Subject: State Aid SA.47258 (2017/N) – Germany
Spectrum migration 700 Mhz

Sir, /Madam,

1. Procedure

(1) On 9 January 2017, Germany informed the Commission on its plans to compensate network operators of digital terrestrial television broadcasting for certain costs resulting from the reallocation of spectrum use in the 694-790 MHz frequency band (hereafter called "700 MHz band") into a lower band.

(2) Following a meeting between the Commission and the German authorities, Germany provided on 11 May 2017 further information. On 9 November 2017, the German authorities notified the above mentioned measure. Requests for information were sent by the Commission on 22 December 2017 and 26 March and 23 July 2018. The German authorities submitted the requested information on 31 January, 24 May and 12 September 2018.

2. Detailed Description of the Measure

(3) The notified measure ("the Measure") aims to compensate network operators of digital terrestrial television (DTT) broadcasting for certain costs resulting from the reallocation of spectrum use in the 694-790 MHz frequency band (the "700 MHz band") to the use by terrestrial systems capable of providing wireless broadband electronic communications services (5G mobile services).
2.1. Context

2.1.1. Market description

Broadcasting services can be transmitted via cable, satellite, internet or terrestrial signals (DTT). DTT transmission in Germany has an average market share of about 9% and of up to 26% in areas of high population density. Germany recognises the special importance of free to air DTT broadcasting in maintaining freedom of individual and public opinion formation and diversity. It is considered to be accessible, anonymous and easy to get as it does not require any contract or costs for the viewers, apart from the receiving set.

For terrestrial television broadcasting, the frequencies are allocated by the Federal Network Agency (Bundesnetzagentur) to the broadcast network operators. In Germany, three terrestrial broadcasting network operators are active. Media Broadcast operates three national multiplexes for the commercial broadcasters and one national multiplex for the public service broadcaster ZDF. It also operates in some federal States a regional multiplex for the public service broadcaster ARD. ARD operates its own transmission network in the other federal States. Mugler AG operates broadcasting transmitters for individual local programmes in some federal States.

2.1.2. European Radio Spectrum Policy

The notified measure is related to the European radio spectrum policy. In view of the importance of extending wireless broadband coverage, the multi-annual Radio Spectrum Policy Programme\(^1\) set the goal to free up additional spectrum for mobile broadband services.

The first step was the release of the "Digital Dividend", which became possible through the switch from analogue to digital broadcasting and which affected also the other TV transmission technologies cable and satellite\(^2\). For terrestrial broadcasting, this technology change allowed re-organising and freeing terrestrial frequencies. In that context, the Commission had recommended to Member States in 2009 that they not only cease analogue terrestrial television broadcasting but also free up the 790-862 MHz frequency band at the latest by 2013 for mobile services.

Now, a second step concerns the liberation of the 700 MHz band of terrestrial television broadcasting by 30 June 2020. Unlike at the occasion of a switch from analogue to digital television, it is not triggered by a change concerning the transmission technology but by the wish to obtain additional spectrum for upgrading mobile networks, in particular for wide-ranging 5G service coverage. To achieve universal, high-quality wireless connectivity in Europe, Decision (EU) 2017/899 of the European Parliament and the Council of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union (the "EPaC Decision")\(^3\) aims to repurpose the 700 MHz band for mobile electronic communication services.


(‘wireless broadband electronic communication services’) and make it available for effective use by June 2020. As a consequence, TV signal transmission channels that use the 700 MHz band have to move by that date to spectrum below the 700 MHz band, more precisely to the 470-694 MHz band.

(9) In Decision (EU) 2016/687, the Commission already stated in recital 11 that terrestrial wireless broadband electronic communications services and national options in the 700 MHz frequency band should ensure appropriate protection of incumbent terrestrial television broadcasting services below 694 MHz.

(10) Likewise, the EPaC Decision states in recital 20 that Member States should ensure continuity for the television broadcasting services that vacate the 700 MHz band. More specifically, Article 4 of that decision states that "Member States shall ensure availability at least until 2030 of the 470-694 MHz frequency band for the terrestrial provision of broadcasting services...". In recital 21, the EPaC Decision states that the scope of and mechanism for possible compensation for completing the transition in spectrum use, in particular for end users, should be analysed in accordance with the relevant national provisions and should be consistent with Article 107 TFEU. Finally, Article 6 of the Decision states that "Member States may, where appropriate and in accordance with Union law, ensure that adequate compensation for the direct cost, in particular for end users, of the migration or reallocation of spectrum use is provided...".

2.1.3. Evolution of the Digital Dividend in Germany

(11) Analogue television broadcasting in Germany ceased in 2008; the 790-862 MHz frequency band was assigned to mobile services in autumn 2010. Regarding the transposition of the EPaC Decision, Germany, anticipating the Decision's objectives, has been preparing the migration of the broadcasting signals since 2014. On 11 December 2014, a political agreement was reached between the federal government and the regional authorities on the release of the 700 MHz band from terrestrial television broadcasting to the benefit of mobile services by early 2019. This means that the operators, which have frequency use rights in the 700 MHz band until 2025, would have to waive their rights for the achievement of the national and European objective.

(12) Freeing up of the 700 MHz band will result in a reduction of the available frequencies for terrestrial television to the 470 to 694 MHz band. The transmission platform operators have thus to re-arrange the amounts of channels they currently use in a lower band width. That move provokes costs, at the very least the direct technical conversion costs resulting from the liberation of the 694-790 MHz frequency band. Other transmission technologies like cable, satellite, or internet are not affected by that migration process.

(13) According to German Telecommunication law (Telekommunikationsgesetz), frequency use rights are limited in time. The frequency use right duration allows right holders the amortisation of the investment; they may trust that they can make full use of the accorded time period. In the current case, the State is not free to

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4 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 (OJ L 118, 4.5.2016, p. 4).
simply revoke or restrict the accorded rights earlier than by the end of their validity (in 2025).

(14) Germany could have legally obliged, by law or administrative act, the platform operators to change frequency before 2025. In that case, Germany advised, it would be bound under general principles of German law of State liability to compensate the platform operators for taking away from them frequency use rights to which they were still entitled for several more years.

(15) In order to start the liberation of the 700 MHz band as early as possible and to avoid possible time consuming litigation which could hold up the process, the German authorities pursued a consensual way to liberate the 700 MHz band, as opposed to an enforced withdrawal of the use rights by administrative act of the responsible authority Bundesnetzagentur.

(16) The German authorities reached, in 2016, a consensus with the right holders which accepted to waive their frequency assignment in the 700 MHz band before the end of the period of validity of their licences (2025). It covers the planned schedule for allowing mobile services to use the 700 MHz band, the clearance of the broadcasting services from that band and compensation that will be granted for the costs incurred by networks operators. The willingness to give up the right of use of the 700 MHz band by the right holders took place in expectation of compensation of the costs related to adapt transmission technology and equipment to a lower frequency band. The freeing up of the 700 MHz band has started in the first quarter of 2017 and should be finished in spring 2019.

2.2. The Measure in detail

(17) **Objective:** The Measure aims to support costs resulting from the reallocation of spectrum use in the 694-790 MHz frequency band for mobile services borne by the operators of DTT signal transmission platforms and the move of digital terrestrial television broadcasting to the 470-694 MHz frequency band by end of March 2019 at the latest.

(18) **Legal basis:** The conditions for compensation are provided by the German Directive of 18 September 2015 on the granting of equity compensation to network operators of terrestrial television broadcasting for conversion costs resulting from the repurposing of the 694-790 MHz frequency band (Richtlinie über die Gewährung von Billigkeitsleistungen für Ausgleichszahlungen an Sendernetzbetreiber des terrestrischen Fernsehundfunks für aus der Umwidmung der Frequenzen im Frequenzbereich 694 bis 790 MHz resultierenden Umstellungskosten, hereafter called "the German Directive")\(^5\).

(19) **Granting authority:** the Federal Ministry of Transport and Digital Infrastructure is responsible for the implementation of the Measure.

(20) **Beneficiaries:** Compensation will only be granted to terrestrial TV transmission platform operators which are holders of a frequency assignment for broadcasting services in the 470-790 MHz frequency band.

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\(^5\) Bundesanzeiger AT, 7. 10. 2015, S. 1.
(21) **Eligible costs:** Only direct technical conversion costs resulting from the liberation of the 700 MHz band are eligible for compensation. This covers both costs resulting from the switching from the 700 MHz band to the sub-700 MHz band and costs resulting from switching frequency within the sub-700 MHz band. More precisely, those conversion costs include:

- costs for acquisition of technical components required for the conversion (including antennas and aerial systems);
- costs of work for changing transmitters, antennas, aerial system, switches, and mask filters;
- costs of changing the modulation allocation.

(22) These costs can be compensated only if they are necessary for planning, designing and implementing any frequency change in the 470-790 MHz frequency band. They are one-off costs and do not involve operating and maintenance costs. For each category of transmitters (low-power transmitters with a power of up to and including 10 kilowatt (kW) and medium/high-power transmitters with power higher than 10 kW), the German authorities have taken into account estimates for filter and combiner and for antennas.

(23) The German authorities have provided a detailed breakdown of the possible costs, calculated on the basis of the cost estimates provided by the transmission platform operators and the regulatory authority Bundesnetzagentur. The estimates from both sources were comparable and allowed the German authorities to determine the typical costs for the conversion of each of the 65 low-power transmitters at around EUR 41 200. The typical costs for the 221 medium/high-power transmitters are around EUR 145 900.

(24) **Form and calculation of the compensation:** Compensation will be granted in the form of a lump sum, based on the transmission power, and corrected by a proportionate amount of depreciation in view of the fact that the items which need to be replaced have already been in use. This leads to an average figure per plant of EUR 20 000 for the 65 low-power transmitters and of EUR 125 000 for the 221 medium/high-power transmitters. Accordingly, the part of the costs of the migration which would be covered by compensation payments will range from 48 % to 86 % of the actual costs.

(25) When more than one change of frequency is required for a radio transmitter, the amount of compensation for the second frequency change is EUR 5000 for a transmission power up to and including 10 kilowatt (kW) and EUR 30 000 for a transmission power exceeding 10 kW.

(26) If in particular cases the actual costs exceed twice the standard compensation amount allocated in principle, network operators may apply for compensation of the costs incurred based on their actual spending. However, if the actual migration costs per transmitter exceed EUR 500 000, operators must first obtain the Federal Network Agency's confirmation that these costs are actually necessary, in order to exclude over-compensation.

(27) The German Directive explicitly excludes costs resulting from the upgrade of the television broadcasting transmission standard from DVB-T to DVB-T2 and does
also not cover any costs related to simulcast transmission\(^6\) which would in any case only be a marketing option for the upgrade from DVB-T to DVB-T2. The spectrum migration in Germany as such does not require consumers to acquire new signal reception equipment.

(28) **Cumulation:** The German authorities confirm that the compensation cannot be cumulated with any other State aid.

(29) **Budget:** The German authorities have provided an overall amount of EUR 50 million from the federal budget.

(30) **Duration:** The scheme will support the eligible costs incurred for that migration exercise which should be terminated by mid-2019. No compensation will be paid out before its approval by the Commission.

3. **ASSESSMENT OF THE MEASURE**

3.1. **Existence of aid within the meaning of Article 107 (1) of the TFEU**

(31) The Commission has examined whether the Measure in question can be qualified as State aid within the meaning of Article 107(1) of the Treaty, which provides that “any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, shall, in so far as it affects trade between Member States, be incompatible with the internal market”.

(32) According to the settled case-law of the Court of Justice, classification as ‘State aid’ within the meaning of Article 107(1) TFEU requires that all the conditions set out in that provision are fulfilled. Thus, first, there must be intervention by the State or through State resources; second, the intervention must be liable to affect trade between Member States; third, it must confer a selective advantage on the recipient; fourth, it must distort or threaten to distort competition\(^7\).

3.1.1. **State resources for an economic activity**

(33) The operation of television transmission networks\(^8\) constitutes an economic activity and the support of that activity is directly financed by the federal budget, hence funded from State resources. The federal government decides about the award of the support payments and the conditions under which that happens. Accordingly, the support is imputable to the State.

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\(^6\) Like it was provided for e.g. in the State aid measure SA.32619 (2012/C (ex 2011/N)) notified by the Kingdom of Spain for the compensation of certain costs for the release of the digital dividend, Commission Decision (EU) 2016/2395 of 5 August 2016 (OJ L 361, 31.12.2016, p. 1).


3.1.2. Economic advantage

(34) In order to qualify as State aid under article 107(1) TFEU, the measure has to grant an advantage that a beneficiary would not have received under normal market conditions, in the absence of State intervention. That includes any measure that mitigates the charges which are normally included in the budget of an undertaking.

(35) The case-law of the Courts indicates that costs bound with legal obligations are normally borne by the undertaking affected and thus any compensatory measure in this context is considered to be aid. By way of example, the Court of Justice specified that the costs of undertakings arising from regulatory measures are included by their nature in the budgets of undertakings. It would in such a case constitute an advantage if the State covered the costs of an undertaking resulting from its adaptation to new legal obligations.

(36) In the present case the licences of the beneficiaries foresaw validity until 2025. Also, there is no national measure in place as a result of which they would be legally obliged to give up their frequency rights earlier than by the end of their validity. The only existing justification foreseen by the legislation on spectrum use licences (Telekommunikationsgesetz) for the removal or withdrawal of the licence before its expiry date is according to section 63 the non-fulfilment of obligations linked to the licence, such as its non-use or lack of financial viability. Section 63(3) states that in those cases there would be no right for compensation or damages according to general rules of administrative law on compensation rights for the revocation of rights.

(37) However, the administrative act which was bestowing the licence does contain a reservation of a right to revoke the licence before its expiry, on condition that this is due to the transposition of international obligations and that a substitute frequency is allocated. It does not acknowledge any duty to financially compensate network operators in such a case.

(38) The migration of broadcasting services currently using the 700 MHz band to a lower band in order to allow the use of more spectrum by mobile services has been determined by the EPaC Decision. According to article 1 of that Decision, Member States should allow the use of 700 MHz band by 5G mobile services in principle by 30 June 2020.

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Pursuant to Article 288 TFEU, European Decisions are binding it their entirety on its addressees, which are in the present case the Member States. Therefore, Member States are obliged to take the necessary steps to liberate by June 2020 the 700 MHz band from terrestrial broadcasting services.

Because of the revocation reservation in the act bestowing the licence, mentioned in recital 37 above, and because of past experience with network migration requirements, the operators are aware that they may be required to liberate frequencies before expiry of the right as a result of, for instance, European decisions about the use of certain frequencies. The wording of that reservation does not suggest that they may expect compensation going beyond assignment of substitute frequencies.

Therefore it can be considered that such measures and their consequences are included in the budget of undertakings active in the market of DTT. Operators could not rely upon being able to use the frequencies up to at least 2025 and could be expected to give up, in the interests of policy objectives, the frequency rights allocated to them. They could be confident only that their ability to transmit TV signals would not be put at risk as such.

Yet no national provision legally obliges the 700 MHz band right holders to vacate that band already now. However, the agreement with the platform operators anticipates an operation and costs that would have to be implemented and borne by the beneficiaries by June 2020. That advancement does therefore not change the fact that eventually the envisaged compensation would mitigate a charge which would have to be borne at a later point in time by the undertakings as a consequence of an otherwise forthcoming regulatory change or administrative act.

The Case-law of Union Courts confirms that costs stemming from the implementation of a legal obligation have to be borne by the undertakings affected. In France v. Commission\(^\text{13}\), the ECJ specified that the costs of undertakings arising from regulatory measures are included by their nature in the budgets of undertakings: "It should be recalled that the costs for undertakings [...] arise from collective agreements, concluded between employers and trade unions, which undertakings are bound to observe, either because they have acceded to those agreements or because those agreements have been extended by regulation. Such costs are included, by their nature, in the budgets of undertakings".

In the case at hand, the Measure foresees a compensation of costs that DTT broadcasters would normally have to bear from their own budget. It relieves these undertakings from regulatory costs that should be inherent to their business costs while other operators have to bear typical regulatory costs by themselves.

However, Germany points out that it would be obliged under general principles of German law to compensate the platform operators for taking away from them frequency use rights to which they were still entitled for a couple of years.

According to Germany, compensation under general principles of German law is based on the understanding that frequency use rights are subject to the right to property provisions under Article 14 of the German Constitution (Grundgesetz). An

\(^{13}\) Judgement of 5 October 1999, France v. Commission , C-251/97, ECLI:EU:C:1999:480, paragraph 40.
encroachment upon frequency assignments and the associated use rights during the period of validity of the licences as extensive as the withdrawal of current frequencies and the granting of replacement frequencies affects the very basis of the activity of the terrestrial broadcasting network operators. The cost resulting from reallocation of frequencies is thus not a charge normally included in the budget of an undertaking, like for instance, payment of taxes or social security contributions or an exemption from the obligation to pay fines.\footnote{See also Judgments of 5 October 1999, Case C-251/97, France v Commission, ECLI:EU:C:1999:480, paragraph 40; 10 January 2006, Case C-222/04, Cassa di Risparmio di Firenze, ECLI:EU:C:2006:8, paragraph 131; 14 February 1990, C-301/87, France v Commission, ECLI:EU:C:1990:67, paragraph 41.}

(47) Germany argues that in view of the property like character of the frequency use right during the time for which it was granted, the broadcasting network operators are entitled to claim compensation based on the legal concept of expropriating encroachment [enteignender Eingriff]. This legal concept is based on customary law and has been developed by German case law (the German authorities refer to relevant jurisprudence of the Federal Constitutional Court and the Federal Court of Justice) as an established element of the German State liability law system. It involves the principle of compensation for the consequences of lawful exercise of state power. The claim arising from expropriating encroachment serves to compensate for unreasonable, generally atypical and unforeseen side effects of a lawful impairment of property rights. Compensation must be granted if a property or comparable position is directly impaired as the result of side effects of administrative action that is in itself lawful but imposes a particular damage [Sonderopfer, literally special sacrifice] on those concerned.

(48) Germany explains, with reference to judgments of the Constitutional Court, that under German constitutional law rights which serve to protect the position of proprietors Germany also cover all rights which are assigned to the owner of that right in a way that it can exercise or use the authority related to the right according to its own decisions and in its private and economic interest. That would therefore also include use rights bestowed by the State.

(49) Germany argues that the costs resulting from spectrum migration would be such side effects of the change in spectrum use, while the main objective is the liberation of the 700 MHz band. Germany argues further, that the costs are unforeseeable.

(50) In the case of the application of the market economy operator principle, the public authority must demonstrate that a prudent market economy operator would have behaved in the same way in similar circumstances. Likewise, in a case of possible State liability it would need to be demonstrated, whether – and to what extent - such liability actually exists. Any prudent public authority would therefore be expected to carry out its own ex ante assessment of the possible damages claims of a company when entering into a particular agreement which factors in such claims\footnote{Cf. by analogy Case C-124/10 P, Commission v. EDF, ECLI:EU:C:2012:318, paragraphs 84, 85 and 105; see, by way of analogy, Commission decision of 12 March 2014 in Case SA.36249 (2014/N-3): Spain – Amendment of the Restructuring of CEISS through integration with Unicaja Banco, recitals 59, 60, OJ C 141, 9.5.2014, p.1.}. It must provide evidence showing that the decision to carry out the transaction was taken on the basis of sound economic evaluations comparable to those which, in similar circumstances, a rational private operator (with
characteristics similar to those of the public body concerned) would have had carried out to determine the transaction’s profitability or economic advantages. That requires that there are no doubts that the authority would be held liable for its actions.

(51) However, in the view of the Commission it is questionable whether the costs resulting from the spectrum migration could be considered to be unforeseeable. That measure is already envisaged by the acts granting the licence to use that spectrum, as set out in recital 37 above. The Commission doubts therefore that the conditions of the general rules of State compensation for expropriation [Enteignender Eingriff] would have been fulfilled in the hypothetical case of compulsory frequency migration. The transmission platform operators knew from the licence itself, from the experience with the previous spectrum migration, and from the preparations on international and European level that such a situation as the one which requires the liberation of the 700 MHz band would occur in the near future with high likelihood and had to count, therefore, with a situation which requires replacement investments.

(52) Considering those legal uncertainties, a market economy operator in a comparable situation would have possibly risked a court action for damages of the platform operators instead of acknowledging such liability. In light of the above, the compensation of costs incurred in freeing up the frequencies can be deemed to constitute an economic advantage within the meaning of Article 107(1) TFEU.

3.1.3. Selectivity of the advantage

(53) In accordance with Article 107(1) TFEU, to be considered State aid, a measure must be specific or selective in that it favours only certain undertakings or the production of certain goods.

(54) The beneficiaries of the Measure are undertakings in the sector of broadcasting transmission services, which operate via the DTT technology as compared to competing alternative operators, such as satellite, cable or IPTV.

(55) In Belgium v Commission\textsuperscript{16}, the ECJ compared the costs of operators in the bovine sector for BSE screening tests with costs which undertakings in other sectors are also obliged to perform to place their products on the market. The Court stated: "It is clear [...] that the situation of operators in the bovine sector was implicitly but necessarily compared to that of all the undertakings which, like them, are subject to inspections which they are required to perform before placing their products on the market”. It furthermore confirmed that "the tests which they ... [the operators] were required to perform before placing their products on the market or trading in them were provided free of charge, whereas undertakings in other sectors were unable to avail themselves of that possibility”.

(56) The Court confirmed that even if BSE screening tests where specifically designed for the bovine sector which differed from tests that other sectors had to bear, the relief of these costs were regulatory costs that are typical for any producer of goods that are subject to tests.

The Measure at hand allows TV signal broadcasters to fulfil the obligations imposed on them by law – to provide TV signal transmission services - and therefore keep their licences. In the absence of the Measure, the broadcasters would also be obliged, due to the entry into force of the EPaC Decision, to fulfil the obligation of providing the broadcasting service with continuity and thus to bear all the costs derived from their licences. The Measure therefore provides relief of a typical normal regulatory cost.

The EPaC Decision sets out a common schedule for the repurposing of the 700 MHz band for mobile services by June 2020 and asks Member States to ensure the availability of the 470-694 MHz frequency band available for terrestrial provision of broadcasting services.

Although it appears that the economic operators that are directly affected by the obligation to liberate are the DTT signal transmission services, also other economic operators offering broadcasting services with other technologies are subject to comparable regulatory constraints. Satellite operators for example are also subject to spectrum legislation and the obligation to obtain a frequency assignment and possibly re-assignment according to section 55 of the Telekommunikationsgesetz. Accordingly, the Commission concludes that the measure is selective.

3.1.4. Distortion of competition and effect on intra-Union trade

State measures fall within the scope of Article 107(1) of the Treaty in so far as they distort or threaten to distort competition and affect trade between Member States. According to the case law of Union Courts, the concept of “effect on trade between Member States” is linked to the notion of distortion of competition and both are often inextricably linked. In this regard, the Court has stated that “In particular, where State financial aid strengthens the position of an undertaking as compared with other undertakings competing in intra-Community trade, the latter must be regarded as affected by that aid”\(^\text{17}\).

As explained above, the Measure favours the terrestrial television network operators. The beneficiaries of the Measure compete with other alternative providers (satellite, cable, IPTV) and they are active at international level. The Commission considers that the operation of television transmission networks is open to competition within the EU\(^\text{18}\).

Therefore, the notified measure may result in distortions of competition among network operators and would have the potential to distort competition in the internal market and to have an effect on intra-Union trade.

3.1.5. Conclusion on the existence of aid

On account of the preceding considerations, the Measure fulfils the criteria laid down in Article 107(1) of the Treaty and constitutes State aid within the meaning of that Article.

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3.2. Compatibility of the aid

(64) Article 107 (3) (c) of the Treaty states that "aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest" may be considered to be compatible with the internal market.

(65) In order for the aid to be compatible with the internal market under Article 107 (3) (c), the Commission balances the positive and negative effects of the aid. In applying the balancing test, the Commission assesses the following questions:

1) Is the aid measure aimed at a well-defined objective of common interest?

2) Is the aid well designed to deliver the objective of common interest (i.e. does the proposed aid address a market failure or other objective)? In particular:
   a) Is the aid measure an appropriate instrument, i.e. are there other, better placed instruments?
   b) Is the aid necessary, is there an incentive effect, i.e. does the aid change the behaviour of firms?
   c) Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?

3) Are the distortions of competition and effect on trade limited so that the overall balance is positive?

4) Does the Measure comply with the transparency obligations?

3.2.1. Objective of common interest

(66) In its Communication of 6 May 2015 entitled 'A Digital Single Market Strategy for Europe'\(^{19}\), the Commission recognised the importance of the 700 MHz frequency band for ensuring the provision of high quality broadband services. It further stressed the need for a coordinated release of that frequency band while ensuring the specific needs of broadcasting services distribution.

(67) On 14 September 2016, the Commission adopted the Gigabit Communication\(^{20}\) which states the objective of 5G coverage of all urban areas and all major terrestrial transport paths for 2025. In order to achieve this goal, the Commission acknowledged the necessity of rapid availability of new spectrum, like the 700 MHz band for 5G coverage in rural areas and indoor use in cities.

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Effective and coordinated management of spectrum has been deemed a condition for the industrial shift to 5G, which will create a favourable environment for electronic communications networks and services to develop, thus maximising the growth potential of the digital economy. In that context, it is considered that the 470-790 MHz frequency band represents an opportunity for the development of those new digital services, but it is currently shared across the Union between digital terrestrial television services and mobile services.

The EPaC Decision provides a coordinated approach for the efficient use of the 470-794 MHz frequency band. As described above, the objective of the Decision is to vacate the 700 MHz band from the terrestrial television services and PMSE, which will migrate to the sub-700 MHz band, in order to allow the use of the 700 MHz band by mobile services.

The EPaC Decision names also another objective of the Union. It states in recital 20 that Member States should ensure continuity for the television broadcasting services that vacate the 700 MHz band. More specifically, Article 4 of that decision states that "Member States shall ensure availability at least until 2030 of the 470-694 MHz frequency band for the terrestrial provision of broadcasting services…".

The Measure at hand has the same objective as the EPaC Decision. It is therefore aimed at a well-defined objective of common interest.

3.2.2. Aid well designed to deliver the objective of common interest

3.2.2.1. Market failure

Only where market forces alone, in the absence of aid, would not be able to reach an efficient outcome, a market failure can be considered to exist. In this case, government intervention may correct the market failure and allow reaching the common interest goal.

Government intervention is necessary in the present case, as the allocation and use of terrestrial frequencies is not subject to market forces but fully regulated. Furthermore, the commercial operators of digital terrestrial TV signal transmission platforms have no market incentive to liberate a certain part of the spectrum and move to another part of it for the benefit of other operators. Migration of the former entails costs but does not offer new possibilities for their activities.

Currently the DTT platforms are not yet legally obliged to liberate the 700 MHz band. They have a concession lasting until 2025, and Member States are not obliged to switch before June 2020 (or even 2022). In view of this, the platform operators have neither a legal nor a commercial incentive to give up the respective band before June 2020.

Consequently, the Commission considers that market failure exists in the present case as market players would not enter into the planned migration project by themselves. Market players are not even entitled to arrange such reallocation on their own initiative. It is however possible that they rather try to block that process by initiating court procedures.
3.2.2.2. Appropriate instrument and incentive effect

(76) According to the German authorities, direct costs compensation was the only possibility to obtain the agreement of the network operators for the early waiver of their licences in order to achieve the national and European objective of clearance of the 700 MHz band. The licences for the spectrum use which the operators are currently holding contain a reservation of a right to revoke the licence before its expiry, on condition that this is due to the transposition of obligations from international agreements. However, before such an obligation under international or European law comes into effect, the principles of the German telecommunication law do not allow the government to revoke the licence; thus the licence holders have to be incentivised by other means to accept a modification of the licence they are holding.

(77) Moreover, the EPaC Decision itself alludes to the possibility of Member States offering compensation of the direct cost of migration and reallocation. In the proposed measure, only the direct costs would be compensated.

(78) The measure is therefore appropriate.

(79) As regards the incentive effect, the aid to television signal transmission network operators accelerates the migration and conversion of the beneficiaries from the 700 MHz band to the sub-700 MHz frequency band. There is no legal obligation for right holders to give up their frequency licences before Germany is obliged by the EPaC Decision to have the 700 MHz band liberated for use by mobile services by June 2020. The notified measure aims at ensuring that that liberation will have been completed by the first half of 2019.

(80) As mentioned in the previous section, the operators of digital terrestrial TV signal transmission platforms have no commercial incentive to liberate a certain part of the spectrum and move to another part of it for the benefit of mobile telephony operators. The migration does not provide any technical improvement that could incentivise them to complete the transition on their own.

(81) In addition, as described in recitals 45 to 49, a spectrum migration enforced by regulatory measures could possibly give ground for a claim for damages under rules of national law on State liability and lead to litigation and thus block or delay substantially the migration process. That would jeopardise the schedule agreed by Council and Parliament which obliges Member States, by the means they consider necessary and appropriate within their national legal framework, to ensure liberation of the 700 MHz band from its current users by mid-2020, although these may still have rights to use that band beyond that date. It is important for the EU that Member States engage with the relevant undertakings, in order to allow the EU wide simultaneous introduction of 5G mobile services from 2020. In order to reach the objective, Member States need to be able to start the assignment of 5G licences during 2019; they need to be able to give reliable dates to the telecommunication operators, to which they sell the licences, from when the operators may start using the frequencies for which they invest in infrastructure. Delays in the availability of the frequencies may lead to damages claims or at least delayed payments of the licence fees.

(82) There is also an interest in the joint smooth transition because frequency assignments have to be coordinated between neighbouring countries in order to
avoid conflicting programme transmissions. Delay in one country could thus block migration in other Member States. Finally, DTT operators, which operate with a declining market share, may lack an incentive to continue providing the service, although the EPaC Decision expressed the common interest in continuing the provision of that service until 2030.

(83) In light of the above, it can be concluded that the measure will ensure the continuous functioning of the DTT operation services.

(84) Moreover, with the voluntary and compensated release of the 700 MHz band, DTT platform operators allow starting the rollout of 5G mobile networks already before the date where it would have been obligatory for Member States to mandate such a migration. The shift to 5G will significantly increase the growth potential of the digital economy and for the development of new digital services. The increasing economic and social importance of the digital economy makes enhanced wireless mobile network capacity imperative. Germany wants to benefit from the impact of 5G on the economy as a whole as early as possible. The Commission itself had underlined the importance of rapid availability of the 700 MHz band.

(85) Last but not least, in the absence of the compensation of costs resulting from the imposed spectrum migration, the transmission platform operators will be imposing the additional costs on their customers, the TV broadcasters. Some of them may, as a consequence, feel inclined to abandon the transmission of their programme via the terrestrial platform. That would be in conflict with the policy objective to ensure continuity for the television broadcasting services that vacate the 700 MHz band and thus to avoid that the present change negatively affects the present offer. Higher prices would also affect the public broadcasters which are client of a DTT platform and thus increase their costs which would need to be covered by household based fees.

(86) Compensation is limited to direct costs. That avoids that the Measure would lead to cost savings on the part of the DTT operators which they could pass on to broadcasters through lower prices or which would make DTT transmission for them financially more attractive than other transmission technologies.

(87) Possible alternative aid to end users, as referred to by Article 6 of the EPaC Decision, is not applicable for the migration costs which are only arising at the part of the transmission platform operators. The mere spectrum reassignment does not constitute a technology change which would require end users to acquire new reception equipment. Additional costs for end users would arise in the case of the upgrade of the DVB-T transmission standard to DVB-T2. That upgrade, which is also addressed by the EPaC Decision, would necessitate new technical reception equipment for the consumers. However, that upgrade is not the objective of the notified measure.

(88) In conclusion, the Commission finds that the measure, in the form of an aid for the direct costs resulting from the migration of frequency, is an appropriate instrument to vacate the 700 MHz band and has an incentive effect on the network operators.

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21 Cf. recitals 9 and 10 of the EPaC Decision.
22 Cf. recital 67 above.
3.2.2.3. Proportionality

(89) The aid is limited to cover part of the direct costs that are necessary for adapting the technical equipment needed for completing the frequency conversion. Germany presented a detailed breakdown of the costs for the single elements of technical equipment to be installed at the transmitters. The level of the costs has been verified by the Bundesnetzagentur. No other cost that is not directly linked to implementation of the frequency shift will be compensated.

(90) The measure provides for lump sum compensation payments. This is appropriate in a case where the costs at the many radio transmitters covering the country can be standardised. Within the same range of transmission power the same technical changes have to be performed at each of the transmitters, with standardised equipment. This allows fixing standard support levels that exclude over-compensation. If beneficiaries claim to have incurred higher costs for single transmitters, they have to apply for compensation of the costs incurred based on their actual spending.

(91) Furthermore, the transmission platform operators will not obtain any other direct or indirect benefit from the spectrum migration to which they agreed that would offset the costs they incur as a result of that exercise.

(92) Hence, the Commission finds that the Measure is proportionate to the objective pursued.

3.2.3. Limited negative impacts

(93) Compensation will only be granted for part of the direct costs strictly necessary for the implementation of the objective of the liberation of the 700 MHz band by terrestrial television services in Germany. The other broadcasting technologies (IPTV, cable or satellite) are not as such affected by the decision taken by the Council and Parliament to move DTT platforms out of a certain transmission corridor which they currently occupy. Thus, only that technology is affected, while Member States agreed at the same time that it should still be maintained. In the absence of over-compensation, the platform operators which are active in several Member States do not benefit from funding that would allow them to strengthen their financial position with regard to activities in other Member States.

(94) In Germany, the spectrum reassignment does as such also not lead to a technology change; so it will not lead to an improvement of the quality of the DTT signal and its competitive position in comparison with other platforms. Aim of the Measure is not to offer additional financial means to the normal operation of DTT platforms. It is just covering part of the costs which arise due to State measures reorganising the spectrum. The measure just ensures maintaining the status quo ante.

(95) DTT transmission platform operators are the only companies that can effectively support the objective of freeing the 700 MHz band in favour of mobile communications. They are the only infrastructure managers that have frequency usage rights in the relevant frequency range.

(96) Moreover, the proposed scheme treats equally all firms which are affected by the planned liberation of that band. It does not introduce distinctions between operators which would not be justified by their respective characteristics. This is unlike the
context of the Digital Dividend with the switch from analogue to digital television which affected also the competing transmission technologies of cable and satellite\textsuperscript{23}. As a consequence, the competitive balance between the various platform operators is not affected to a degree that would not be justified by the objectives pursued by the EPaC Decision.

(97) Accordingly, there is no negative impact on trading conditions contrary to the common interest.

3.2.4. Transparency

(98) The German authorities have committed to publish the text of the Measure as well as the information related to the beneficiaries of any aid that exceeds EUR 500 000. Therefore, the Measure complies with the transparency requirements.

4. Conclusion

(99) The Commission has accordingly decided not to raise objections to the aid on the grounds that it is compatible with the internal market pursuant to Article 107 (3) (c) of the Treaty on the Functioning of the European Union.

If this letter contains confidential information which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site: http://ec.europa.eu/competition/elojade/isef/index.cfm.

Your request should be sent electronically to the following address:
European Commission, 
Directorate-General Competition
State Aid Greffe
B-1049 Brussels
Stateaidgreffe@ec.europa.eu

Yours faithfully

For the Commission

Margrethe VESTAGER
Member of the Commission

\textsuperscript{23} For that reason, the Commission had found it a discriminating violation of the principle of technological neutrality that only DTT and not also cable or satellite transmission came into the benefit of support for simulcasting (Commission decision of 9 November 2005 in case C25/2004, DVB-T Berlin-Brandenburg, confirmed by the Court of Justice in Judgment of 15 September 2011, Case C-544/09, Germany v Commission, ECLI:EU:C:2011:584).