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**PROPOSAL**

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From:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	2 February 2016
To:	Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of the European Union
No. Cion doc.:	COM(2016) 43 final
Subject:	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

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Delegations will find attached document COM(2016) 43 final.

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Brussels, 2.2.2016  
COM(2016) 43 final

2016/0027 (COD)

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**

{SWD(2016) 19 final}

{SWD(2016) 20 final}

## EXPLANATORY MEMORANDUM

### 1. CONTEXT OF THE PROPOSAL

- **Reasons for and objectives of the proposal**

The Digital Single Market Strategy for Europe has a vision of universal, high-quality connectivity for businesses and the public. The strategy includes specific proposals from the Commission on ‘the coordinated release of the 694-790 MHz (‘700 MHz’) band, which is particularly well-suited for ensuring the provision of broadband services in rural areas, while accommodating the specific needs of audiovisual media distribution’.

Wireless connectivity requires access to spectrum in the bands below 1 GHz, being the sweet spot for both wide coverage and high speeds. Following the switch to more spectrum-efficient digital television technologies, the 800 MHz band (790-862 MHz, or the ‘digital dividend’) was the first portion of the UHF broadcasting band (470-862 MHz) to be repurposed for wireless broadband services in the Union. At present the UHF broadcasting band comprises the range of frequencies from 470 to 790 MHz (hereinafter the ‘UHF band’). This band is used for digital terrestrial television (DTT) and audio programme making and special events (‘audio PMSE’) equipment, essentially wireless microphones.

The 2012 World Radiocommunication Conference (WRC-12), the International Telecommunications Union (ITU) Conference that revises the binding Radio Regulations, decided that the 700 MHz band should be allocated to both the broadcasting and mobile service in Region 1 (Europe and Africa) as of 2015.

WRC-15, which took place in November 2015, finalised international negotiations on technical and regulatory parameters for the use of the 700 MHz band for wireless broadband. The coherent situation in the 700 MHz frequency band in all ITU regions<sup>1</sup> offers a rare opportunity for near-global harmonisation of this frequency band for wireless broadband use. WRC-15 also maintained the exclusive allocation of the 470-694 MHz (‘sub-700 MHz’) frequency band to the broadcasting service in Region 1.

In 2013, the Commission’s Vice President Neelie Kroes asked former Commissioner Pascal Lamy to chair a high-level group of representatives of the mobile, broadcasting and media sectors to find a common position on the UHF band’s future use. The Chairman’s report in his own capacity (the ‘Lamy Report’) recommended repurposing the 700 MHz band for wireless broadband while sustaining the European audiovisual model by providing safeguards that terrestrial broadcasting would have spectrum access to the sub-700 MHz frequency band.

The Commission’s public consultation on the Lamy Report found that there was support for coordinated Union action. In parallel, the Radio Spectrum Policy Group (RSPG) adopted an Opinion<sup>2</sup>, which also supports a coordinated Union approach to providing wireless broadband in the 700 MHz frequency band. The RSPG Opinion recommended harmonised technical conditions and a common deadline for effective use of the 700 MHz band and long-term use

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<sup>1</sup> The 700 MHz band in Region 3 as well as the 698-790 MHz band in Region 2 had been allocated to the mobile services on a co-primary basis before 2012

<sup>2</sup> Document RSPG15-595 final, link: [http://rspg-spectrum.eu/wp-content/uploads/2013/05/RSPG15-595\\_final-RSPG\\_opinion\\_UHF.pdf](http://rspg-spectrum.eu/wp-content/uploads/2013/05/RSPG15-595_final-RSPG_opinion_UHF.pdf)

of the sub-700 MHz frequency band for audiovisual distribution, including its availability for DTT.

The Commission responded to the outcomes of the European stakeholder process and international agreements under the aegis of the ITU by developing a strategy for the Union on the long-term use of the UHF band. The strategy will promote the digital single market and ensure efficient management of radio spectrum in the UHF band, reflecting its social, cultural and economic value. The UHF band strategy has three major strands:

- harmonised technical conditions for wireless broadband electronic communications services in the 700 MHz frequency band based on the principle of technology and service neutrality;
  - a common deadline for making the 700 MHz band available for effective use for wireless broadband electronic communications services in line with the harmonised technical conditions above, and coordination measures to support this transition;
  - priority for distribution of audiovisual media services (AVMS) in the sub-700 MHz frequency band in conjunction with a flexible approach to how the band is used; this is necessary to cater for diversity regarding the market significance of DTT in Member States.
- **Consistency with existing policy provisions in the policy area**

This proposal contributes to the target of 1200 MHz for wireless broadband, which is one of the key objectives of Decision 2012/243/EU of the European Parliament and the Council establishing a multiannual radio spectrum policy programme (RSPP). The proposal also promotes the further development of innovative audiovisual media services in line with the RSPP objectives and is consistent with the Authorisation Directive<sup>3</sup> and the Framework Directive<sup>4</sup>, in particular Articles 9 and 9a of the latter.

## 2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

### • Legal basis

This legislative measure is based upon Article 114 TFEU to ensure the functioning of the internal market.

### • Subsidiarity and proportionality

As also explained in the impact assessment, the solution under this decision proposal is the best option in terms of subsidiarity and proportionality.

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<sup>3</sup> Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.04.2002, p. 33).

<sup>4</sup> Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) (OJ L 108, 24.04.2002, p. 21).

The subsidiarity principle is respected as the initiative's objectives could not be achieved by Member States individually while at the same time it allows national circumstances (in both the 700 MHz and the sub-700 MHz bands) to be taken into account.

The EU should decide how it intends to use the 700 MHz frequency band in the future if it wants to avoid divergent national approaches and limit interference across borders. The absence of a Union-wide common legislation for the UHF band would create detrimental fragmentation in the use of the UHF band within the Union. Fragmentation leads to cross-border interference, which could affect up to 13% of the EU population.

Therefore, there is a need for a coordinated designation and authorisation of the 700 MHz band for wireless broadband by 2020 and coordinated designation of the sub-700 MHz band for flexible use which safeguards the provision of audiovisual media services to mass audience, as well as investments into more efficient technologies, which are needed in order to vacate the current use of the 700 MHz band by DTT.

The flexible use of the sub-700 MHz band is also proportionate as it addresses the problem and achieves the objectives in the most efficient way. Clearing the whole sub-700 MHz band for wireless broadband, for example, would go beyond what is currently necessary to satisfy the demand for sub-1 GHz spectrum to meet wireless traffic demand. At the same time, flexible use provides regulatory certainty for DTT in the sub-700 MHz band for those Member States that wish to maintain their current DTT capacity. Moreover, harmonised technical conditions for spectrum use may be established in agreement with national technical experts in the Radio Spectrum Committee under Decision 676/2002/EC.

- **Choice of the instrument**

The Commission's UHF band strategy for the Union will be implemented on the basis of two legal instruments. A non-binding measure such as a recommendation of the Parliament and the Council would neither make Union coordination obligatory nor require action from the Member States. A decision has been preferred to a regulation as the measure creates obligations for Member States but is not meant to have directly applicable effects into Member States for private parties. A decision is also more appropriate than a directive as the draft measure does not set out a whole body of general rules to be transposed into national law but only includes a limited number of specific actions to be taken by Member States. Decision 243/2012/EU of the European Parliament and of the Council establishing the RSPP for example included similar obligations and actions for Member States in its Article 6(4), and Decisions 128/1999/EC, 626/2008/EC and 676/2002/EC of the European Parliament and of the Council were also adopted in the past to impose upon Member States obligations and actions of a similar nature.

This measure according to Article 114 TFEU will be accompanied by a Commission implementing decision, adopted through a comitology procedure pursuant to Decision No 676/2002/EC<sup>5</sup>, to designate and make available the 700 MHz frequency band for use for wireless broadband electronic communications services under harmonised technical conditions developed with the assistance of the CEPT<sup>6</sup>. This approach was also used to

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<sup>5</sup> Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) (OJ L 108, 24.4.2002, p. 1)

<sup>6</sup> European Conference of Postal and Telecommunications Administrations

harmonise the 800 MHz frequency band for wireless broadband electronic communications services by virtue of the RSPP and the Commission decision 2010/267/EU<sup>7</sup>.

### **3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS**

#### **• Stakeholder consultations**

This proposal has taken into account the following stakeholder inputs:

- (a) the Lamy report<sup>8</sup>, drawn up by Pascal Lamy himself on the basis of the work of the high-level group he chaired;
- (b) contributions to the public consultation<sup>9</sup> on the Lamy report;
- (c) the RSPG report on a ‘Proposed spectrum coordination approach for broadcasting in the case of a reallocation of the 700 MHz band’<sup>10</sup>;
- (d) the RSPG Opinion on a ‘Long-term strategy on the future use of UHF band (470-790 MHz) in the European Union’.

#### **• Collection and use of expertise**

Two dedicated independent studies have been undertaken for the Commission, which provided input to this proposal. These were:

- ‘Economic and Social Impact of Repurposing the 700 MHz frequency band for Wireless Broadband Services in the European Union’;
- ‘Challenges and opportunities of broadcast-broadband convergence and its impact on spectrum and network use’.

The first of the two studies analyses the costs of transitions, the impact of wireless broadband coverage making use of the 700 MHz frequency band and the socio-cultural aspects of reconfiguring DTT spectrum use into the sub-700 MHz frequency band.

The second study provides a comprehensive assessment of the opportunities for convergence between DTT and wireless broadband beyond 2020.

#### **• Impact assessment**

An impact assessment prepared by the Commission received a positive opinion from the Regulatory Scrutiny Board<sup>11</sup> on 27 November 2015.

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<sup>7</sup> Commission Decision of 6 May 2010 on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union (OJ L 117/95, 11.5.2010)

<sup>8</sup> Link: <http://ec.europa.eu/digital-agenda/en/news/report-results-work-high-level-group-future-use-uhf-band>.

<sup>9</sup> Link: <https://ec.europa.eu/eusurvey/runner/PublicConsultationLamyReport2014>.

<sup>10</sup> Document RSPG13-524 rev1, link: [https://circabc.europa.eu/d/a/workspace/SpacesStore/614d3daf-76a0-402d-8133-77d2d3dd2518/RSPG13-524%20rev1%20Report\\_700MHz\\_reallocation\\_REV.pdf](https://circabc.europa.eu/d/a/workspace/SpacesStore/614d3daf-76a0-402d-8133-77d2d3dd2518/RSPG13-524%20rev1%20Report_700MHz_reallocation_REV.pdf).

The impact assessment looked at four policy options:

- (1) No action at Union level.
- (2) Coordinated designation and authorisation of the 700 MHz frequency band for wireless broadband by 2020 and reservation of the sub-700 MHz frequency band for DTT and audio PMSE.
- (3) Coordinated designation and authorisation of the 700 MHz frequency band for wireless broadband by 2020. Coordinated designation of the sub-700 MHz frequency band for flexible use, subject to national demand, which would safeguard the continued provision of audiovisual media services to a mass audience (in a technology-neutral way), including free-to-view distribution, as well as spectrum availability for audio PMSE use. To avoid interference, the use of sub-700 MHz spectrum should be limited technically to ‘downlink-only’ mode<sup>12</sup>. This option would also make provision for developing a spectrum strategy for audio PMSE that would respond to spectrum loss for audio PMSE in the UHF band.
- (4) Coordinated designation and authorisation of the whole UHF band for wireless broadband services by 2020.

The Commission selected option 3, making it its ‘preferred option’ for fulfilling the policy objectives. The preferred option will contribute to Union-level spectrum and connectivity targets. Use of the 700 MHz frequency band for wireless broadband together with spectrum in the 800 MHz and 900 MHz frequency bands would boost mobile network capacity. This would provide universal coverage at high transmission speeds of at least 30 Mb/s per user within a representative competitive 3-4 operator market. Having 2020 as the common deadline for repurposing the 700 MHz frequency band is appropriate also because it ties in with initial 5G deployment. Option 3 also provides certainty for spectrum access in the sub-700 MHz band to broadcasters and providers of audiovisual media services to the general public, in particular digital terrestrial broadcasting. Flexibility of use for sub-700 MHz spectrum makes it easier to mitigate interference and makes it possible to create an innovative ‘ecosystem’ promoting investment and new business models.

Option 3 is supported by the aforementioned outcome of WRC-15 both for the 700 MHz frequency band and for the sub-700 MHz frequency band. The sub-700 MHz band remains exclusively allocated to broadcasting services in Europe and Africa and in large parts of the rest of the world.

The first aforementioned study tendered by the Commission found that clearing the 700 MHz band in 2020 and upgrading to next generation terrestrial broadcasting technology would cost an estimated €1.2 to 4.4 billion. The bulk of these costs would be incurred by end-users when they upgrade their reception equipment before the end of the normal equipment renewal cycle. Audio PMSE costs for a transition in 2020 would amount to €200 million, based on a figure where 30 % of current audio PMSE users operate in the 700 MHz frequency band. However, EU countries may offer technology-neutral public support measures that limit these costs, if consistent with state-aid rules<sup>13</sup>. Furthermore, the adaptation of DTT networks to

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<sup>11</sup> Link: [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/cia\\_2015\\_en.htm#cnect](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/cia_2015_en.htm#cnect)

<sup>12</sup> Transmission solely from the network infrastructure to receiving terminals such as TV sets or tablets.

<sup>13</sup> The Commission approved state aid to limit the impact on consumers and PMSE users in several decisions. See, among others, N622/03 Digitalisierungsfonds — Austria, OJ C 228, 17.9.2005; C25/04

carry the same amount of programmed content with reduced spectral capacity is estimated to cost a maximum of around €890 million. This may in particular include costs incurred by right-holders whose rights of use would need to be amended before the period for which they were granted expires. If Member States consider measures to mitigate such costs, they must comply with the principle of technological neutrality and the relevant decision practice of the Commission in the area of State aid<sup>14</sup> as well as the related case law of the EU Courts<sup>15</sup>. In some instances, measures adopted to compensate for the withdrawal of rights, where such compensation does not exceed the prejudice generated by the withdrawal, could be in certain circumstances consistent with Union state-aid law. According to the RSPG, rights of use have been granted in 14 Member States either indefinitely or for a period extending beyond 2020.

Taking into account the results of the recent spectrum auctions for the 800 MHz and 900 MHz frequency bands, a conservative estimate of the overall revenues from assigning the 700 MHz frequency band in the EU-28 by 2020 would be around €11 billion, all other things being equal.

#### 4. BUDGETARY IMPLICATIONS

No specific budgetary implications are expected for the Union.

#### 5. OTHER ELEMENTS

- **Detailed explanation of the specific provisions of the proposal**

In accordance with the UHF band strategy, this proposal lays down:

- deadlines for repurposing the 700 MHz frequency band for wireless broadband electronic communications services in accordance with harmonised technical conditions at Union level;
- measures facilitating the transition in spectrum use in the UHF band;

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Introduction of digital terrestrial television (DVB-T) in Berlin-Brandenburg — Germany, OJ L 200, 22.7.2006; C24/04 Digital terrestrial television in Sweden, OJ L 112, 30.4.2007; C52/05 Digital decoders in Italy, OJ L 147, 8.6.2007; N270/06 Subsidies to digital decoders with API — Italy, OJ C 80, 13.4.2007; N107/07 Subsidies to IdTV — Italy, OJ C 246, 20.10.2007; C34/06 Introduction of digital terrestrial television (DVB-T) in North Rhine-Westphalia, OJ L 236, 3.9.2008; SA.28685 Captación de Televisión Digital en Cantabria — Spain, OJ C 119, 24.4.2012; N671b/2009 — Digital switch-over in Slovakia, OJ C 39, 8.2.2011.

<sup>14</sup> State aid C 25/2004, DVB-T Berlin Brandenburg; State aid C 52/2005, Digital decoders; planned Commission decision for January 2016 on State aid SA.32619 notified by the Kingdom of Spain for the compensation of damages for the liberation of digital dividend.

<sup>15</sup> Case ECJ, C-222/04 of 10 January 2006, *Cassa di Risparmio di Firenze*, para. 131; Case ECJ, C-126/01 of 20 November 2003, *GEMO SA*, para. 28; Case ECJ, C-53/00 of 22 November 2001, *Ferring SA*, paras. 19 ff; Case ECJ, C-143/99 of 8 November 2001, *Adria-Wien Pipeline*, para 38; Case ECJ, C-310/99, *Italy v. Commission*, para 251; Case ECJ, T-109/01 of 14 January 2004, *Fleuren Compost BV v. Commission*, para. 54; Case ECJ, C-251/97 of 5 October 1999, *France v. Commission*, para. 40. Case GC, T-177/07 of 15 June 2010, *Mediaset v. Commission*, case ECJ, C-403/10 P of 28 July 2011, *Mediaset v. Commission*. GC Case T-21/06 of 6 October 2009, *Germany v. Commission* concerning DVB-T – Berlin/Brandebourg, GC Cases T-461/13 Spain v. Commission, T-462/13 *Basque Country and Itelazpi v. Commission*, [T-463/13](#) and [T-464/13](#) *Galicia v. Commission and Retegal v. Commission*, [T-465/13](#) *Catalonia and CTTI v. Commission*, [T-487/13](#) *Navarra v. Commission* and finally [T-541/13](#) *Abertis Telecom and Retevisión v. Commission*.



- measures for the long-term use of the sub-700 MHz frequency band, although these will include a review.

Article 1 sets two binding common deadlines for Member States for repurposing the 700 MHz frequency band for wireless broadband:

- cross-border coordination agreements must be completed by the end of 2017;
- the 700 MHz frequency band must be made available for effective use for wireless broadband electronic communications services by mid-2020, in accordance with the Commission Implementing Decision on the harmonised technical conditions for using the band<sup>16</sup>.

Article 1 also stipulates that use of the 700 MHz frequency band for wireless broadband after the common Union deadline must be protected across borders.

Article 2 requires Member States to make rights of use in the 700 MHz frequency band tradable. This is in line with the policy objectives and provisions of the RSPD<sup>17</sup> and the Framework Directive.

Article 3 requires Member States to consult on at national level and 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 aim is to reap the socioeconomic benefits of the UHF band by contributing to bridging the digital divide and enabling the pervasive Internet of Things.

Article 4 deals with the long-term use of the sub-700 MHz frequency band. It requires Member States to safeguard use of this band in the long term for the distribution of audiovisual media services to a mass audience (or to the general public). This should include continued use for wireless audio PMSE, in accordance with national priorities.

To ensure coherence of Member States' obligations with Articles 9 and 9a of the Framework Directive, the obligation to safeguard use of the sub-700 MHz band applies to the provision of audiovisual media services to a mass audience and not to the type of the underlying wireless technology or the type of electronic communications service. Therefore, the safeguard set out in Article 4 provides certainty for spectrum access and allows for the further development of DTT as the major platform for terrestrial broadcasting of audiovisual media services to the general public. The article also allows the sub-700 MHz frequency band to be used also for other technology or electronic communications services limited to downlink-only (i.e. from the network to receiving terminals such as TV sets or tablets).

Article 5 requires Member States to adopt and communicate across the Union their national roadmaps on repurposing the 700 MHz frequency band for wireless broadband and the related transition process for the whole UHF band. This provision is motivated by the transition roadmap agreed among stakeholders (see Annex 2 to the Lamy report). The roadmap sets out the scope of measures to be considered in the transition to new DTT technologies in conjunction with repurposing of the 700 MHz frequency band. The aim is to ensure that impacts on the public and businesses can be limited using a transparent process.

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<sup>16</sup> These deadlines are in line with the RSPG report, the RSPG opinion and the Lamy report.

<sup>17</sup> cf. Article 6(8).

Article 6 requires the Commission to conduct by 2025 a review of spectrum use in the sub-700 MHz frequency band in cooperation with the Member States. Having carried out this review, the Commission must report its conclusions to the European Parliament and the Council together with any proposal for regulatory changes, which might, for example, change the substance or format of safeguards or their duration. This provision of the Decision is in line with a recommendation in the Lamy report. The Commission's review of spectrum use in the sub-700 MHz frequency band should take into account the planned review of this band at the 2023 ITU World Radiocommunication Conference.

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**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee<sup>18</sup>,

Having regard to the opinion of the Committee of the Regions<sup>19</sup>,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) In the multiannual radio spectrum policy programme (RSPP) established by Decision No 243/2012/EU<sup>20</sup>, the European Parliament and the Council set the objectives of identifying at least 1 200 MHz of spectrum suitable for wireless broadband electronic communications services in the Union by 2015, of supporting the further development of innovative audiovisual media services by ensuring sufficient spectrum for the satellite and terrestrial provision of such services, if the need is clearly substantiated, and of ensuring sufficient spectrum for programme making and special events (PMSE).
- (2) In its strategy for the digital single market (DSM)<sup>21</sup>, the Commission highlights the importance of the 694-790 MHz ('700 MHz') frequency band for ensuring the provision of broadband services in rural areas and stresses the need for a coordinated release of that frequency band, while accommodating the specific needs of audiovisual media services distribution.
- (3) Spectrum in the 470-790 MHz frequency band is a valuable asset for the cost-efficient deployment of wireless networks with universal indoor and outdoor coverage. This spectrum is currently used across the Union for digital terrestrial television (DTT) and

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<sup>18</sup> OJ C , , p. .

<sup>19</sup> OJ C , , p. .

<sup>20</sup> Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme (OJ L 81, 21.3.2012, p. 7).

<sup>21</sup> See [http://ec.europa.eu/priorities/digital-single-market/index\\_en.htm](http://ec.europa.eu/priorities/digital-single-market/index_en.htm).

wireless audio PMSE equipment. It supports the development of the media, creative and cultural sectors, which extensively rely on this spectrum resource for the wireless provision of content to mass audiences.

- (4) For Region 1, which includes the Union, the International Telecommunication Union's Radio Regulations adopted by the World Radiocommunication Conference have allocated the 700 MHz frequency band to the broadcasting and the mobile (except aeronautical mobile) service on a co-primary basis, and the 470-694 MHz ('sub-700 MHz') frequency band exclusively to the broadcasting service, on a primary basis, and to wireless audio PMSE use, on a secondary basis.
- (5) Rapidly growing wireless broadband traffic makes enhanced wireless network capacity a necessity. Spectrum in the 700 MHz frequency band provides both additional capacity and universal coverage, in particular for the economically challenging rural and remote areas, for indoor use and for wide-range machine-type communications. In this context, coherent measures for high-quality terrestrial wireless coverage across the Union, which build on best national practice for operators' licence obligations, should aim to meet the RSPP objective that all citizens should have access to broadband speeds of not less than 30 Mb/s by 2020. In this way, the measures will promote innovative digital services and ensure long-term socioeconomic benefits.
- (6) Spectrum sharing within a common frequency band between bidirectional wireless broadband use (uplink and downlink), on the one hand, and unidirectional television broadcasting or wireless audio PMSE use, on the other hand, is technically problematic. This means that repurposing the 700 MHz frequency band for bidirectional terrestrial wireless broadband electronic communications services would deprive DTT and wireless audio PMSE users of part of their spectrum resources. The DTT and PMSE sectors therefore need long-term regulatory predictability on the availability of sufficient spectrum, so that they can safeguard the sustainable provision and development of their services, in particular free-to-view television. Measures may be needed at national and Union level to ensure additional spectrum resource for wireless audio PMSE use outside the 470-790 MHz frequency band.
- (7) In his report to the Commission (the 'Lamy report')<sup>22</sup>, Pascal Lamy, the Chairman of the high-level group on the future use of the 470-790 MHz frequency band, recommended that the 700 MHz frequency band be made available for wireless broadband by 2020 (+/- two years). This would help achieve the goal of long-term regulatory predictability for DTT in having access to the sub-700 MHz frequency band until 2030, although this would have to be reviewed by 2025. The Lamy Report also recommended national flexibility in spectrum use of the sub-700 MHz frequency band, which is limited to downlink-only. Downlink-only is the restriction of all transmissions in a wireless system, independent of its technology, to unidirectional transmission from central infrastructure stations such as a TV broadcasting tower or a mobile base station to portable or mobile terminals such as TV sets or mobile phones.
- (8) The Radio Spectrum Policy Group (RSPG) recommends in its opinion on a long-term strategy on the future use of the 470-790 MHz frequency band in the Union (the 'RSPG opinion') the adoption of a coordinated approach across the Union to make the

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<sup>22</sup> Report by Mr Pascal Lamy, available at: <https://ec.europa.eu/digital-agenda/en/news/report-results-work-high-level-group-future-use-uhf-band>.

700 MHz frequency band available for effective use for wireless broadband electronic communications services by the end of 2020. This would be in conjunction with ensuring long-term availability until 2030 of the sub-700 MHz frequency band for the downlink-only provision of audiovisual media services. The RSPG particularly recommends introducing flexibility so that the sub-700 MHz frequency band can also be used for downlink-only wireless broadband electronic communications services.

- (9) As some Member States have already launched or completed a national process to authorise the use of the 700 MHz frequency band for bidirectional terrestrial wireless broadband electronic communications services, the Union should take immediate action in order to prevent fragmentation of the single market. What is needed is a coordinated approach to the future use of the 470-790 MHz frequency band, which should also provide regulatory predictability, balance Member State diversity with single market objectives and promote a coherent Union position on the international scene. In this context, Member States should be required to repurpose the 700 MHz frequency band in a timely manner in accordance with Union and national law.
- (10) The use of the 700 MHz frequency band by other applications in non-Union countries, as allowed by international agreements or in parts of national territory outside the effective control of the Member State authorities, may limit the band's use for terrestrial wireless broadband electronic communications services in some Member States. This would prevent them from complying with the common schedule set at Union level. Member States concerned should take all necessary steps to minimise the duration and geographical extent of these limitations and seek the assistance of the Union, where necessary, under Article 10(2) of the RSPP. They should also notify the Commission of such limitations pursuant to Articles 6(2) and 7, and the information should be published in accordance with Article 5, of Decision No 676/2002/EC<sup>23</sup>.
- (11) The use of the 700 MHz frequency band for terrestrial wireless broadband electronic communications services should be subject to a flexible authorisation regime as soon as possible. This should include the possibility for holders of rights of use of spectrum to trade and lease their existing rights in the context of the application of Articles 9, 9a and 9b of Directive 2002/21/EC<sup>24</sup>.
- (12) In line with Articles 9 and 9a of Directive 2002/21/EC, Member States should apply a flexible approach where possible and may allow the introduction of alternative downlink-only uses such as terrestrial wireless broadband electronic communications services in the sub-700 MHz frequency band in accordance with national needs for distribution of audiovisual media services to a mass audience. When allowing use within the sub-700 MHz frequency band for downlink-only terrestrial wireless broadband electronic communications services, Member States should ensure that such use does not affect the use of sub-700 MHz band for digital terrestrial

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<sup>23</sup> Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) (OJ L 108, 24.4.2002, p. 1).

<sup>24</sup> Directive No 2002/21/EC of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L108, 24.4.2002, p.33).

broadcasting in neighbouring Member States, as provided for in the agreement at the Regional Radiocommunication Conference of 2006<sup>25</sup>.

- (13) In any case, spectrum usage in the 470-694 MHz frequency band should be reassessed at Union level no later than 2025. Such an assessment should also take into account the planned review of this frequency band at the World Radiocommunication Conference in 2023. Changes in the use of the sub-700 MHz frequency band should take into consideration technological developments, consumer behaviour, the importance of continuing the delivery of free television<sup>26</sup> service and social, economic and cultural general interest objectives. In this context, studies on technical and regulatory conditions for co-existence between incumbent and new spectrum uses in the sub-700 MHz frequency band are necessary. These would ensure coherence between the approaches taken by different Member States on flexible and efficient spectrum use and would enable technical harmonisation measures for use and co-existence in this band. Such studies and measures may be developed pursuant to Decision No 676/2002/EC.
- (14) Member States should adopt coherent national roadmaps to facilitate the use of the 700 MHz frequency band for terrestrial wireless broadband electronic communications services while ensuring continuity for the television broadcasting services that vacate the band. Once adopted, Member States should communicate the roadmaps in a transparent manner around the Union. The roadmaps should cover activities and timescales for frequency re-planning, technical developments for network and end-user equipment, co-existence between radio and non-radio equipment, existing and new authorisation regimes and information on the possibility to offer compensation for migration costs, where these would arise, in order to avoid, inter alia, costs for end-users. Where Member States intend to maintain DTT, the roadmaps should give particular attention to facilitating upgrades of broadcasting equipment to more spectrum-efficient technologies such as advanced video formats (e.g. HEVC) or signal transmission technologies (e.g. DVB-T2).
- (15) The scope and mechanism of possible compensation for completing the transition in spectrum use within the 470-790 MHz frequency band should be analysed in accordance with the relevant national provisions as provided by Article 14 of Directive 2002/20/EC<sup>27</sup>, and have to be consistent with the provisions of Articles 107 and 108 TFEU.
- (16) Since the objective of this Decision, namely to ensure coordinated transition in spectrum use of the 470-790 MHz frequency band in the Union according to common objectives, cannot be sufficiently achieved by the Member States and can therefore, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set

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<sup>25</sup> Regional Radiocommunication Conference of 2006 for planning of the digital terrestrial broadcasting service in parts of Regions 1 and 3, in the frequency bands 174-230 MHz and 470-862 MHz (RRC-06) in Geneva.

<sup>26</sup> In the meaning of Directive 2010/13/EU of the European Parliament and of the Council (Audiovisual Media Services Directive).

<sup>27</sup> Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) (OJ L 108, 24.04.2002, p. 21)

out in that Article, this Decision does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS DECISION:

#### *Article 1*

- (1) By 30 June 2020, Member States shall allow the use of the 694-790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services only under harmonised technical conditions set by the Commission pursuant to Article 4 of Decision 676/2002/EC. Where necessary, Member States shall carry out the authorisation process or amend relevant existing rights to use the spectrum in accordance with Directive 2002/20/EC, in order to allow that use.
- (2) In order to allow the use of the 694-790 MHz frequency band in accordance with paragraph 1, Member States shall by 31 December 2017 conclude all necessary cross-border frequency coordination agreements within the Union.
- (3) Member States shall not be bound by the obligations under paragraphs 1 and 2 in geographical areas where frequency coordination with non-Union countries remains unresolved, as long as Member States make all practicable efforts to minimise the duration and geographical scope of such unresolved coordination and annually report the results to the Commission until the outstanding coordination issues have been resolved. This paragraph shall also apply to the spectrum coordination problems in the Republic of Cyprus arising from the fact that the Government of Cyprus is prevented from exercising effective control in part of its territory.

#### *Article 2*

By 30 June 2022, Member States shall allow the transfer or leasing of the rights of use of spectrum for electronic communications services in the 694-790 MHz frequency band.

#### *Article 3*

When Member States authorise the use of the 694-790 MHz frequency band or amend existing rights to use the 694-790 MHz frequency band, they shall take all necessary measures to ensure a high-quality level of coverage of their population and territory at speeds of at least 30 Mb/s, both indoors and outdoors, including in pre-determined national priority areas where necessary, and along major terrestrial transport paths. Such measures may include conditions facilitating or encouraging sharing network infrastructure or spectrum in compliance with Union law.

To that end, Member States shall assess and consult on the need to attach conditions to the rights of use for frequencies within the 694-790 MHz frequency band.

#### *Article 4*

- (1) Member States shall ensure availability of the 470-694 MHz frequency band or parts of the band for the terrestrial provision of audiovisual media services to mass audiences, including free television, and for use by wireless audio PMSE equipment, based on national broadcasting needs. Member States shall ensure that any other use of the 470-694 MHz frequency band on their territory does not cause harmful interference with the terrestrial provision of audiovisual media services in a neighbouring Member State.
- (2) If Member States authorise the use of spectrum in the 470-694 MHz frequency band for terrestrial systems capable of providing electronic communication services other than television broadcasting networks, such use shall be limited to downlink-only. Such use shall be without prejudice to obligations resulting from international agreements and Union law.

#### *Article 5*

By 30 June 2017, Member States shall adopt and make public their national plan and schedule ('national roadmap') for fulfilling their obligations under Articles 1 and 4 of this Decision.

In order to ensure that the use of the 694-790 MHz frequency band is in accordance with paragraph 1 of Article 1, Member States shall include in their national roadmaps, where appropriate, information on measures to limit the impact of the forthcoming transition process on the public and users of wireless audio PMSE equipment and to facilitate the timely availability of interoperable television broadcasting network equipment and receivers in the internal market.

#### *Article 6*

By 1 January 2025, the Commission, in cooperation with the Member States, shall carry out an assessment and report to the Council and Parliament on developments in the use of the 470-694 MHz frequency band, taking into account the social, economic, cultural and technological aspects affecting the use of the band pursuant to Articles 1 and 4. The report shall assess whether it is necessary to change the use of the 470-694 MHz frequency band, or any part of it, in the Union.

#### *Article 7*

This Decision shall enter into force on the 20th day following that of its publication in the *Official Journal of the European Union*.

#### *Article 8*

This Decision is addressed to the Member States.



Done at Brussels,

*For the European Parliament*  
*The President*

*For the Council*  
*The President*