



EUROPEAN COMMISSION

Brussels, 13.07.2011
C(2011) 4941 final

<p>In the published version of this decision, some information has been omitted, pursuant to articles 24 and 25 of Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...].</p>	<p style="text-align: center;">PUBLIC VERSION</p> <p style="text-align: center;">WORKING LANGUAGE</p> <p style="text-align: center;">This document is made available for information purposes only.</p>
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Subject: State Aid SA.32009 (2011/C ex 2010/N) – Germany – LIP – Aid to BMW Leipzig

Sir,

The Commission wishes to inform Germany that, having examined the information supplied by your authorities on the aid measure referred to above, it has decided to initiate the procedure laid down in Article 108(2) of the Treaty on the Functioning of the European Union ("TFEU").

1. PROCEDURE

- (1) By electronic notification registered at the Commission on 30 November 2010 (SANI 5190), the German authorities notified their intention to grant regional aid under the Guidelines on national regional aid 2007-2013 (hereinafter "RAG")¹ to BMW AG for its investment project in Leipzig, Saxony, Germany.
- (2) The Commission requested supplementary information on the notified aid measure by letters and electronic mails on 31 January 2011, 21 March and 20 April 1011. The German authorities submitted the requested additional

¹ OJ C 54, 04.03.2006, p. 13.

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information by letters and electronic mails on 1, 18 and 23 March 2011. By letter of 13 May, Germany requested a deadline extension for the submission of the latest requested information, however, on 26 May 2011 provided the information. Additional information was submitted by Germany on 28 June 2011.

2. DESCRIPTION OF THE PROJECT AND THE AID MEASURE

2.1. Objective

- (3) The German authorities intend to promote regional development by providing regional investment aid amounting to EUR 46.0 million discounted to BMW AG (hereinafter "BMW") for setting up a new production facility within the existing BMW plant in Leipzig in order to manufacture electric passenger cars with car bodies of carbon fiber reinforced plastic materials.
- (4) The investment will take place in Leipzig, Germany, Land Saxony which is an assisted area in virtue of Article 107(3)(a) of the TFEU. At the date of notification, its standard regional aid ceiling for large enterprises was 30% gross grant equivalent (GGE) according to the German regional aid map 2007-2013².

2.2. The beneficiary

- (5) The beneficiary of the aid is BMW AG which is the mother company of the BMW Group with headquarters in Munich, Bavaria, Germany. The BMW Group focuses on the manufacturing of cars and motorbikes under the following brands: BMW, MINI and Rolls-Royce Motor Cars.
- (6) The investment will take place at a plant in Leipzig, which is one of the 17 BMW's production facilities and does not have an independent legal personality.
- (7) Since BMW Leipzig is not an independent organizational entity, no separate financial data could be provided. In 2009 it had 2,852 employees. The German authorities provided the following information about the BMW Group:

Table: Turnover of the BMW Group in million EUR

	2007	2008	2009
Worldwide	56.0	53.2	50.7
EEA	31.7	29.4	26.3
Germany	11.9	10.7	11.4

Table: Number of employees by 31 December of a given year

	2007	2008	2009
Worldwide	107,539	100,041	96,230
EEA	94,284	87,596	84,791
Germany	80,128	73,916	71,648

² Commission decision of 8 November 2006 on State aid case N 459/2006 - Regional State aid map for Germany 2007-2013 (OJ C 295, 5.12.2006, p. 6).

2.3. The investment project

2.3.1. The notified project

- (8) The investment project aims at setting up a new production facility for manufacturing of electric cars with car bodies made of carbon fiber reinforced plastic materials. The manufacturing of two models is planned: they represent completely innovative products which have not been manufactured in the past and they will be completed in the Leipzig plant: the model 'i3', the so called Mega City Vehicle (hereinafter 'MCV'), and the luxury sport car model 'i8'.
- (9) The MCV is a purely electric car without combustion engine driven by electricity stored in a battery, a BEV (Battery Electric Vehicle).³ The car body is developed from carbon fiber reinforced plastic material as a result of which its weight does not exceed 1.3t for a length between 3.95 and 4.05 m. The car is envisaged for urban use, with a reach of up to 150 km without battery recharge, its speed is up to 140 km/h. The production capacity of the plant will be [10,000-50,000]* vehicles per year, of which about half is envisaged for consumption within the EEA and half will be traded outside of the EEA. This breakdown depends on future governmental policies on subsidies to consumers for the purchase of electric cars in the destination countries, since the production costs of the electric vehicles significantly exceed costs of production of conventional combustion engine cars. The price of the i3 urban model cars is expected to be around EUR [...].
- (10) The sport car model 'i8' is a plug-in hybrid car, a PHEV (Plug-in Hybrid Electric Vehicle)⁴. The 'i8' model will fully profit from the advantages of an electric vehicle including weight reducing construction with the carbon fiber reinforced plastic car body, however, in addition to this, it will contain a small but very effective 3-cylinder combustion engine. According to Germany, the purpose of the combustion engine is to compensate for the handicaps of a fully electric vehicle in comparison to a combustion engine car in situations when necessary: 1) distance longer than a battery without recharge could cover and, 2) speed lower than desired for sport cars. In addition, BMW intends to develop for i8 an innovative aerodynamic concept and a new control system with low consumption (3 l per 100 km). The weight of the car should be around 4.6 m for less than 1.5 t weight and the maximum speed the 'i8' model can reach is 250 km/h. The price of the sport car will exceed EUR [...]; the car is targeted at high profile consumers. The production of this model should be very limited – in average [...] cars per year (a higher demand is expected for the first two years) – and is included in the [10,000-50,000] electric cars in total to be produced in Leipzig since it will be

³ 'Electric vehicles do not have dual mechanical and electrical powertrains. 100% of its propulsion comes from an electric motors, energized by electricity stored in batteries.' (Source: Deutsche Bank: Electric Cars: Plugged In Batteries must be included, 9 June 2008, p. 10).

* *Business secret.*

⁴ Plug-in hybrids will allow for vehicles to store enough electricity (from an overnight charge) for a certain distance to be driven solely on electric power and will function as a full hybrid beyond this range. Full hybrids provide enough power for limited levels of autonomous driving at slow speed, and they offer efficiency gains ranging from 25%-45%. Fuel efficiency of a PHEV is estimated to 40-65%. (Source: Deutsche Bank: Electric Cars: Plugged In Batteries must be included, 9 June 2008, p. 10).

manufactured on the same production lines as the MCV 'i3' model (the combustion engine will be developed in the BMW plant in [...]). Also in the case of the 'i8' sport model it is expected to sell ca 50% on the EEA market and 50% outside the EEA.

- (11) Both models are planned to be introduced on the market in 2013. The works on the investment started in December 2009; the investment should be completed by 2013/2014, the aid will be paid out till the end of 2015.

2.3.2. Previous investment aid in the Leipzig plant

- (12) In September 2007, i.e. within the course of three years prior to the start of works on the notified project, a previous investment started at the Leipzig plant for which regional aid was granted. The eligible costs of the project amounted to EUR 100 million, the aid reached EUR 12.5 million and was granted on the basis of block exempted schemes.
- (13) The investment aimed at the production of mouldings, doors and flaps for the combustion engine cars (1er and X1 models). The production technology, as well as the components a combustion engine car consists of in comparison to the notified electric car consists, is substantially different – e.g. a conventional combustion engine car consists of ca 250-300 metal sheets or aluminium parts which are welded together. An electric car with the carbon fibres car body consists of ca 30 plastic parts which are glued together: no metallic components, moulding or welding is involved.

2.4. Eligible costs

- (14) The eligible expenditure of the investment amounts to EUR 392 million in nominal value, which is EUR 368.01 million discounted. The table below presents the breakdown of eligible expenditure for the implementation of the investment project in nominal terms during the investment implementation period.

Table: Breakdown in eligible costs in million EUR nominal value

	2009	2010	2011	2012	2013	2014	Total
Building	1	2	86	40	1	1	131
Plant/Machinery	2	3	34	163	53	6	261
Total	3	5	120	203	54	7	392

2.5. Financing of the investment

- (15) The German authorities confirm that the own contribution by the beneficiary, which is free of any public support, exceeds 25 per cent of the eligible costs. Except of the aid amounting to EUR 46.0 million in discounted value, the remaining project costs of EUR 322.01 in discounted value are financed from own resources of BMW (mainly by cash flow).

2.6. The aid measure

- (16) The currently notified investment project amounts to EUR 392 million in nominal value, i.e. EUR 368.01 million in discounted value, with the aid intensity of 12.5%, i.e. the aid amounts to EUR 49.0 million nominal value (EUR 46.0 million discounted value).
- (17) The notified aid is to be granted in the form of an investment allowance which is financed from taxes and will be paid always the year after costs were occurred, i.e. the last payment will take place in 2015.

Table: Plan for paying out the aid in EUR million nominal value

	2009	2010	2011	2012	2013	2014	Total
Investment allowance	0.4	0.6	15.0	25.4	6.8	0.9	49.0

- (18) The German authorities confirmed that this aid amount and intensity will not be exceeded in case of modifications of the eligible costs. They also confirmed that the aid will not be cumulated with any additional aid for the same eligible costs.

2.7. Incentive effect

- (19) The legal entitlement for drawing the aid exists automatically upon compliance with the conditions of the scheme, no granting decision or confirmation of eligibility is required.

2.8. Regional aid ceiling

- (20) Leipzig is situated in Saxony, Germany, which is an assisted area by virtue of Article 107(3)(a) of the TFEU with a standard regional aid ceiling for large enterprises of 30 per cent Gross Grant Equivalent (GGE) according to the German regional aid map 2007-2013⁵ at the moment of notification.

2.9. Legal basis and the aid granting authority

- (21) The aid will be granted by the tax authority Munich (Finanzamt München) as the aid granting authority.
- (22) The indicated national legal basis for granting the aid is the following:
- Investment Allowance Act (*Investitionszulagengesetz 2010*) of 7 December 2008, block exempted under X 167/2008⁶.

⁵ Commission decision of 8 November 2006 on State aid case N 459/2006 - Regional State aid map for Germany 2007-2013 (OJ C 295, 5.12.2006, p. 6).

⁶ X 167/2008 – Germany – Investitionszulagengesetz (IZ) 2010, OJ C 280, 20.11.2009, p. 7.

2.10. Contribution to regional development

- (23) The German authorities indicate that the investment project creates ca 800 new jobs in the assisted region.

2.11. Maintenance of the investment

- (24) The German authorities confirmed that the investment project is required to be maintained in the assisted region concerned for a minimum period of five years from the day of its completion.

2.12. General provisions

- (25) The German authorities committed to submit to the Commission:
- within two months of granting the aid, a copy of the relevant acts concerning this aid measure;
 - on a five-yearly basis, starting from the approval of the aid by the Commission, an intermediary report (including information on the aid amounts being paid, on the execution of the aid contract and on any other investment projects started at the same establishment/plant);
 - within six months after payment of the last tranche of the aid, based on the notified payment schedule, a detailed final report.

3. ASSESSMENT OF THE AID MEASURE AND COMPATIBILITY

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

- (26) In order to qualify as State aid, the following conditions must be met on a cumulative basis: i) the aid has to be granted by an act of a Member State or out of State resources, ii) it has to confer an economic advantage to undertakings, iii) the advantage has to be selective, and iv) the measure distorts or threatens to distort competition and affect trade between Member States.
- (27) The financial support will be provided by the German authorities in the form of an investment allowance. The support can thus be considered as granted by the Member State and through State resources within the meaning of Article 107(1) TFEU since it reduces the income for the State which would be otherwise received from taxes.
- (28) The aid is granted to a single company, BMW, thus the measure is selective.
- (29) The aid will relieve the company from costs which it normally would have to bear itself under normal market conditions when setting up the production facility and, therefore, the undertaking benefits from an economic advantage over its competitors.
- (30) The aid will be granted by the German authorities for an investment resulting in manufacturing of electric passenger cars. Since this product is subject to trade

between Member States, the support provided is likely to affect trade between Member States.

- (31) The economic advantage granted to BMW over its competitors for production of goods which are subject to intra-EU trade has the potential to distort or threaten to distort competition.
- (32) Consequently, the Commission considers that the notified measure constitutes State aid to BMW within the meaning of Article 107(1) TFEU.

3.2. Legality

- (33) By notifying the planned aid measure before putting it into effect, the German authorities respected their obligation under Article 108(3) TFEU and the individual notification requirement expressed in Article 6 (2) of the General Block Exemption Regulation.

3.3. Basis for the assessment of the aid measure

- (34) As the measure concerns regional investment aid, the Commission is under the obligation to assess its compatibility with the Internal Market on the basis of the provisions of the RAG; more specifically, the provisions of section 4.3 of the RAG related to large investment projects, since the aid exceeds the thresholds defined in points 64 and 67 of the RAG.

3.4. Compatibility with the general provisions of the RAG

- (35) The German authorities exclude that the BMW Group in general or BMW AG in particular would qualify as a firm in difficulty within the meaning of the conditions laid down in the Community guidelines on State aid for rescuing and restructuring firms in difficulty⁷. Thus the aid beneficiary is eligible for regional aid.
- (36) The aid is granted in application of a block-exempted scheme X167/2008. Thus point 10 of the RAG is not applicable, since the measure is not an *ad hoc* aid.
- (37) The Saxony region is entirely eligible for regional aid under Article 107(3)(a) TFEU with a maximum allowable regional aid intensity of 30% GGE at the time of notification⁸.
- (38) The notified aid qualifies as aid for initial investment, as defined in point 34 of the RAG, since the aid supports an investment in tangible assets in relation to the extension of an existing establishment.

⁷ OJ C 244, 1.10.2004, p. 2. In particular, the following conditions laid down in paragraph 10 of the rescue and restructuring guidelines are not fulfilled: (a) in the case of a limited liability company, where more than half of its registered capital has disappeared and more than one quarter of that capital has been lost over the preceding 12 months; (c) whatever the type of company concerned, where it fulfils the criteria under its domestic law for being the subject of collective insolvency proceedings.

⁸ See footnote 4 above.

- (39) The granting of the aid in the form of an investment allowance under the relevant legislation (the Investment Allowance Act 2010) is based on an automatic legal entitlement to aid once objective criteria are incurred. In addition, the actual payment of the aid is conditional upon the approval of the measure by the Commission in accordance with point 38 of the RAG.
- (40) The own contribution of the beneficiary to the eligible costs which shall be free of any aid exceeds the mandatory 25% threshold as laid down in point 39 of the RAG.
- (41) The investment will be maintained in the region for at least five years following its completion pursuant to point 40 of the RAG.
- (42) The eligible costs involve the costs of buildings and plant/machinery and are in line with point 50 of the RAG.
- (43) The rules on cumulation of the aid as laid down in section 4.4 of the RAG will be respected.
- (44) In view of the above, the Commission considers that the aid complies with the standard compatibility criteria laid down in the RAG.

3.5. Assessment under the provisions for aid to large investment projects

3.5.1. Single investment project (point 60 of the RAG)

- (45) Point 60 of the RAG states that in order to prevent a large investment project being artificially divided into sub-projects in order to escape the provisions of these guidelines, such a project will be considered as a single investment project (hereinafter “SIP”) when the initial investment is implemented in a period of three years prior to the start of the works on the project and consists of fixed assets combined in an economically indivisible way.
- (46) Member States might be inclined to notify separate projects because treating them as separate instead of as a SIP normally allows a higher maximum aid intensity due to the application of the automatic scaling-down mechanism⁹.
- (47) The manufacturing of the electric passenger cars with car bodies of carbon fiber reinforced plastic material is completely separated from the production of conventional combustion engine cars with metallic car bodies (1er, X1). The production takes place on separate independent production lines representing two independent separated production cycles which do not intersect. The previous investment concerning mouldings, doors and flaps was targeted at manufacturing of conventional combustion engine cars (see recital 12-13 above) and the manufacturing of the ‘i3’ and ‘i8’ models does not involve the used of any of those components nor cannot profit in any way of the previous aid.

⁹ Indeed, for one project above EUR 100 million divided into two projects, the Member State could apply twice the full regional aid ceiling to the first EUR 50 million of the projects (no scaling down of the applicable regional aid ceiling required) and twice half of this ceiling to the next EUR 50 million, while for all eligible costs above EUR 100 million the regional aid ceiling is reduced to one third (by 34%).

- (48) Hence, the Commission concludes that there are no functional, technical, or strategic links between the two projects which are clearly economically divisible, and which therefore do not constitute a SIP within the meaning of point 60 of the RAG.

3.5.2. Aid intensity (point 67 of the RAG)

- (49) The planned total eligible expenditure of the project in Leipzig in present value¹⁰ is EUR 368.01 million. This leads to a maximum aid intensity allowed of 13.5 % gross grant equivalent (GGE) applying the scaling down mechanism.
- (50) The notified total aid amount in present value is EUR 46.0 million; the aid intensity (GGE) is 12.5 %. Since the total aid intensity for the project is lower than the maximum aid intensity allowed, the proposed aid intensity for the project complies with the RAG. Germany also committed not to exceed the notified aid amount and aid intensity.

3.5.3. Filters for in-depth assessment of regional aid to large investment projects under point 68 of the RAG

- (51) Under point 68 of the RAG, the Commission has to initiate the formal investigation and proceed to an in-depth assessment of the aid, verifying its incentive effect and proportionality, and balancing its positive (regional contribution) and negative (distortion of competition/effect on trade) effects, if the aid beneficiary's sales exceed 25% of the size of the relevant product and geographic market before and/or after the investment, or if the capacity created by the investment exceeds 5% of the EEA apparent consumption on the market concerned, and this market was in absolute or relative (compared to EEA GDP growth) decline during a five year reference period (2003-2008).
- (52) The Commission notes however that pursuant to footnote 65 of the RAG, the tests under point 68 of the RAG do not need to be carried out, if the Member State demonstrates that the aid beneficiary creates a new product market. In this situation, the aid can be authorized without the 68(a) and (b) tests, if the standard compatibility criteria for regional aid, and the other specific conditions for regional aid to large investment projects, in particular the scaling down of the applicable aid intensity pursuant to point 67 of the RAG are met.
- (53) At this stage, and on the basis of the information available, the Commission is not able to conclude that the aid to the investments that are carried out by BMW in Leipzig fall under this footnote, and are thus exempted from the 68(a) and (b) tests. On one hand, the Commission notes that the notified electric car models as such and in view of the carbon fiber reinforce plastic car bodies in particular represent such a degree of innovation that they create a new product which is not comparable to cars manufactured in the past. However, on the other hand BMW does not seem to be the first, nor the only manufacturer of this type of vehicles.

¹⁰ The present values in this decision are calculated on the basis of a base rate of 1.24%, applicable on the date of the notification, on top of which 100 basis points need to be added according to the Commission Communication on reference rate – i.e. 2.24% (OJ C, 19.1.2008, p.6). (http://ec.europa.eu/competition/state_aid/legislation/reference_rates.html).

Since the Commission is not able to decide on the applicability of the footnote 65 of the RAG at this stage, it therefore decided to carry out the tests for the assessment of the present case. However, it invites interested parties to present their comments on this factual issue, and on the interpretation that is to be given to this footnote in emerging markets.

- (54) In order to carry out the relevant tests under point 68(a) and (b) of the RAG, the Commission has first to identify the product(s) concerned by the investment and establish the appropriate product and geographic market definitions.

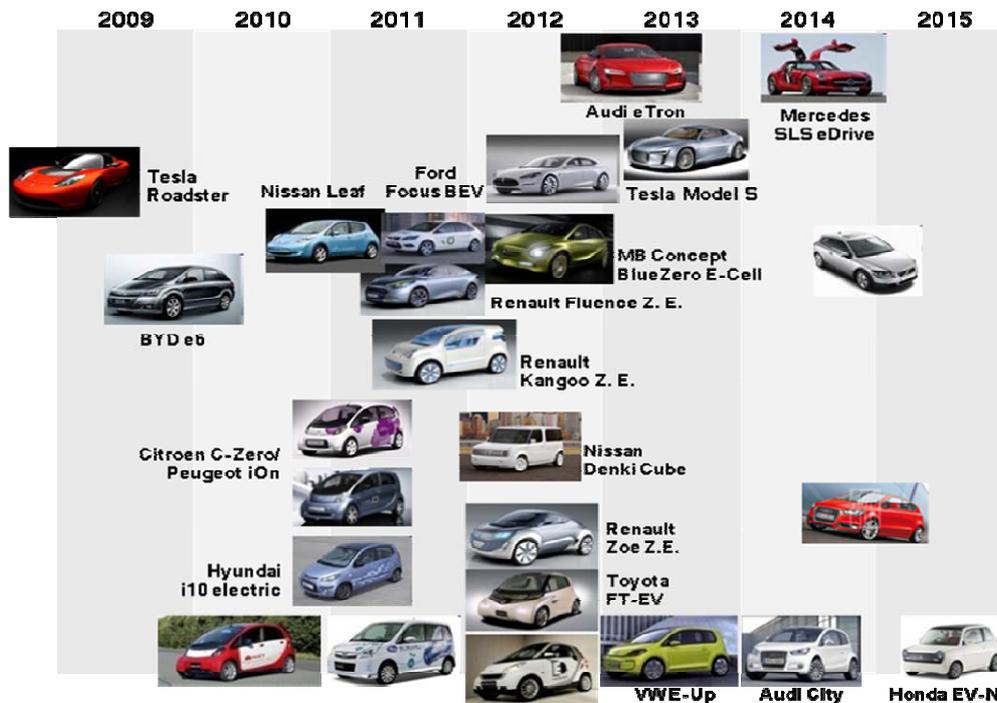
3.5.3.1. Product concerned

- (55) According to point 69 of the RAG, the "product concerned" is normally the product covered by the investment project. Where an investment project involves the production of several different products, each of the products needs to be considered. When the project concerns an intermediate product and a significant part of the output is not sold on the market, the product concerned may be the downstream product.
- (56) The notified investment project is targeted exclusively at the production of electric passenger cars with car bodies of carbon fiber reinforced plastic material in two models: the purely electric vehicle (BEVs) with electric energy stored in a car battery 'i3' and the electric sport car 'i8' which has in addition to the car battery also a small effective combustion engine (PHEVs). No separate intermediate products will be manufactured and sold on the market.
- (57) No other products can be manufactured on the production line created by the investment. The use of production lines for the electric vehicles for the manufacturing of the combustion engine passenger cars is technologically excluded.
- (58) On the basis of the above, the Commission concludes that the product concerned by the investment are the i3 (BEVs) and i8 (PHEVs) cars.

3.5.3.2. Relevant product market

- (59) Point 69 of the RAG stipulates that the relevant product market includes the product concerned and its substitutes considered to be such either by the consumer (by reason of the product's characteristics, prices and intended use) or by the producer (through flexibility of the production installations).
- (60) The Commission has adopted a series of decisions (both in the field of state aid and mergers) on the traditional car sector, and analysed in this context the appropriate definition of the relevant product markets.
- (61) There are a number of service providers analysing the car market. Among the most renowned ones are ISH Global Insight and POLK. Member States and beneficiaries usually provide information based on segmentation by one of these consultancies. ISH proposes a narrow segmentation of passenger cars (27 segments) and POLK differentiates the car market along 8 segments (A000, A00, A0, A, B, C, D and E), where segment A000 means urban small cars and segment E is the ultra luxury category. From segment A000 to E, the average price, size and the average engine performance of passenger cars gradually increase.

- (62) In state aid cases, the Commission relied on these segmentations, as Member States used them in their notifications to delineate the markets.
- (63) In the present case, for the first time the Commission deals with a notification concerning regional aid for manufacturing of electric passenger vehicles (BEV/PHEV). The notification raises a series of questions regarding the appropriate market definition, since conclusions of past decisions on combustion engine passenger cars are not necessarily transferable.
- (64) The key problem for the definition of the relevant product market is whether electric passenger cars without combustion engine, or hybrid cars with the specification of the i8, both with car bodies of carbon fiber reinforced plastic materials will constitute in 2015 an integral part of the market for all passenger cars, or a separate product market. The Commission seeks comments from interested parties also on this issue.
- (65) On the basis of the information available the Commission cannot exclude without doubts the possibility that electric cars will constitute a separate market: there is clearly no supply side substitutability, carbon fiber based electric cars cannot be produced on production lines for conventional cars and vice versa. From the demand side substitutability (i.e. by reason of the product's characteristics, prices and intended use), the electric passenger car as well as the conventional passenger car with combustion engine serve the same basic purpose, namely passenger transport; however, in the case of the urban electric vehicle 'i3', this use is restricted mainly to urban transport due to its limited reach of up to 150 km without battery recharge. The model 'i8' serves a dual purpose, urban transport and other, and compensates for the limitations of an electric car with a small efficient combustion engine. Electric cars are substantially more expensive than conventional cars of the same size and purpose (even with governmental subsidies for consumers the price difference is mitigated only partially), and their expected buyers seems to be rather different in terms of income and environmental awareness from the buyers of conventional cars for the same size. The Commission seeks comments by interested parties on the issue whether the electric cars constitute a separate product market.
- (66) If electric markets constitute a separate market, it is questionable whether and to what extent a further segmentation of the market for electric passenger cars is necessary.
- (67) The German authorities provided an overview of the competing electric cars by various producers and the year when they are introduced to the market. In spite of the fact that this overview seems to be somewhat inaccurate since in some cases a significant delay occurred (contrary to expectations, the first electric car - Nissan Leaf - was introduced to the market only in January 2011) the graphics still provides an overview of the competing electric car models, which suggests that a complete abolition of segmentation in the case of electric passenger cars is not an accurate solution either due to the variation of the models:



- (68) The Commission seeks comments by interested parties on the question whether a further segmentation of the electric car market is appropriate, and on what principles and criteria such segmentation could be established.
- (69) Independently on whether electric cars constitute an integral part of the general passenger car market, or a separate market, the assignment of the electric cars to be produced in Leipzig to a specific car segment is problematic. With regard to possible market segmentations, in the present case, the German authorities chose for the purpose of the notification the segmentation after ISH Global Insight.
- (70) According to Germany, the MCV ‘i3’ model falls into segments C¹¹ and D¹², and Germany proposes to apply a combined C/D segment. However, applying the segmentation strictly, the Commission would have to conclude that in view of its size, the MCV ‘i3’ can be attributed to segments B¹³ and C, and in view of its price to segment D. According to Germany, the customers of the MCV are not limited to customers who would normally opt for low segments of combustion engine cars, but come from across all the segments, since they have a distinct environmental concern.
- (71) The BMW model i8 sport car falls into segment F¹⁴ according the ISH Global Insight. Segment F is not limited by size of the car, the demarcation depends

¹¹ For comparison: e.g. Ford Focus, VW Golf, BMW 1-Series or Audi A3 fall into the C segment according to Global Insight.

¹² For comparison: e.g. Honda Accord, VW Passat, BMW 3-Series, Mercedes-Benz C-Class, Audi A4 fall into the D segment according to Global Insight.

¹³ For comparison: e.g. VW Polo, Ford Fiesta, Peugeot 207 or Toyota Yaris fall under the B segment according to Global Insight.

¹⁴ For comparison: e.g. Maserati Quattroporte, Ferari 430, 599, 612, Lamborghini Murcielago or Ashton Martin DBS fall into the F segment according to Global Insight.

entirely on the price. In the case of this car model, an additional problem has to be solved. According to Germany, the model classifies as a hybrid car in view of the added combustion engine. On the other hand, however, it is produced on the same production lines as the MCV model, has the carbon fiber reinforced plastic car body and the combustion engine is an additional element improving the electric propulsion, which moreover will be developed outside the aided facility. Considering the hybrid cars which have been so far available on the market, they are usually combustion engine cars with metallic car bodies and a supplementary electric propulsion provides only for a minor share of the car performance.

- (72) At this stage the Commission is not in a position to take a definite view as to whether the traditional market segmentations developed for the conventional car market by Polk, Global Insight, and others, can be transferred to the electric car market at all. At this stage, it considers that the attribution to segments analogous to the combustion engine passenger cars is highly problematic. *Prima facie*, it seems difficult to apply the segmentation according to POLK due to the importance that is given to the combustion engine in defining the segments. Also the application of the segmentation established by ISH Global Insight appears difficult. The decisive parameters here are the length of the car and its price: by length, the majority of the electric vehicles recently being developed (as announced by car manufacturers) seems to fall within the small segments A – B – C; however by price, the appropriate segment is higher, might be at least D. The Commission seeks comments by interested parties on the transferability of existing classifications for the purpose of the market definitions.
- (73) In addition, the Commission is not in a position to take a definite view of whether (independently on the fact whether electric cars constitute an integral part of the general passenger car market or not) the assignment of the i3 and i8 models to the segments proposed by Germany is appropriate. The Commission seeks comments by interested parties on this issue.
- (74) In this context, the Commission notes that Germany suggests to place the i3 car into a combined C/D segment. The Commission reminds that it raised doubts as to the feasibility of applying combined segments for the combustion engine passenger cars in the past¹⁵. The Commission is not in a position to take a definite view on the issue of combined segments at this stage, and again seeks comments by interested parties on the issue.
- (75) Without any past experience, and due to the difficulties stated above, the Commission is not in a position to reach a conclusion on the relevant product market at this stage. Therefore, in its further analysis, the Commission considers all plausible markets as relevant product markets, i.e. the market for electric cars, the market for all passenger vehicles without the distinction of propulsion and the market for hybrid cars (in the situation of model ‘i8’). Regarding the segmentation, the Commission carried out the calculations of the market shares in line with the German proposal to assess the BMW MCV electric car as part of the

¹⁵ Most recently see Commission decisions in SA.27913 - C 31/2009 - HUN - LIP - Aid to Audi Hungaria Motor Kft; Decision of 28.10.2009 (C(2009)8131) in the case C 31/2009, OJ C 64, 16.03.2010, p. 15; Extension decision of 6 July 2010 (C(2010)4474) in the case C 31/2009, OJ C 234, 10.09.2010, p.4.

combined C/D segment, as well as for B, C and D segments separately and the sport car in segment F.

3.5.3.3. Relevant geographic market

- (76) According to point 70 of the RAG, markets should normally be defined at the EEA level for the purposes of carrying out the tests under point 68, subparagraphs a) and b) of the RAG or, “if such information is not available or relevant, on the basis of any other generally accepted market segmentation for which statistical data are readily available”.
- (77) The German authorities consider as the relevant geographic market the global market or at least a market larger than the EEA, since both BMW models are targeted at an international demand, and so far the manufacturing of the electric passenger cars is limited to Europe, USA and Asia (according to the German authorities at the present ca 50% of the production takes place in Europe and 30% in the USA).
- (78) The German authorities underline that the dynamics of the development of the market for electric vehicles depend also on further sharpening of CO2 emission legislation in particular countries and the fact that while some countries (USA, Japan) apply the same customs duties on imports of electric passenger cars as those of combustion engine cars, others (China) apply much lower customs duties. Differences exist also in prices of imports of carbon fibers in comparison to steel used for production of combustion engine vehicles. In addition, the trade in electric vehicles is also less limited by technical standards applicable in different countries as in the case of combustion engine cars. They also emphasize that the market is heavily dependant on governmental programs of subsidies for consumers. These subsidies make electric cars affordable to a larger group of consumers since they partially mitigate the significant difference between the price of an electric car and a combustion engine car corresponding with its size. Without the subsidies it would remain very exclusive and the demand for it limited to a very small group of consumers. In the US, the governmental support is envisaged up to USD 7,500 per car, and similar amounts apply in China and Japan. In the future, the subsidies might be extended to megacities like Mexico City and Sao Paolo.
- (79) In some of its previous decisions concerning the car sector¹⁶ the Commission defined the relevant geographical market as “at least EEA-wide” and did not explicitly exclude the possibility of the relevant geographic market being larger than EEA. However, in two cases of regional aid to the car sector (Audi Hungary, Fiat Powertrain Poland) the Commission initiated the formal investigation as regards, inter alia, the appropriate market definition.
- (80) On the basis of information available (the first electric cars where introduced on the market only in 2010), the Commission is unable to take a definite position at this stage on whether a separate electric cars market would be global or not. The Commission invites third parties to submit comments as to the appropriate

¹⁶ Commission decisions in cases C 31/2009 Audi Hungary, N 674/2008 VW Slovakia (OJ C 205, 29.7.2010, p. 1), N 473/2008 Ford España (OJ C 19, 26.1.2010, p.5), etc.

definition of the geographic market for electric cars in general, respectively for cars as represented by the i3 and i8 models.

- (81) As the Commission is not in position to reach a final conclusion on the precise geographic market definition for the purposes of the point 68(a) of the RAG, it will carry out the relevant tests both for the EEA and the global markets.

3.5.3.4. Market shares- test (point 68(a)-test)

- (82) In order to examine whether the project requires a detailed verification of the necessity of aid and whether the benefits of the project outweigh the resulting distortion of competition and trade in accordance with point 68(a) of the RAG, the Commission has to analyse the market shares of the aid beneficiary before and after the investment and verify if these market shares exceed 25% on the relevant production and geographic market.
- (83) As the notified investment project of BMW started in 2009 and full production capacity is envisaged for 2014, the Commission should examine the market share of the BMW Group on the relevant product and geographical markets in 2008 and 2015. However, since the first electric car was introduced on the market only in January 2011 (Nissan Leaf), the Commission is not able to establish the market share of BMW on the market for electric passenger cars in 2008.
- (84) Concerning the market shares of BMW in electric cars after the implementation of the project, i.e. in 2015, the German authorities based their calculation on data which were published in an external study on electric cars produced by the Deutsche Bank dated 9 June 2008 and data collected by the Boston Consulting Group in August 2009. In particular, the data provided by Germany are based on the assumption that the worldwide market for electric cars (limited to BEVs) will represent only 1% of the total car passenger market (in 2015 the sales of all passenger cars without distinction of propulsion are estimated to amount to 72.4 million worldwide and 15.3 million within the EEA, whereas sales of the electric cars limited to BEVs only to 720,000 units worldwide/150,000 in the EEA and sales of the hybrids in total to 12.3 million worldwide/2.6 million in the EEA). This percentage may be too conservative, but Germany was unable to provide any other independent third party estimate for period around 2015 than the Deutsche Bank study arguing that most other sources provide estimates only as of 2020. The sales of the first electric model, Nissan Leaf, suggest that the dynamics of the development of the electric car market was underestimated by Nissan even in 2011, i.e. 3 years after the publication of the Deutsche Bank forecast. Nissan expected to sell 10,000 units of the electric model in 2011, however, only during the first three months of 2011 it sold 4,000. The Commission invites interested parties to submit comments on the expected size of the worldwide and EEA electric car market in 2015.
- (85) Germany presented data/estimates for BMW sales. It should be noted in this context that BMW calculated its market share assuming that out of its entire production of [10,000-50,000] (or [...]) only [...] MCVs are planned to be sold on the EEA market while [...] will be exported. Similarly, it is envisaged that 50% of the envisaged production of the sport car model (up to [...] units) will be sold outside the EEA. *This breakdown between EEA domestic sales and extra-EEA exports is not verifiable for the Commission at this stage.* The Commission

invites interested parties to submit comments on whether such breakdown is realistic, in view of the foreseeable market evolution.

- (86) The Commission also notes also that Germany was also unable to provide data for the F segment alone, and provided data for combined segment E2+F (relevant for i8), since for internal purposes BMW does not collect data on segments E2 and F individually.
- (87) The results of the market share tests (applying the above breakdown between EEA domestic sales and extra-EEA exports) are presented in the following table:

	2008	2015
All passenger car market - worldwide total	2.6%	2.6%
Segment B	1.8%	1.8%
Segment C	1.4%	1.5%
Segment D	5.1%	5.5%
Segment E2+F***	5.1%	8.2%
Combined segment C/D	2.9%	3.1%
All passenger car market - EEA wide total	5.7%	6.5%
Segment B	3%	4%
Segment C	3.5%	4.5%
Segment D	12.3%	14.2%
Segment E2+F***	12.7%	17.3%
Combined segment C/D	6.5%	7.7%
Electric car market - worldwide total	/	[3-6%]
Segment B	/	[<25%]
Segment C	/	[<25%]
Segment D	/	[>25%]
Segment E2+F***	/	[>25%]**
Combined segment C/D	/	[<25%]
Electric car market - EEA wide total	/	12.7%
Segment B	/	[>25%]
Segment C	/	[>25%]
Segment D	/	[>25%]
Segment E2+F***	/	[>25%]**
Combined segment C/D	/	[<25%]
Hybrid car market - worldwide total	/	*
Segment E2+F***	/	3.2%
Hybrid car market - EEA wide total	/	*
Segment E2+F***	/	15%

* data not available

** one of the scenarios of the Commission for the purpose of this assessment under which the i8 and i3 models are perfect substitutes provided that they are manufactured on the same production lines as i3 and therefore a supply-side substitute (own calculations of the Commission)

*** according to Germany data solely for the F segment are not available

- (88) These results suggest that only on the **all passenger car market** BMW's market share is below 25%, whether this market is EEA or global, and whatever the segmentation (disregarding the problems the application of the segmentation as indicated in recital 68-70 above).
- (89) As for the **electric car market**, the results based on the available data do not allow to exclude that BMW's market share on a separate **global** electric car market might exceed the 25% threshold in the **D segment** (forecasts reach [$>25\%$]). Similarly, if the relevant product market for the 'i8' model was defined as the market for electric cars and not hybrid cars in view of the fact it is manufactured on the same production lines as the purely electric 'i3' model and thus represents a substitute to the BEVs, the market share of BMW might also exceed the 25% threshold for the F segment ($[>25\%]$).
- (90) On the **EEA** market for electric cars **without segmentation**, the 25% threshold is not exceeded only if BMW sells less than [...] cars of its output of [10,000-50,000] cars on the EEA market. However, the 25% threshold risks to be exceeded with regard to the **segmented electric car EEA** market and even under the consideration of the division of sales inside and outside the EEA as suggested by Germany, if the Commission rejects, in line with the current practice (e.g., in the opening decision on Audi Hungary, the Commission did not accept the proposal by Hungary to combine certain segments defined according to Polk) in the preliminary assessment the possibility that car segments can be combined and if the BMW production has to be assigned to either the B, C or the D segment. In this situation, BMW's market share would exceed 25% on all considered individual segment within the EEA ($[...]\%$ in the **B segment**, $[...]\%$ in **C**, $[...]\%$ in the **D segment** and even $[...]\%$ in the **F segment**).
- (91) On the basis of the available data, the Commission is not able to exclude without doubts at this stage that the market shares of BMW on all considered plausible markets do not exceed the 25% threshold as laid down in point 68(a) RAG. At the same time, in view of the production capacity of [10,000-50,000] electric cars in the plant in Leipzig and considering the dynamics of the electric car market and the number of competing car manufacturers on that market, it is plausible that BMW may not exceed the 25% threshold laid down in point 68(a) RAG, at least not in a longer term perspective. This fact suggests that the available data demonstrating that the electric car market (BEV) would constitute only 1% of the overall passenger car market are too conservative to serve as a reliable basis for the purposes of the tests pursuant to the point 68 of the RAG. The Commission invites third parties to provide their views on the above discussed problems.

3.5.3.5. Production capacity increase in an underperforming market test (point 68(b)-test)

- (92) The Commission is obliged to examine under point 68(b) of the RAG whether the capacity created by the investment project exceeds the threshold of 5% of the size of the market measured using apparent consumption¹⁷ data of the product

¹⁷ Apparent consumption of the product concerned is defined in footnote 62 of the RAG as “production plus imports minus exports”.

concerned. In that case, the Commission must also examine whether the average annual growth rate of the apparent consumption of the products concerned over the last five years is above the average annual growth rate of the EEA's GDP. The Commission carries out the test for the plausible product segment markets identified above.

- (93) The results of the capacity increase test in an underperforming market gives the following results for each of the analyzed segments:

Table: capacity increase created by the project on all passenger car market at EEA level

	Market volume 2008	Capacity increase
Segment B	4.6 million	0.87%
Segment C	5.1 million	0.78%
Segment D	2.6 million	1.54%
Segment C/D	7.7 million	0.52%
Segment E2+F	1.1 million	0.36%

- (94) From the results of the test it is obvious that considering the all passenger car market without distinction of propulsion, the 5% threshold in the first part of at point 68(b) of the RAG would not be exceeded in any of the analyzed segments of the EEA market.
- (95) This test cannot be performed for the electric car market, since it had not existed in 2008. However, it can be excluded with certainty that the market for electric cars is an underperforming market.
- (96) By contrast, as regards the conventional car markets, the German authorities provided data on the compound annual growth rate (CAGR) of the apparent consumption of the overall passenger cars market without distinction of segments, for the segments B, C and D separately and for the combined segment C/D and E2/F¹⁸. The data for the reference period 2003-2008 concern only EU27, not the EEA and its sources are the European Association of Manufacturers (ACEA) and EUROSTAT.
- (97) The indicated growth rates for the reference period 2003-2008 clearly demonstrate that the analyzed markets are underperforming, even declining, and the situation in other segments concerned is not likely to differ: -0.55% for the total passenger car market, -1.65% for the B segment, 0.80% for the C segment, -4.66% for the D segment, -1.73% for the E2+F segment and -1.25% for the combined C/D segment. During the same period, the average annual growth rate of the EEA GDP was clearly higher: 2.17% in EUR in nominal prices and 0.86% in real prices (the respective growth rates for EU27 are 2.11% and 0.85%).
- (98) However, as referred to above, the Commission only needs to apply the test set out in the second part of point 68(b) of the RAG if the 5% threshold laid down in the first part is exceeded. The available data shows that the 5% capacity increase threshold in the relevant market is not exceeded by the investment project under scrutiny.

¹⁸ According to Germany it was not possible to provide data on the F segment separately.

3.6. Conclusion on the 68(a) and (b) tests

- (99) On the basis of the test results the Commission cannot confirm that the thresholds laid down in point 68(a) of the RAG are not exceeded for all plausible markets, whereas the capacity increase test under point 68(b) of the RAG does not create problems for the compatibility of the investment project with the Internal Market.

3.7. Doubts and grounds for opening

- (100) The Commission deals for the first time with a notification concerning regional aid for manufacturing of electric passenger vehicles (BEV/PHEV). The preliminary examination did not allow the Commission to take definite views on the appropriate definitions of the relevant product and geographic markets, and having carried out the point 68 (a) test for all plausible markets, the Commission is unable to confirm that the 25% threshold is certainly not exceeded. At the same time, the Commission raises doubts as to whether the notified aid can be exempted from the tests under point 68 of the RAG, on the basis of footnote 65 of the RAG.
- (101) For the reasons set out above, the Commission, after a preliminary assessment of the measure, has doubts as to whether the notified aid does not exceed the threshold laid down in point 68 (a) of the RAG.
- (102) Consequently, the Commission is under duty to carry out all the required consultations and, therefore, to initiate the procedure under Article 108(2) of the TFEU. This would give the opportunity to third parties whose interest may be affected by the granting of the aid to comment on the measure. In the light of both the information submitted by the Member State concerned and that provided by third parties, the Commission will assess the measure and will take its final decision.
- (103) In the event that the comments received in reply to the opening of the formal investigation do not allow the Commission to conclude without any doubt that either the aid can be exempted from the application of the tests under point 68 of the RAG, on the basis of the provisions of footnote 65 of the RAG, or that the thresholds laid down in point 68(a) and (b) tests are not exceeded, the Commission will carry out an in-depth assessment of the investment project on the basis of the Commission Communication on the Criteria for an In-Depth Assessment of Regional Aid to Large Investment Projects¹⁹.
- (104) The Member State and interested parties are invited to provide in their comments to the opening decision all information necessary to carry out this in-depth assessment and to submit the appropriate information and documentation, as indicated in the Communication.
- (105) On the basis of the evidence submitted concerning the above mentioned factors, the Commission will perform a balancing exercise of the positive and the negative effects of the aid, conducting an overall assessment of the impact of the

¹⁹ Communication from the Commission concerning the criteria for an in-depth assessment of regional aid to large investment projects, OJ C 223, 16.09.2009, p.3.

aid in such a way as to allow the Commission to close the formal investigation procedure.

4. DECISION

- (106) In light of the foregoing considerations, the Commission, acting pursuant to the procedure laid down in Article 108(2) of the TFEU, requests Germany to submit its comments and to provide all such information as may help to assess the aid measure, within one month of the date of receipt of this letter. It requests your authorities to forward a copy of this letter to the potential recipient of the aid immediately.
- (107) The Commission wishes to remind Germany that Article 108(2) of the TFEU has suspensory effect, and would draw its attention to Article 14 of Council Regulation (EC) No 659/1999, which provides that all unlawful aid may be recovered from the recipient.
- (108) The Commission warns Germany that it will inform interested parties by publishing this letter and a meaningful summary of it in the Official Journal of the European Union. It will also inform interested parties in the EFTA countries which are signatories to the EEA Agreement, by publication of a notice in the EEA Supplement to the Official Journal of the European Union and will inform the EFTA Surveillance Authority by sending a copy of this letter. All interested parties will be invited to submit their comments within one month of the date of such publication.

If this letter contains confidential information which should not be published, 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 publication of the full text of this letter. Your request specifying the relevant information should be sent by registered letter or fax to:

European Commission
Directorate-General for Competition
State Aid Greffe
B-1049 Brussels
Fax (32-2) 296 12 42

Yours faithfully,
For the Commission

Joaquín ALMUNIA
Vice-President