Subject: State aid SA.43666 (2015/N) – Germany
KWKG – Reform of the Combined Heat and Power Generation Act, CHP Act - Railways

Sir,

1. Procedure

(1) On 19 November 2015 the German authorities notified to the Commission the amendment of the Act on Combined Heat and Power Generation (Novelle des Kraft-Wärme-Kopplungsgesetzes KWKG, hereinafter "CHP Act") originally enacted on 1 April 2002 and amended on 21 December 2015.

(2) On 22 January 2016, the Commission requested information from Germany, which replied on 8 March 2016.

(3) On 3 May 2016, the Commission requested additional information from Germany, which replied on 25 May 2016.

(4) On 6 July 2016, Germany waived its right under Article 342 TFEU in conjunction with Article 3 of Regulation (EEC) No 1/1958 to have the decision adopted in German and agreed to the decision being adopted in English.

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2. DESCRIPTION OF THE MEASURE

2.1. Overall objectives and scope of the reform of the CHP Act

(5) The purpose of the CHP Act is to contribute to increase the net electricity production from cogeneration installations to 110 TWh by 2020 and to 120 TWh by 2025 so as to increase energy efficiency and environmental and climate protection. The aim of the CHP is the increase of the share of CHP in electricity production which consequently will lead to a lower consumption of resources and greater climate protection in power generation (indirect target). For reasons of climate protection, highly efficient combined heat and power plants are promoted by the CHP Act. The national German target for development of CHP stands in line with the various energy policy goals such as the development of renewable energy, increasing energy efficiency, the reduction of CO2 emissions, and aims supports those.

(6) Support for CHP under the German CHP Act is funded via a surcharge that is borne by electricity consumers. The relevant section 26 para. 3 limits this surcharge for railway undertakings. This Decision concerns only the derogations provided in the CHP Act for railway undertakings. Germany has notified under procedure SA.42393 the CHP Act and reductions for other undertakings than railways.

2.2. Beneficiaries and duration of the CHP Act

(7) Beneficiaries of section 26 para. 3 German CHP Act are electricity-run railway undertakings as defined in the Renewable Energies Act (EEG). These are any undertaking that operates vehicles like railway trains, magnetic levitation trains, electric tramways or other trains on rails that are similar in construction type or method of operation, or infrastructure necessary for the operation of such vehicles for the purpose of transportation of persons or freight (section 5 § 28 EEG).

(8) The CHP surcharge applies to railway undertakings reaching 1 GWh of consumption in a given year. Railway undertakings above this threshold shall benefit for the amount above their consumption of 1 GWh of the reduced surcharge, whereas railway undertakings below this threshold shall pay 100% of the surcharge.

(9) According to § 26 paragraph 2 sentence 2 of the CHP Act for a reduction of the CHP surcharge to the amount of 0,03 ct/kWh, the railway undertaking needs to demonstrate that the proportion between its total annual electricity costs and its total turnover of the last full calendar year has been higher than 4%.

(10) According to § 26 paragraph 2 sentence 1 of the CHP Act, any railway undertaking that can demonstrate a minimum electricity consumption of 1 GWh in a given calendar year, will benefit from a reduced surcharge, capped to the amount of 0,04 ct/kWh. This is valid for any railway undertaking, regardless at which moment in time during the calendar year the respective railway undertaking has started its activity.

(11) Installations, storage facilities and district heating/cooling networks under the CHP Act can benefit from the KWKG if they start operations before 31.12.2022 and reductions will in principle be granted until 5 years following the date of this decision. Germany committed that in case it intends to continue the measures
provided for in the CHP Act for railway undertakings, to re-notify the measures for any period going beyond that date.

(12) The reduction is granted directly by the grid operator on proof by the railway undertaking that the legal prerequisites are fulfilled.

2.3. The financing mechanism and the budget of the CHP Act

(13) The financing of the measure occurs through a surcharge imposed on electricity consumption collected as a supplement to network charges (the so-called "KWKG-Umlage"). Network operators have to keep separate accounts in respect of the collected CHP surcharge (§26 (1) CHP Act).

(14) The amount of the CHP surcharge is calculated each year by the transmission system operators as a uniform rate per kWh consumed. According to the CHP Act some categories of users benefit, however, from a reduced rate. Those comprise consumers and railways with a consumption of more than 1 GWh in a given year. The CHP Act establishes a maximum CHP surcharge of 0.04 ct/kWh for this category of consumers (called “Category B consumers” by transmission network operators). The other category of consumers with a reduced CHP rate are consumers active in the manufacturing sector or railways consuming more than 1 GWh and for which the electricity costs represents more than 4% of turnover. The CHP Act establishes a maximum CHP surcharge of 0.03 ct/kWh for this category of consumers (also called “Category C consumers” by transmission network operators) (see §26(2) CHP Act). Consumers paying the full CHP surcharge are called “Category A consumers”.

(15) The current CHP levy rates amount to the following1:

<table>
<thead>
<tr>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.445 ct/kWh</td>
<td>0.04 ct/kWh</td>
<td>0.03 ct/kWh</td>
</tr>
</tbody>
</table>

(16) In order to make sure that each network operator is compensated for the extra costs resulting from his compensation obligation, the CHP Act organizes a system by which the burden resulting from the purchase and compensation obligations is spread evenly between network operators in respect to the consumption of consumers connected to their network and then compensated in the same even way through the CHP surcharge (which is as well proportionate to the consumption in their respective network) (§28 CHP Act). This system can be summarized as follows:

(a) all distribution network operators can require full compensation of their extra-costs from their respective transmission network operator.

(b) transmission network operators balance the financial burden between themselves out in such a way that each of them bears the same burden in

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1 See https://www.netztransparenz.de/de/file/KWKG-Aufschaeg_2016_V01.pdf.
propor tion to the consumption of end consumers (directly or indirectly) connected to their grid.

(c) Transmission network operators then transfer part of the financial burden back to distribution network operators in such a way that each network operator (be it distribution or transmission) bears the same financial burden in respect of the consumption of the consumers directly connected to his grid.

(17) The level of the CHP surcharge is on the one hand a function of the projected aid amount (this projection is based on the estimates made by each network operator regarding the volume of CHP electricity eligible for support that would be produced in his network area and on the estimates made by the BNetzA on the subsidies to be paid out for storage and district heating/cooling networks) and the projected consumption by each category of consumers. On the other hand it will take into account corrections for preceding years. As the CHP surcharge is calculated based on estimates, there could be a deviation between the forecasted aid amount and the aid amount actually paid out as well as a deviation between the forecasted consumption and the actual consumption. Every year transmission network operators verify whether the estimated aid amount and consumption for year X-1 corresponded to the aid actually paid out and electricity consumed in year X-1 (see §28(6) CHP Act). If there are mismatches, it is corrected by a higher or lower CHP surcharge in year X+1 (see §27(3) CHP Act, second part of the sentence).

(18) The CHP Act sets a yearly limit to the budget of the scheme and hence the total CHP surcharge (§29 CHP Act "Begrenzung der Höhe der KWKG-Umlage und der Zuschlagzahlungen"): The yearly amount of support paid to CHP installations, storage facilities and district heating/cooling networks under the CHP Act may not exceed EUR 1.5 billion. Of this amount, the yearly support for storage and district heating/cooling networks may not exceed EUR 150 million, except if estimates indicate that the total budget of 1.5 billion will not be exhausted. Once the maximum budget has been reached, further storage or district heating/cooling projects will obtain authorisation in the following year.

(19) If on the basis of the estimates used to determine the level of the CHP surcharge, it is established that the EUR 1.5 billion budget will be exceeded in year X+1, the support for all CHP installations of more than 2 MW of installed capacity will be reduced in same proportion. This reduction will be compensated in the following years. Transmission system operators will have to warn the BAFA when they observe a risk of the budget being exceeded. The BAFA will then determine the reduced support rates and publish them (§29 (4) CHP Act).

2.4. Position of the German authorities

(20) Germany has notified the measure for legal certainty. It considers that the measure is not financed from State resources and considers that the capping of the CHP surcharge does not involve the use of State resources. It has referred to the arguments brought forward in the cases EEG 2012, EEG 2014 and Court case T-47/15. It has indicated that the arguments put forward in the EEG file are valid for the CHP file as well without however enumerating them. It considers that such system does not qualify as being financed from State resources. Nevertheless,
Germany takes the view that, should the measure be considered as State aid by the Commission, the measure would be compatible with the internal market, as it fulfils the requirements of Article 93 TFEU.

3. **ASSESSMENT OF THE AID MEASURE**

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

(21) Under Article 107(1) TFEU, 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, in so far as it affects trade between Member States, is incompatible with the internal market.

*Existence of a selective advantage for railway undertakings*

(22) The notified CHP-system contains advantages for railway undertakings. Measures which, in various forms, mitigate the charges which are normally included in the budget of an undertaking and which, without being subsidies in the strict meaning of the word, are similar in character and have the same effect are considered to constitute aid.

(23) The Court has also ruled that in the case of exemptions from charges, in order to demonstrate that an advantage is selective, the Commission has to prove that the measure at stake creates differences between undertakings which, with regard to the objective of the measure in question, are in a comparable factual and legal situation. However, the concept of aid does not encompass measures creating different treatment of undertakings in relation to charges where that difference is attributable to the nature and general scheme of the system of charges in question.

(24) Railway undertakings are advantaged compared to other undertakings in the transport sector (such as airlines or undertakings operating vehicles) because the CHP surcharge charged to them is capped under certain conditions. Hence, when the network operator applies a capped surcharge, the respective electricity supplier is prevented from recovering the entire CHP surcharge from the respective railway undertaking. Consequently, only a reduced CHP surcharge can be imposed on electricity consumed by these privileged companies. This privilege of a limited CHP surcharge for railway undertakings is not attributable to the nature or the general logic of the system, but it is based on an external objective, i.e. the environmental aim to privilege rail transport in the intermodal transport competition.

(25) This advantage is selective because only railway undertakings can benefit from it.

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3 Case C-159/01 Netherlands v Commission [2004] ECR I-4461, paragraph 42; Case C-279/08 NOx emission trading scheme, paragraph 62.
Imputability

(26) The capped CHP surcharge for railway undertakings is imputable to the State, as it is granted by law – the CHP Act. As the advantage is granted by law, it is imputable to the State, which is not disputed by Germany. It is the State, through the network operators, on the basis of the relevant provisions of the CHP Act that grants the entitlements to a capped CHP surcharge for railway undertakings. In addition, the Commission observes that the BAFA (the Federal Office for Economic Affairs and Export Control), a superior federal authority subordinated to the Federal Ministry for Economic Affairs and Energy, is in charge of verifying that only eligible operators obtain the support.

Existence of State resources

(27) For advantages to be capable of being categorised as aid within the meaning of Article 107 TFEU, they must be granted directly or indirectly through State resources. The concept of "intervention through State resources" is intended to cover not only advantages which are granted directly by the State but also "those granted through a public or private body appointed or established by that State to administer the aid". In this sense, Article 107(1) TFEU covers all the financial means by which the public authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector.

(28) However, the mere fact that the advantage is not financed directly from the State budget is not sufficient to exclude that State resources are involved. It results from the case-law of the Court that it is not necessary to establish in every case that there has been a transfer of money from the State budget or from a public entity for the advantage granted to one or more undertakings to be capable of being regarded as State aid within the meaning of Article 107(1) TFEU.

(29) The Commission has observed that in order to finance the CHP support, Germany introduced a special levy, the CHP surcharge, defined its purpose, which is the financing of the CHP and the investment subsidies for storage and district heating/cooling networks. Germany also defined the methodology to determine the amount of the levy and for some consumers determined the level of the CHP surcharge directly. Also, deficits and surpluses of the collected CHP surcharge (in comparison to the support needed) are corrected in the following year, thereby ensuring that network operators are entirely compensated for the extra costs

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4 Case 76/78 Steinike & Weinlig v Germany [1977] ECR 595, paragraph 21; Case C-379/98 PreussenElektra [2001] ECR I-2099, paragraph 58; Case C-677/11 Doux Elevage and Cooperative agricole UKL-ARREE, not yet published, paragraph 26; Case C-262/12, Vent de Colère, not yet published, paragraph 20; Sloman Neptune, paragraph 19.

5 Case C-677/11 Doux Elevage, not yet published, paragraph 34, Case T-139/09 France v Commission, not yet published, paragraph 36, Case C-262/12, Vent de Colère, not yet published, paragraph 21.

6 Doux Elevage, cited above in footnote 13, paragraph 34, France v Commission, cited in footnote 13, paragraph 36; joined cases C-399/10 P et C-401/10 P Bouygues Telecom v Commission, not yet published, paragraph 100; Case C-262/12, Vent de Colère, not yet published, paragraph 19; Case C-275/13 Elcogás SA v Administración del Estado, Iberdrola SA, Order of 22.10.2014, not yet published, paragraphs 24-26, 30 and 32.
resulting from their obligation to pay the support, but also implying that they cannot use the revenue from the surcharge for anything other than the financing of CHP electricity, storage of district heating/cooling support. On that basis, the Commission concludes that, like in the case giving rise to the judgment of 19 December 2013 in Association Vent de Colère! (C-262/12, EU:C:2013:851), the State has, within the framework of the CHP law, created a system where the costs incurred by the network operators in connection to the support of CHP electricity, storage facilities and district heating/cooling networks are fully compensated by the CHP surcharge imposed on electricity consumers. This differentiates this case from the case giving rise to the judgment of 13 March 2001 in PreussenElektra (C-379/98, EU:C:2001:160) as in that case the electricity suppliers had to finance the additional costs from their own means.

(30) The CHP surcharge is imposed by the State: the CHP surcharge is established by law (see §26 of the CHP Act establishing the CHP surcharge and giving the right to network operators to raise the CHP surcharge on consumers). It serves to finance a State policy, namely cogeneration support, which is not disputed by Germany as Germany has itself described the support as based on a guaranteed feed-in tariff that is covered by a levy on electricity consumption and raised by network operators. Both the CHP support and the CHP surcharge are based on an initiative of the State and not on an initiative of the network operators; paying out complementary revenues to producers of cogenerated electricity that the network operators have in most cases not even purchased does not correspond to the normal task of network operators. The CHP surcharge serves to finance support for the deployment of CHP electricity in order to reach the environmental and climate goals of the State (see §1 of the CHP Act setting out the purpose of the CHP support).

(31) The levy is calculated on the basis of the methodology determined by the law (§27 of the CHP Act). The law also defines three categories of consumers and the respective level of the CHP surcharge for each category: maximum CHP surcharge of 0.03 ct/kWh for electro-intensive consumers/railways, max. 0.04 ct/kWh for consumers/railways with consumption above 1 GWh and normal CHP surcharge for other consumers/railways. The CHP surcharge for this category of consumers will correspond to the amount of CHP support needed minus the expected CHP surcharge revenues from the consumers/railways with consumption above 1 GWh and the electro-intensive consumers/railways divided by the estimated consumption of "normal consumers".

(32) The CHP Act provides for a correction mechanism ensuring that any surpluses resulting from the CHP surcharge are used to reduce the CHP surcharge of the following year(s). As a result, network operators are not allowed to keep any additional revenues resulting from the CHP surcharge. The CHP surcharge is not at their free disposal. Conversely, the correction mechanism also ensures that deficits are recouped through the CHP surcharge of following year(s) with the result that the CHP surcharge offsets in full the additional costs imposed on undertakings because of an obligation to pay out premiums and grants to operators of CHP installations, storage facilities and district heating/cooling networks.

(33) Transmission network operators play a special role in the system: they have been entrusted with the calculation of the CHP surcharge based on the methodology set out in the CHP Act and have to ensure that the financial burden and hence the
compensation is equally spread between all network operators. They also have to warn the BAFA in case the budget would be exceeded. In that regard they display similarities with the situation of the Samenwerkende ElektriciteitsProduktiebedrijven NV in the case giving rise to the judgment of 17 July 2008 in Essent Network Noord (C-206/06, EU:C:2008:413) and with that of the TSOs in the case giving rise to the judgment of 10 May 2016 in Germany v. Commission (EEG 2012).7

(34) Furthermore, the Commission finds that the following elements confirm that the CHP surcharge is under State control: it is calculated and allocated as provided by the law, it is collected by network operators and has to be placed on a separate account so that the regulator can verify the absence of cross-subsidies between the various activities of the network operators. In addition, the law requires that the drawing up of accounts between transmission network operators be controlled by a certified accountant.

(35) Finally, the law also limits the total budget of the measure and the total amount of the surcharge (see §29 of the CHP Act). When there is a risk that the budget would be exceeded, transmission network operators have to warn the BAFA which will then calculate new but reduced support rates to ensure that the budget is not exceeded. This is a further confirmation that the CHP surcharge constitutes a resource under the control of the State.

(36) Based on those elements, the Commission concludes that the support scheme for cogenerated electricity, district heating/cooling networks and heat/cooling storage facilities is financed from a State resource.

(37) Furthermore, the reduced CHP surcharge for railway undertakings is also financed from State resources: those reductions constitute an additional burden for the State. Any reduction in the amount of the CHP surcharge has the effect of reducing the amounts collected from the railways concerned. They have to be regarded as leading to losses in revenues that subsequently have to be recovered from other electricity consumers via an increased CHP surcharge. Thus electricity consumers that do not benefit from a reduced CHP surcharge are involved in the subsidizing of railways that benefit from a reduced CHP surcharge. The reduced CHP surcharge therefore must also be considered as financed from State resources. The Commission refers in this context also to its assessment in its decision concerning the EEG 2014 (renewable energy law 2014).8 This conclusion is in line with the findings of the General Court in the EEG 2012 case.9

(38) The Commission therefore concludes that the capped CHP surcharge involves the use of State resources.

Distortion of competition and effect on trade between Member States

(39) The Commission considers that the capped surcharge for railway undertakings is liable to distort competition and have an effect on intra-EU trade as potential

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7 Case T-47/15, EEG 2012, of 10 May 2016.
9 Case T-47/15, EEG 2012, of 10 May 2016, recital 112.
beneficiaries belong to the railway sector, which is open to competition between undertakings from different Member States.

**Conclusion on the existence of aid**

(40) The Commission concludes that the reduced CHP surcharge entails State aid for railway undertakings.

### 3.2. Lawfulness of the aid

(41) The reduced CHP surcharge for railway undertakings was notified to the Commission on 19 November 2015. It has so far not been implemented. Thus, Germany has complied with its obligations under Article 108 TFEU.

### 3.3. Compatibility

(42) The Commission has assessed the notified aid scheme on the basis of the Railway Guidelines, and in particular section 6 (Aid for coordination of transport) and its sub-section 6.3 (Criteria for aid for rail infrastructure use, reducing external costs and interoperability). Article 93 TFEU states that "Aids shall be compatible with the Treaties if they meet the needs of coordination of transport or if they represent reimbursement for the discharge of certain obligations inherent in the concept of a public service".

#### 3.3.1. Eligible costs

(43) The transport sector entails major negative externalities, for example between users (congestion), or in respect of society as a whole (pollution). These externalities are difficult to take into account, notably due to the inherent limits of including external costs, or even simply direct usage costs, in the pricing systems for access to transport infrastructure. As a result, there may be disparities between the different modes of transport, which it may be appropriate to correct by way of public support for those modes of transport which give rise to the lowest external costs.

(44) The Railway Guidelines state in point 103 that, "as regards aid for reducing external costs, the eligible costs are the part of the external costs which rail transport makes it possible to avoid compared with competing transport modes". Member States are allowed to put in place a compensation scheme for the demonstrably unpaid environmental, accident-related and infrastructure costs of competing transport modes in so far as these costs exceed the equivalent costs of rail.

(45) To assess the eligible costs for the measure at stake, Germany provided the Commission with two studies:

   (a) The first study, conducted in 2007\(^{10}\), estimates the annual external costs of transport in Germany in 2005. It only takes into consideration direct

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external costs (accident, noise, air pollution, climate costs, nature and countryside, downstream and feeder processes, additional costs in urban areas) and not indirect costs. In 2005, of an annual total of external costs of transport in Germany (passengers and freight) of EUR 80.4 bn, railway transport counted for 3.1% (EUR 2.5 bn), road transport for 96% (EUR 77 bn), domestic aviation for 0.6% (EUR 0.5 bn) and inland water transport for 0.5% (EUR 0.4 bn).\(^\text{11}\)

Table S-2\(^\text{12}\) of the same study compares average external costs of the various transport modes for passenger and freight transport in Germany in 2005: costs for passenger rail transport (EUR 21.2 per 1 000 Pkm\(^\text{13}\)) are around three times less than costs for passenger road transport (EUR 64.5 per 1 000 Pkm) and the difference is even higher for freight transport, as costs for freight rail transport (EUR 9.5 per 1 000 Tkm\(^\text{14}\)) are around four times less than costs for freight road transport (EUR 38.9 per 1 000 Tkm).

(b) The second study, conducted in 2011\(^\text{15}\), provides total external costs per inhabitant and year for EU-27 by country and transport mode (passenger and freight) and refers to data from 2008. It concludes that, in Germany in 2008, ca. 93.6% of external costs derived from road transport, whereas 2.5% derived from railway transport. According to Germany, this study confirms the results provided by the first study.

The second study also provides data on average external costs for Germany in 2008 by country and transport mode (excluding congestion): average costs for passenger rail transport amount to EUR 21.5 per 1 000 Pkm whereas the same data for road transport is EUR 87 per 1 000 Pkm. Average costs for freight rail transport amount EUR 9.3 per 1 000 Tkm whereas the same data for road transport is EUR 52.9 per 1 000 Tkm.

(46) Germany concludes that the main competitor of railway transport, either for passenger or for freight transport, is road transport; external costs for rail transport have to be compared to external costs for road transport.

Transparency of the analysis

(47) The Railway Guidelines state that Member States have to provide a transparent, reasoned and quantified comparative cost analysis between rail transport and the alternative options based on other modes of transport. The methodology used and calculations performed must be made publicly available\(^\text{16}\).

(48) Both the above mentioned studies are public and can be accessed via the internet. They are based on data on external costs which are methodically founded. Both

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\(^\text{11}\) See Table S-1 at page 5 of the study - Tabelle S-1 Gesamtkosten 2005.

\(^\text{12}\) See Table S-2 at page 7 of the study - Durchschnittskosten 2005 in € pro 1’000 Pkm bzw. 1’000 Tkm.

\(^\text{13}\) Passenger-kilometer.

\(^\text{14}\) Ton-kilometer.


\(^\text{16}\) See recital (105) of the Railway Guidelines.
studies explicitly justify the methodology and calculations used. Moreover, the Commission compared the methodology of the two studies with the methodology used in the Commission's handbook on estimation of external costs and reaches the conclusion that the methodology of the two studies is very similar to that of the Commission's handbook. In addition, the figures and values of the two studies and the handbook are in the same range of magnitude. The Commission is of the opinion that the comparative cost analysis in the two studies provided by Germany is reliable and fully transparent.

Validity of the data provided

(49) Germany argues that the calculation of external costs in the transport sector implies complex calculations and long term data investigations. This results in a significant delay between the period studied and the establishment of the final results, as the elaboration of data is a complex process. Indeed, in the two studies mentioned at recital (38), two to three years have passed between the period studied and the final results.

(50) In addition, Germany argues that data on external costs in the transport sector do not change significantly throughout the years, which explains why some "recent" studies refer to data from the period 2000-2010. This is also the case with the two studies mentioned at recital (38), for which the results are similar, although a three years period has passed in-between both studies.

(51) The Commission notes that the difference between external costs from rail transport and external costs from road transport is so high, that, even if the most recent data would differ significantly from those underlying the studies (which appears unlikely given the developments in the past), the possibility for the eligible costs to exceed the compatibility criteria set out by the Railway Guidelines would be extremely low.

(52) Finally, the Commission has itself carried out an assessment in which it analysed the average external costs for railway and for road transport in Germany on the basis of the following cost elements: accidents, noise, pollutants, climate costs, infrastructure and congestion. This internal study estimates that total costs for Germany for rail amount to EUR 7.3 per 1 000 Tkm, whereas the same data for road transport result in an amount of EUR 30.6 per 1 000 Tkm. As the difference between the external costs of railway and road transport is similar to the one presented in the two studies provided by Germany, the Commission considers that the data presented by Germany are valid and that the resulting conclusions can be taken into consideration for the compatibility assessment. The Commission's own assessment therefore confirms the finding of the studies presented by Germany.

3.3.2. Necessity and proportionality of the aid

(53) The Railway Guidelines state that for aid for reducing external costs, the Commission considers that there is a presumption of necessity and proportionality

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18 Internal study " Freight marginal average external costs of transport per country."
of the aid when the intensity of the aid stays below 30% of the total cost of rail transport, up to 50% of the eligible costs\(^{19}\).

(54) The Railway Guidelines state that, for aid for reducing external costs, the aid has to be strictly limited to compensation for opportunity costs connected with the use of rail transport rather than with the use of a more polluting mode of transport. Where there are several competing options which cause higher levels of pollution than rail transport, the limit corresponds to the highest cost differential among the various options\(^{20}\). As claimed by Germany (see recital (39)), the Commission deems appropriate comparing costs generated by the rail sector to costs generated by road, as road transport represents the highest cost differential with rail.

(55) The Commission notes that, in the present case, the intensity of the aid stays below 30% of the total cost of rail transport as energy costs in railway transport constitute approx. 10% of total costs of passenger transport\(^{21}\) and approx. 16% of total costs of freight transport\(^{22}\). The reduced CHP surcharge corresponds to a part of the energy costs. Hence, even a full exemption of the CHP surcharge would not lead to an aid intensity of more than 30% of the total cost of rail transport.

(56) The Commission also finds that the aid intensity is not above 50% of the eligible costs: the difference between overall external costs for rail (2.5 bn) and road transport (77 bn) amounts to around EUR 74.5 bn per annum according to the aforementioned study\(^{23}\). The exact amount of the reduction of the CHP surcharge is difficult to estimate, as it is linked to the effective electricity consumption, itself linked to the economic activity of the railway sector and to the specific business development of the eligible railway undertakings. The exact number of the eligible railway undertakings is still unknown. However, Germany has indicated that in 2015 around 130 railway undertakings benefitted from a reduced surcharge under the "EEG 2014" - Renewable energy law of 2014. As the threshold for benefitting of a reduced surcharge under the EEG 2014 is the consumption of at least 2 GWh in a given year, it can be concluded that under CHP Act (with the threshold of 1 GWh) at least the same amount of railway undertakings will be beneficiaries.

(57) In the light of these findings, the Commission concludes that, in terms of its level, the aid is necessary and proportional.

3.3.3. Incentive effect

(58) The Railway Guidelines stipulate in point (110) that: "At any rate, where the aid recipient is a railway undertaking it must be proved that the aid really does have
the effect of encouraging the modal shift to rail. In principle this will mean that
the aid has to be reflected in the price demanded from the passenger or from the
shipper, since it is they who make the choice between rail and the more polluting
transport modes such as road". Finally, specifically as regards aid for rail
infrastructure use and aid for reducing external costs, there must be realistic
prospects of keeping the traffic transferred to rail so that the aid leads to a
sustainable transfer of traffic.

(59) Germany states that such a requirement is fulfilled as the CHP surcharge
mechanism is clearly reflected in the transport price set by railway undertakings:
without a reduced CHP surcharge, the final price of railway transport would be
higher. The reduced CHP surcharge will contribute to a shift of passengers and
freight towards rail transport instead of road transport. Germany has claimed that
there is a realistic prospect that this shift of passengers and freight will lead to a
sustainable transfer of traffic. The Commission considers that, taking into
consideration that the CHP surcharge is capped to 0.04 ct/kWh and that electricity
costs for passenger transport amount to approx.10% of total costs and respectively
to approx. 16% for freight transport.24 , Germany's claim that the reduced EEG-
surcharge will be reflected in the final prices of railway transport appears
credible. Without the reduced surcharge it is likely that the transport prices for rail
would be higher which in turn may negatively affect demand for train transport
services. Hence, the Commission concludes that the requirements of point (110)
of the Railway Guidelines are fulfilled.

(60) According to point (111) of the Railway Guidelines the aid "must give realistic
prospects of keeping the traffic transferred to rail so that the aid leads to a
sustainable transfer of traffic". Germany has explained that the demand for
different transport modes is mainly determined by duration and costs of the
respective transport mode. Due to the CHP surcharge the competitive situation of
electrified railway undertakings is deteriorated compared to other transport modes
as explained in recital (52). A reduced CHP surcharge will reduce the negative
impact of the surcharge on railway undertakings and thus support the
competitiveness of railway undertakings. The measure in question will thus
support the transfer of traffic to rail compared to a situation where the full CHP
surcharge is paid and will therefore support a long-term shift of traffic to rail. The
Commission is therefore of the view that the reduced CHP surcharge gives
realistic prospects of supporting the shift of traffic to rail (that would otherwise
shift to other transport modes).

3.3.4. Negative effects on competition and trade

(61) However, the above discussed positive effects of the aid measure, namely its
necessity, proportionality and incentive effect, have to be compared against any
negative effects in the form of distortions of competition within the railway
sector. In the following, this analysis is done in particular with respect to any
eligibility criteria of the CHP Act which might discriminate against competitors
of beneficiaries, in the sense that potential market entrants would not be eligible
for reduced surcharges from the very start of operations.

24 See Recital (48) above.
As explained in paragraphs (8)-(10), the CHP-Act provides that the reduced CHP surcharge will only apply to railway undertakings reaching 1 GWh of consumption in a given year. Railway undertakings below the threshold of 1GWh shall pay 100% of the surcharge. Thus all undertakings, new entrants and incumbents alike, pay the full CHP surcharge on the first GWh of consumption.

The Commission had to examine to what extent the existence of this threshold introduces discrimination between small and large railway undertakings.

Germany states that railway undertakings which remain below the threshold of 1 GWh (if they exist at all) are active in a very specific sector and do not compete with railway undertakings with a consumption level above the threshold. According to Germany, the electricity consumption below 1 GWh in a given year typically concerns local railway companies with a very specific transport business, like museum or touristic railways, for which there is no competition. In addition, Germany argues that the fixing of the threshold is linked to administrative considerations, in particular with a view to the cost of treating application files for the reduced surcharge.

The Association of German Transport Companies (VDV) issues yearly statistics, which measure energy input per passenger-kilometres (pkm). In 2009, public railway undertakings energy use was on average at 6 kwh/pkm. After approximately 83000 to 167000 pkm these undertakings reach the threshold.

This opinion of Germany is supported by submissions from CER and Mofair, two German railway associations, "Netzwerk Europäischer Eisenbahnen e.V. & mofair e.V." (Mofair) and "Community of European Railway and Infrastructure Companies" (CER). The Commission consulted the two associations in 2014 when assessing the EEG 2014. In that assessment the Commission had to assess a similar question, i.e. whether a threshold of 2 GWh would discriminate small railway undertaking compared to large railway undertakings. Both submissions stated that railway undertakings with energy consumption levels below the threshold of 2 GWh could only be found in particular cases, whose business model is restricted to specific operations, like for example heritage and tourist railway companies, test drives, seasonal special excursions, vehicle transfer, etc. Both associations stated that these operations would not concern business activities that are carried out in competition with other, regular railway activities. CER states that on the basis of averaged data, an average railway undertaking (for example in the freight transport service) will already exceed 2 GWh per year with only one train ride per day. The use of one locomotive eight hours per day will

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25 Source: https://www.vdv.de/jahresbericht---statistik.aspx
26 The "Netzwerk Europäischer Eisenbahnen e.V. & mofair e.V." (Mofair) represents private, independent railway undertakings (almost exclusively from Germany) that are operating in regional passenger transport (see: http://www.netzwerk-bahnen.de/mitglieder.html); its stated objective is to develop the conditions for fair competition in the railway sector and in this context ensure non-discriminatory regulation. The "Community of European Railway and Infrastructure Companies" (CER) represents 75 railway undertakings (both incumbents and new entrants), their national associations and infrastructure companies operating in the EU. According to internet site, CER members represent about 61% of the rail network length, more than 84% of the rail freight business and about 99% of rail passenger operations in EU, EFTA and EU accession countries.
represent a higher consumption than 2GWh per year. According to CER, operations of this kind do not concern business activities of undertakings which stand in a competitive relation to other regular railway activities. CER therefore cannot see any impact either on intramodal competition or on intermodal competition.

(67) The Commission recognizes the need to apply a minimum threshold for such a measure, as the necessity of a minimum of electricity consumption ensures the right proportion between the benefit of a reduced surcharge and the considerable costs (both for the administration as well as the applicant) linked to an application for reduction. The Commission considers at the same time that its impact should be strictly limited to specific cases of small railway undertakings active on specific routes on which no competition can be considered with other railway undertakings qualifying for the reduced CHP surcharge. Taking into consideration the arguments of the two railway associations, the Commission concludes that these arguments are equally valid for a threshold of 1 GWh and that on balance the threshold of 1 GWh can be justified.

(68) The Commission considers that the provisions of § 26 of the CHP Act stipulating the conditions for the application of a capped CHP surcharge to railways ensure an equal treatment between existing railway undertakings and new entrants, i.e. newly created railway undertakings. According to § 26 paragraph 2 sentence 1 of the CHP Act, any railway undertaking that can demonstrate a minimum electricity consumption of 1 GWh in a given calendar year, will benefit from a reduced surcharge, capped to the amount of 0,04 ct/kWh. This is valid for any railway undertaking, regardless at which moment in time during the calendar year the respective railway undertaking has started its activity. Thus new entrants can rely on the reduction already in their first year provided that their consumption exceeds 1 GWh.

(69) According to § 26 paragraph 2 sentence 2 of the CHP Act a further reduction of the CHP surcharge to the amount of 0,03 ct/kWh is possible, if the railway undertaking can demonstrate that the proportion between its total annual electricity costs and its total turnover of the last full calendar year has been higher than 4%. The demonstration of data of a full calendar year is however only possible for existing railway undertakings, it is not possible for newly established railway undertakings that started their activity in the course of the respective calendar year.

(70) Germany argued that the condition of the demonstration of the data of a full calendar year does not lead to a considerable disadvantage for newly established railway undertakings compared to established railways. First of all, newly established railway undertakings do benefit from a capped surcharge to the amount of 0,04 ct/kWh as explained in recital (59). In this respect they are equally treated with established railways. Only the difference to the further reduction under § 26 paragraph 2 sentence 2 of the CHP Act of 0,01 ct/kWh is not possible for newly established railway undertakings during their first year of establishment. As of the first full calendar year they can equally benefit from the reduction to 0,03 ct/kWh as described in paragraph (60). Moreover, Germany calculated the expected amount that newly established railway undertakings would expect if they cannot benefit from the further reduction to 0,03 ct/kWh.
The difference of 0,01 ct/kWh would result in an increased surcharge of 100 EUR per GWh.

(71) The Commission considers that in view of the arguments of Germany, the financial disadvantage for newly established railways only in their first year of activity seems to be indeed not very high, as they can benefit from the reduction to 0,04 ct/kWh. This disadvantage of 0,01 ct/kWh seems to be negligible compared to the overall electricity costs of railways. Moreover, the measure in question will be made transparent and is publicly available, so that any potential market entrant is able to take its eligibility provisions into account when considering market entry and to price in the effect of starting operations during the year.

(72) The Commission therefore considers that any possible discrimination would not outbalance the positive effects of the measure.

3.3.5. Conclusion

(73) The aid measure at stake fulfils the criteria of the Railway Guidelines (as well as general principles of non-discrimination) and can therefore be considered compatible with the internal market under Article 93 TFEU, as aid for reducing external costs that is necessary and proportionate and is not contrary to the common interest.

4. COMMITMENT FROM GERMANY ON THE DURATION

(74) The Railway Guidelines state in point (97) that, in view of the rapid development of the transport sector and hence the need for coordinating it, any aid notified to the Commission on the basis of Article 93 TFEU has to be limited to a maximum of five years, in order to allow the Commission to re-examine it in the light of the results obtained and, where necessary, to authorise its renewal.

(75) Hence, the Commission authorises the aid scheme only for a period of five years, after which Germany should re-notify the measures. Germany therefore commits, in case it intends to continue the measures provided for in the CHP Act for railway undertakings, to re-notify the measures for any period going beyond the five-year period from the date of this letter, in order to apply for a new assessment of their compatibility.

5. AUTHENTIC LANGUAGE

(76) Germany has waived its right to have the decision adopted in German. The authentic language will therefore be English.

6. CONCLUSION

(77) The Commission has accordingly decided not to raise objections to the aid measures on the grounds that they are compatible with the internal market pursuant to Article 93 TFEU.

(78) The present decision is valid for five years in respect of the reduced CHP surcharge for railway undertakings.
The Commission reminds the German authorities that, in accordance with article 108 (3) TFEU, any plans to refinance, alter or change this aid have to be notified to the Commission pursuant to Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 2015/1589 laying down detailed rules for the application of Article 108 TFEU.

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:


Your request should be sent by registered letter or fax to:

European Commission
Directorate-General for Competition
Directorate for State Aid
State Aid Greffe
B-1049 Brussels
Belgium
Email: stateaidgreffe@ec.europa.eu
Fax No: (0032) 2-296.12.42

Yours faithfully,
For the Commission

Margrethe VESTAGER
Member of the Commission

CERTIFIED COPY
For the Secretary-General,

Jordi AYET PUIGARNAU
Director of the Registry
EUROPEAN COMMISSION

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