

**Opinion of the European Economic and Social Committee on the ‘Proposal for a Decision of the European Parliament and of the Council on the use of the 470-790 MHz frequency band in the Union’**

**(COM(2016) 43 final — 2016/0027 (COD))**

(2016/C 303/18)

**Rapporteur: Mr Raymond HENCKS**

On 16 February 2016 and ... 2016 respectively, the Council and the European Parliament decided to consult the European Economic and Social Committee, under Article 114 of the Treaty on the Functioning of the European Union, on the:

*Proposal for a Decision of the European Parliament and of the Council on the use of the 470-790 MHz frequency band in the Union*

(COM(2016) 43 final — 2016/0027 (COD)).

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee’s work on the subject, adopted its opinion on 3 May 2016.

At its 517th plenary session, held on 25 and 26 May 2016 (meeting of 26 May 2016), the European Economic and Social Committee adopted the following opinion by 167 votes, with 3 abstentions.

## **1. Conclusions and recommendations**

1.1 The EESC welcomes the Commission’s proposal for coordinated release, together with a specific timetable, of the newly available capacity on the 694-790 MHz frequency (referred to as 700 MHz). This will enable mobile operators to provide wireless broadband services in the framework of advanced 4G and the future 5G technology, while reducing the geographical digital divide by improving coverage of rural areas and increasing transmission speeds.

1.2 It fears, however, that the prices of the new technology used in the 700 MHz band, together with the auction price of the new capacity, could entail additional costs for consumers which would be unaffordable for a growing section of the population, as well as for some small enterprises, to the point where there is a risk that a large number of vulnerable people may not have the financial means to participate in the new digital drive. The EESC therefore calls on the Member States to set up a support scheme, in compliance with the EU rules on State aid, to avoid any further deepening of the economic divide.

1.3 The physical properties of radio spectrum propagation in the 700 MHz band may well rekindle the debate on the potential health effects of exposure to electromagnetic fields. The EESC urges <sup>(1)</sup> the Commission once again to continue its work in this area, in line with the precautionary principle, particularly as more in-depth research is still needed.

1.4 The EESC would call on Member States to make it a requirement, when granting rights of use of the 700 MHz band for wireless broadband communications services, to ensure that the various public transport networks benefit from the requisite channels in order to provide good coverage.

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<sup>(1)</sup> OJ C 242, 23.7.2015, p. 31.

1.5 Finally, given that some Member States have already auctioned the new frequencies and begun national procedures for their use, the EESC calls on the Commission to monitor developments in this situation very closely and intervene within the scope of its remit in this area should it detect the slightest risk of fragmentation of the single market.

## 2. Introduction/background

2.1 The end of analogue television and the transition to digital terrestrial television, which uses technologies that take up much less of the radio spectrum than analogue technology, have made for considerable savings in terms of bandwidth (around 18 % of total resources) as a result of previously freeing up digital dividend in the 800 MHz band for mobile communications.

2.2 The current spectrum used by terrestrial television is located at the lower end of what is referred to as the UHF band (470-862 MHz), where frequencies have more robust radio spectrum propagation properties (less attenuation than is the case with higher frequencies).

2.3 These frequencies transmit signals further and have better penetration, which is particularly suited to rural coverage and in-building transmission. The release of low frequencies is very beneficial to ultra-fast bidirectional mobile broadband communication. It also brings down the cost of network construction (since fewer transmitters or transmission stations are required) and benefits public finances through the sale of the rights of use of these frequencies to operators on the basis of detailed rules laid down by telecoms regulators. This explains why they are sometimes referred to as 'golden' frequencies. Mobile operators, as well as audio-visual operators, compete to have these frequencies awarded to them by the public authorities.

2.4 At present, the 470-790 MHz band is used for the transmission of audio-visual media services, including digital terrestrial television, and for Programme Making and Special Events ('PMSE equipment' such as wireless microphones and in-ear monitors used during performances and to give directions in television studios). The frequencies currently used for latest generation of mobile communications technology are the 800 MHz, 900 MHz, 1 800 MHz and 2 600 MHz bands.

2.5 The 2012 World Radiocommunication Conference decided to allocate a substantial proportion of the 470-790 MHz (referred to as 700 MHz) frequencies released in Europe and Africa to mobile broadband services.

2.6 The allocation to mobile services of 700 MHz capacity, offering additional broadband frequencies, is fully in line with the objective of the EU's multiannual radio spectrum policy programme (RSPP) of providing citizens with access to broadband speeds of not less than 30 Mb/s by 2020.

2.7 According to the Commission's calculations, the new allocation of frequencies will entail costs for television operators, caused by the transition from the MPEG-2 digital television broadcasting standard to the MPEG-4 standard (from EUR 600 to 890 million) and/or to HEVC (from EUR 450 to 660 million), and for consumers, with an additional EUR 40 to 100 per household required for the purchase of new decoders or adaptors.

## 3. Gist of the proposal for a decision

3.1 The proposal under consideration seeks to take advantage of the 700 MHz spectrum capacity released to achieve near-global harmonisation of this frequency band, namely through the coordinated designation and authorisation of the frequency at EU level. This will involve:

- harmonised technical conditions for wireless broadband electronic communications services based on the principle of technology and service neutrality;

- Member States adopting and communicating across the Union their national roadmaps on repurposing the 700 MHz band and concluding the necessary cross-border coordination agreements by the end of 2017;
- adopting a common deadline (by mid-2020) for making capacity available on the 700 MHz band; and
- requiring Member States to authorise the transfer of the rights of use of the spectrum by June 2022.

3.2 With regard to the sub-700 MHz frequency band, this will involve:

- ensuring availability of the 470-694 MHz frequency band, or parts of the band, for the terrestrial provision of audiovisual media services, including free television, to mass audiences and for use by wireless PMSE equipment, based on national broadcasting needs;
- undertaking a review of spectrum use in the sub-700 MHz frequency band by 2025 in light of the conclusions of the 2023 ITU World Radiocommunication Conference.

#### 4. General comments

4.1 The EESC welcomes the fact that capacity released on the 700 MHz band is being allocated for the provision of wireless broadband electronic communications services, whilst maintaining sufficient capacity for digital terrestrial television.

4.2 It also welcomes the Commission's proposal for coordinated release together with a specific timetable, as this will avoid a repetition of the negative experience of 'disorderly' implementation that occurred when authorising use of the released spectrum in the 800 MHz band after 2008 without a timetable for implementation. At the same time, the EESC suggests that the Commission assist Member States in the timely conclusion of cross-border frequency agreements with non-EU neighbouring countries in order to facilitate the process of making the 700 MHz band available for wireless broadband within the single market.

4.3 Allocating 700 MHz capacity to mobile operators will allow them, in the medium term, to remain at the cutting edge of progress on the mobile communications market, which is currently geared to the rollout of a comprehensive 4G system and will eventually open up to 5G, which is now in its test phase and likely to reach speeds of 10 to 50 Gb/s. 5G technology will provide consumers with higher speed broadband, enabling the expansion of the Internet of Things, internet videos, e-health applications and holograms, etc.

4.4 The EESC notes with satisfaction that future connectivity through the 700 MHz band is particularly suited to ensuring better coverage of rural areas, which will help to reduce the geographical digital divide.

4.5 The new allocation of frequencies will, however, generate a cost for consumers which will certainly be higher than the Commission has anticipated (see paragraph 2.7 above). This is because the costs for operators, resulting from the change in coding standards for digital television, as well as the purchase price for mobile operators for new capacity on the 700 MHz band, will be passed on to customers who, in addition to having to purchase new TV adapter/decoders, will also need new smart phones when the 5G mobile services become available.

4.6 This means there is a risk that the prices consumers will have to pay, directly or indirectly, as a result of reallocating the 700 MHz frequency could become unaffordable for a growing section of the population, as well as for some small enterprises, which often pay more for online access than 'integrated' users as they do not meet the terms of offers designed to benefit large-scale users. As a result, a large number of vulnerable people will not have the autonomy needed to claim their rights, some of which, such as certain benefits or allowances for the elderly or for young job-seekers, can in some instances only be accessed online. In order to prevent any further deepening of the economic divide, and to guarantee universal digital connectivity, the EESC calls on the Member States to set up, in compliance with the EU rules on State aid, a support scheme for vulnerable consumers so that everyone can benefit from the new digital drive.

4.7 The physical properties of radio spectrum propagation in the 700 MHz band may well rekindle the debate on the potential health effects of exposure to electromagnetic fields. The EESC urges <sup>(2)</sup> the Commission once again to continue its work in this area, in line with the precautionary principle, particularly as more in-depth research is still needed.

4.8 The proposal for a decision requires Member States to 'consider taking measures to ensure a high-quality level of coverage of their population and territory when they grant rights of use of the 700 MHz band for wireless broadband electronic communications services'. The EESC believes that in this case operators will need to have access to the requisite channels to ensure good ultra-fast mobile broadband coverage, not only in the most rural areas but also on the various public transport networks.

4.9 Given that some Member States have already auctioned the new frequencies and begun national procedures for their use, the EESC calls on the Commission to monitor developments in this situation very closely and intervene within the scope of its remit in this area should it detect the slightest risk of fragmentation of the single market.

Brussels, 26 May 2016.

*The President*  
*of the European Economic and Social Committee*  
Georges DASSIS

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<sup>(2)</sup> See footnote 1.