



EUROPEAN COMMISSION

Brussels, 3.8.2011
C(2011) 5546 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>PUBLIC VERSION</p> <p>WORKING LANGUAGE</p> <p>This document is made available for information purposes only.</p>
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COMMISSION DECISION

of 3.8.2011

ON THE STATE AID

No SA. 26980 (C 34/2009 (ex N 588/2008))

which Portugal plans to grant to Petrogal

(Text with EEA relevance)

COMMISSION DECISION

of 3.8.2011

**on the aid No SA. 26980 (C 34/09 (ex N 588/08))
which Portugal is planning to grant to Petrogal**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular the first subparagraph of Article 108(2) thereof,

Having regard to the Agreement on the European Economic Area, and in particular Article 62(1)(a) thereof,

Having called on interested parties to submit their comments pursuant to those provisions¹ and having regard to their comments,

Whereas:

1. PROCEDURE

- (1) By letter dated 19 November 2009, the Commission informed Portugal of its decision to initiate the procedure laid down in Article 108(2) of the Treaty in respect of regional ad hoc aid in favour of an investment project by Petroleos de Portugal, Petrogal S.A. ('Petrogal'), concerning its refinery activities in Sines and Matosinhos (the 'investment project'). By letter dated 9 December 2009, Portugal provided the non-confidential version of the opening decision for its publication.
- (2) By letter dated 17 December 2009, Portugal asked for an extension of the delay to submit its comments by one month. On 22 December 2009, the Commission accepted this request. By letter dated 21 January 2010, the Portugal submitted its comments.
- (3) The Commission decision to initiate the procedure was published in the *Official Journal of the European Union*². The Commission called on interested parties to submit their comments.
- (4) The Commission received comments from the *Associação das Indústrias da Petroquímica, Química e Refinação*³, from the *Confederação da Indústria Portuguesa*⁴, from *Associação para a eficiência energética*⁵, from Competitor n°2⁶, a

¹ OJ C 23, 30.1.2010, p.34.

² Cf. footnote 2.

³ Letter dated 26 February 2010.

⁴ Letter dated 26 February 2010.

⁵ Letter dated 26 February 2010.

competitor undertaking of Petrogal⁷, from Competitor n°1⁸⁹, from *União Geral de trabalhadores*¹⁰, from the Municipality of Sines¹¹, from *Confederação Geral dos Trabalhadores Portugueses*¹² and from the *Associação Industrial Portuguesa*¹³.

- (5) By letters dated 9 March, 10 March, 17 March and 19 March 2010 the Commission forwarded these comments to Portugal, which was given the opportunity to react; its observations were received by letter dated 8 April 2010.
- (6) By letters dated 15 and 28 July 2010¹⁴, the Commission requested further information, which was provided by Portugal by letters dated 16 and 23 August 2010, respectively.
- (7) By letters dated 4 and 5 August 2010, the Commission asked Competitors n°1 and n°2 for clarifications, which were provided by letters dated 10 and 15 September 2010. By letter dated 20 September 2010, these clarifications were submitted to Portugal for comments.
- (8) By letters dated 17 September and 1 October 2010, the Commission requested further information from Portugal. Portugal replied on 18 and 29 October 2010.
- (9) By letters dated 13 October 2010, Competitors n°1 and n°2 were asked specific details regarding their replies dated 10 and 15 September 2010, respectively.
- (10) By letters dated 21 and 28 October 2010, the Commission asked Portugal for additional information. By letters dated 12 November, Portugal replied.
- (11) By letter dated 10 November 2010, Competitor n°1 submitted clarifications to its letter dated 15 September 2010. On 12 November 2010, these clarifications were submitted to Portugal for comments, which were replied on 19 November 2010.
- (12) By letter of 30 November 2010, the Commission asked Portugal for additional information. By letter of 20 December 2010 Portugal submitted its reply.
- (13) By letter dated 11 November 2010, the Commission asked Portugal to submit a cost-benefit analysis of the investment project. On 1 December 2010, Portugal submitted the requested information.
- (14) By letter dated 6 January 2011, Portugal submitted information regarding Petrogal's shareholders.
- (15) On 12 January 2011, a meeting was held between the Portuguese authorities, Petrogal's representatives and the Commission. By letter dated 25 January 2011,

⁶ In accordance with Article 6(2) of Regulation (EC) No 659/1999, this interested party has requested its identity to be withheld from the Member State concerned on grounds of potential damage.

⁷ Letter dated 26 February 2010.

⁸ In accordance with Article 6(2) of Regulation (EC) No 659/1999, this interested party has requested its identity to be withheld from the Member State concerned on grounds of potential damage.

⁹ Letter dated 1 March 2010.

¹⁰ Letter dated 2 March 2010.

¹¹ Letter dated 10 March 2010.

¹² Letter dated 11 March 2010.

¹³ Letter dated 18 March 2010.

¹⁴ Portuguese version of the letter (English version was sent on 22/7/2010)

Portugal submitted information regarding some of the issues raised during the meeting (e.g. market assessment, incentive effect of the aid).

- (16) By letters dated 24 January, 16 March and 12 April 2011, the Commission requested additional information on the potential counterfactual scenario to the investment project, to which Portugal replied by letters dated 7 February, 4 April and 29 April 2011 respectively. By email dated 7 June 2011, the Commission requested information not submitted by Portugal in previous letters. By email dated 9 June 2011 and letters dated 11 and 17 June 2011, Portugal submitted information regarding some of these issues.
- (17) By letter dated 24 June 2011, the Commission asked Portugal to clarify outstanding information regarding the diesel fuel market. By letters dated 30 June and 14 July 2011, Portugal submitted this information. By letter dated 20 July 2011, the Portuguese authorities submitted their agreement that the Commission adopts this decision in the English language.

2. DETAILED DESCRIPTION OF THE STATE AID

2.1. The beneficiary

- (18) The beneficiary of the State aid, Petróleos de Portugal - Petrogal, S.A. (hereinafter referred to as "Petrogal"), is a 100% subsidiary of Galp Energia, SGPS, S.A. ("Galp Energia"). The main shareholders of Galp Energia are ENI SpA¹⁵ (33.34 %), Amorim Energia BV ("Amorim Energia")¹⁶ (33.34 %), Parpública Participações Públicas ("Parpública")(SGPS)¹⁷ (7 %), Fidelity International Limited (2.01 %), Caixa Geral de Depósitos SA ("CGD")¹⁸ (1 %), and others (23.31 %). Galp Energia is the holding company of the Galp Energia Group ("Galp"). Galp Energia is active in the petroleum product market (which includes refining and marketing activities, such as non-retail and retail sales) as well as in the gas market.
- (19) The holding company was originally set up on 22 April 1999 under the name of GALP - Petróleos e Gás de Portugal SGPS, S.A., mainly for the purpose of trading in oil and

¹⁵ ENI S.p.A. ("ENI") is the leading Italian-based energy company, listed on the Milan and New York (NYSE) stock exchanges. Its operations in Exploration & Production, Gas & Power, Refining & Marketing of oil products, Petrochemicals and Engineering, Construction and Drilling services span over 70 countries. ENI's refining capability is extended to Italy, Germany and Czech Republic. In Italy, it is composed of five wholly 100% owned refineries and a 50% interest in the Milazzo refinery in Sicily. As for refineries outside Italy, ENI has limited participations in refineries in Germany and in the Czech Republic. In Germany ENI holds an 8.3% interest in the German SCHWEDT refinery and a 20% interest in BAYERNOIL, an integrated pole that includes the Ingolstadt, Vohburg and Neustadt refineries. ENI's refining capacity in Germany amounts approximately to 70 kbbl/d mainly used to supply ENI's distribution network in Bavaria and Eastern Germany. As for the activity in the Czech Republic, ENI has an overall stake of 32.4% in Česka Rafinerska, which includes two refineries, Kralupy and Litvinov. ENI's share of refining capacity amounts to 53 kbbl/d. In 2007, refining throughputs on ENI's own account in Italy and outside Italy were 37.15 mmt tonnes.

¹⁶ Amorim Energia is based in the Netherlands. Its main shareholders are Esperanza Holding B.V. (45%), Power, Oil & Gas Investments B.V. (30%), Amorim Investimentos Energéticos, SGPS, S.A. (20%) and Oil Investments B.V. (5%). Portuguese investor Américo Amorim controls, directly or indirectly, 55% in Amorim Energia, the other 45% being owned by Sonangol, through its control of Esperanza Holding B.V. Sonangol is Angola's state oil company.

¹⁷ Parpública is the holding company for the Portuguese state's equity stakes in several companies

¹⁸ CGD is a financial institution wholly-owned by the Portuguese state.

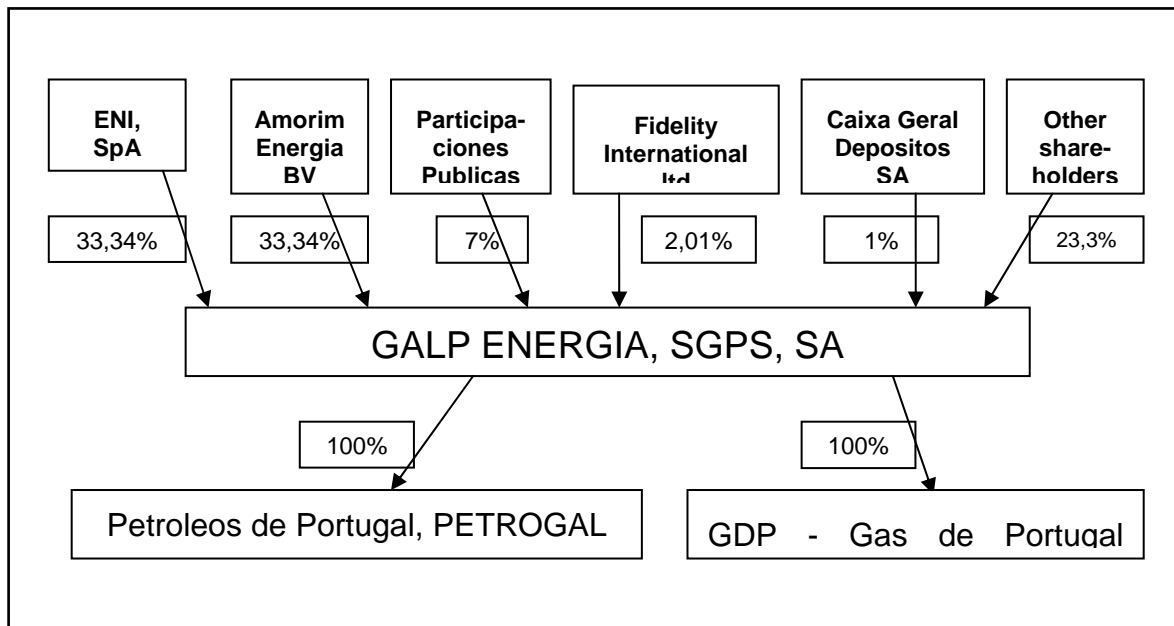
natural gas, bringing together two pre-existing Portuguese government owned companies which were placed under Galp Energia's control namely Petrogal, focusing on petroleum products, and GDP - Gas de Portugal, SGPS, S.A., focusing on natural gas¹⁹.

- (20) Galp Energia's business also includes retail and wholesale marketing of refined petroleum products in the Iberian Peninsula. It is the market leader in Portugal²⁰, and has a growing presence in Spain.
- (21) Petrogal owns the sole two refineries in Portugal. The refineries are in Sines and Matosinhos. The refining business comprises all refining, supply and logistics activities. Petrogal is the largest marketer of petroleum products in Portugal, as well as one of the largest in the Iberian Peninsula. It effectively manages all the imports of crude oil, and a part of the imports of refined products into Portugal; it also manages 80 % of the storage capacity of crude oil and refined products²¹ and has an important position in Portugal's logistics infrastructure for oil products.
- (22) Petrogal has an extensive product range that includes gasoline, diesel fuel, jet fuel, fuel oil, naphtha, LPG, bitumen and several aromatic products. The refining business is responsible for the supply of oil products to Petrogal's retail, wholesale and LPG marketing divisions, to competitors and foreign customers, and for the operation of their refining assets and logistics tools. Petrogal stores and transports its products using either its wholly-owned storage assets, or affiliated logistics companies.
- (23) Figure 1 presents Petrogal's ownership and controlling rights:

¹⁹ Source: Galp Energia's website: <http://www.galpennergia.com>

²⁰ According to Petrogal's website, in 2005, through its network of service stations (837 in Portugal and 223 in Spain), Petrogal had a 37% retail market share, based on sales volumes, in Portugal and a 9% retail market share in the Iberian Peninsula. In the wholesale market, it supplied more than 4,300 industrial and commercial users with an aggregate of 5.5 million tonnes of refined petroleum products, representing a 51% market share in Portugal and 11% in the Iberian Peninsula.

²¹ Data included in the Report by the Portuguese Competition Authority on the Fuel Market in Portugal, 2 June 2008, p. 9 - as published on the website: <http://www.concorrencia.pt/Publicacoes/Autoridade.asp>



The Shareholders' Agreement

- (24) A shareholder agreement was signed on 29 December 2005 between Amorim Energia, ENI and Rede Eléctrica Nacional de Portugal (REN), with CGD joining the agreement on 28 March 2006 (the "Shareholders' Agreement"). The Shareholders' Agreement entered into force on 29 March 2006 for a period of eight years. According to article 20, first paragraph c) of the Portuguese Securities Code, voting rights attached to Galp Energia shares owned by parties to the Shareholder's Agreement are reciprocally assigned to the other parties. Consequently, Galp Energia is considered to be jointly controlled by the shareholders that are parties to the Shareholders' Agreement.
- (25) According to Portugal, it results from the Shareholders' Agreement that shareholders and, in particular, ENI, cannot control and solely define strategies between their own refining activities and Petrogal's refining activities.

2.2. The Petrogal investment project

- (26) The investment project serves to reconfigure and expand the existing refinery units in Sines and Matosinhos, the only two existing refineries in Portugal. In addition, the investment project aims at improving integration and synergy effects between the two refineries. It opens the possibility of using heavier crudes.
- (27) The investment project aims mainly at increasing the production of diesel fuel to the detriment of gasoline. The investment project concludes that the increased use of heavy crude oil will reduce raw materials cost and will lend flexibility to the origin of crude oils to be processed.
- (28) The investment project for the conversion of the Matosinhos refinery consists more precisely in the construction of a new vacuum distillation unit for obtaining vacuum gas oil (VGO) and a new visco-reduction unit (visbreaker) for the soft thermal cracking of the resulting vacuum residue.
- (29) The investment project for conversion of the Sines refinery aims at the construction of a new hydrocracker, namely a unit for hydrocracking vacuum gas oil, for the production of diesel and jet fuel. According to the investment project, the hydrocracker unit will use, as feedstock, vacuum gas oil and visbreaker gas oil

produced both at the Matosinhos and Sines refineries, thereby making full use of the processing capacity of the national refining equipment. It will treat around [] barrels per day, using around [] Ktonnet/annum of atmospheric residue as primary feedstock.

- (30) The products obtained by hydrocracking (LPG, heavy naphtha²² and diesel) are [] hydrogenated, which gives them a superior quality. As a result of the investment project, it is expected that only the production of diesel and heavy naphtha will increase.
- (31) According to the investment project, part of the heavy naphtha produced in the Sines refinery will be shipped to Matosinhos as raw material for Petrogal's aromatics plant²³, which will be a further step to increased integration of both refineries. The increased production of heavy naphtha is an inevitable technical consequence of the conversion project in Sines.
- (32) The works on the investment project started in 2008 (the first order was issued on 14 March 2008 as a result of the decision taken by the Board of Directors on 5 March 2008) and were due by 31 December 2010. Full production capacity is expected to be reached by 2011.

2.3 Single investment project

- (33) Portugal suggests that despite the geographic distance between the two refineries (some 450 km to be covered by sea transport), the investment project should be considered as a single investment project (SIP) within the meaning of paragraph 60 of the Guidelines on national regional aid for 2007-2013²⁴ (hereinafter referred to as 'RAG'). The Portuguese authorities confirm that Petrogal has not received State aid in the three years previous to the start of the notified investment project.

2.4 Costs of the investment project

- (34) The investment in Sines represents investment costs of EUR [] in nominal value. The Sines refinery is to receive aid worth EUR [] (nominal value), resulting in an aid intensity of 16 %. Regarding the Matosinhos refinery, the investment amounts to EUR [] (nominal value) and the refinery is to benefit of aid worth EUR [] (nominal value), corresponding to an aid intensity of 13 %.
- (35) The eligible expenditures of the investment project are EUR 974 064 894 at present value (EUR 1 058 934 146 in nominal value) and consist exclusively of equipment (no land or buildings). The aid amount for both refineries amounts to EUR 121 091 314 in present value (EUR 160 484 007 in nominal value), corresponding to an aid intensity of 12.43 %. The breakdown per year of eligible expenditures is presented in the Table 1:

Table 1

Eligible costs (in EUR)	2007	2008	2009	2010	Total
Tangible fixed assets	[] ²⁵	[]	[]	[]	1,058,934,146

²² Naphtha is a light fraction of refined crude oil between gases and petroleum. It is used as feedstock by the petrochemical industry as its cracking supplies several products and it can also be used as a component for gasoline (light naphtha) or to produce reformat (heavy naphtha).

²³ The remaining part is immediately reused in Sines refinery in its internal process.

²⁴ OJ C54, 4.3.2006, p. 13.

²⁵ Costs for preparatory engineering studies.

2.5 Financing of the investment project

- (36) Petrogal plans to finance this investment project from using its own resources, in addition to the State aid it has applied for (EUR 160 484 007 in nominal value). There are no other State aid sources of financing foreseen. The investment project benefits also from European Investment Bank loans totalling EUR 500 million, approved in 2009. The beneficiary's own contribution to eligible expenditure accounts for 36%.

2.6 Regional aid ceiling

- (37) In accordance with the Portuguese regional aid map for 2007-2013²⁶, the regions of Alentejo and Norte, in which the Sines and Matosinhos refineries are respectively located, are eligible for regional aid under the derogation foreseen by Article 107(3)(a) of the Treaty with ceilings for regional investment aid to large enterprises of respectively 40 % and 30 % gross grant equivalent (GGE).

2.7 Contribution to regional development

- (38) The investment project is supposed to lead to the creation of approximately 150 direct jobs and of 450 indirect jobs in both regions. Moreover, according to the information submitted by Portugal, approximately 3 000 temporary jobs will be created during the construction period.

2.8 Form of aid

- (39) The State aid is to be granted as ad hoc aid which was designed in applying the provisions of an expired aid scheme (N 97/1999) based on Decree law n° 409/99 of 15 October 1999.
- (40) Following the Resolution of the Portuguese Council of Ministers of 6 March 2008, two contracts were signed on 10 March 2008 between the Portuguese Government, Petrogal and Galp Energia, for the purpose of granting the State aid. The two contracts were: "contract for the granting of tax benefits" and the "investment contract" (the "aid contracts").
- (41) The signed aid contracts foresaw the concession of the tax credit linked to the completion investment project. The aid would be a tax credit to be deducted from future payments of corporate income tax. The amount of the tax credit would be calculated by the Portuguese authorities as a percentage of the eligible investment. The tax credit would only be used for taxes generated by the investment project. In the event that tax credit could not be fully deducted, any pending tax credit could still be deducted, until the expiry of the contract (namely 31 December 2016).

2.9 Aid amount

- (42) Portugal intends to grant regional aid amounting to EUR 160 484 007 in nominal value to be awarded as from 2011. Table 2 below, provided by the Portuguese authorities, details the schedule of the granting of the aid:

²⁶ The Portuguese regional aid map was approved by the Commission by decision of 7 February 2007, case N 727/2006 (JOCE C 68, 24.03.2007 p. 26)

Table 2

Year	estimated taxable Income	Taxes	Utilisation of the tax credit*
2008			
2009			
2010			
2011	[]	[]	
2012	[]	[]	[]
2013	[]	[]	[]
2014	[]	[]	[]
2015	[]	[]	[]
2016	[]	[]	
			160 484 007

* Income generated in a given year will be taxed in the following year, and in this way the utilisation of the tax credit only takes effect in the subsequent year.

- (43) Portugal confirmed that the aid for the investment project would not be cumulated with aid received for the same eligible costs from other local, regional, national or EU sources.
- (44) In addition, the aid is granted under the condition that Petrogal will maintain the investments in the assisted regions for a minimum period of five years after completion of the investment project.
- (45) Portugal confirmed that the granting of the aid was subject to the Commission's clearance.
- (46) Petrogal applied for State aid with regard to the investment project on 22 January 2007. On 23 January 2007, the Portuguese authorities confirmed in writing to Petrogal that, subject to detailed verification, the investment project met the conditions of eligibility laid down in the "fiscal scheme" before the start of work on the project.
- (47) Portugal committed itself not to exceed the maximum aid amount and the maximum aid intensity as laid down in this Decision, even in the case of lower or increased eligible expenditures.

2.10 General provisions

- (48) Portugal committed itself to submit:
- within two months of granting the aid, a copy of the document sent to Petrogal notifying the entry into force of the aid contracts;
 - on a five-yearly basis, starting from the date of 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 the grant of the last tranche of the aid, based on the notified granting schedule, a detailed final report.

3. GROUNDS FOR INITIATING THE FORMAL INVESTIGATION PROCEDURE

- (49) In its decision to initiate the formal investigation procedure pursuant to Article 108(2) of the Treaty ('the opening decision'), the Commission expressed doubts as regards the compatibility of the aid with the provisions of the RAG. In this respect, the Commission expressed doubts in the opening decision regarding the issues mentioned in Recitals (50) to (64).

3.1. Compatibility with the general provisions of the RAG

Initial investment

- (50) Paragraph 34 of the RAG describes the standard categories of an initial investment "an investment in tangible and intangible assets relating to:
- the setting up of a new establishment;
 - the extension of an existing establishment;
 - diversification of the output of an establishment into new, additional products;
 - a fundamental change in the overall production process of an existing establishment.

Replacement investment which does not meet any of these conditions is explicitly excluded from the scope of the definition of initial investment.

- (51) In this respect, the Commission expressed doubts in the opening decision as to whether the investment project, which aims at modernising and better integrating the two refineries, increasing the production of diesel (and collaterally naphtha) while at the same time reducing the production of gasoline, could be considered as initial investment. The Commission considered that the investment project did not constitute an investment into a new establishment, nor a diversification of the output of an existing establishment into new, additional products. It could however be considered to include certain "extension" and "fundamental change of the production process" aspects.

Regional coherent development

- (52) The Commission pointed out in the opening decision that, as the aid measure has to be assessed as an *ad hoc* aid, Portugal needed to demonstrate that the investment project contributes towards a coherent regional development strategy within the meaning of paragraph 10 of the RAG.

- (53) In particular, the Commission expressed doubts in the opening decision as to whether the expected contribution to regional development really outbalances the sectoral effects resulting from the aid (EUR 160 million aid, creating only 150 direct jobs).
- (54) In this context, the Commission pointed out that there were grounds to doubt the necessity of the aid, as is apparent from the Petrogal's 2008 financial accounts, the investment project is part of its industrial strategy and is likely to be carried out in a counter-factual scenario analysis without aid. The Commission indicated that the aid did not seem necessary for the implementation of the investment (for which works started in 2008) and that Petrogal could have considered other locations for the investment. Unnecessary aid is unlikely to contribute to regional development and might result in unacceptable distortions of competition.

Formal incentive requirement

- (55) The Commission in the opening decision doubted whether the formal incentive effect requirements laid down in paragraph 38 of the RAG were met. In case of ad hoc aid, the competent authority should have issued a letter of intent, conditional on the Commission's approval, to award aid before works started on the project.
- (56) In this respect, the Commission expressed doubts in the opening decision as to whether Portugal's written confirmation that, subject to detailed verification, the investment project was eligible for State aid did indeed meet the requirements of paragraph 38 of the RAG.

3.2. Assessment of the aid under the provisions for aid to large investment projects

Single investment project

- (57) Portugal notified the investment project in the two refineries as a single investment project ("SIP"). According to paragraph 60 of the RAG, an initial investment is deemed to be a SIP when it is economically indivisible, taking into account the technical, functional and strategic links and the immediate proximity.
- (58) In this respect, the Commission expressed doubts in the opening decision considering the distance between the two refineries. Besides, the consideration of the investment project as a SIP would imply the application of an adjusted regional ceiling, on the basis of the scaling down percentage in accordance with paragraph 67 of the RAG.

Assessment of the aid under the provisions of paragraph 68 and 69 of the RAG

- (59) The Commission raised doubts in the opening decision as regards the assessment of the aid under the provisions of these two paragraphs of the RAG.
- (60) More specifically, the Commission was unable to conclude on the relevant products concerned by the investment project. It remains unclear whether the products are exclusively diesel and naphtha, as claimed by Portugal, or whether other products from the refining activity should be taken into account. The potential substitutability of refinery products from the supply side has to be considered along with the fact that naphtha may be considered an intermediate product within the meaning of paragraph 69 of the RAG.

- (61) The Commission raised doubts as regards the relevant product market and whether it is to be considered being at ex-refinery level for both diesel and naphtha, as claimed by Portugal.
- (62) The Commission raised doubts as to whether the relevant geographic markets for the products concerned should be defined at national, regional (Iberian Peninsula) or the European Economic Area ("EEA") level.
- (63) Moreover, the Commission raised doubts as to whether Petrogal, and the Galp Energia and ENI groups to which Petrogal belongs, had a market share below 25 % of the relevant market, in accordance with paragraph 68 (a) of the RAG.
- (64) Finally, in accordance with paragraph 68(b) of the RAG, the Commission raised doubts, in respect of all the products concerned, as to whether the production capacity created by the investment project exceeds 5 % of each relevant market, measured using apparent consumption data, and in that case, whether the average annual growth rate of that product's apparent consumption over the last five years is above the average annual growth rate of the European Economic Area's GDP.

4. COMMENTS FROM INTERESTED PARTIES

4.1. Comments from the Associação das Indústrias da Petroquímica, Química e Refinação (AIPQR)

Necessity of the investment project

- (65) AIPQR considers the investment project as essential for boosting the Portuguese economy and as a way to strengthen the European competitiveness in the petrochemical and refining sector. If the investment project could not be finalised or if it lacked the support necessary for its completion, this could have serious consequences regarding the autonomy and support for the petrochemical chain.

Attraction of new investment and development of new products

- (66) The new PTA (Purified Terephthalic Acid) production unit planned by Artensa (Artenius - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, S.A. which is a Spanish subsidiary of La Seda de Barcelona S.A) in Sines will substantially increase La Seda's naphtha requirements. Consequently, the increased production of naphtha by Petrogal's hydrocracking unit is crucial for the realisation of La Seda's investment, estimated at around EUR € 400 million.

Reduction of diesel deficit and gasoline surpluses

- (67) According to AIPQR, the investment project will reduce the diesel deficit at European level.

Regional development and international recognition

- (68) AIPQR considers Petrogal's contribution essential for making feasible and promoting the development of the Competitiveness and Technology Centre of the Refining, Petrochemical and Industrial Industries, as part of the Portugal strategy for the promotion of key industries for the national and regional economies.

Environmental impact

- (69) According to AIPQR, the diesel fuel obtained by hydrocracking is of superior quality, ensuring more efficient combustion and minimisation of contaminants in exhaust emissions. The quality of the diesel fuel products and also, the energy efficiency which should be achieved with the investment project, will permit to fulfil Petrogal's 2008-2011 energy efficiency plan.

Social and economic impact

- (70) Furthermore, AIPQR considers that the investment project will contribute to social and economic sustainability of Matosinhos and Sines regions and to national social and economic sustainability, if considered as a whole.

4.2. Comments from the Associação para a eficiência energética (COGEN)

Supply of diesel-oil

- (71) The investment project is relevant: more flexibility of supply and increased autonomy in diesel-oil.

Creation of new jobs

- (72) According to COGEN, the investment project will create a major opportunity in terms of technological innovation and create around 150 direct jobs and around 500 indirect medium-level jobs, all permanent.

Energy efficiency

- (73) From an energy point of view, COGEN considers that the conversion projects for both refineries will allow 14 % energy savings. Furthermore, COGEN highlight that the investment project will also make feasible another type of investment not covered by the investment project - the installation of two 82 MW cogeneration units, one at each refinery - resulting in an increased capacity of around 12 % in this technology in Portugal.

4.3. Comments from the Confederação da Indústria Portuguesa ("CIP")

Balancing of supply and demand between diesel fuel and gasoline

- (74) CIP considers that the investment project addresses the Portuguese situation which is characterised by:
- (i) a discrepancy between vehicle diesel consumption and Portugal's existing processing capacity, the result of which is a chronic need for large imports of diesel fuel and the sale abroad of excess gasoline;
 - (ii) future fuel oil surpluses caused by the fact that fuel oil is no longer used in electricity generation and that there are disincentives to use fuel oil in industry in general, which are set out in the Portuguese National Climate Change Programme;

(iii) international market trends related to an increase in purchases of heavier and more acidic fractions of crude oils, which would provide more flexibility in terms of the choice of crude oils;

(iv) contribution to security of supplies.

Energy efficiency

- (75) CIP considers that the investment project will significantly increase the energy efficiency of both refineries, in line with the commitments made by Portugal to the EU as regards increasing European energy efficiency by 10 %.

Creation of new jobs

- (76) CIP considers that the envisaged job creation of about 150 highly skilled posts and 450 indirect permanent jobs will significantly contribute to Portugal's economic development. It will boost the local economy in the regions concerned where the GDP per capita is lower than the national average and it will result in the creation of roughly 5,000 temporary jobs during the construction period.

4.4. Comments from the União Geral de Trabalhadores ("UGT")

Promotion of regional development

- (77) UGT considers that the investment project will promote regional development and have a positive impact on the economic development and social and territorial cohesion of the regions concerned. The regions concerned are characterised by high unemployment levels, by a business structure that shows little diversity and by a GDP per capita that lies below the national average. The investment project will have a significant impact on the industrial fabric of both regions and Portugal as a whole, since both upstream and downstream activities will be developed, in particular in areas such as mechanical and civil engineering, electricity or even, commerce and catering.

Creation of new jobs

- (78) UGT considers that the investment project will create more and better jobs, particularly at a time when unemployment is growing rapidly due to the economic and social crisis. The investment project is designed to create 150 jobs directly in both refineries, many of them highly skilled. A further 450 jobs are expected to be created indirectly, while 5,000 temporary jobs will be created during the construction period. The investment project will contribute to maintain some of the 2,050 existing jobs which could be jeopardised without the investment project.

Environmental impact

- (79) Furthermore, UGT considers that the investment project will help meeting rigorous environmental and safety standards as the refineries will be equipped with more environmentally friendly technology.

Insufficient supply of diesel

- (80) According to UGT, the investment project is very important to improve Portugal's insufficient diesel fuel refining and production capacity. The existing refining capacity

is clearly too small to cover domestic demand, which makes Portugal more dependent on diesel fuel imports from other countries (thus increasing strategic risks). A decrease of diesel fuel imports would also reduce the current trade deficit, which derives to a large extent from the energy accounts.

General contribution to the EU's main objectives

- (81) Finally, UGT notes that the investment project is important not only in national terms, but also for the EU, as it is designed to help develop a greener and more sustainable economy.

4.5. Comments by the Municipality of Matosinhos (CMM)

- (82) The CMM considers that the creation of jobs has a great impact on the area. Thanks to the creation of qualified jobs with salaries above the regional average, the Matosinhos refinery will contribute to the increase of the purchasing power of the area and of the region. It will continue the significant impact on the regional Gross Added-Value, resulting from the refinery's activity and from the activity of hundreds of commercial and industrial small and medium-sized enterprises, especially because the region has an unemployment rate of around 13 % (above the national average). The CMM considers that the investment project is crucial for the region, both in economic and social terms.

4.6. Comments by the Municipality of Sines (CMS)

- (83) The CMS is convinced of the importance of the Sines refinery's new units of production for the development of the local and regional economy. This will impact positively on the region's social development, due to the creation of qualified jobs and the creation of more and better small and medium-sized enterprises.

4.7. Comments by the Confederação Geral dos Trabalhadores Portugueses ("CGTP")

- (84) The CGTP considers that the investment project produces very positive environmental effects and is important for Portugal's regional development as:

i) it will make it possible to offer a larger diversification of products of better quality to the national organic chemical industry, as well as for exports. Therefore the investment project will positively contribute to the valorisation of the specialization profile of the manufacturing industry;

ii) it will generate hundreds of permanent jobs and some thousands temporary jobs in the construction phase, mainly in regions that have some of the largest unemployment rates in Portugal;

iii) it will develop the local economy at the level of housing, commerce and hotels, among other economic activities.

4.8. Comments by the Associação Industrial Portuguesa ("AIP")

- (85) The AIP indicates that the investment project will decisively contribute to the increased wealth of the Northern and Alentejo regions.

- (86) The Norte region, with an unemployment rate of 11.6 % compared with the national average of 9.8 % (data from the third quarter of 2009), is currently the Portuguese region with the highest level of unemployment, and particularly high unemployment of long duration (half of the unemployed population has been job-searching for a year or more). In the current social crisis context, the creation of 500 direct jobs and 200 permanent indirect jobs and also of, around, 2,000 temporary jobs during the construction phase represents a huge contribution for the region.
- (87) The Alentejo region is currently one of the Portuguese regions with the highest unemployment rate - 10.2 % as compared with the national average of 9.8 % (data from the third quarter of 2009) - and particularly high unemployment of long duration (half of the unemployed population has been job-searching for a year or more). In this context, the creation of 100 direct jobs and of 250 permanent indirect jobs plus around 3,000 jobs during the construction phase will represent an important contribution for the region.

4.9. Comments from Competitor n°1

4.9.1. Comments on the opening decision

The initial investment and SIP character of the investment project

- (88) According to Competitor n°1, the investment project can be considered a mere “extension of an existing establishment” within the meaning of paragraph 34 of the RAG. The investment project cannot be considered to be a SIP because the fixed assets of the investment would be “economically divisible” within the meaning of paragraph 60 of the RAG. Indeed, the Sines and Matosinhos refineries are geographically distant from each other. The investment project clearly defines a separate investment for each refinery. The refineries can choose to have vacuum and visbreaking units but no hydrocracker unit, or vice versa. The investments for the refineries are not therefore necessarily directly connected. In any event, the refineries could operate on their own without requiring any integration. Moreover, the Matosinhos refinery could sell its production of vacuum gasoil on international markets and the hydrocracker unit located in Sines could be fed with imported vacuum gasoil.

Contribution of the aid to regional development

- (89) Portugal only mentioned direct and indirect job creation as a contribution of the investment project to regional development. It is therefore impossible to demonstrate that the investment project contributes towards a coherent regional development strategy and that it addresses the economic cohesion objective²⁷. It is difficult to accept that spending more than one million euro per direct job created can be considered as an exceptional contribution to regional development. In this respect, the ratio of aid amount to direct jobs for the investment project is compared to previous Commission's decisions (presented in a table reviewing this ratio in previous Commission's

²⁷ Within the meaning of point 11 of the Communication of the Commission of 24 June 2009 on the "Criteria for an in-depth assessment of regional aid to large investment projects", published in the OJ C 223, 16.9.2009, p.3.

decisions). Furthermore, Competitor n°1 considers that the investment project is not connected with any alleged market failure.

Incentive effect of the aid

- (90) As to the formal incentive effect requirement, Petrogal never received a letter of intent from Portugal before the works started. Therefore, Competitor n°1 concludes that the aid is not in conformity with paragraph 38 of the RAG.
- (91) From an economic assessment point of view, Competitor n°1 considers that the aid does not satisfy the criteria of necessity and does not produce any incentive effect. The investment project is a productive investment economically driven by the imbalance between supply and demand, and the opportunity to have access to heavier and cheaper crude oil. It is an investment in response to the natural evolution of demand for diesel fuel. All other operators across Europe are carrying out similar investments in refineries without State aid. Therefore, facts indicate that the investment project would have been carried out anyway which is not in line with paragraph 22 of the Communication of the Commission of 24 June 2009²⁸ (the "In-Depth Assessment Communication").

Products concerned

- (92) Competitor n°1 considers that the products concerned are:
- diesel fuel (which is an end product),
 - naphtha (which is an intermediate product within the meaning of paragraph 69 of the RAG), therefore petrochemical products derived from naphtha must also have to be considered as products (deemed) concerned,
 - hydrocracking residues (where the hydrocracker unit is not equipped with a recycler).

Products and geographic markets

- Diesel

- (93) According to Competitor n°1, Petrogal is the sole market operator with a refining capacity for crude oil in Portugal. Petrogal supplies its competitors on this market. Petrogal controls the largest import and storage facilities for gasoline and diesel fuel. Petrogal has the largest service station network in Portugal. Petrogal has a dominant position or, at the very least, has significant market power in a large number of petroleum products markets in Portugal. Competitor n°1 considers that the assessment of the relevant market should not only address the ex-refinery level, but should also assess the competitive situation at the level of retail and non-retail market of diesel fuel.

- Naphtha

²⁸

Communication of the Commission of 24 June 2009 on the "Criteria for an in-depth assessment of regional aid to large investment projects", OJ C 223, 16.9.2009, p.3.

- (94) With regard to naphtha, Competitor n°1 also considers that the relevant product market to be assessed should not be limited to ex-refinery sales but should take into account downstream activities.
- (95) As regards the relevant geographic market, the ratio of total diesel fuel imports and exports in relation to the total diesel fuel sales in Portugal is too low to justify choosing the regional market as the relevant market. Competitor n°1 considers that the Portuguese market is the relevant geographic market.

Market shares

- (96) Competitor n°1 considers that ENI's activities in the affected product markets should be taken into account as, where a company can exercise decisive influence over the sales policy of another company, it is necessary to look at the combined market share of both in the relevant markets.
- (97) Competitor n°1 concludes that for diesel fuel the 25 % market threshold established in paragraph 68 of the RAG is significantly exceeded. Therefore, the aid granted by the investment project is designed to subsidize the dominant market operator, enabling it to maintain and to increase its market power. Competition will be seriously affected and the aid will distort significantly the relevant markets.
- (98) In conclusion, Competitor n°1 considers that the aid constitutes operating aid that strengthens the market position of a dominant operator in the relevant markets. The aid does not contribute to produce any incentive effect. In any event, the negative effects of the aid outweigh any positive effects it may have.

4.9.2. *Comments submitted by letters dated 15 September and 10 November 2010 (in reply to Commission questions of 5 August and 13 October 2010)*

Similar investment projects conducted and rate of return

- (99) Similar investment projects were conducted in four refineries (La Rabida, Castellón, Cartagena and Bilbao), with the same objective, to increase assets profitability through the installation of new conversion units which maximise the yield of medium distillates, reduce the production of fuel oil and process heavier crude oil. Competitor n°1 refers also to similar investment projects in Italy (refineries of Sannazzaro and Taranto, by ENI), in Germany (Bayernoil), in Lithuania (Mazeikiu Nafta) and in Belorussia (Slavneft).
- (100) As regards a potential benchmark rate of return for such investments in the sector, Competitor n°1 states that it is unaware of a benchmark: investment project profitability depends normally in the cost of capital of each company and other aspects. Competitor n°1 considers that, for the period during which the investment project was decided, the proxy return rate in the refining sector should be at least 10 %.

Barriers to imports of diesel (ex-refinery level)

- (101) Competitor n°1 refers in general terms to the existence of import barriers in relation to the relevant geographic market. It considers the main problem in Portugal to be Petrolgal's dominant position on the market, controlling 100 % of the refining capacity

in Portugal and hence the most important import and export terminals. It further claims that Petrogal has a dominant position in terms of product storage capacity, which some independent sources²⁹ put at 90 % of the market. This allows Petrogal to have a retail sales share of about 45 % and a non-retail sales share of 80 % of the Portuguese market.

- (102) As regards the Commission's question as to the existence of a refusal to grant access to Petrogal's capacity storage, Competitor n°1 was unable to describe such a situation.
- (103) Competitor n°1 considers that there are storage capacity limitations in Portugal and that storage costs are higher in Portugal than in other countries, such as Spain and Italy, for similar facilities or operations (approximately 25 % higher).
- (104) Competitor n°1 considers that there are no significant differences between the prices for imported diesel and price for diesel acquired from Petrogal, as prices are indexed to international prices plus logistics cost.

4.10. Comments from Competitor n°2

4.10.1. Comments to the opening decision

- (105) Competitor n°2 considers that the investment project will increase Petrogal's diesel production capacity by some 2.5 million tonnes, transforming Portugal from a small importer into a major exporter of diesel.

Contribution of the aid to regional development and incentive effect of the aid

- (106) Competitor n°2 expresses doubts as to the necessity of the aid, as Petrogal belongs to a major company, held and controlled by ENI. Petrogal is a profitable company, which has conducted substantial investments both upstream to refining in Brazil and Angola and downstream to enlarge its distribution network in Spain. It enjoys a privileged position in Portugal, being the owner of the only two refineries.
- (107) Petrogal is vertically integrated and the largest company marketing petroleum products in Portugal and the third largest competitor in the Iberian Peninsula.
- (108) Competitor n°2 considers that the State aid does not meet the formal requirements of the incentive effect of aid as set out in paragraph 38 of the RAG. The investment project is a profitable transaction in itself that satisfies the medium long-term strategic goals of Petrogal, which will thus be carried through in any event.
- (109) According to Competitor n°2, the investment project will contribute to satisfying the increasing internal demand for diesel, will allow Petrogal to become a net exporter to other markets (France and Spain for example), and will increase Petrogal's refining margin.
- (110) Competitor n°2 considers that the necessity of the aid has to be assessed on the basis of the provisions of section 2.3 of the In-Depth Assessment Communication.

²⁹ PCF Energy: Downstream Monitoring Service- Europe PORTUGAL: Galp Energia controls some 90% of Portugal's total crude and product storage capacity.

- (111) Competitor n°2 refers to the PFC Energy report mentioned in footnote 31, in which it is mentioned that Petrogal's investment project was already a reality in 2006. The investment project could only be carried out in Matosinhos and Sines regions (not because these are assisted areas, but because the refineries are located there).
- (112) Finally, Competitor n°2 considers that there could not be, by definition, another location to invest into the reconfiguration of the existing refineries.

Products concerned and relevant market

- (113) Competitor n°2 only submitted comments regarding diesel fuel.
- Ex-refinery level
- (114) Competitor n°2 explains that, although there are no legal barriers to imports, these are highly conditioned (if not limited) by a range of physical factors (lack of import storage locations, their location and ownership, the limitations of the secondary logistical network) and market structure factors (ability to set the ex-refinery prices).
- Non-retail level
- (115) The other Portuguese market players import 90 % of the total diesel imported, on which they face substantial difficulties, as mentioned in the Portuguese Competition Authority report entitled "*Relatório final sobre os sectores dos combustíveis líquidos e do gás engarrafado em Portugal*"³⁰ (the "Authority report"). Competitor n°2 considers that all these factors make the Portuguese market more closed than comparable markets in other countries.
- (116) Competitor n°2 considers that the assessment of the relevant market should not be limited to the ex-refinery level, but should also cover distribution and sales channels (retail and non-retail). The investment project will increase the production by 2.5 million tonnes per annum, transforming Portugal into a country with an annual surplus of 1.6 million tonnes of diesel, plus annual 0.5 million tonnes of bio-diesel from the Sines refinery.
- Non-retail and retail sales
- (117) According to the Authority report, this level of sales is considered as a second level in the diesel distribution structure. The diesel price will depend on the purchase price at the refinery or on import, to which transport and storage costs are added, and the sales margin.
- (118) Competitor n°2 considers that Petrogal competes also at distribution level, with a clear competitive advantage: any aid granted to reduce Petrogal's cost in the production of diesel would strengthen its current dominant position in the Portuguese market (51 % in the non-retail market and 37 % in the retail market).

³⁰ Date of publication: 31 March 2009.

Relevant geographic market

- (119) Competitor n°2 considers that the relevant geographic market should be, at most, the Iberian market. The relevant geographic market could only be at EEA level if diesel imports effectively compete with diesel refined in Portugal (namely assuming there are no legal or economic barriers to entry).
- (120) Aid to the investment will affect Petrogal's competitors on the Iberian market, as refineries located in Spain made similar investments (with very similar strategic goals) without aid.
- (121) Should non-retail and retail sales be deemed part of the relevant product market, Petrogal's market share in the national and local markets is well above the 25 % threshold set out in paragraph 68 of the RAG, and aid should not be granted.

Market shares

- (122) Competitor n°2 considers that, on the supply side, the non-retail gasoline and diesel markets are highly concentrated (the top four market players enjoy over 95 % market share), as indicated by the Portuguese Competition Authority in its report.
- (123) Petrogal has an estimated share of the non-retail diesel market in Portugal in volume terms between 35 % and 45 %. Competitor n°2 considers that the investment project will result in an additional production capacity 2.5 Mtonnes and taking this project in conjunction with this others that Petrogal has undertaken, Petrogal will be in position to meet the internal demand in the Portuguese diesel market but also to export close to 2 Mtonnes of diesel to neighbouring countries (Spain and France).

4.10.2. *Comments submitted by letter dated 10 September 2010, in reply to the Commission's request for information dated 4 August 2010.*

Similar investment projects carried out and rate of return

- (124) Competitor n°2 indicates that there is no rate of return benchmark established at sectoral level, since companies have their own target rate and target rates could differ depending on the characteristics of each investment project. Competitor n°2 gives a list of five refineries which undertook similar investment projects, amounting to more than EUR 6 billion in total, without State aid.

Barriers to diesel imports (at ex-refinery level)

- (125) Competitor n°2 points out that storage capacities and port facilities are limited. Therefore, shipments to Portugal take place in smaller quantities, which leads to higher distribution costs that affect the final retail and non-retail sales margins.
- (126) As regards storage facilities, Competitor n°2 indicates that the installations are normally used by the owner (such as Petrogal), for its own purposes. In cases of storage facilities belonging to third parties, little storage is available due to existing long term contracts already signed with other operators.

- (127) Competitor n°2 considers Petrogal has an advantage in its diesel sale price towards its competitors estimated around 3 to 5 USD/tonne due to its dominant position in the storage facilities.

5. COMMENTS FROM PORTUGAL

5.1. Comments on the opening decision

- (128) Portugal rectifies that the meeting between the Portuguese authorities and the Commission services took place on 11 March 2009. Portugal specifies that the investment project is not a replacement or an upgrading project; it is a conversion project implying effective change of the refining process with a view to better serve the increasing demand for diesel. Portugal adds that the EIB will provide funding and that the aid, in the form of a tax credit, will be granted as from 2011. Portugal also considers that assessing the investment project as an *ad hoc* aid should not lead to a tightening of the assessment rules. Indeed, the investment project contract and the aid contract concluded between Portugal and the beneficiary are conditional on the Commission's positive decision. Since the investment project and aid contracts were already submitted to the Commission during the notification phase, Portugal suggests submitting an administrative letter - with the investment project and aid contracts referred to in page 8 of the opening decision in annex to this administrative letter - indicating the entry into force of these contracts.

5.1.1. Comments regarding the investment project

The investment project as an initial investment

- (129) Portugal considers that the investment project constitutes an initial investment falling into the following categories: extension of an existing establishment or fundamental change of the production process.

Fundamental change in the overall production process

- (130) According to Portugal, the new vacuum distillation unit and the new hydrocracker unit will allow the production of higher quantities of diesel and thus to adjust the diesel production to market needs. Such adjustment is not possible with the existing configuration of the refining system that offers very little flexibility to shift production from gasoline to diesel.

Extension of the existing establishment

- (131) The new vacuum distillation unit and visbreaker in Matosinhos, the new hydrocracker unit in Sines and the original pre-existing refining units will function simultaneously. Therefore, Portugal considers the investment project to be an extension of the production system with a fundamental change of the production process.

The project as a SIP

- (132) The Portuguese authorities explain that the new process configuration will reinforce the operational and functional complementary links between the two refineries: vacuum gas oil [] will be transported from Matosinhos to Sines and, heavy naphtha []

will be transported from Sines to Matosinhos. The investment project is taking place in an integrated refining system: Sines and Matosinhos refineries are inseparable, in particular to optimize diesel production. Only the geographic criterion ("immediate geographic proximity") is not respected. However, splitting the investment project into two parts would be artificial since it is technically, functionally and strategically indivisible³¹.

5.1.2. *Comments regarding the characterization of the market and the relevant products*

Relevant products

- (133) Portugal considers that the relevant products are diesel and heavy naphtha, with diesel being the economic driver for the investment and heavy naphtha being a technically inevitable by-product of the production in Sines.
- (134) As regards the heavy naphtha produced by the reconfigured refineries, it will be used domestically, in Petrogal's aromatics production in Matosinhos, and it will substitute imports (92% of which are originated from outside the EU). The investment project will increase only the production of heavy naphtha in Sines (by [200-250] ktonne yearly)³². The increased production of heavy naphtha in Sines will replace the quantities currently imported in Matosinhos and will not be sold to third parties.
- (135) Portugal clarified that no investment in the Matosinhos refinery relates to the specific units processing heavy naphtha into reformer, an intermediate product for the aromatics (namely naphtha derivatives) production, and subsequently processing reformer in Petrogal's Matosinhos based aromatics plant into naphtha derivatives (which are sold on the market at market prices to the second generation petrochemical industry). The price of reformer charged to the aromatic plant will remain unchanged as it is indexed to [10-20] % of the import parity of naphtha and [80-90] % of the gasoline export parity.

Relevant geographic market

In relation to diesel

- (136) Portugal considers its relevant national market to be open and competitive without barriers to trade. Diesel prices are based on the price for crude oil and refining costs. Refiners have to compete with imports. Portugal considers the relevant geographic market to be Northwest Europe.

In relation to naphtha

- (137) Previous Commission decisions state that naphtha is an internationally traded product and the relevant product market is at least Western Europe.

³¹ Criteria mentioned at footnote 55 of paragraph 60 of the RAG.

³² This capacity increase occurs totally at the Sines refinery. The volume of naphtha to be transferred from Sines to Matosinhos would be 143 Ktonne/year, as import replacement, to supply the needs of the Matosinhos refinery. The balance of 69 Ktonne/year will be used within the Sines refinery in its internal process, namely as feed to the platforming units to increase production of hydrogen for the operation of the hydrocracker.

Beneficiary's market share

- (138) At group level (not including ENI figures since it does not have refining or retailing activities in the Iberian market and the Herfindahl–Hirschman Index (HHI) shows low concentration level at European level), the market share is below 25 % at regional level.

5.1.3. Comments regarding the project within a European, national and regional strategy

- (139) Portugal underlines that the investment project is in line with strategic objectives taken at national or European level. The maximisation of diesel production - estimated at [1-3] Mtonnes/year from 2011 - will allow a better use of the processing capacity of the national refining system. It will allow to better match supply and demand and to counteract the serious deficit of diesel and to reduce surplus gasoline production.

Energy dependency of the EU

- (140) According to Portugal, the investment project will reduce the dependency on Russian diesel imports – which is an objective adopted by the Commission (in its 2008 Second Strategic Energy Review: an EU energy security and solidarity action plan³³) and the Member States.
- (141) The demand for diesel has increased and will increase between 2000 and 2025 but refineries in their existing configurations can only adapt marginally to the evolution of demand without major investment into reconfigurations. Petrogal's investment foresees to the increased demand and reduces dependency on imports and associated supply risks.
- (142) The investment project will promote the reduction of the atmospheric emissions and the energy efficiency of the installations will be optimized. The energy rationalization measures foreseen allow reducing the current energy consumption in the refineries by [] %.
- (143) When production begins at the reconfigured refineries, the same cargo will be processed, but with a considerably higher conversion capacity, with lower energy consumptions, and with emissions reduction.

Summary of environmental benefits and their importance

- (144) According to Portugal, the impact on air pollution has a significant importance, as the investment project will reduce the refineries' fixed-source emissions and thus contribute towards the achievement of the regional and national air quality objectives.
- (145) At regional level, the importance of the investment project is recognized insofar as it also includes the introduction of natural gas in the refineries' fuel portfolio and in the replacement of the current steam production plant by a cogeneration unit.

³³ COM(2008) 781 final

- (146) At national level, the environmental benefits can be assessed with regard to the contribution to the achievement of goals established in the National Program for the Reducing of sulphur dioxide and nitrogen oxides Pollutants Emissions³⁴.
- (147) The investment project will improve diesel quality, and consequently, reduce polluting emissions from vehicles. The investment project will also have a positive impact on biological factors (flora and fauna) and on the landscape.

5.1.4. *Comments regarding the contribution to regional development*

Framework

- (148) Portugal underlines the investment project's important contribution to regional development, given its location in two disadvantaged regions, both suffering from high unemployment. Both regions are areas eligible under Art. 107.3(a) of the Treaty, with standard regional aid ceilings for large enterprises of 40 % (for Sines, in the Alentejo region) and 30 % (for Matosinhos, in the Norte region), according to the Portuguese regional aid map. Both regions are Convergence Objective (as defined in the EU regional policy) regions, with a GDP per capita below 75 % of the European average.
- (149) Portugal considers that the Sines and Matosinhos refineries constitute fundamental pillars of the regional economies. Portugal expects the investment project to produce extremely positive effects on employment and, more generally, on the economic fabric of the Norte and Alentejo regions.

(i) Sines

- (150) The refinery in Sines is located in Alentejo, a region with a GDP 6 % below the national average. The region is characterised by a reduced business density and a shortage of advanced services for development support and innovation. In the third quarter of 2009, the unemployment rate was 10.2 %, namely 0.4 % above the national average, and has increased since then to 11.6 % in the third quarter of 2010 (0.7 % above the national average).

(ii) Matosinhos

- (151) The refinery in Matosinhos is located in the Oporto area in the Norte region. The Norte region is currently the poorest NUTS II (Nomenclature of Territorial Units for Statistics) region of Portugal, with a GDP per capita about 20 % below the national average in 2008. The region has an economic growth rate below the EU and Portuguese average and suffers from low levels of qualified human resources. The unemployment rate grew from 11.6 % in the third quarter of 2009 to 13.2 % in the same quarter of 2010, which is significantly above the national average (respectively 9.8 % in 2009 and 10.9 % in 2010).

³⁴

Within the framework of the Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants

5.1.5. *Jobs and Training*

Creation of Direct Jobs

- (152) According to Portugal, in the operation stage, the investment project will create an estimated 150 new jobs directly related to running the processing units at the two refineries.
- (153) The ratio between the investment expenditure and the number of created direct jobs shows that the refining sector is very capital intensive. Moreover, the sector requires specific and qualified training.

Creation of Indirect and Temporary Jobs

- (154) The investment project has a significant potential to create indirect jobs, as the new units will increase the technological complexity of the refineries, and require more maintenance interventions. As a result of the refineries' subcontracting policy, there will be an increasing demand for the provision of services by specialized workers. Portugal considers that the "reconfiguration of the refining units will have a marked effect on the national industrial fabric, particularly in the mechanical engineering, electricity and building industries. It is estimated that during the busiest period of construction, around 3,000 workers will be involved in the construction of both refineries" and "around 450 indirect permanent jobs are expected to be created". These jobs require qualified personnel, normally paid above the market average, with an expected significant social and economic impact on the surrounding community, particularly in the Sines area.
- (155) As to whether the ratio of three indirect jobs for each direct job presented for the investment project – and the methodology applied – is justified, Portugal replied that this ratio should be compared to those for other investment projects in the same sector. Referring to two other State aid measures approved by the Commission (Commission Decisions N 898/2006 and N 899/2006, respectively for the Repsol Polimeros and the Artensa petrochemical projects)³⁵, Portugal considers that the direct/indirect jobs ratio proposed for the investment project is more conservative and realistic than the Repsol Polimeros ratio (15 indirect jobs for each direct job), even though both projects are brownfield. Portugal also noted that the amounts for the investment project are close to those of the Artensa project, which is a root project (greenfield). Portugal also takes into account the benchmark established by HSB Solomon Associates LLC concerning the petroleum industry: the PEI (Personnel Efficiency Index). This indicator shows the number of hours worked per EDC (Equivalent Distillation Capacity), that is, in general terms, the number of jobs generated per processed barrel of crude. In the latest available report (2008 figures), the beneficiary presented a global index of [50-70], which compares with a value of 113.7 for the study average and, 206.8 for the Southern and Central European average. This reflects the number of workers involved internally in the refinery, []; and the existence of a group of support activities based on external services which are continually provided. Portugal considers that this

³⁵ Commission Decision of 10.7.2007 for State aid case N 898/06 - Repsol Polimeros, published in the OJ C 220 of 20.9.2007, and Commission Decision of 10.7.2007 for State aid case N 899/06 Artensa - (Artenius) - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, SA., published in the OJ C 227 of 27.9.2007.

recourse to external services ensures the creation of indirect jobs and justifies the expectation of a higher ratio of indirect jobs to direct jobs than in the case of Artensa. Therefore, when compared with the Commission Decisions described in this recital, Portugal concludes that this strategy is taken to the extreme in the Repsol Polimeros Project (minimum utilisation of internal resources and maximum utilisation of external resources). The Artensa's case demonstrates the opposite, namely a balance in the utilisation of internal and external resources. Portugal considers the proposed ratio 3:1 to be in line with the refining industry's ratio and correctly reflects the degree of externalisation of Petrogal's activities (as in the area of maintenance).

- (156) In a later submission, Portugal strengthens this statement by quoting a more recent document³⁶ released by the Commission that, in Portugal's opinion, would indicate a ratio between 4:1 and 6:1: "thus while the industry employs directly only 100,000 people in the EU, it can be considered that as much as 400,000 to 600,000 jobs are directly dependent on the EU refining industry". The same document, at footnote 41, mentions "further 600,000 jobs in logistics and marketing", which would even allow a 12:1 ratio.

Safeguarded jobs

- (157) During the formal investigation phase, in a further document (a cost-benefit analysis) provided to the Commission Portugal quantifies the number of jobs safeguarded by the investment project, as it was clear that in a counterfactual no-investment scenario Petrogal would have introduced some restructuring measures, including downsizing of labour force. If the investment project were not carried out, there would have been a "total loss of 1,240 jobs – 150 direct jobs + 450 indirect jobs (direct result of the project) in addition to the estimated loss of 160 direct jobs + 480 indirect jobs due to the cost reduction measures that would be implemented to face the reduced refining margins of the refineries in their current configuration".

Impact in terms of social and economic wellbeing of the regions

- (158) Portugal underlines that the investment project will mainly use qualified workers, paid [] the average salary in the relevant local market. The resulting socio-economic impact on the surrounding communities will contribute to the development of other businesses and activities. The investment project will therefore be of benefit to the establishment and renewal of the infrastructures and facilities in the regions of Oporto and Sines, providing the conditions necessary for these regions to progress to a new stage in terms of quality of life and competitiveness.
- (159) In its reply, Portugal stresses also that "during the construction phase, the project will have a significant impact on the national industrial fabric, in promoting the creation and development of local businesses. When fully operational, the project will encourage the development of new maintenance-related businesses, and thus it will continue to consolidate the regional dynamic". Therefore, "with this initiative, Petrogal will help to balance the competitiveness of less developed regions vis-à-vis the

³⁶ Section 3.2.7 Impacts of restructuring of the sector, in the Commission Staff Working Paper on "Refining and the Supply of Petroleum Products in the EU", dated 17.11.2010, annex to the *Communication of the Commission on energy infrastructure priorities for 2020 and beyond*, SEC(2010)1398 fin., available on the Commission's internet website.

national average. Finally, the project will have a positive impact on business in Alentejo region and on its exposure to foreign markets".

- (160) Furthermore, by increasing the flow of raw and manufactured products between the two refineries, the investment project is expected to produce a very positive effect on the port infrastructures of Sines and Leixões³⁷, by significantly increasing their activity and utilisation and therefore also their operating results.
- (161) Finally, Portugal considers that Petrogal foresees that the investment project will have an exploitation period of not less than 30 years, which shows the long term commitment to regional, national and European objectives.

Training and Protocols

- (162) The investment project will also contribute to enhance the regional human capital potential. To train the staff involved in the investment project, whether newly recruited or current staff, professional qualification and training structures will be created, in cooperation with the Alentejo Litoral Technical College³⁸ in the business centre of the Industrial and Logistics Zone of Sines³⁹ (ZILS).
- (163) In term of links with R&D projects and cooperation with universities, Portugal mentions that the two refineries represent regional development centres in terms of research and training. According to Portugal, the investment project is expected to have a positive effect and the potential to attract new agreements between Petrogal and education centres in the scientific and engineering area.

Amount of aid per job created by the investment project

- (164) Portugal comments on the investment/number of created jobs ratio, which would show the complete reasonableness of the proportion, specifically considering that the refining sector is very capital intensive and requires highly qualified labour and high levels of investment in training a skilled workforce. Similarly high aid per created jobs ratios were approved by the Commission in the Repsol Polimeros and Artensa petrochemical projects⁴⁰.

Cost-benefit analysis

- (165) Following a Commission request to produce a cost-benefit analysis and project appraisal comparable to that requested for major projects co-financed by Structural Funds⁴¹, Portugal submitted a document mainly aimed at quantifying the social and economic benefits deriving from the investment project. The document points to an economic impact due to positive contributions resulting from the investment, such as:

³⁷ The Leixões port is the sea port of Matosinhos.

³⁸ Escola Tecnológica do Litoral Alentejano.

³⁹ Zona Industrial e Logística de Sines.

⁴⁰ Commission Decision of 10.7.2007 for State aid case N 898/06 - Repsol Polimeros, published in the OJ C 220 of 20.9.2007, and Commission Decision of 10.7.2007 for State aid case N 899/06 Artensa - (Artenius) - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, SA,, published in the OJ C 227 of 27.9.2007.

⁴¹ Cost-benefit analysis of investment projects under Structural Funds, see point E of Annex II of Regulation 1828/2006, OJ L 371 of 27.12.2006, amended by Regulation 832/2010, OJ L 248 of 22.9.2010, pages 25-28

project's tax payable; direct employment (taxes); indirect employment (taxes); avoided unemployment aid; consumption tax (VAT); CO2 emission savings in transportation and industry sectors; avoided interests in Portuguese Government External Debt Interests; freight and demurrage (taxes); Additional revenue for Leixões Port; and support for local community development.

- (166) The local benefits of the investment project consist in: consumption tax (VAT); additional revenue for Leixões Port; and support for local community development (accounting all together for EUR 49 million in net present value), while the remaining benefits are to be considered a national amenity (accounting all together for EUR 454 million in net present value), benefitting the whole national economy and can be therefore only partially allocated to the concerned regions. Under the assumption that this national amenity is proportionally spread over the Portuguese regions according to their respective economic weight, as Norte and Alentejo regions represent 34.8 % of Portuguese national GDP in 2007, the total regional benefit (accounting for EUR 195 million in net present value) largely exceeds the cost of the aid granted to the investment project (accounting for EUR 121 million in net present value).

5.1.6. Comments regarding the necessity of the aid

Incentive Effect of the Aid

- (167) Portugal underlined that the aid effectively and decisively contributed to Petrogal's decision to invest, as it was necessary to ensure its profitability. On 5 March 2008, Galp's Board of Directors approved the investment project, after having received the letter of eligibility from the national authorities, issued on 23 January 2007. The first commitment to order equipment dates back to 14 March 2008, namely after the signature of the aid contracts with the Portuguese Government on 10 March 2008.

Necessity of Aid

- (168) Without the aid, the investment project would not have been implemented as its profitability would not have been justified.
- (169) In 2001, Galp's Board of Directors decided against an earlier plan into upgrading the refinery of Matosinhos, as the project's return on capital employed (ROCE) was below Galp Energia's weighted average cost of capital (WACC) for its refining sector.
- (170) In 2005, Galp's Board of Directors reconsidered the strategic opportunity to undertake a conversion project of the two refineries. After internally studying alternative investment projects, the Sines and Matosinhos Conversion Project was submitted to the Board of Directors for approval in March 2008. The internal rate of return associated with the reviewed investment of EUR [] million was calculated at [8-10] % without any incentive, namely [] percentage points above Galp Energia's WACC for refining activities (set at [7-9] %).

- (171) The decision of Galp's Board of Directors in March 2008 was based on the following analysis of the sensibility of the Internal Return Rate (IRR) of the investment project (**Table 3**):

With the aid	Net Present Value	€[100-150]M
	Return Rate/IRR	[9-11] %
Without the id	Net Present Value	€[1-50]M
	Return Rate/IRR	[8-10] %

Source: GALP

- (172) According to Galp Energia's Executive Committee's deliberations of 10 January 2008, the company's WACC and internal "hurdle rate" (a risk premium added to the cost of capital⁴²) for the Supply, Refining and Logistic Area were at [7-9] % and [10-12] %, respectively.
- (173) Portugal indicated that both WACC and internal hurdle rate set by Galp Energia were in line with the standard practice in the refining sector and that the use of these economic criteria is commonly accepted by all large companies in the sector. To support these statements, Portugal provided the Commission with a table elaborated by Citigroup, Bloomberg and Broker Research in 2010 comparing the WACC of significant companies operating in the sector.
- (174) Portugal maintains that the investment decision was and is consistent with the practice and the normal requirements of profitability that the beneficiary demands in all of its projects. To assess the profitability, besides the concept of WACC, the hurdle rate is used as additional criteria. Forecasts of future cash flows are not, generally, infallible. There is always uncertainty (risk) associated with the forecast of cash flows; the more distant in time they are, the greater the chance that the estimation is rough and contains errors. The most common way to deal with the uncertainty is to add a risk premium to the cost of capital (WACC) and using its rate as a minimum profitability rate required for the investment (hurdle rate). The difference between the value of the hurdle rate and the value of the WACC is, therefore, the extra profit expected when deciding whether to invest because it accepts additional risk found in the forecasted future cash flows. Portugal submitted that the insertion of the hurdle rate in the analysis and decision of Galp Energia's investment projects - exists since 2002. It was established, in that year, that the hurdle rate applying to the projects would be the WACC increased by a [1-5] percentage points (pp) spread. In 2006, Galp Energia decided to calculate the hurdle rate in a slightly different way, namely, instead of adding [1-5] pp to the WACC, it opted to increase the WACC by [10-50] % ($WACC_{2006} + \text{hurdle rate}_{2006} = [1.1-1.5] \times WACC_{2006}$). This new criteria was a result of the internal weighting that, given the different levels of WACC of each business sector, the use of a percentage on the base seemed to be more suitable and coherent than using an absolute value. As a further explanation, Portugal provided the Commission with the different WACC and hurdle rates applied by Galp Energia between 2002 and 2006 for each business sector: supply and refining, marketing of petroleum products, exploration and production, gas and power.

⁴² More explanation in Recital (232).

- (175) Portugal argued that according to the internationally recognized standards for projects of this type, because the level of variation in the investment is still significant in that phase of engineering development (Front End Engineering Design), Galp's Board of Directors did not consider a project of this importance with a rate of return so close to the WACC to be viable, as it could easily end up in a return less than that reference value.
- (176) However, taking into consideration the granting of the tax incentive in the investment project, the investment project's return would be [9-11] %, which, in light of the investment project's strategic nature, was considered an acceptable minimum for the start and approval of the execution of commitments with equipment suppliers.
- (177) Portugal has submitted a list of alternative investment projects that Petrogal could have undertaken at the time the investment project was decided. Due to the limitation of available financial resources for new investment, several Galp Energia business areas compete with each other for those limited resources and there is a strict selection policy.
- (178) However, had the aid contract with the Portuguese State not been signed and the investment project not taken place, the competitiveness of both refineries would have inevitably deteriorated. According to Portugal, had the investment project not been undertaken, the refineries' capacity utilization would have been cut down to [80-90] % to respond to a downward market trend demand for gasoline and fuel oil (as studies foresee a significant decrease in demand, from 2008 to 2020, with reductions of the demand between [20-30] % and [40-50] %). The refineries would have maintained only a very limited refining margin. To offset this situation, a drastic restructuring program involving job cuts would have been implemented.
- (179) As the Commission doubted that in their decision Galp's Board of Directors had not taken into account changes in the business environment, Portugal were requested to provide a detailed analysis of the counterfactual scenario without the investment project. For this purpose, Portugal was asked to submit the investment project's IRR considering the refineries' potential profitability had the investment project not taken place and taking into account the reduction in refining margins.
- (180) Portugal's counterfactual scenario is summarised in **Table 4**:

		Business case	New Final Investment Value
With the Aid	NPV	€[200-250]M	€[150-200]M
	Return Rate/IRR	[10-12] %	[10-12] %
Without the Aid	NPV	€[100-150]M	€[100-150]M
	Return Rate/IRR	[9-11] %	[9-11] %

- (181) According to Portugal, "the fact that a project may be very relevant to a company, even strategic, does not mean that it is the only project or unquestionable project, if the IRR does not rise up to meet the minimum admissible requirements" (as it was the case in 2001).

5.2. Observations submitted by Portugal on comments by third parties

- (182) Portugal underlines the high level of participation from various entities (municipalities, unions and sectoral and industrial associations) and lists all the comments supporting the value of the investment project in terms of regional development and energy efficiency.

5.2.1. Observations on comments by competitors n°1 and n°2

- (183) Completing its submission of 21 January 2010, Portugal explains that the vacuum feedstock market is highly volatile and does not offer the required stable supply of vacuum gas oil needed to feed a hydrocracker of the size of the one in Sines. Regarding the production of hydrocracker residues, Portugal confirms that it is almost insignificant since the hydrocracker will use iso-cracking technology.

Projects' contribution to Regional Development

- (184) Portugal repeat that the investment project will stimulate regional development in disadvantaged regions (creation and maintenance of jobs, training of workers, economies of scale, technology transfers, spill-over effects, etc.) even if located in pre-existing refineries and this point is confirmed by all the positive comments received. They also underline the strategic importance and the environmental value of the investment project to counter the comments according to which employment is the only regional benefit.
- (185) Concerning the Table prepared by the third party competitor n°1 comparing the ratio "aid per created jobs" in other regional *ad hoc* aid projects (see Recital (89)), Portugal pointed out that it does not include other projects in refining or any other capital intensive industry. For this reason, the investment project must not be compared to those presented in the Table, but ought to be compared to the aid to large investment projects in the same economic sector (see the Commission Decisions of 10.07.2007 on State aid case N 898/06 - Repsol Polimeros and of 10.07.2007 on State aid case N 899/06 - Artensa (Artenius) - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, SA, where the ratio "aid/jobs created" would be in a comparable range as for Petrogal's project).
- (186) Similarly, if the ratio "indirect jobs/direct jobs" is compared with comparable projects (such as the projects mentioned in Recital (185)), equivalent figures are obtained.

Necessity of aid

- (187) Portugal reiterate that Galp's Board of Directors validated the investment project – in March 2008 - after having received - in January 2007 – a written confirmation from the Portuguese authorities that the investment project was eligible for aid. Therefore, the aid was conditionally (in particular the Commission's approval was needed) granted before the start of the work. The first firm order took place in March 2008, after aid contracts were signed by Petrogal.
- (188) Portugal refutes third party comments according to which Petrogal had already decided to launch the investment project in 2006.

- (189) Portugal admits that feasibility studies were conducted before taking the definitive decision. While such information is absolutely necessary for Galp's Board of Directors to take a decision, it does not imply that Galp's Board of Directors had already decided.
- (190) Portugal maintains that the investment project would not have been implemented without aid.
- (191) Portugal explains that the investment project had an insufficient IRR compared to the level of risk taken and the attractiveness of other projects ([]) which are crucial for Galp Energia's development. It results that the investment project would not have gone ahead without aid.

Relevant product and geographic market

- (192) Portugal concludes from the comments received from third parties that the relevant geographic market is not the Portuguese market but, at the very least, the Iberian market.
- (193) Portugal specifies that Petrogal's market shares for diesel (at ex-refinery, non-retail and retail levels) will never exceed 25 % if the relevant geographic market is the Iberian Peninsula or wider.
- (194) Portugal reasserts that, in any event, the investment project will not impact on the diesel non-retail and retail markets since the price at ex-refinery level is set under market conditions: Petrogal behaves as a price taker. If that were not the case, Petrogal's clients would easily switch to imports, as according to Portugal, there are no obstacles (technical, tariff, logistics⁴³, etc.) to diesel imports from other Member States. Portuguese import requirements are in line with EU requirements.
- (195) Portugal provided figures of the aggregate data on diesel imports (maritime and land) in Portugal.

Table 5

DIESEL IMPORTS & EXPORTS

Year		2006	2007	2008	2009
IMPORTS	Total (Ktonne)	638	776	1,011	1,478
	Petrogal	[]	[]	[]	[]
	Others	[]	[]	[]	[]
EXPORTS	Total (Ktonne)	314	192	164	95

⁴³ Third parties storage capacity is 428 000 m³ which represents a delivery capacity of 2.9Mton e/year (on the basis of 8 rotations a year); which is more than half of the national market. Moreover, diesel is also imported by land through the Spanish capillary network.

	Petrogal	[]	[]	[]	[]
	Others	[]	[]	[]	[]

Source: DGEG (*italic*) and Petrogal's data

- (196) Furthermore, Portugal has enough storage capacity: Portugal provided data showing that the different operators have taken different strategic options (invest in storage capacity or lease facilities) and that both alternatives are possible and viable. The main operators have not increased their storage capacity, despite the opportunities that appeared in the market, indication that their storage resources are enough to support their marketing activities. Portugal indicates that there has been a continuous growth of the total diesel imports as well as a slight decrease of exports. This results from the continuous growth of the market and the increasing deficit the local production capacity. However, 2009 figures reflect the impact of an accident at the Sines refinery that limited for a period of several weeks the running of the refinery and the production. Operators had to increase their imports during that year, thus demonstrating the existence of alternative supply options.
- (197) Import of diesel in Portugal in 2009 represented 27.2 % of the total consumption of diesel in that year. In the previous years, the average diesel imports in relation to annual diesel consumption in Portugal (around 5.4 Mtonnes) were about 14 %.
- (198) Therefore, Portugal considers the Portuguese diesel market as an open and competitive market where trade is facilitated and where prices are based on the price of crude oil, on the refining costs and defined by the alternative of importing at *Platts* prices.
- (199) As regards heavy naphtha, Portugal considers that the market is, at least, the EEA, as naphtha is an internationally traded product.

6. ASSESSMENT OF THE AID MEASURE

6.1. Existence of State aid

- (200) According to Article 107(1) of the Treaty, save as otherwise provided in the Treaty, any aid granted by a Member State or through State resources in any form whatsoever, which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall be incompatible with the internal market, insofar as it affects trade between Member States.
- (201) Portugal's aid to Petrogal will take the form of a tax credit. The support can thus be considered as given by the Member State and through State resources within the meaning of Article 107(1) of the Treaty.
- (202) The aid is granted to a single company, Petrogal, and is therefore selective.
- (203) The aid is granted for an investment resulting in the increased production of diesel and heavy naphtha. Since these products are the subject of trade between Member States, the measure is therefore likely to affect trade between Member States. The aid granted to Petrogal will relieve the company from costs which it normally would have had to bear itself. Consequently, Petrogal will benefit from an economic advantage over its

competitors. By favouring Petrogal and its production in this way, the aid therefore distorts or threatens to distort competition.

(204) Consequently, the Commission considers that the aid constitutes State aid within the meaning of Article 107(1) of the Treaty.

(205) Having established that the aid constitutes State aid within the meaning of Article 107(1) of the Treaty, it is necessary to consider whether the measure can be found to be compatible with the internal market.

6.2. Legality of the aid measure

(206) By notifying the aid before putting it into effect, Portugal respected the notification obligation resulting from Article 108(3) of the Treaty.

6.3. Legal basis for the assessment

(207) As the objective of the aid is to promote regional development, the basis for assessing the compatibility of the aid with the internal market are the RAG and, in particular, the provisions of section 4.3 of the RAG relating to large investment projects, and the criteria for the in-depth assessment of regional aid to large investment projects laid out in the In-Depth Assessment Communication), unless the formal investigation leads to the result that the thresholds laid down in paragraph 68(a) ("market share test") and paragraph 68(b) ("capacity increase and market performance tests") of the RAG are not exceeded.

(208) The Commission needs to conduct its assessment in three steps:

- first, it has to assess the compatibility with the general provisions of the RAG;
- second, it has to verify whether the market share test and capacity increase and market performance tests under paragraph 68(a) and (b) (the "paragraph 68(a) and (b) tests") are definitively not met;
- third, depending on the outcome of the assessment in the second step, it may proceed to an in-depth assessment.

6.4. Compatibility with the general provisions of the RAG - verification of the doubts expressed in the opening decision

(209) The Commission verified whether the granted aid was in conformity with the general provisions of the RAG. This assessment led to the following observations:

Initial investment project

(210) In the opening decision, the Commission expressed doubts as to whether the investment project constitutes an initial investment or could be considered as replacement investment.

- (211) The Commission took account of the comments of Portugal presented in Recitals (130) and (131) that the investments lead to an extension of an existing establishment and a fundamental change in the overall production process of an existing establishment and that therefore, the investment can be considered as an initial investment as defined in paragraph 34 of the RAG.
- (212) Indeed, the new vacuum distillation unit and the visbreaker in Matosinhos, and the new hydrocracker unit in Sines will be functioning simultaneously with the original pre-existing refining units; therefore, the investment project does not constitute a replacement but an extension of the production system. Besides, the investment project will transform the refineries providing them with new technologic infrastructures for the conversion of heavier fractions of crude into gasoline and diesel.
- (213) Competitor n° 1 does not object to the initial investment character of the investment; but it considers that the investment constitutes the mere extension of an existing establishment.
- (214) Consequently, the Commission finds that, the investment project constitutes as an initial investment within the meaning of paragraph 34 of the RAG, and therefore, the doubts as regards the initial investment character of the investment project are removed.

Formal Incentive effect

- (215) In the opening decision, the Commission doubted that the formal incentive effect requirements applicable to *ad hoc* aid, as laid down in paragraph 38 of the RAG were fulfilled. In particular, the Commission expressed doubts as to whether Portugal's written confirmation that, subject to detailed verification, the investment project met the conditions of eligibility laid down in the scheme⁴⁴ could replace the required letter of intent.
- (216) Paragraph 38 of the RAG reads as follows: "It is important to ensure that regional aid produces a real incentive effect to undertake investments which would not otherwise be made in the assisted areas. Therefore aid may only be granted under aid schemes if the beneficiary has submitted an application for aid and the authority responsible for administering the scheme has subsequently confirmed in writing that, subject to detailed verification, the project in principle meets the conditions of eligibility laid down by the scheme before the start of work on the project. (...). In the case of *ad hoc* aid, the competent authority must have issued a letter of intent, conditional on Commission approval of the measure, to award aid before work starts on the project. If work begins before the conditions laid down in this paragraph are fulfilled, the whole project will not be eligible for aid."
- (217) The "start of works" is defined by footnote 40 of the RAG either as start of construction works, or first binding order of equipment.

⁴⁴ In this case, the beneficiary submitted an application for the aid under an expired scheme, on 22 January 2007 (cf. Recital (46) above). The aid was initially notified as an individually notifiable case of application of this expired scheme; the notification was later amended, and the aid was notified as *ad hoc* aid outside the expired scheme.

- (218) The Commission took into account the following factual information submitted by Portugal:
- Petrogal applied for the aid on 22 January 2007;
 - Portugal confirmed the eligibility in principle of the aid project on 23 January 2007.
 - The aid was approved by the Portuguese Council of Ministers on 6 March 2008 but the granting of the aid is subject to Commission approval and Petrogal will not benefit from the aid before 2011 (once the investment is completed).
 - Petrogal's Board of Directors authorised to proceed to orders of equipment on 8 March 2008.
 - The first binding order was placed on 14 March 2008. Construction works on the investment were effectively started in November 2008 in Sines and in January 2009 in Matosinhos.
- (219) The Commission considers that the aid contracts signed on 10 March 2008 between Portugal and Petrogal, and the publication of the Resolutions of the Council of Minister, adopted on 6 March 2008, in the Portuguese Official Journal⁴⁵ are at least equivalent to a letter of intent, and have to be considered as a stricter proof of the formal incentive effect than the letter of intent required by paragraph 38 of the RAG. These aid contracts were signed before the start of works on the investment project.
- (220) Therefore, the Commission finds that the doubts as regards the formal incentive effect are removed.

Contribution to regional development and necessity of aid

- (221) In the opening decision, the Commission expressed doubts as to the contribution of the investment to regional development. In this context, the Commission also raised doubts as to the necessity of the aid and emphasised that an "unnecessary aid is unlikely to contribute to regional development and might result in unacceptable distortions of competition"⁴⁶.

Necessity of aid

- (222) Competitors n°1 and n°2 indicated that Petrogal would have gone ahead with the investment project even without aid. In their view, it is a productive investment economically driven by the imbalance between diesel supply and demand and the opportunity to have access to heavier and cheaper crude. All operators across Europe are carrying out similar investments in their refineries without State aid.

⁴⁵ *Resolução do Conselho de Ministros n. 55/2008*, published in *Diário da República* 1. série n.º 60, 26.03.2008, p. 1734.

⁴⁶ See section 3.3 of Commission Decision of 19.11.2009 on State aid case C .../2009 (ex N 588/2008) – PT- LIP – PETROGAL, S.A.

- (223) Therefore, it has to be assessed whether the aid is necessary to produce a real incentive effect to undertake an investment which otherwise would not take place in these two assisted regions or whether the investment project would, in any event, have been undertaken. In this respect, the Commission needs to establish whether the aid changed Petrogal's behaviour, so that it would have undertaken additional investment in the regions concerned.
- (224) It appears that the strategic decision to invest was taken in 2006. This is reflected in a document published by Galp Energia in October 2006⁴⁷. As stated in Galp Energia's annual report for 2006, the Board of Directors took the executive decision concerning the investment project on 23 January 2007⁴⁸ and on 5 March 2008 (that is after receiving the letter of eligibility from the national authorities dated 23 January 2007). The Board of Directors took the operational decision to order the first equipment related to the investment project on 14 March 2008.
- (225) Portugal stated that Petrogal had not undertaken the investment until 2008 due to its insufficient financial viability and that Galp's Board of Directors finally decided to proceed with orders of equipment and constructions only after the Portuguese government adopted the relevant Resolution of the Council of Ministers.
- (226) Portugal claims that the availability of State aid was decisive for Petrogal's decision to invest. Without the aid, the investment project would have been abandoned. Petrogal would have implemented an alternative restructuring plan to adjust its refining activities to changed market and crude oil supply conditions. Furthermore, the available financial resources would have been used to invest into alternative projects outside the refining activity.
- (227) Portugal submitted documents belonging to Petrogal which contain an analysis of the investment project's expected IRR, the cost of capital (WACC), as well as a list of possible alternative investments that Galp Energia could have undertaken with the available capital.

⁴⁷ GALP ENERGIA SGPS S.A., *Prospecto de oferta pública de venda e de admissão à negociação* October 2006, as available in the internet: <http://web3.cmvm.pt/sdi2004/emitentes/docs/fsd11332.pdf>. This document reads: "*Optimizar as Capacidades de Refinação*. A Galp Energia pretende adaptar os activos de refinação às exigências do mercado, expandindo e modernizando a refinaria de Sines, onde planeia investir num novo projecto de conversão que deverá estar concluído no final de 2010. A Galp Energia tem como objectivo não só aumentar a rentabilidade dos investimentos através da optimização das matérias-primas e da gama de produtos refinados, mas também melhorar a integração das duas refinarias existentes, de modo a retirar vantagens das suas diferentes características de refinação e alcançar um processo integrado e complementar de refinação. Está em curso a avaliação de duas alternativas para a configuração do novo projecto de conversão na refinaria de Sines, o montante de investimento está estimado em aproximadamente 1.000 milhões de Euros e o aumento esperado na margem de refinação é de cerca de US\$3,0 por barril após a conclusão do projecto"

⁴⁸ GALP ENERGIA, Annual Report 2006, available on the website www.galpennergia.com. At page 19, the document reads as follows: "CONVERSION PROJECT AND REFINERIES OPTIMIZATION On 23 January 2007, the Board of Directors approved the conversion project and processes optimization of Sines and Oporto refineries for the purpose of raising diesel production by 2.5 million tonnes and reducing the production of fuel oil. The increase in diesel production is meant to respond to rising demand in the Iberian market and to take advantage of the spread between diesel and fuel oil prices in international markets. These investments will also make it possible to process heavier crude."

- (228) The Commission considers that the documents submitted to Galp's Board of Directors on 23 January 2007 and 5 March 2008 were decisive for the assessment of the necessity of the aid, as the Board's decision was based on those documents.
- (229) According to Portugal, the calculations submitted to the Galp's Board of Directors in 2008 showed an IRR of the investment project, in the absence of the aid, of [8-10] %. This IRR is well above Petrogal's WACC of [7-9] %.
- (230) Portugal explained however that the decisions of Galp's Board of Directors were based on a hurdle rate approach introduced already in 2002. The hurdle rate, or minimum acceptable rate of return (MARR), is the minimum rate of return on a project a decision-maker is willing to accept before starting a project, given its risk and the opportunity cost of forgoing other projects. Other expressions used for "hurdle rate" are "cut-off rate" or "benchmark rate".
- (231) As from 2006, for the refinery activities, the internal hurdle rate was set at [110-150] % of the WACC, namely at [10-12] %. Normally, no investment decision would be taken if the calculated IRR did not exceed this threshold. In this case, the aid increases the IRR by [1-3] percentage points, from [8-10] % to [9-11] %, as presented in Table 3 in Recital (171) for the calculations submitted to the Board of Directors in 2008. Though the aid adjusted IRR remains significantly below the internal hurdle rate, the additional safety margin created by the aid was considered sufficient by Galp's Board of Director to finally approve the investment project.
- (232) The hurdle rate is an instrument used by companies in decisional situations involving major levels of risk and it may therefore vary depending on the risk associated with projects. The hurdle rate may also be influenced by the currency in which it is calculated: in currency areas with high levels of inflation, the hurdle rate is higher than in areas with price stability.
- (233) So far, State aid decisions in the area of regional aid did not use the "hurdle rate" concept to decide on issues of necessity and incentive effect of aid. Neither is the concept of "hurdle rate" mentioned in the In-Depth Assessment Communication. However, the "hurdle rate" concept was already used in a limited number of State aid decisions (such in the Commission Decision of 23.02.2011 on State aid case N 204/2010 – Sweden - R&D aid to Volvo Aero for Trent XWB ICC, yet to be published in the OJ), mainly adopted under the Community framework for State aid for research and development and innovation⁴⁹, for projects involving high levels of risk.
- (234) Portugal underlines that the investment project is characterised by multiple risks that justify the use of the hurdle rate approach. The investment project is the largest productive investment ever carried out in Portugal. The implementation of the investment project will take several years. Cost estimates for the investment project are extremely difficult: in fact, Portugal submitted figures showing that the initial cost estimates were very seriously overrun in reality. As the investment project has a long-term orientation, long-term forecasts of refinery margins are extremely difficult, in particular in situations where, in the long-term, traditional combustion cars may be replaced by electric and other cars.

⁴⁹ OJ C 323, 30.12.2006, p. 1.

- (235) An empirical study⁵⁰ of 2006, analysing more than 100 self-reported hurdle rates (mainly for North American companies), report an average hurdle rate of 14.1 %, and an absolute difference between WACC and hurdle rate of 5 % points, namely about 155 % of WACC. Taking account of this information, the hurdle rate applied by Petrogal and Galp Energia for the refinery sector does not appear *prima facie* excessive.
- (236) In view of these elements, and in particular taking into account the specific characteristics of the sector and of the case (namely the importance of the risks involved given the magnitude of the investment project and its long-term exploitation period), the Commission considers that the hurdle rate can be taken into account to decide whether the aid was necessary as an incentive to carry out the investment project or not.
- (237) Competitors n°1 and n°2 confirmed that for refinery activities, there are no sectoral benchmark. However, competitor n°1 indicated that it would consider a benchmark (namely rate of return) of 10% as sufficient to carry out the investment project. The Commission notes that this benchmark rate of 10% is very similar to the post-aid IRR submitted in 2008 to Galp's Board of Directors of [9-11]%. The Commission therefore considers that the aid does not exceed the amount that would be considered as necessary by a competitor to reach an acceptable IRR.
- (238) Thus, it appears that the aid measure brings the calculated IRR closer to the Petrogal's hurdle rate and to the competitor n°1 indicated benchmark rate. Post-aid, the IRR neither exceeds Petrogal's hurdle, nor the competitor's benchmark rate, which suggests that the aid was not excessive. The fact that the investment decision was taken in 2008 in a situation where the aid-adjusted IRR was still considerably below the declared hurdle rate alone is not sufficient doubt the importance of the hurdle rate. It is obvious from earlier statements of Galp's Board of Directors that it was aware of the investment project's strategic importance to stop declining refining margins. Even though the hurdle rate was not fully reached, this strategic element appears to have been sufficient to justify a limited deviation from the hurdle rate.
- (239) As a result, the Commission considers that the aid was necessary as an investment incentive and did not exceed the amount necessary for that purpose. In this respect, it is not entirely correct to affirm that all operators across Europe have carried out similar investments in their refineries without State aid. For instance, the Commission has analysed other aid measures for similar investments. This was notably the case in Commission Decision N283/2004⁵¹ concerning a distillate hydrocracking unit.

Regional contribution

- (240) In the opening decision, referring to paragraph 10 of the RAG, the Commission expressed doubts regarding the contribution of the aid and the investment project to regional development, emphasising the limited number (150) of jobs created when compared with the amount of aid (EUR 160 million), and whether the expected

⁵⁰ Meier I. and Tarhan V., *Corporate investment decision practices and the hurdle rate premium puzzle*, February 2006, Southern Finance Association Meetings, Destin, France.

⁵¹ Commission Decision of 20 October 2004 on State aid case N 283/2004 – France – Aid to Total (Gonfreville), OJ C136 of 3.6.2005.

contribution to regional development really outbalanced the sectoral effects resulting from the aid.

- (241) The Commission notes that, as was also emphasised by competitor n°1, the amount of aid per job created indeed significantly exceeds the level of aid per job in previous recent *ad hoc* aid cases (see Recital (89)). Several negative decisions⁵² concluded on an insufficient regional contribution based on the number of jobs created.
- (242) Portugal accepts that the amount of aid per direct job created is very high; however, this is explained by the capital intensive character of the investment project which is characteristic for investments in the sector: individually notifiable applications of aid schemes for this sector with an even higher aid amount per job created were approved by the Commission in the past⁵³. Portugal considers that other factors than the aid per direct job should be taken into account, such as the importance of indirect job creation, of temporary job creation, and other related aspects.
- (243) In previous decisions, the Commission has always taken account of direct job creation. In addition, indirect job creation was taken in consideration in a number of decisions⁵⁴.
- (244) Portugal initially claimed that each direct job created (or lost) would result also in three indirect jobs. The 3:1 ratio was justified by referring to other Portuguese cases in the same industry⁵⁵ for which the Commission accepted similar or higher ratios in the past. The potential to create indirect jobs results from maintenance activity, which is probably the market niche that will benefit the most from the project. This would be the effect of the increased technological complexity of the refineries that will result in subcontracting services requiring increasingly specialised employees and technicians.
- (245) Portugal reinforced its argument by referring to a recent Commission working document concerning the petrochemical sector⁵⁶ which states that while the industry employs directly only 100,000 people in the EU, it can be considered that as much as 400,000 to 600,000 jobs are directly dependent on the EU refining industry. The same document, at footnote 41, mentions further 600,000 jobs in logistics and marketing. On the basis of these statements, a higher ratio than 3:1, namely 4:1 to 6:1, and taking into account job creation in logistics and marketing, even of 12:1, could be justified.

⁵² See Commission Decisions of 15 September 2010 on State aid case C 8/09 (ex N 357/08) *Friel Acerra*, OJ L 46 of 19.2.2011, of 11 December 2007 on State aid case C 12/07 (ex N 799/06) *Glunz & Jensen*, OJ L 178 of 5.7.2008, and of 4 June 2008 on State aid case C 57/2007 (ex N 843/2006) *Alas Slovakia*, OJ L 248 of 17.9.2008.

⁵³ See Commission Decisions of 10.07.2007 on State aid case N 898/06 - Repsol Polimeros and of 10.07.2007 on State aid case N 899/06 - Artensa (Artenius) - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, SA, where the ratio "aid/jobs created" would be in a comparable range as for Petrogal's project.

⁵⁴ As Commission Decisions : of 17.11.2009 on State aid case N 447/2009 *TietoEnator Sp. z o.o.*, OJ C 25 of 2.2.2010; of 25.6.2007 on State aid case N 828/2006 *Bridgestone Stargard*, OJ C 278 of 21.11.2007; of 13.2.2006 on State aid case N 630/2005 *MAN Trucks*, OJ C 126 of 30.5.2006; of 6.8.2007 on State aid case N 251/2006 *LG Innotek Poland*, OJ C 270 of 13.11.2007.

⁵⁵ See Commission Decisions of 10.07.2007 on State aid case N 898/06 - Repsol Polimeros and of 10.07.2007 on State aid case N 899/06 - Artensa (Artenius) - Produção e Comercialização de Ácido Tereftálico Purificado e Produtos Conexos, SA.

⁵⁶ Section 3.2.7 Impacts of restructuring of the sector, in the Commission Staff Working Paper on "Refining and the Supply of Petroleum Products in the EU", dated 17.11.2010, annex to the *Communication of the Commission on energy infrastructure priorities for 2020 and beyond*, SEC(2010)1398 fin., available on the Commission internet website.

- (246) Portugal indicated also that, in a "no-aid and no-project" counterfactual scenario, Petrolgal would have restructured its refineries and downsized its workforce, with a loss of 160 direct jobs. Therefore, the Commission should take account, in its assessment of the contribution of the aid to regional development, of 310 direct jobs created or maintained⁵⁷, and of approximately 930⁵⁸ to 3,720 indirect jobs eventually resulting from the investment project, which would mitigate the excessive amount of aid per direct job.
- (247) In addition, Portugal emphasised that the investment project constitutes the largest single investment ever undertaken in Portugal and will create 3,000 temporary jobs in the regions concerned during the construction phase.
- (248) Furthermore, in previous decisions⁵⁹ approving *ad hoc* regional aid, the Commission referred to the importance of the following factors:
- increasing employees' income (creation of better paid direct and indirect jobs),
 - the social wellbeing in the region (through improved environmental and living conditions, sponsorship of local events),
 - the enhancement of human capital potential (through training, education, PhD programmes),
 - the contribution to R&D, technology and know-how transfer (as a result of the upgrading investment),
 - the increased activity for subcontractors in the areas concerned,
 - the better use of the existing port facilities.
- These factors are certainly positive elements that could be taken into account in the assessment of the contribution of the aid and the investment project to regional development in Portugal.
- (249) Thus, comments from Portugal and several interested parties refer to other important contributions to regional development in terms of social and environmental impact, increased training, and protocols with higher education institutions.
- (250) Portugal also referred to the development of the supply chain and the impact of the construction of the new units on the national industrial fabric, with an impact on civil engineering works, building works and mechanical engineering assembly. This is certainly a positive impact, but it is either only temporary or of general nature (see Recital (154)).

⁵⁷ Maintained jobs were recently taken into account also in Commission Decision of 29.5.2009 on State aid case N 381/2008 *Pirelli Industrie Pneumatici S.r.l.*, OJ C 284 of 25.11.2009.

⁵⁸ Using the more conservative 3:1 ratio.

⁵⁹ As in Commission Decisions of 24.6.2008 on State aid case N 730/2007 *SIA Ekobriketes*, OJ C 210 of 19.8.2008; of 15.1.2009 on State aid case N 729/2007 *SIA Eko Osta*, OJ C 80 of 3.4.2009; and of 24.3.2009 on State aid case N 500/2008 *Baňa Čárý a.s.*, OJ C 147 of 27.6.2009.

- (251) The Commission takes into account the non-temporary positive spill-over effects of the investment project in the regions concerned as presented by Portugal. In particular, the expected long life of the refineries (expected to be operational at least for 30 years), the positive impact on the subcontracting industry, the significant amount of training and the number of protocols with schools and universities point to the importance of the refineries in the concerned regions. Even if a large part of these positive spill-over effects are already present as a consequence of the long time existence of the refineries, it can be agreed that the investments certainly enhance the role of Petrogal's presence both in Sines and in the Oporto area.
- (252) Portugal also submitted a cost-benefit analysis of the aid project. A cost-benefit analysis aims to go beyond an analysis of the viability of the project by the investor, and to take into account all the (discounted) social costs and benefits deriving from the project. In this context, a cost-benefit analysis quantifies the expected benefits, including the amount of taxes from direct and indirect employment, the avoided unemployment contribution (by safeguarding jobs), the amount of consumption taxes, the additional revenues for the port of Leixões, direct support for local communities, etc.
- (253) The cost-benefit analysis concludes that the aid is highly beneficial for Portugal. Of course, the geographic scope of the cost-benefit analysis goes beyond regions of Norte and Alentejo directly concerned by the investment project. However, if the national benefit is proportionally transferred to the regions concerned according to their respective economic weight, the Norte and Alentejo regions will capture 34.8 % of this national benefit.
- (254) Portugal also emphasised that the aid and the resulting investment had beneficial effects in other policy areas than regional development. Portugal insisted on the strategic importance of the investment project at national level and in terms of importance for European energy supply security. These beneficial effects include the reduced dependence on imports, a response to the increasing demand of diesel, the improvement of the energy efficiency in both refineries, and the positive environmental impact. These arguments cannot be taken into account for the assessment of the contribution of the aid to regional development.
- (255) Despite the apparent *prima facie* disproportional amount of aid per direct job created, the positive indirect effects (indirect jobs, spill-over effects, creation of high income jobs, enhancement of human capital, improvement of social wellbeing) point to a regional contribution to Alentejo and Norte that cannot be considered negligible. The Commission therefore considers its initial doubt as to the contribution of the aid to regional development removed.
- (256) Furthermore, subsequent sections on the application of the paragraph 68 (a) and (b) show that the negative sectoral effects of the aid are limited as the markets concerned by the investment project are not underperforming, that is they are not in absolute or relative decline. In addition, Petrogal does not have a high market share in the relevant ex-refinery market that could be abused by anti-competitive behaviour. The substitution of heavy naphtha imports for the aromatics industry has limited effects on EEA suppliers. The Commission therefore considers its initial doubt that the negative sectoral effects of the aid are not outbalanced by its expected contribution to regional development as removed.

Other general provisions

- (257) In accordance with paragraph 9 of the RAG, Petrogal is not a company in difficulty within the meaning of the Communication from the Commission on Community guidelines on State aid for rescuing and restructuring firms in difficulty⁶⁰.
- (258) In accordance with paragraph 39 of the RAG, Petrogal's own contribution to eligible expenditure is above 25 % (see Recital (36) above).
- (259) In accordance with paragraph 50 of the RAG, the eligible expenditure of the investment project is calculated on the basis of the eligible investment costs (see Recital (35) above).
- (260) In accordance with paragraphs 71-75 of the RAG, the rules on cumulation of aid are respected (see Recital (43) above).
- (261) In accordance with paragraph 40 of the RAG, the aid is granted under the condition that Petrogal maintains the investment project in the regions concerned for a minimum period of five years after its completion.
- (262) The Commission therefore considers that the aid complies with the general provisions of the RAG.

6.5. Compatibility with the criteria for large investment projects - verification of the doubts expressed in the opening decision

Single Investment Project

- (263) In the opening decision, the Commission expressed doubts as to whether the investment project can be considered to be a SIP within the meaning of paragraph 60 of the RAG, despite the fact that the refineries are not in immediate geographic proximity to each other.
- (264) Although there is no geographic proximity between the two refineries, Portugal considers that there are strong economic, functional and strategic links between them. Without the investment into the vacuum distillation unit in Matosinhos, the related investment into the hydrocracker in Sines would not be possible, due to the risk of frequent shortfalls on the market of vacuum gas oil (feedstock for the hydrocracker). Portugal therefore considers that the strong functional links make the refineries economically indivisible.
- (265) Competitor n° 1 contests this approach as it considers that the fixed assets of the investment project are economically divisible.
- (266) One of the comments from third parties received in reply to the opening decision indicated that the increase in the production of heavy naphtha is crucial for the realisation of an investment by the group La Seda in Sines. The Commission has verified whether the investment by La Seda could constitute a SIP together with the investment in Matosinhos. Portugal has confirmed that the increase of the production of heavy naphtha will be exclusively used by Petrogal internally and that heavy

⁶⁰ OJ C 244, 1.10.2004, p 2.

naphtha will not be sold to third parties. Therefore, the Commission concludes that the investment project does not constitute a SIP with La Seda's investment project.

- (267) Paragraph 60 of the RAG targets investment projects that are artificially divided into subprojects to avoid the scaling down mechanism that reduces the maximum aid intensity that can be applied to investment projects above EUR 50 million. In this particular case, the Commission has verified that the aid intensity applied (12.43 % NPV) is below the maximum aid intensity that should have been applied in case the investment project is considered as a SIP (14.28 % NPV) and therefore, lower than the maximum aid intensity of which the two projects, separately, could have benefitted. Therefore, the maximum aid intensity, even in the case of a SIP, has been respected, and the Commission concludes that it is not necessary to decide whether the two projects in Sines and Matosinhos constitute a SIP or not despite their geographic distance, since the issue does not prejudice the compatibility assessment of the aid under the RAG.

Aid intensity

- (268) The calculation of the aid intensity under paragraph 67 of the RAG depends on whether the investment project is considered a SIP or rather two separate investment projects. In the latter case, if the investments in the two locations are taken separately, then the calculation of the aid intensity would take into account the two different standard regional aid ceilings applicable for Sines (40%) and for Matosinhos (30%).
- (269) As notified by Portugal, the total planned eligible costs for the investment project amount to EUR 1 058 934 146 (EUR [] for the investment in Sines and EUR [] for Matosinhos) in nominal value.
- (270) The net present value of the investment in Sines amounts to EUR [] for a planned aid amount of EUR [] in net present value, corresponding to an aid intensity for this refinery of 13.12% gross grant equivalent (GGE), which is below the adjusted maximum aid intensity of 15.94%.
- (271) The net present value of the investment in Matosinhos amounts to EUR [] for a planned aid amount of EUR [] in net present value, corresponding to an aid intensity for this refinery of 10.66%, gross grant equivalent (GGE), which is below the adjusted maximum aid intensity of 14.68%.
- (272) In the opening decision, the Commission checked the aid intensity in the two regions, which is different, being 40% in Sines and 30% in Matosinhos, and recalculated the maximum aid intensity by weighing the aid intensities taking proportionally into account the investment (in net present value) in the corresponding region over the total investment. The result would be an aid intensity of 37.18%, corresponding to an adjusted maximum aid intensity of 14.21%.
- (273) Even if the investment project had been considered a SIP, the net present value of the total investment costs would amount to EUR 974 064 894. The total planned aid would amount to EUR 121 091 314 in net present value, corresponding to an aid intensity of 12.43% GGE, which is below the previously calculated adjusted maximum aid intensity of 14.21%.

- (274) Therefore, as the aid intensity in GGE would result below the adjusted maximum aid intensity considering the scaling down rules, the Commission considers that the proposed aid intensity for the investment project complies with paragraph 67 of the RAG.
- (275) Portugal has given assurances that the maximum aid amount and the maximum aid intensity as laid down in this Decision will not be exceeded, even in the case of lower or increased eligible expenditure.

Assessment under the rules laid down in paragraph 68 (a) and (b) of the RAG

- (276) In the opening decision, the Commission raised doubts regarding certain issues relating to the aid assessment in accordance with the rules laid down in paragraph 68(a) and (b) of the RAG. These issues were as follows:
- whether the products concerned by the investment project were exclusively diesel and heavy naphtha, as claimed by Portugal, or also include other refinery-related products, given the potential substitutability of refinery products from the supply side and the fact that heavy naphtha may be considered an intermediate product within the meaning of paragraph 69 of the RAG;
 - whether the relevant product market is at ex-refinery level for both diesel and heavy naphtha, as claimed by Portugal;
 - whether the relevant geographic market for the products concerned must be defined at national, regional (Iberian Peninsula) or EEA level;
 - whether the beneficiary, Petrogal, and the Galp Energia and ENI groups to which Petrogal belongs, have a market share above 25 % of any of the relevant markets (paragraph 68 (a) of the RAG);
 - for all the products concerned, whether the production capacity created by the investment project is more than 5 % of any relevant market measured using apparent consumption data and, if so, whether the average annual growth rate of the product concerned apparent consumption over the last five years is below the average annual growth rate of the EEA's GDP.
- (277) In the Recitals (278) to (311), the Commission reassesses whether the thresholds of the paragraph 68(a) and (b) tests are exceeded in order to decide whether an in-depth assessment of the investment project is necessary. First, the products concerned and deemed concerned by the investment project are examined. Second, the resulting relevant product markets are identified. Third, whether the assessment should take place ex-refinery, retail or non-retail market level is analysed. In Recitals (312) to (344), the product market and the relevant geographic market are established, following which the product market concerned is assessed with regard to Petrogal's relevant market share. Finally, the analysis focuses on whether the product-capacity increase exceeds 5% of the relevant EEA apparent consumption on a market where the growth of the EEA apparent consumption for the products concerned is underperforming.

Products concerned/deemed concerned by the investment project

- (278) Paragraph 69 of the RAG reads as follows: "The product concerned is normally the product covered by the investment project. 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...." Footnote 64 of that paragraph specifies that "Where an investment project involves the production of several different products, each of the products needs to be considered."
- (279) In the opening decision, the Commission identified diesel and heavy naphtha as products directly concerned by the investment project. Since apparently the whole heavy naphtha production was used by Petrogal's naphtha's derivatives production, naphtha derivatives were also deemed a product concerned. The Commission also accepted Portugal's assertion that the other horizontally related products produced by the refineries (gasoline, LPG, fuel oil, jet fuel, and bitumen) were not affected by the investment project.
- (280) The Commission notes Portugal's explanation that refineries operate on the basis of a multi-product-production function where the input, crude oil, is transformed into a multitude of intermediate (for instance, heavy naphtha, vacuum gas oil) and final (for instance, gasoline, diesel) products. Many of the intermediate products are immediately re-used within the different steps of the refining process as inputs ("feedstocks"), whereas others are sold on the market or used as input for the first generation petrochemical industry, for instance, heavy naphtha for the aromatics production. The technical production function depends in particular on the type of crude oil used (not all types of crude oil can be processed in given installations), and the exact technical configuration of the refinery. A profit maximising refinery tries to optimise its profits over the whole range of products, the so-called "refining margin", by adjusting the production of the different outputs, taking into account the technical restrictions resulting from the production function (and the type of crude oil used) and the input and output prices. However, the possibilities to adjust the configuration of an existing refinery without additional investments are extremely limited.
- (281) The refinery sector has faced structural changes over the last decade. The lighter types of crude oil have become more and more rare and are increasingly substituted by heavier types of crude oil. At the same time, market demand for diesel (an increasingly common substitute for gasoline as a propellant) has grown quickly. On the contrary the demand for fuel oil, used in electricity generation and maritime transport, is decreasing and expected to decrease further (due to its substitution in these uses through more environmentally-friendly technologies). The EU is a net importer of diesel and an exporter of gasoline (mainly to the US market which is expected to shrink).
- (282) As explained by Portugal, and confirmed by the competitors n°1 and n°2, the economic driver for the investment project is, on the one hand, to allow the refineries to process heavier types of crude oil and, on the other, to change its configuration in a way that allows the refineries to produce more diesel and less fuel oil.

- (283) As described in Section 2.2, diesel and heavy naphtha are the products directly concerned by the investment project. Indeed, the investment project will increase the production of diesel (to the detriment of fuel oil) as well as the production of heavy naphtha, which according to Portugal is an inevitable technically caused side-effect. The Commission notes Portugal's assertion that the other horizontally-related products produced by the refineries (gasoline, LPG, fuel oil, jet fuel, and bitumen) are not affected by the investment project.
- (284) However, the Commission ascertained in the formal investigation that the investment in Matosinhos into the new vacuum distillation unit and the new visbreaker will also lead to the production of vacuum gas oil. The increased production of diesel will take place in Sines, where the new hydrocracker unit will use as feedstock the vacuum gas oil produced in the refineries of Matosinhos and Sines. As a consequence, vacuum gas oil also has to be deemed a product directly concerned by the investment, since the investment project will lead to a significant increase of its production in Matosinhos refinery.
- (285) Portugal submitted that vacuum gas oil will be used exclusively as feedstock for the hydrocracker in Sines. Therefore, it should be considered as an intermediate product for the increased production of diesel and not be assessed separately. Portugal also stated that the necessary stable and secure supply of feedstock for a hydrocracker of the size of the one in Sines could not be ensured by purchasing the necessary quantities on the market. This is due to the very limited size and the high volatility in the open vacuum feedstock market, a spot market. As a consequence, no potential third party supply is excluded by the supplies of vacuum gas oil from Matosinhos to Sines.
- (286) The Commission accepts that vacuum gas oil is considered an intermediate product and that a significant part of the output of vacuum gas oil is not sold on the market (whilst no potential third party supplies are excluded). In this case, as laid down in paragraph 69 of the RAG, it can be concluded that with regard to the new vacuum distillation unit and the new visbreaker in Matosinhos, the product concerned is the downstream product, namely diesel.
- (287) The Commission also notes that Competitor n°1 considers that hydrocracking residues could be deemed a product concerned by the investment project (see Recital (92)). As Portugal explained that, due to the use of iso-cracking technology, the production of these residues is almost insignificant (see Recital (183)), the Commission does not take hydrocracking residues into account as a product concerned.
- (288) In the opening decision, the Commission expressed doubts as to whether diesel and naphtha were the only products concerned, pointing to the fact that naphtha may be considered an intermediate product within the meaning of paragraph 69 of the RAG, and that naphtha derivatives could be products deemed concerned for which the tests under paragraphs 68 (a) and (b) might have to be carried out.

(289) Portugal submitted the following explanations:

- The term naphtha covers both heavy and light naphtha; heavy and light naphtha are not substitutable, neither in their production, nor in their uses.
- Heavy naphtha is a product which is used as feedstock in refining processes and in the production of a very wide range of chemical products, not only in the production of aromatics.
- The investment project leads to the additional production of heavy naphtha in Sines: the Sines refinery heavy naphtha production is increased by [200-250] Ktonne per year.
- The largest part of the heavy naphtha produced in the Sines refinery is transported to Petrogal's refinery in Matosinhos where it is processed, together with heavy naphtha imported from other countries and heavy naphtha produced in Matosinhos itself ([650-700] Ktonne on average in 2007-2009), to reformer⁶¹. The total heavy naphtha volume used in the Matosinhos refinery to produce reformer is [1000-1050] tonnes (on average in 2007-2009).
- Of the total additional production of [200-250] Ktonne of heavy naphtha in Sines, [100-150] Ktonne on are transported to Matosinhos (the remainder is reused as feedstock in the Sines hydrocracking process) to replace [100-150] Ktonne of imported heavy naphtha; the import volume of [250-300] Ktonne before the investment is reduced to [100-150] Ktonne, namely by [50-60]%.⁶²
- 92% of imports of heavy naphtha in 2009 originated from outside the EEA, 8% from the EEA⁶².
- The own production capacity of the Matosinhos refinery of heavy naphtha (average production 2007-2009: [650-700] Ktonne) is not changed by the investment project.
- Reformer is an intermediate product for the production of aromatics.
- The production capacity of reformer is not changed by the investment.
- The reformer produced in Matosinhos is used as feedstock to Petrogal's Matosinhos aromatics plant.
- The aromatics plant produces a wide range of primary aromatics or naphtha derivatives, in particular benzene, toluene, orthoxylene, paraxylene and solvents.
- The production capacity of the aromatics plant (sales average in 2007-2009: [400-450] Ktonne) is not changed by the investment project and no extension is planned.

⁶¹ See Recital (135) for information on reformer as an intermediate product.

⁶² 92% of Petrogal naphtha imports are from non-EEA countries (Angola, Egypt, Ukraine, Libya and Russia), 8% originates from France and Netherlands.

- The aromatics plant is an independent business unit; the internal price for heavy naphtha is, and will be after the investment, the import price of heavy naphtha. The sales price of the reformer to the aromatics plant is, and will be after the investment, calculated as [10-20]% of import parity of naphtha (CIF NEW) and [80-90]% of gasoline export parity (RBOB USA), and transport costs of Sines to Porto.
 - The raw material costs (heavy naphtha) represented some [90-100]% of the total production costs of the aromatics production. The additional production of heavy naphtha in Sines represents some 14% of the total heavy naphtha processed to reformer.
 - The primary aromatics are sold on the market to the petrochemical industry, at market prices; Petrogal, with a market share below [0-5]%, is a price taker on the EEA aromatics market. The total turnover of Petrogal's aromatics plant amounted to some € [] million in 2009. After the completion of the investment, []% of the turnover (some € [] million on the basis of the 2009 turnover) would result from heavy naphtha additionally produced in Sines.
- (290) The Commission notes that competitor n°1 considers that heavy naphtha is an intermediate product and that the assessment should include naphtha derivatives as products concerned.
- (291) To decide whether the paragraph 68(a) and (b) test have to be carried out for the naphtha derivatives, it is necessary to give an interpretation to the wording of paragraph 69 of the RAG. Paragraph 69 stipulates that the product concerned may be the downstream product when the product of the investment is an intermediate product, and a significant part of its output is not sold on the market. This wording aims at situations where the distortive effect of the aid on competitors is not felt, or only partially felt, on the market of the intermediate product, and is transferred to the final product market. On the basis of the information given by Portugal on the definition of the products concerned, the Commission considers that the aid neither affects the production volumes, nor the production costs, nor the price setting behaviour of Petrogal's aromatics plant. In addition, the quantity of additional heavy naphtha produced in Sines is only of minor importance, compared to the overall quantity of heavy naphtha used to produce reformer. The Commission therefore considers that the aromatics markets are not, or only indirectly very insignificantly (via an indirect reduction of the naphtha import price, see subsequent section) affected by the aid for the investment project.
- (292) The Commission, therefore, considers that it is not appropriate to carry out the paragraph 68(a) and (b) tests for the aromatics markets.
- (293) At the same time, the Commission considers that the aid may affect the naphtha market, insofar as the investment project allows to substitute imports and forces suppliers to find other outlets on the heavy naphtha market. The Commission therefore carried out the paragraph 68 (a) and (b) tests with regard to heavy naphtha as a product concerned.

Relevant product markets

- (294) Paragraph 69 of the RAG specifies 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).
- (295) In the opening decision, the Commission could not conclude on the relevant market for the product(s) concerned, due to difficulties to identify definitely the list of products concerned.

Diesel

- (296) In the opening decision, the Commission concluded that there were no substitutes for diesel from the consumer side. However, there were doubts on the supply side as to substitutability in the production of diesel, as flexibility of the production installations could lead to produce other types of products (mainly gasoline) by changing the refineries' configurations.
- (297) In order to dispel these doubts, Portugal argued that the Commission merger decision⁶³ quoted by the Commission, referred to a different context when the unbalance between the supply and the demand in the gasoline and the diesel markets was much less important than it is nowadays and because of that the level of flexibility at the switch level between the production of these two products was still available. However, according to Portugal from 2000, with the important increase of diesel demand those choice levels ended and nowadays there is no additional capacity to meet the demand.
- (298) Whilst this explanation does not entirely exclude the possibility that diesel production facilities could be used for the production of gasoline, it seems unrealistic to assume that an undertaking could spend more than EUR 1 billion to increase its capacity to produce gasoline whilst an oversupply exists in Europe for the production of this commodity. Various studies⁶⁴ point to the decline in the demand for gasoline and residual fuel oil and an increase in the demand for diesel in the European motor fuel market. This shift in demand patterns has left refineries producing excess volumes of products which are declining in demand, and value, and insufficient volumes of product with growing demand and value⁶⁵. The consumption of gasoline in Europe is projected to fall significantly over the period 2010 to 2030, as a result of the switch from gasoline cars to diesels cars and the introduction of alternative sources of energy. Available studies indicate also that the demand for gasoline will decrease due to the use of more energy efficient cars in the USA (main export market for the European surplus) and the expected future role of electric cars.

⁶³ Commission Decision of 7 August 1996 on Merger Case COMP/M.727, BP/Mobil, OJ C381 of 17.12.1996.

⁶⁴ Portugal mainly refers to various reports by Purvin and Gertz, as the *Global Petroleum Market Outlook* of March 2011.

⁶⁵ As outlined at page 46-47 of the report prepared by Pöyry for the European Commission, *Survey of the competitive aspects of oil and oil product markets in the EU*, December 2009. This study is made public as from the website of the European Commission, Directorate General for Energy: http://ec.europa.eu/energy/oil/studies/oil_en.htm

- (299) Therefore, the Commission considers that in this specific case, for the type of investment and in light of the medium-term trend of the product market, the product concerned, also from the supply side, should be considered to be diesel.

Naphtha and naphtha derivatives

- (300) In line with the discussion of the products concerned, the second relevant product market to be discussed is the market for heavy naphtha. In the Sines refinery, heavy naphtha production is a by-product of the diesel production, the driver of the investment. Heavy naphtha is used in the production of a very wide range of chemical products, not only in the production of aromatics. In its general uses, it cannot be replaced by any substitutes. The Commission therefore considers the market of heavy naphtha to be the relevant product market with regard to paragraph 68(a) and (b) tests.
- (301) Therefore, the Commission considers that the relevant product markets with regard to paragraph 68(a) and (b) tests, are the product markets for diesel and heavy naphtha. For information purposes, data will also be given for naphtha derivatives.

Level at which the market assessment has to be carried out

- (302) In the opening decision, the Commission could not conclude on the question of whether these markets should be assessed at the level of ex-refinery, non-retail or retail.
- (303) Competitors n°1 and n°2 consider that the relevant product market should be extended to retail and non-retail diesel sales (see Recitals (93) and (116). Portugal considers that, for State aid cases, the correct level of assessment is the ex-refinery level. The provisions of the RAG do not specify at which level the paragraph 68(a) and (b) tests, and in particular the test under paragraph 68 (a) of the RAG, should be carried out.
- (304) Depending on the issue to be analysed, and the underlying theory of harm, competition policy assesses the competitive situation of markets at different levels, manufacturing, distribution (non-retail) and retail. Market players are, for example for the car sector, consumers and individual car traders for the retail level, car traders and distributors for the non-retail level, and distributors and manufacturers for the manufacturing level. For the products concerned by this Decision, market players are, for example, car owners and petrol stations for the retail market, petrol stations and distributors for the non-retail market, and refineries and distributors for the ex-refinery market.
- (305) The manufacturing level corresponds in this Decision to the ex-refinery level. Portugal confirmed that the ex-refinery market is equivalent to the total diesel market. According to Portugal, the notion of "ex-refinery sales" includes all sales made in large lots on a spot basis (directly at the refinery gate) to oil companies (including Galp Energia's own companies), traders, resellers or large industrial consumers, including imports of diesel⁶⁶. Ex-refinery sales in Portugal correspond to all ex-

⁶⁶ e.g. the Commission Decision on Merger case COMP/M.4348, PKN/MAZEIKIU, defines the ex-refinery market as follows: *"Ex-refinery/cargo sales constitute a primary level of distribution and ... should be distinguished from smaller non-retail sales of the fuels (secondary level of distribution). The ex-refinery/cargo sales consist of large volume sales by refiners directly at the refinery gate, or delivered by primary transport (i.e. generally by rail, pipeline, ship or barge) to clients' terminals*

refinery sales of Petrogal minus exports plus imports into Portugal. The supply side of the ex-refinery market in Portugal therefore includes Petrogal and non-Portuguese refineries exporting their products to Portugal and, for instance, for the demand side of the diesel market, different chains of petrol distributors, as Petrogal, Repsol, CEPSA, and BP that either buy or are supplied from Petrogal, or import diesel from outside Portugal.

- (306) The main purpose of the control of investment aid is not to protect consumers (or traders) against undesirable consequences of anti-competitive behaviour, such as the reduction of consumer rents through monopolistic pricing by cartels or market players abusing their dominant market position. In fact, the investment aid allows to increase output on the market, and thus leads to a price reduction that is *prima facie*, at least in the short and medium term, beneficial to consumers.
- (307) The objective pursued by the control of investment aid is rather to protect other producers and the economies of other Member States against excessive (namely going beyond the level of distortion that is considered compatible with the internal market within the meaning of Article 107(3) of the Treaty) distortive effects of the aid on competition and trade. This competition between manufacturers takes place at manufacturing level, and in this case, the competition between refineries takes place at the level of ex-refinery sales.
- (308) Whilst the standard regional aid ceilings laid down in the regional aid maps and the scaling down of aid intensities for large investment projects pursuant to paragraph 60 of the RAG are meant to impose a standard (and for large projects) progressive level of protection against such distortion of competition and effect on trade, the paragraph 68(a) and (b) tests are designed to filter out, for subsequent in-depth assessment, situations where competition between manufacturers may be particularly affected. The paragraph 68(b) test examines to what extent the investment aid involves a major capacity increase allowing the aid beneficiary to bring quantities on a market in absolute or relative decline under more favourable conditions than those faced by non-aided competitors. The paragraph 68(a) test examines to what extent the investment aid will maintain, reinforce, or create a strong market position for the aid beneficiary that could be abused by a dominant market player, by foreclosing the market for instance. In both situations, competitors may lose market shares on the market at manufacturing level, see their profitability reduced, or may be excluded of the market, whereas potential competitors may be prevented from market access.
- (309) The Commission therefore considers that the tests have to be carried out at manufacturing level. Indeed, the market situation at manufacturing level is decisive as State aid decisions on aid to production facilities assess the effects of aid on competition distortions between manufacturers and on trade between Member States. Moreover, it can be presumed that when the beneficiary's market share upstream (ex-refinery) is high, this creates in itself a sufficiently high likelihood of finding a significant distortion of competition, irrespective of the market share downstream. Therefore, sales of diesel at retail and non-retail level, even if they were included in

(storage facilities) inland or abroad. The customers are wholesalers, traders or internal wholesale arm of the refiners which usually own or rent large storage facilities."

the relevant product markets definitions in previous Commission merger cases⁶⁷, do not need to be taken into account for the purpose of the paragraph 68(a) and (b) tests.

- (310) The paragraph 68 (a) and (b) tests are simple filters that are meant to identify mechanically situations of risk to competition and trade. However, the detailed assessment of these risks is the purpose of the subsequent in-depth assessment. Whilst this in-depth assessment will normally address the situation of the market at manufacturing level, it may be necessary, for instance in case of market foreclosure, to analyse the impact of the aid in the downstream markets.
- (311) Therefore, taking into account the Commission's decisional practice on State aid cases in other economic sectors, in particular the car sector⁶⁸, and the fact that the investment project exclusively concerns expenditure in Petrogal's refining activity, for the purpose of applying the paragraph 68 (a) and (b) tests, the ex-refinery level is the only relevant level for this Decision.

Relevant geographic market

Relevant geographic market for diesel

- (312) In the opening decision, the Commission expressed doubts as to whether the relevant geographic market for diesel should be considered as being EEA-wide, regional (Iberian Peninsula) or national.
- (313) Portugal considers that the relevant market for diesel should be wider than the national market, preferably the Western European market or EEA market. Competitors n°1 and n°2 do not differentiate between the level of the market to be assessed. They argue that the relevant geographic market should be the Portuguese market or, at the utmost, the Iberian market.
- (314) The Commission adopted in 1997 its Notice on the definition of the relevant market for the purposes of Community competition law (the "Notice")⁶⁹. The Notice stipulates that the relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.
- (315) The Notice is conceived as an assessment instrument for antitrust and merger control policies. It relies on the investigative powers available under such policies and is not directly applicable to State aid. The Notice explicitly recognizes that "the focus of assessment in State aid cases is the aid recipient and the industry/sector concerned rather than the identification of competitive constraints faced by the aid recipient". Nonetheless, the Notice states that elements of the approach developed therein "might serve as basis for the assessment of State aid cases".

⁶⁷ See Commission Decision of 31.10.2008 on Merger Case COMP/M.5005 – Galp Energia/ ExxonMobil Iberia, OJ C307 Of 02.12.2008.

⁶⁸ See Commission Decisions of 29.04.2009 on State aid case N 635/2008 – Italy – LIP – Fiat Sicily, and of 29.06.2011 on State aid case N 671/2008 – Hungary – LIP – Aid to Mercedes-Benz Manufacturing Hungary Korlátolt Felelősségű Társaság.

⁶⁹ OJ C 372, 9.12.1997, p. 5.

- (316) So far, the Commission has not yet published a notice on the principles and approach for the definition of the relevant product and geographic market for State aid cases. The RAG themselves do not give guidance on how the relevant geographic market should be defined. However, paragraph 70 of the RAG includes wording that seems to give some preference to the assessment at EEA level: "For the purpose of applying points (a) (...), sales (...) will be defined (...), normally in the EEA, 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".
- (317) The appropriate definition of a geographic market has to be seen in the light of the underlying theory of harm. However, it seems safe to assume that the test found in paragraph 68(a) of the RAG, regarding market shares exceeding 25%, is meant to protect EEA competitors from being excluded from the market on which they operate or prevented access to that market (crowded out) by the anti-competitive behaviour of an aid beneficiary with market power.
- (318) For the purpose of this Decision, it is not relevant to define the exact geographic delimitation of the market at manufacturing level; as Petrogal's market share exceeds the 25% threshold on the national market only. It is sufficient to verify whether the national market constitutes the relevant geographic market. The arguments presented by the competitors, on which Portugal has commented, in particular regarding import barriers and limited storage capacity, were considered. It was concluded that a geographic market definition deviating from the default approach which defines markets for the purpose of the paragraph 68(a) and (b) tests as EEA market, and lays down the national market as relevant geographic market, can only be justified if there are clear indications that the market is largely closed. It is therefore necessary to assess whether there are barriers to trade that would impede undertakings competing with Petrogal on the non-retail market from importing diesel from non-Portuguese refineries if prices that are applied on the Portuguese ex-refinery market exceed those observed on the larger market.
- (319) In this context, the following was noted:
- The diesel sold on the Portuguese market has the same technical characteristics as the diesel sold in neighbouring markets.
 - There are no import duties for intra-EEA trade.
 - There are no regulatory or administrative restrictions limiting imports to Portugal.
 - Statistical data provided by Portugal (see Recital (195)) show the existence of trade flows, both imports into Portugal, and exports from Portugal to neighbouring countries. Exports have decreased due to the increased need for diesel in Portugal.
 - Imports take place both via maritime and road transport; import volumes over the last years were highly reactive to external events, and increased significantly over the last years. The increase in imports shows that other operators have alternative supply options, and have a capability to replace direct supplies from Petrogal refineries with imports. From the information

submitted by Portugal (see Recital (195)), it shows this is particularly evident for the year 2009, when production was stopped during several weeks following an accident at the Sines refinery.

- Portugal rejects allegations that Petrogal controls more than 90% of the existing storage capacity and clarifies that third parties' storage capacity represents a delivery capacity of 2.9 Mtonnes per year, representing more than 50% of the national market. No third party competitor was interested in buying additional storage capacity when it was offered for sale.
- The competitors were invited by the Commission to give concrete examples confirming the existence of these barriers to trade or descriptions of situations in which they have suffered difficulties in importing diesel, but they did not submit such information.

- (320) In the absence of concrete examples and on the basis of the information provided by Portugal on storage capacities and imports, it is concluded that there is no evidence that restrictions on the availability of storage capacities and other barriers to import diesel *de facto* exist.
- (321) As for the prices of diesel acquired by third parties from Petrogal at ex-refinery level, they appear to be similar to the cost of importing diesel to Portugal. As suggested by Portugal during the notification and stated in Part 3.4.3 of the opening decision, prices at ex-refinery level are set to international product price quotations and, in the case of refinery products in Portugal, at *Platts (Rotterdam)* prices for the North-Western European region plus spreads (transport, freight, insurance, losses, and other). This points to a wider market than the national (Portuguese) one. Third party competitors did not put forward arguments regarding the ex-refinery prices applied by Petrogal, but limited their comments to Petrogal's market power and position. Competitor n°1 remarked that the ratio of total diesel imports and exports was too low to justify a regional market, but did not indicate any shortage of diesel, or situation in which the control of storage capacity would have led competitors into difficulties.
- (322) Competitor n°2 rather remarked (see Recital (109)) that the investment project would transform Petrogal into a net exporter to other markets and would strengthen its market position on the Iberian Peninsula.
- (323) Therefore, it cannot be concluded that the relevant geographic market for diesel is national, as there appear to be no limitations to imports of diesel into Portugal, nor to exports to neighbouring countries. Thus, the relevant geographic market is at least the regional market, namely the Iberian Peninsula.

Relevant geographic market for naphtha and naphtha derivatives

- (324) In the opening decision, the Commission expressed doubts as to whether the relevant geographic market for heavy naphtha should be considered as being EEA-wide, regional (Iberian Peninsula) or national.
- (325) Portugal considered that the relevant geographic market for heavy naphtha and naphtha derivatives was at least EEA, if not worldwide. The competitors did not object to this relevant geographic market definition.

- (326) Portugal's comments were not rejected by interested parties and, given that heavy naphtha is a commodity which is easily transportable over long distances at low transport cost, the relevant geographic market is at least the EEA⁷⁰.

Market share test pursuant to paragraph 68 (a) of the RAG:

- (327) Paragraph 68 (a) of the RAG stipulates that the Commission proceeds to an in-depth assessment if "the aid beneficiary accounts for more than 25 % of the sales of the product(s) concerned on the market(s) concerned before the investment or will account for more than 25 % after the investment".
- (328) In the opening decision, the Commission was unable to confirm whether the threshold laid down in paragraph 68(a) of the RAG were exceeded due to doubts as to the appropriate definition of the relevant product and geographic market and the relevant level of assessment (ex-refinery, retail, non-retail). In addition, no data were available at group level (including ENI market shares). Data for naphtha derivatives was also unavailable.

Market share test for diesel

- (329) Data provided by Portugal show that Petrogal's ex-refinery diesel market share would be below 25 % in the regional market (Iberian Peninsula), as already stated in the opening decision and confirmed by Portugal during the formal investigation phase. This information refers only to Petrogal's production capacity, given that Portugal declared that the ENI is not present at ex-refinery level in the Iberian Peninsula. Also for Western Europe and the EEA, Petrogal's ex-refinery diesel market share at group level (including ENI's market shares) is below 25 %, as is apparent from data provided by Portugal (see Tables 6 and 7 below).

Table 6: Combined market shares of Petrogal and ENI on the Western European market (in Mtonnes/year)

Product concerned	2007			2012		
	Petrogal and ENI sales	Western Europe market	Petrogal and ENI market shares	Petrogal and ENI sales	Western Europe market	Petrogal and ENI market shares
Diesel	[]	243.6	[5-10] %	[]	252	[5-10] %

⁷⁰ In line with Commission Decision of 10.07.2007 on State aid case N 898/06 - Repsol Polimeros

Table 7: Combined market shares of Petrogal and ENI on the EEA market (in Mtonnes/year)

Product concerned	2007			2012		
	Petrogal and ENI sales	EEA market	Petrogal and ENI market shares	Petrogal and ENI sales	EEA market	Petrogal and ENI market shares
Diesel	[]	323.5	[5-10] %	[]	334.6	[5-10] %

- (330) On the basis of the figures in Tables 6 and 7 above, it is concluded that Petrogal does not account for more than 25 % of the sales of the product concerned on the relevant market at regional (Iberian Peninsula) level, as well as at Western European and EEA level, including the ex-refinery market shares at ENI's group level. Therefore, for diesel, the threshold laid down in paragraph 68(a) of the RAG is not exceeded.
- (331) As the combined ENI-Petrogal market share does not exceed 25 %, it is not necessary to consider whether Petrogal's market share is controlled by ENI to an extent which requires their combined market share to be taken into account.

Market share test for naphtha, information on naphtha derivatives

- (332) According to information provided by Portugal, most refineries producing heavy naphtha, process it in-house in captive production. The data on market shares provided by Portugal for the purpose of the paragraph 68(a) test refer, as required by the test, to sales on the EEA, namely to the merchant market.
- (333) To examine whether the investment project is compatible with paragraph 68(a) of the RAG, Petrogal's market share before and after the investment project has to be analysed and verified whether it exceeds 25 %.

Table 8: Market shares of Petrogal on the EEA market (in Ktonnes)

Products concerned	2007			2012		
	Petrogal sales	EEA market	Petrogal market shares	Petrogal sales	EEA market	Petrogal market shares
Heavy Naphtha	[]	49 172	[0-5] %	[]	49 769	[0-5] %
Naphtha derivatives:	[]	16 045	[0-5] %	[]	15 640	[0-5] %

- Benzene	[]	10 093	[0-5] %	[]	10 093	[0-5] %
- Orthoxylene	[]	681	[5-10] %	[]	606	[5-10] %
- Paraxylene	[]	2 169	[5-10] %	[]	2 169	[5-10] %
- Toluene	[]	2 503	[5-10] %	[]	2 173	[5-10] %
- Solvents	[]	599	[5-10] %	[]	599	[5-10] %

Table 9: Market shares of ENI on the EEA market (in kt)

Products concerned	2007			2012		
	ENI sales	EEA market	ENI market shares	ENI sales	EEA market	ENI market shares
Heavy Naphtha	[]	49 172	[0-5] %	[]	49 769	[0-5] %
Naphtha derivatives:	n.a.	16 045		n.a.	15 640	
- Benzene	[]	10 093	[5-10] %	[]	10 093	[0-5] %
- Orthoxylene	[]	681	[5-10] %	[]	606	[10-20] %
- Paraxylene	[]	2 169	[0-5] %	[]	2 169	[0-5] %
- Toluene	[]	2 503	[5-10] %	[]	2 173	[5-10] %
- Solvents	n.a.	599		n.a.	599	

Table 10: Combined market shares of Petrogal and ENI on EEA market (in kt)

Products concerned	2007			2012		
	Petrogal and ENI sales	EEA market	Petrogal and ENI market shares	Petrogal and ENI sales	EEA market	Petrogal and ENI market shares
Heavy Naphtha	[]	49 172	[0-5] %	[]	49 769	[0-5] %
Naphtha derivatives:	n.a.	16 045		n.a.	15 640	

- Benzene	[]	10 093	[5-10] %	[]	10 093	[5-10] %
- Orthoxylene	[]	681	[10-20] %	[]	606	[10-20] %
- Paraxylene	[]	2 169	[5-10] %	[]	2 169	[5-10] %
- Toluene	[]	2 503	[10-20]%	[]	2 173	[10-20] %
- Solvents	[]	599	[5-10] %	[]	599	[0-5] %

- (334) On the basis of the figures in Tables 8 to 10, it is concluded that Petrogal, alone, and in combination with ENI, has market shares below 25% for the product concerned on the relevant product market for heavy naphtha at EEA level. Petrogal's market share does not exceed 25% on the derivatives markets either.
- (335) In addition, the total in-house production of heavy naphtha used by Petrogal in captive production, which is not reflected in the above market share data in Table 8, amounts to less than [<5] % of the size of the EEA retail market. The additional production in the Sines refinery amounts to some [<5] %.
- (336) On the basis of these considerations, it is concluded that, for heavy naphtha, the threshold laid down in the paragraph 68(a) test is not exceeded.

Capacity increase in an underperforming market (pursuant to paragraph 68 (b) of the RAG)

- (337) Paragraph 68 (b) of the RAG provides that the Commission proceeds to the in-depth assessment if "the capacity created by the project is less than 5 % of the size of the market measured using apparent consumption data of the product concerned, unless the average annual growth rate of its apparent consumption over the last five years is above the average annual growth rate of the EEA's GDP."
- (338) Paragraph 70 of the RAG clarifies that "...For the purpose of applying points 68 (a) and (b), sales and apparent consumption will be defined at the appropriate level of the Prodcom classification, normally in the EEA, 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".
- (339) In the opening decision, the Commission raised doubts, for all the products concerned, as to whether the production capacity created by the investment project was more than 5 % of each market measured using apparent consumption data and, if so, whether the average annual growth rate of the product's apparent consumption over the last five years (before the start of the works) was below the average annual growth rate of the EEA's GDP.

Capacity increase in an underperforming market (pursuant to paragraph 68 (b) of the RAG) for diesel

- (340) The Compound Annual Growth Rate ("CAGR") of the apparent consumption of diesel in the EEA for the years 2001 to 2006 is around 2.12 % in volume terms or 15.38 % in value terms. The corresponding CAGR of the EEA's GDP for the years 2001 to 2006

reached 2.06 % in real terms (to be equated to volume terms) and 4.12 % in nominal terms (to be equated to value terms).

- (341) It results that the market for diesel cannot be considered underperforming if takes into account the CAGR, both in volume and in value terms, is compared respectively to the GDP growth rate in nominal and real terms. Therefore, it is not necessary to check whether the capacity generated by the investment project is more than 5 % of the market concerned.

Capacity increase in an underperforming market (pursuant to paragraph 68 (b) of the RAG) for naphtha and information on naphtha derivatives

- (342) To examine whether the investment project complies with paragraph 68(b) of the RAG, the Commission needs to verify whether the capacity created by the investment project is less than 5 % of the size of the market measured using apparent consumption data of the product concerned, unless the average annual growth rate of its apparent consumption over the last five years is above the average annual growth rate of the EEA's GDP.
- (343) Portugal provided the following data presented in Tables 11 to 13 below. The figures in the column for the EEA market are identical to those in the market share tables indicated as EEA market (sales). Since the size of the retail market (sales) is smaller than the size of the apparent consumption including captive production, the data on production capacity increase over-estimate the importance of the increase. It can thus be said to constitute a worst-case scenario.

Table 11: The ratio of production capacity increase in the Sines refinery over the products concerned markets in the EEA (in Ktonnes)

Products concerned	Production capacity in 2007	Production capacity in 2012	Increase in production capacity	EEA market in 2007	Share of capacity increase to EEA market	CAGR of the apparent consumption
Heavy naphtha	[]	[]	[]	49 172	[0-5] %	-
Naphtha derivatives:	[]	[]	[]	16 045	[0-5] %	-
- Benzene	[]	[]	[]	10 093	[0-5] %	-
- Orthoxylene	[]	[]	[]	681	[0-5] %	-
- Paraxylene	[]	[]	[]	2 169	[0-5] %	-
- Toluene	[]	[]	[]	2 503	[0-5] %	-
- Solvents	[]	[]	[]	599	[0-5] %	-

Table 12: The ratio of production capacity increase in Matosinhos over the products concerned markets in the EEA (in Ktonnes)

Products concerned	Production capacity in 2007	Production capacity in 2012	Increase in production capacity	EEA market in 2007	Share of capacity increase to EEA market	CAGR of the apparent consumption
Heavy naphtha	[]	[]	[]	49 172	[0-5] %	-
Naphtha derivatives:	[]	[]	[]	16 045	[0-5] %	-
- Benzene	[]	[]	[]	10 093	[0-5] %	-
- Orthoxylene	[]	[]	[]	681	[0-5] %	-
- Paraxylene	[]	[]	[]	2 169	[0-5] %	-
- Toluene	[]	[]	[]	2 503	[0-5] %	-
- Solvents	[]	[]	[]	599	[0-5] %	-

Table 13: The ratio of the combined production capacity increase (in the Sines and Matosinhos refineries) over the products concerned markets in the EEA (in Ktonnes)

Products concerned	Production capacity in 2007	Production capacity in 2012	Increase in production capacity	EEA market in 2007	Share of capacity increase to EEA market	CAGR of the apparent consumption
Heavy naphtha	[]	[]	[]	49 172	[0-5] %	-
Naphtha derivatives:	[]	[]	[]	16 045	[0-5] %	-
- Benzene	[]	[]	[]	10 093	[0-5] %	-
- Orthoxylene	[]	[]	[]	681	[0-5] %	-
- Paraxylene	[]	[]	[]	2 169	[0-5] %	-

- Toluene	[]	[]	[]	2 503	[0-5] %	-
- Solvents	[]	[]	[]	599	[0-5] %	-

(344) In all cases, the production capacity increase for the products listed in Tables 11 to 13 is below 5 % on the relevant product markets at EEA level. Thus, it is considered that the investment project does not exceed the threshold laid down in the first part of paragraph 68(b) of the RAG.

Conclusion

(345) On the basis of the data presented in Recitals (278) to (344), the investment project does not exceed the thresholds laid down in paragraphs 68(a) and 68(b) of the RAG for the products concerned. Therefore, it is not necessary to conduct an in-depth assessment of the aid following the opening of the procedure provided for in article 108(2) of the Treaty.

(346) To conclude, the proposed regional investment aid in favour of Petrogal fulfils all the conditions set out in the RAG to be considered compatible with the internal market on the basis of Article 107(3)(a) of the Treaty. It is therefore not necessary to assess whether the aid could be approved on the basis of other Treaty derogations.

(347) Portugal has exceptionally agreed that this Decision be adopted in English as its only authentic language.

HAS ADOPTED THIS DECISION:

Article 1

1. The State aid which Portugal plans to grant to Petrogal, amounting to EUR 160 484 007 in nominal value (EUR 121 091 314 in discounted prices) and representing a maximum aid intensity of 12.43 % in discounted prices, is compatible with the internal market in accordance with Article 107(3)(a) of the Treaty.

2. Implementation of the State aid referred to in Article 1(1) is accordingly authorised. In case of deviations from the planned eligible expenditure and from the notified granting schedule of the State aid, Portugal shall not exceed the maximum aid amount in discounted prices of EUR 121 091 314 nor the maximum aid intensity in discounted prices of 12.43 %.

Article 2

1. Portugal shall submit interim reports to the Commission every five years as from the date of this Decision. The interim reports shall provide updated information on the State aid amounts granted, on the execution of the aid contracts and on any other investment projects started at the Sines or Matosinhos refineries.

2. In addition, Portugal shall submit, within six months of the grant of the last tranche of the State aid, based on the notified granting schedule, a detailed final report including information on the State aid amounts paid, on the execution of the aid contracts and on any other investment projects started at the Sines or Matosinhos refineries.

Article 3

This Decision is addressed to the Portuguese Republic.

Done at Brussels, 3.8.2011.

For the Commission

Joaquin ALMUNIA
Vice-President

Notice

If the decision 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 the decision. Your request specifying the relevant information should be sent by registered letter or fax to:

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Directorate-General for Competition
State aid registry
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