as to the evolution of the radiation standards in the long run.

KPN GB feels that the radiation standards at Brussels make it impossible to roll out in the 800 MHz band in Brussels.

- Duration of the licences

Mobistar thinks a 20-year duration appropriate.

- Payment terms

Mobistar is in favour of proposing different payment options.

- Annual fees

Mobistar feels that the existing approach to calculate the annual fees is all but optimal and does not encourage a fast network roll-out. Mobistar proposes fixed annual fees.

- Universal service

Mobistar points out that the consultation does not mention the obligations linked to the universal service.

- 700MHz band

Mobistar feels that clarifications regarding the availability in the 700 MHz band are necessary.

- Opening bids

Mobistar and KPN GB fear that the auction opening bids are too high. KPN GB thinks that the opening bid should take account of the LTE technology being able to be implemented in other bands and that the 800 MHz band shall be mostly used for the coverage of rural areas.

- Transfer of the 800 MHz user rights

Ericsson suggests creating a clear legal framework for the transfer of the 800 MHz band user rights and the coverage obligations corresponding to these user rights.

4. Errors and omissions

Certain contributions received mention errors or omissions in the public consultation of 21 March 2012 on the 800 MHz band:

- Canal+ (Be 1) was broadcast via analogue terrestrial means up until 31 December 2009. (section 2.1, second paragraph)
- Télé Bruxelles was broadcast via analogue terrestrial means up until 30 November 2011. (section 2.1, last paragraph)
- VRT's programs are broadcast through terrestrial digital television. (section 4.3.1)
- Today channel 55 (mentioned in RTBF's management contract) is used by Télé Bruxelles. (section 4.3.2)
- RTBF has a fifth transmitter in the 800 MHz band: La Roche en Ardenne, channel 63. (section 4.4.1)