

**DECISION OF THE AGENCY FOR THE COOPERATION OF ENERGY
REGULATORS No 01/2014**

of 11 August 2014

**ON THE INVESTMENT REQUEST INCLUDING CROSS-BORDER COST
ALLOCATION FOR THE GAS INTERCONNECTION POLAND-
LITHUANIA PROJECT OF COMMON INTEREST No 8.5**

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to the Treaty on the Functioning of the European Union,

HAVING REGARD to Regulation (EU) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators¹,

HAVING REGARD to Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009², and, in particular, Article 12(6) thereof,

HAVING REGARD to the consultation with the project promoters and the National Regulatory Authorities concerned,

HAVING REGARD to the hearing of AS EG Vörguteenus and the observations provided by JSC Latvijas Gaze,

Having given the addressees the opportunity to make known their views on the preliminary considerations of the Agency,

WHEREAS:

- (1) On 31 October 2013, Gaz-System S.A. (Poland) and AB Amber Grid (Lithuania), promoters of the project of common interest ("PCI") No 8.5, Gas Interconnection Poland – Lithuania ("GIPL"), submitted pursuant to Article 12(3) of Regulation No 347/2013 a joint investment request to all the National Regulatory Authorities ("NRAs") concerned, namely: i) Urząd Regulacji Energetyki for the Republic of Poland, ii) Valstybinė kainų ir energetikos kontrolės komisija for the Republic of Lithuania, iii) Sabiedrisko Pakalpojumu Regulēšanas Komisijā for the Republic of Latvia, and iv) Konkurentsiamet for the Republic of Estonia.

¹ OJ L 211, 14.8.2009, p.1.

² OJ L 115, 25.4.2013, p. 39.

- (2) The investment request accompanied by a Business Plan, a Cost Benefit Analysis (“CBA”), and a Proposal for a Cross-Border Cost Allocation (“CBCA”) was received by all the NRAs concerned on 31 October 2013.
- (3) The NRAs concerned did not reach an agreement on the investment request within six months of 31 October 2013, the date on which the request was received by the last of the NRAs concerned.
- (4) On 1 May 2014, the competence to take a decision on the investment request was therefore transferred to the Agency, pursuant to Article 12(6) of Regulation (EU) No 347/2013³.
- (5) On 19 May 2014, the project promoters submitted to the Agency and to all NRAs concerned an updated Business Plan, CBA and Proposal for CBCA, based on the comments and observations expressed, during the consultation stage foreseen by Article 12(3) of Regulation (EU) No 347/2013, by the NRAs concerned and the Transmission System Operators (“TSOs”) of the Republics of Latvia and Estonia, JSC Latvijas Gaze (Latvia, “Latvian TSO”) and AS EG Vörguteenus (Estonia, “Estonian TSO”).
- (6) On 10 June 2014, the Agency sought further information to the project promoters within the meaning of Article 12(6), third sub-paragraph, of Regulation (EU) No 347/2013. In particular, the Agency requested the project promoters to submit further information on used data and assumptions, provided calculations, sensitivity analysis, and capacity booking scenarios applied based on market tests.
- (7) On 23 June 2014, the project promoters provided a reply to the request for further information of 10 June 2014.
- (8) On 27 June 2014, the Agency requested additional information to the NRAs about the maturity of the project.
- (9) On 27 June 2014, the Latvian NRA provided a reply to the request for additional information of 27 June 2014.
- (10) On 1 July 2014, the Lithuanian NRA provided a reply to the request for additional information of 27 June 2014.
- (11) On 2 and 3 July 2014, the Agency held an oral hearing of the project promoters and the NRAs concerned. The Agency offered a hearing to the Latvian and Estonian TSO. The Latvian TSO was unavailable.
- (12) On 4 July 2014, the Agency held a hearing to which the Estonian TSO participated.

³ See http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Documents/Notice%20on%20the%20investment%20request%20on%20the%20GIPL%20Project%20of%20Common%20Interest.pdf.

- (13) On 7 July 2014, the Agency sought further information from the project promoters within the meaning of Article 12(6), third sub-paragraph, of Regulation (EU) No 347/2013. In particular, the Agency requested the project promoters to consult the Latvian and Estonian TSOs on the updated Business Plan, CBA and Proposal for CBCA submitted on 19 May 2014.
- (14) On 18 July 2014, the Estonian TSO provided its observations on the updated Business Plan, CBA and Proposal for CBCA submitted on 19 May 2014.
- (15) On 23 July 2014, the Latvian TSO provided its observations on the updated Business Plan, CBA and Proposal for CBCA submitted on 19 May 2014.
- (16) On 4 August 2014, the Agency held an oral hearing of the Estonian TSO.

1. PROJECT DESCRIPTION

- (17) The project promoters describe the GIPL project in the investment request. The following paragraphs contain a brief extract from the GIPL description.
- (18) The physical infrastructure will be located in Poland and Lithuania (hosting countries). However, the project will also provide significant net positive benefits to Latvia and Estonia (non-hosting countries). Accordingly, the Member States deemed to be significantly impacted by the GIPL project are Poland, Lithuania, Latvia and Estonia.
- (19) The GIPL project aims at connecting the Polish and Lithuanian gas markets by means of a new bidirectional gas pipeline. The GIPL project will enable the integration of the isolated gas markets of the Baltic States (Lithuania, Latvia and Estonia) into the European Union's wholesale gas markets.
- (20) Presently, gas supply to the Baltic States is not diversified in terms of sources, routes and counterparties. According to the project promoters, the GIPL project will make diversification of gas supply sources possible, increase security of supply and may enhance competition in the gas markets of the Baltic States.
- (21) The gas demand in the Baltic countries is currently about 5 billion cubic meters per year (bcm/y) and demand is expected to remain at this level or decrease slightly during the period 2014 to 2030⁴.
- (22) The GIPL pipeline is planned to be 534 km long, of which 357 km in Poland and 177 km in Lithuania. GIPL's starting point is Rembelszczyzna (Poland) and the ending point is Jauniunai (Lithuania). The GIPL pipeline will use DN700 mm steel pipe.

⁴ Business Plan, page 8

- (23) The investment request concerns Stage 1 of the GIPL project only. The initial maximum technical capacity during Stage 1 in the direction from Poland to Lithuania will be 2.4 bcm/y and the reverse flow maximum technical capacity in the direction from Lithuania to Poland will be 1.0 bcm/y. The installed power of the compressor stations will be 9.3 MW in Stage 1. The maximum daily technical capacity of the pipeline will be 6.6 million cubic meters per day (mcm/d) in Stage 1 in the Poland to Lithuania direction.
- (24) Depending on market developments, the project promoters may decide to implement Stage 2 of the project, which would increase the maximum technical capacity to 4.1 bcm/y from Poland to Lithuania, by adding additional compressor power. The compression power during Stage 2 would be increased to 24.4 MW and the maximum technical capacity from Poland to Lithuania would be 12.2 mcm/d.
- (25) The GIPL project is expected to be commissioned by December 2018, according to the Business Plan.

2. INVESTMENT REQUEST

- (26) The following information was submitted in the investment request by the project promoters pursuant to Article 12(3) of Regulation (EU) No 347/2013.

2.1. The Business Plan

- (27) The Business Plan defines the underlying assumptions adopted for the analysis and evaluates the financial viability of the project, including the preferred financing option, the results of the market test and the project implementation schedule. The financial analysis evaluates the project's cash flows (inflows and outflows) from the investors' perspective (the TSOs) and provides projections of demand and profitability.
- (28) The (undiscounted) investment costs for Stage 1 are estimated at €558 million, of which €422 million (76% of the total) on the Polish side and the remaining €136 million (24% of the total) on the Lithuanian side.
- (29) The operational expenditure of the GIPL project is estimated at €14.1 million in nominal average terms per year over the 2019-2038 period, of which €12.3 million (87%) on the Polish side and €1.9 million (13%) on the Lithuanian side.
- (30) The project promoters agreed that the transmission assets ownership, maintenance and investment duties, as well as the operating activities are to be divided between the two TSOs concerned for the purposes of the Business Plan. Investment costs will be distributed according to the physical location of the assets which are the object of the investment.
- (31) A market test shows the likely bookings levels by shippers and gas consumers in Poland, Lithuania, Latvia and Estonia. The test was conducted by the project promoters in the second half of 2012 and subsequently revised in September 2013. The test was

based on questionnaires submitted to potential shippers and gas consumers in Poland, Lithuania, Latvia and Estonia. Over 30 companies provided responses. According to the project promoters, the results of the market test confirm the potential interest in capacity bookings for the GIPL pipeline. The fact that the market test was not binding was primarily due to the uncertainties related to the project's commissioning date, as well as to the emerging character of the Baltic States' gas markets. The market test resulted in a capacity bookings forecast covering a 20-year horizon.

- (32) The market test indicates expressions of interest in capacity bookings equivalent to 2.36 bcm/y from Poland to Lithuania, or almost 100% of the pipeline's technical capacity in this direction during Stage 1, and 1.07 bcm/y in the reverse direction, or 107% of the pipeline technical reverse flow capacity during Stage 1. However, the project promoters also asked bidders to estimate the probability of booking the capacity and, on the basis of the information received from bidders, applied weights to the interest expressed in capacity bookings (as a "probability factor" by which the stated interest was "discounted"), resulting in an expected 20% capacity booking level. This figure was adopted in the CBCA analysis in the direction from Poland to Lithuania. In the reverse direction, no bookings are assumed. The expected annual average capacity bookings during 2019-2038 period for the GIPL project thus amount to 0.47 bcm/y in the Poland to Lithuania direction and nil in the Lithuania to Poland direction.
- (33) The financial analyses submitted by the project promoters cover only Stage I of the GIPL project. The analyses include an assessment of the level of external (grant) support needed to achieve the desired minimum profitability of the project for investors ($FNPV \geq 0^5$ and $FRR^6 > WACC^7$). The proposed financial structure of the GIPL project foresees significant external support, the amount of which is determined by a funding gap analysis. The investment request foresees the closing of most of the financial gap by means of external funding (grants) and cross-border contributions based on a CBCA. The remaining part of the project's investment costs is to be financed by the project promoters through a combination of debt (70%) and equity (30%).
- (34) The results of the financial analyses indicate a negative FNPV of €369 million (discounted at the nominal financial discounting rate of 8%), calculated as the sum of the present value of GIPL revenues (€127 million), the present value of the residual value of the project (€33 million), the present value of investment costs (negative €430 million), the present value of operational expenditure (negative €98 million), and the present value of changes in NWC⁸ (negative €1 million). By country, the FNPV for Poland is negative €285 million and for Lithuania it is negative €84 million.

⁵ FNPV: Financial Net Present Value.

⁶ FRR: Financial Rate of Return.

⁷ WACC: Weighted Average Cost of Capital.

⁸ NWC: Net Working Capital.

- (35) The project promoters do not expect the GIPL project to be implemented without external financial support and, accordingly, have not requested the inclusion of the cost of the project in the transmission tariffs in the absence of external support.
- (36) According to the Business Plan, the minimum project profitability level is defined as one producing an FNPV equal to zero and a FIRR equal to 8% (the profitability threshold for the project set by the project promoters)⁹.
- (37) The Business Plan states that GIPL's economic viability could be impacted by gas infrastructure developments in the region, in particular by the construction of LNG terminals which could be competing to some extent with the GIPL project, since the effects of the commissioning of such infrastructure could potentially lead to lower capacity bookings for GIPL.
- (38) The project promoters identified higher risks related to the realisation of the GIPL project that may require the granting of additional regulatory incentives to the project by the NRAs concerned. The project promoters note that, as a minimum, a mechanism is needed which will provide a stable and predictable level of income from capacity bookings for both TSOs (in Poland and Lithuania) during the operational phase of the project. Therefore, the project promoters claim that the introduction of capacity booking guarantees is indispensable for increasing the chances that the project is implemented, and propose the issuing of such guarantees by the TSOs of Latvia and Estonia to the TSOs in Poland and Lithuania.

2.2. *The Cost-Benefit Analysis*

- (39) The CBA identifies Poland, Lithuania, Latvia and Estonia as significantly impacted by the implementation of the project, according to the N-1 indicator¹⁰. Poland is expected to be the country least impacted by the GIPL project.
- (40) The project promoters state that the CBA takes into consideration the guidelines detailed in Regulation (EU) No 347/2013 and in Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility (CEF)¹¹, the Agency's Recommendation No 07/2013 of 25

⁹ In Poland, the WACC is 9.12%. In Lithuania, the WACC is 7.09%. Thus, the Financial Discount Rate used by the project promoters is in line with the prevalent WACCs in the relevant countries.

¹⁰ The N – 1 indicator describes the ability of the technical capacity of the gas infrastructure to satisfy total gas demand in the relevant area in the event of disruption of the single largest gas infrastructure during a day of exceptionally high gas demand occurring with a statistical probability of once in 20 years. Cf. Article 1, Annex I, Regulation (EU) No 994/2010 of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC, OJ L 295, 12.11.2010, p.1.

¹¹ OJ L 348, 20 .12.2013, p. 129.

September 2013, the European Commission's DG Regional Policy Guidelines for CBA (2008)¹² and ENTSOG's Draft CBA Methodology of 15 November 2013¹³.

(41) The most important assumptions used by the project promoters in the economic analysis (CBA) include:

- A reference period of 20 years commencing on the start of operation of the GIPL pipeline;
- A social discount rate (SDR) of 4.5% (applied to real prices, without taking inflation into account);
- Costs include investment costs, OPEX and the residual value of the investment (as a benefit, i.e. negative cost), as indicated in the Business Plan;
- Costs and benefits are broken down by country and by year.

(42) Regarding the regional and Union-wide positive externalities which the project is expected to generate, the project promoters note that:

- Removing the physical (pipeline) isolation and enhancing the integration of the Baltic gas market into the EU's market is a major positive externality;
- GIPL contributes to the enhancement of the regional N-1 indicator, to the diversification of gas supply in the Baltic countries by source and route, and to the promotion of competition in the gas market.

(43) The positive externalities are expressed in monetary terms by using the "saved cost approach", i.e. by comparing scenarios with and without GIPL in place. The analysed impacts are the project's effect on competition and market integration, security of gas supply and sustainability. The identified positive externalities of the project (the benefits) are according to the criteria defined in Article 4(2)(b) of Regulation (EU) No 347/2013.

(44) In terms of competition and market integration, the "saved cost of gas" is monetised. The savings are measured as the price differential between the existing wholesale gas price on the domestic market (reference price) and the total cost of gas in the domestic market after the GIPL project implementation.

(45) In terms of security of supply, the "savings of avoided gas disruptions" are calculated as the economic value of the avoided gas interruption, multiplied by the probability of

¹² Guide to cost-benefit analysis of investment projects. DG Regional Policy, European Commission, 2008, Brussels.

¹³ ENTSOG, Brussels, 15 November 2013, PR049-13.

the interruption and its duration, and the expected volume of interrupted supply covered by the GIPL project¹⁴.

- (46) In terms of sustainability, the value of the externality is assessed as “fuel switching costs/savings”, which is based on the difference in costs between using gas that can be supplied via GIPL and continuing the use of alternative fuels (for example, coal and oil), plus the benefits from the reduction of negative environmental externalities (CO₂ emissions) and improved efficiency. The sustainability impact (fuel switching effects) is calculated only for Poland, since the substitution effect of gas flows via GIPL in the Baltic States is in relation to imports of Russian gas rather than to other fuels, while in Poland the GIPL project will supply gas to areas currently not serviced with gas.
- (47) The qualitative analysis relates to externalities which have been neither monetised nor subjected to quantitative analysis due to unavailability of data or their non-quantifiable nature. These externalities include positive effects on economic activity and employment, as well as negative effects in terms of visual intrusion, noise, land use, water and flow rate disturbance and soil stability disturbance.
- (48) The total costs of the project were estimated by the project promoters at €547 million, and the total benefits at €1170 million, including €1075 million of externalities¹⁵, €21 million of fiscal effects and €74 million in residual value (all values are in economic net present value terms, ENPV), resulting in a BCR¹⁶ of 2.1. The project promoters conclude that the indicators confirm the high net positive socioeconomic impact of the GIPL project on the Baltic region.
- (49) The economic indicators calculated by the project promoters vary widely between the impacted countries, even though the economic impact of the GIPL project is positive as a whole:
- ENPV for Poland was estimated at negative €155 million. The ERR and the BCR further confirm that the project is not viable in Poland in socio-economic terms (ERR<0, BCR <1).
 - ENPV for Lithuania was estimated at €431 million, and this positive socio-economic outcome is supported by the values for the ERR and BCR (ERR of 28% and BCR of 4.5).
 - ENPV for Latvia is estimated at €263 million.

¹⁴ The duration of a disruption is assumed to be 14 days and its probability is estimated at 5%. The economic value is based on the economy's dependence on gas, i.e. the share of gross domestic product (GDP) which is dependent on gas.

¹⁵ Effects in terms of improvement in competition, integration of gas markets, security of gas supply, and sustainability.

¹⁶ Benefit-to-Cost Ratio.

- ENPV for Estonia is estimated at €84 million.

(50) The project promoters consider that, while the GIPL project provides net positive socio-economic benefits to all three Baltic States, Poland is a net cost bearer. Thus, a cost allocation based on territorial criteria would fail to allocate costs to all countries where benefits actually accrue. The project promoters believe that the Baltic States, as net beneficiaries, should provide compensation for costs incurred by Poland, as a net cost bearer. Therefore, a cross-border cost allocation was proposed.

2.3. *The Cross-Border Cost Allocation Proposal*

(51) The CBCA proposed by the project promoters includes: a) the identification of the net beneficiaries and the cost bearers based on the project-specific; CBA; b) a calculation of the financial gap of the project as a business undertaking; c) a review of the funding needed for the closing of the financial gap, by way of: (1) maximum possible grants from the CEF; (2) a cross-border allocation of the project's remaining costs among the net beneficiaries; (3) an identification of guarantee mechanisms for compensations in case the financial profitability of the GIPL project were not achieved.

(52) The project promoters estimate the financial gap that will need to be covered by the beneficiary countries to be €102 million, which is the sum of the total investment costs (negative €558 million), the part of project costs to be covered by revenues minus the operational expenditure (€76 million) and the expected European Union grant (€380 million; all values are in nominal terms).

(53) The project promoters propose that Lithuania would contribute €56.4 million, Latvia €34.4 million and Estonia €11.0 million. The suggested cost allocation is proportional to the shares of these countries in the assessed net benefits of the project, which are 55%, 34% and 11% , respectively.

(54) According to the proposed CBCA, the GIPL project may lead to an increase in the average transmission tariffs in the Baltic States for the 2019-2038 period, amounting to 11% in Lithuania, 10% in Latvia and 4% in Estonia, with tariffs in Poland remaining unaffected.

(55) In addition to European Union grants and the increase in transmission tariffs, the project promoters propose a guarantee mechanism intended to enhance the degree of stability and predictability of capacity bookings, namely the issuing of capacity booking guarantees by two TSOs (those of Latvia and Estonia) in favour of the project promoter's venture. The guarantees are conditional and may only be activated if average annual capacity bookings fall below 20% of the maximum technical capacity during Stage 1 of the project.

3. ASSESSMENT OF THE INVESTMENT REQUEST

3.1. Admissibility

- (56) The Agency finds that all required documents as per Article 12(3) of Regulation (EU) No 347/2013, namely the project-specific CBA, the business plan including the results of market testing, and a proposal for CBCA are present and complete.
- (57) Article 12(3) of Regulation (EU) No 347/2013 contains two admissibility criteria which project promoters need to meet for submitting a valid investment request and which require a careful assessment by the Agency: (i) a prior consultation of the TSOs from the Member States to which the project provides a significant net positive impact; and (ii) the project having reached sufficient maturity.

3.2. Evidence on TSO consultations

- (58) Both prior and throughout the investment request procedure, the TSOs from the Member States to which the project provides a net significant impact were consulted by the project promoters.
- (59) In the investment request, the project promoters provided a report of the East-Baltic TSO Working Group¹⁷ (established on 1 February 2013 and involving, *inter alia*, the TSOs of Estonia and Latvia) as proof that the TSOs of Latvia and Estonia were consulted prior to the submission of the investment request. The TSOs participating in the East-Baltic TSO Working Group held six meetings before the release of its report. The report contains an analysis of the interoperability of gas infrastructure projects of the Eastern-Baltic cluster, including the GIPL project. The report was agreed by all TSOs and explores various scenarios, including supply and disruption scenarios.
- (60) In addition, during the CBA preparation phase, the project promoters requested the provision of data and assumptions from the Latvian and Estonian TSOs which were to be used for the analysis of the Latvian and Estonian markets¹⁸. This information was duly submitted by the two TSOs.
- (61) Upon request from the NRAs concerned, the project promoters sent the Business Plan, the CBA and the proposal for the CBCA on 22 January 2014 to the Latvian and the Estonian TSOs.
- (62) On 6 February 2014, the project promoters held a consultation meeting with the Latvian TSO on the documents supporting the GIPL investment request. The Estonian TSO did

¹⁷ Analysis of interoperability of gas infrastructure projects of the Eastern-Baltic cluster proposed in relation to Projects of Common Interest list in BEMIP region and Joint Preventive Action Plan of Estonia, Latvia, Lithuania and Finland, Final Revision 25.10.2013, Riga, 2013.

¹⁸ As evidenced by the letter of the project promoters to the Agency, 11 July 2014, and the letter of the Latvian TSO to the project promoters, the Latvian regulator and the Agency, 23 July 2014.

not attend the meeting, but subsequently submitted a written response to the project promoters on 14 February 2014¹⁹. During the six month period from 31 October 2013, when the concerned NRAs tried to reach an agreement on the investment request, the elements of the investment request, including the CBA, were thus consulted with the TSOs in Estonia and Latvia, and where issues were raised during the consultation, they were addressed by all the concerned NRAs.

- (63) To the extent that not all consultations had fully taken place before the original submission of the investment request, the Agency considers that this has no material effect, since it had been corrected by the time the investment request was submitted to the Agency.
- (64) Based on the foregoing, the Agency finds that the project promoters consulted the concerned TSOs in line with Article 12(3) of Regulation (EU) No 347/2013.

3.3. *Maturity*

- (65) The NRAs concerned have indicated that, while they were assessing the project until 1 May 2014, they considered it in substance by accepting the project as sufficiently mature. However, the NRAs of Estonia and Latvia later informed the Agency, on 18 June and 27 June 2014, respectively, of their concerns about the maturity of the project. The Agency requested additional information about the maturity of the project from the project promoters and the NRAs concerned during the consultation meetings held on 2 and 3 July 2014.
- (66) The Agency considered the maturity of the GIPL project pursuant to the Agency's Recommendation No 07/2013, namely in terms of:
- sufficient certainty and thus strong confidence about the expected costs and benefits assessed by the CBA;
 - good knowledge about the factors affecting expected costs and benefits and their ranges;
 - the commencement of permitting procedures in all hosting countries;
 - the expected start-up date of construction being reasonably soon.
- (67) The Agency finds that in terms of sufficient certainty about the expected costs and benefits and good knowledge about the factors affecting expected costs and benefits and their ranges, the GIPL investment request features the following main aspects:
- The investment request takes into consideration projects in the same area by including in the input dataset for the project analysis only the projects, irrespective

¹⁹ See the letter of the project promoters to the Agency, 11 July 2014.

of whether these are PCI or non-PCI, for which the final investment decision (FID) has been taken, namely the LNG terminal at Klaipėda²⁰. This is a non-PCI project, but is under construction, with commissioning due by the end of 2014.

- Other PCI projects, namely PCI 8.1.1 and 8.1.2 (Interconnector between Estonia and Finland “Balticconnector” and one of the following LNG terminals: 8.1.2.1. Finngulf LNG; 8.1.2.2. Paldiski LNG; 8.1.2.3. Tallinn LNG; 8.1.2.4. Latvian LNG) have not been included in the analysis by project promoters, since these projects are at the pre-FID stage²¹.
- The investment request assesses whether the certainty of its main aspects (benefits, costs, financial aspects) is sufficiently known, with respect to key elements of the input dataset and scenarios, by performing a sensitivity analysis. The results of the sensitivity analysis are presented in the investment request. The Agency performed comparative sensitivity analyses and found that the sensitivity analysis performed by the project promoters demonstrates good knowledge about the factors affecting expected costs and benefits and their ranges, with the exception of one of these factors, namely the level of gas demand in Poland.
- The project promoters, in the updated investment request of 19 May 2014, use estimates for the investment cost (capital expenditure) which are revised with respect to those used in the request submitted on 31 October 2013. The project promoters have indicated that the values used for costs as of their expected incidence (moment in which they occur) do not diverge significantly in both versions, with the difference in the NPV of the costs due to the following factors:
 - In accordance with the requirements of the ENTSOG draft CBA Methodology of 15 November 2013, the time horizon in the updated CBCA was extended to 20 years from the start of operation of the infrastructure (2013-2038), instead of 20 years from the year of the analysis used in the initial CBCA (2013-2032).
 - Also in accordance with the requirements of the ENTSOG draft CBA Methodology of 15 November 2013, the updated CBA uses a social discount rate of 4.5%, instead of 5.5% used in the initial CBA.
 - The incidence of the capital expenditures has been slightly reallocated within the project's implementation period, with part of the project costs

²⁰ In line with Annex V(1) (b) of Regulation (EU) 347/2013: “in gas: scenarios for demand, imports, fuel prices (including coal, gas and oil), carbon dioxide prices, the composition of the transmission network and its evolution, taking into account all new projects for which a final investment decision has been taken and that are due to be commissioned by the end of year $n+5$.”

²¹ Accordingly, the project promoters have not included in the input data set the expected dates of commissioning of these PCI projects and no sensitivity analysis of the project regarding these dates was carried out.

transferred from 2014-2015 to 2016-2018, without changing substantially the total investment cost.

- A part of the infrastructure cost in the territory of Poland was excluded from the scope of the GIPL project.
 - The Agency notes that in the investment request, the cost of works related to the environmental impact assessment (EIA) are included in the investment cost. However, on 27 June 2014 the European Commission adopted grant decision no. C (2014) 2415 allocating financial contribution to the GIPL project promoter for the implementation of the EIA, in the amount of 50% of the EIA cost, namely €200,000 to Gaz-System S.A. and €220,000 to AB Amber Grid. The Agency notes that the costs covered by this grant are no longer eligible for inclusion in the investment cost. The Agency has taken this correction into account in the present Decision.
- (68) The Agency finds that the investment request demonstrates sufficient certainty and thus strong confidence about the expected costs and benefits assessed by the CBA, by using essentially the same values for the investment cost in both versions of the investment request, as adjusted based on ENTSOG's draft CBA Methodology and other corrective requirements.
- (69) The Agency considers that, according to Article 10 of Regulation (EU) No 347/2013²², the permitting process consists of two procedures, the first being a pre-application procedure which includes the preparation of environmental reports. The Agency also notes that according to Article 19, second paragraph, of Regulation (EU) No 347/2013, the provisions of Chapter III of Regulation (EU) No 347/2013 do not apply to the permit granting process for which a project promoter has submitted an application file before 16 November 2013²³. This implies that for this investment request, it is not necessary for the permitting procedures to have started in all countries.
- (70) Work on the GIPL project's EIA began in August 2013 by the signing of a Cooperation Agreement between the project promoters, in which they agreed to cooperate on the preparatory and engineering works up to the obtaining of the environmental permit, both in Poland and Lithuania. The Agency further notes that, pursuant to the Cooperation Agreement between the project promoters, on 29 October 2013 the Ministry of Energy of the Republic of Lithuania appointed AB Amber Grid as the organiser of a special plan and decided to start the preparation of the special plan for the gas interconnector between Poland and Lithuania at regional level, and that in

²² Article 10 of the Regulation (EU) No 347/2013 "Duration and Implementation of the Permit Granting Procedures" includes the preparation of environmental reports by the project promoters in the "pre-application procedure", covering the period between the start of the permit granting process and the acceptance of the submitted application file by the competent authority.

²³ Article 19, second paragraph of Regulation (EU) No 347/2013; "For projects of common interest in the permit granting process for which a project promoter has submitted an application file before 16 November 2013, the provisions of Chapter III shall not apply."

Poland on 14 March 2014 Gaz-System S.A. issued an order (in line with internal procedures) to start immediately the pre-investment activities, including the activities for enabling the environmental permit for the GIPL project on the Polish territory.

- (71) The Agency finds that the pre-application procedure which includes the preparation of environmental reports started on 29 October 2013²⁴.
- (72) The promoters further stressed that the subsequent practical implementation of EIA work in both Lithuania and Poland is underway. The Agency also notes that EIA work is currently supported in both countries with European grants.
- (73) The investment request foresees the start of the construction of the project in June 2016 in Lithuania and in November 2016 in Poland. The Agency finds that the investment request foresees the start of GIPL's construction as soon as reasonably possible, in view of the end of the permitting phase expected by the project promoters in July 2016.
- (74) Therefore, the Agency concludes that the GIPL project fulfils the requirements for sufficient maturity provided for by Article 12(3) of Regulation (EU) No 347/2013 and stated in Section 2.1 of its Recommendation No 07/2013 regarding cross-border cost allocation requests.

3.4. Main Assumptions of the Investment Request

- (75) The project promoters provided a detailed breakdown of the investment costs as recommended by the Agency in Annex IV of its Recommendation No 07/2013. The Agency assessed the value of the total investment costs as provided by the project promoters by comparing GIPL's implicit unit investment costs²⁵ to the unit investment costs for onshore gas pipelines as evidenced in industry sources²⁶. The Agency concludes that the value of the total investment costs as indicated by the project promoters is nominally slightly higher than global averages, but could still be considered realistic.
- (76) The justification of the CBCA has been assessed by the Agency in conjunction with the submitted evaluation of the identified impacts, including on network tariffs, the

²⁴ Since the project promoters submitted a joint application before 16 November 2013 to the Ministry of Energy of the Republic of Lithuania.

²⁵ The implicit unit investment costs are assessed as cost per inch per meter. For GIPL, the implicit unit investment costs are €37.31 per inch per meter.

²⁶ Cf. Oil and Gas Journal, 3 February 2014, p. 88. The global average cost for 22-30 inch pipelines due for completion, under construction or due for start-up of construction in 2014 is about €67.00 at a rate of exchange to the U.S. Dollar of 1.35 per Euro. By applying a location correction factor of 0.8 (for relative ease of access to the construction site, flat terrain without major crossings, and low population density) and a GDP purchasing power correction to the U.S. Dollar of 0.6 in Poland and Lithuania (as reported by the World Bank, cf. below), the estimated implicit cost of construction per inch per meter would be €32.37. The one informed by the project promoters is €37.31 per inch per meter.

Business Plan, the CBA, the regional and Union-wide positive externalities and the feedback from the consultation.

- (77) The Agency notes that the outcome of the analysis submitted by the project promoters is strongly dependent on several key assumptions, namely total investment costs and the allocation of investment costs between Poland and Lithuania, the pipeline's average annual capacity bookings, daily gas demand in the concerned countries, gas prices in the Baltic States, depreciation periods and WACC for new infrastructure, and the levels of the transportation tariffs in the concerned countries.
- (78) The Agency notes that for a number of these critical parameters, a sensitivity analysis has been carried out by the project promoters. However, no assessment has been carried out in a scenario where the level of capacity bookings significantly exceeds the one assumed in the analyses (20%), and consequently, the potential impact of higher bookings on the proposed CBCA and on tariffs is unknown. Similar considerations are applicable to assessments performed by the project promoters regarding the level of available external (grant) support for the investment costs, in the sense that the project promoters consider this parameter as being fixed.
- (79) The Agency notes that, according to the Business Plan, the project promoters will bear no capacity (volume) risk, even though the capacity bookings forecast is set at only 20% of the pipeline's Stage 1 capacity. On the other hand, the project promoters will, in their proposal, capture the entire additional revenue (upside) in the case where capacity bookings exceed the forecasted level of 20%. The Agency also notes that the proposal contains no indication on how any upside in capacity bookings can be re-distributed to the TSOs of Latvia and Estonia, i.e. there are no corrective measures to make these two TSOs benefit in case the project's revenues were to exceed the forecast, even though the TSOs of Latvia and Estonia are expected to contribute to the costs of the GIPL project and, according to the project promoters' investment request, are required to provide capacity booking guarantees.
- (80) The absence of a corrective opportunity for the requested CBCA results in an unbalanced risk distribution between the concerned TSOs. Furthermore, the Agency notes that the capacity booking guarantee scheme proposed by the project promoters would likely lead to the undertaking by the TSOs in Latvia and Estonia of liabilities that could appear on their books without an equivalent book record of assets.
- (81) The Agency notes that the construction of the Klaipeda LNG terminal in Lithuania and its expected commissioning by the end of 2014 removes, to some extent, the market isolation of Lithuania, since it provides access to global LNG markets, but not integration into the European Union gas market. The Agency also notes that the capacity of the Klaipeda LNG terminal could satisfy at least 50% of gas demand in Lithuania, Latvia and Estonia (but not Finland).
- (82) The Agency notes that in its Opinion on ENTSOG's draft CBA methodology of 13 February 2014 the use of a real SDR of 4% is recommended.

- (83) The Agency notes that the proposed CBCA deviates from its Recommendation No 07/2013, in particular with respect to Sections 2.2²⁷ and 2.3²⁸, a circumstance which can affect the outcome of the CBCA and the levels of the impact on tariffs.
- (84) Considering all comments and responses received by the Agency during the consultation process, as well as the complexity of the assessment of the GIPL project for the purposes of CBCA, the Agency has reviewed the underlying assumptions and reconstructed the calculations and (partially) the simulations performed by the project promoters, and compared the outcome of its analysis with the results presented in the submitted documentation. The Agency has assessed the costs and the benefits of the project, with a breakdown by Member States, and has carried out a sensitivity analysis of the key parameters of the investment request analyses, including the total net benefit, financial gap, and benefits accruing to Member States.
- (85) The Agency, considering its Recommendation No 07/2013, has used the following values for certain parameters in its CBCA:
- Real SDR of 4.0%;
 - Significance threshold equal to 10% of the sum of the positive net benefits accruing to all net benefitting countries.
- (86) With these adjustments of the value of the SDR and the method used for the calculation of benefits relevant for the CBCA, the Agency is of the opinion that the CBA provided by the project promoters is sufficiently robust to serve as the basis for a CBCA decision.

3.5. Calculation of the Cross-Border Cost Allocation by the Agency

- (87) With the foregoing in view, the Agency has recalculated the CBCA proposed by the project promoters for the GIPL project in the following way:

3.5.1 Identification of the countries which are net cost bearers and the countries which are net beneficiaries

- (88) For the purpose of the CBCA, all benefits and costs have been re-calculated in NFV²⁹ as of the expected year of the commissioning of the GIPL project pipeline (2018), which is also the year when the compensation payments become due. All monetary flows are referred to the year 2018 by using the relevant discount rate (SDR or FDR), and the inflation rate used by the project promoters is applied to rebase real flows to the year 2018.

²⁷ Regarding the compensation to be provided to project promoters.

²⁸ Regarding the allocation of compensation to the contributing countries.

²⁹ Net Future Value.

- (89) A country is a net cost bearer if the NFV³⁰ of the Net Benefit is negative. Poland is identified as a net cost bearer; Lithuania, Latvia and Estonia are net beneficiaries, as presented in Table 1.

Table 1 Identification of net cost bearers and net beneficiaries in NFV

Values in € million, year 2018.

Country	Benefits	Costs	Net Benefits	Net Cost Bearer or Net Beneficiary
Poland	301.4	528.1	-226.7	Net cost bearer
Lithuania	723.2	145.0	578.2	Net beneficiary
Latvia	359.6	0.6	359.1	Net beneficiary
Estonia	118.5	0	118.5	Net beneficiary
Total	1502.7	673.7	829.1	

3.5.2 Calculation of the compensation to be provided by net beneficiaries to cost bearers.

- (90) The negative net benefit to the net cost bearer is compensated by the net beneficiaries, to the extent that the revenues³¹ from the sale of capacity bookings, estimated at 20% of maximum technical capacity in the direction from Poland to Lithuania, cannot offset the said negative net benefit. The calculation of compensations uses a significance threshold set at 10% of the sum of all positive net benefits accruing to all net benefiting countries. As the total positive net benefits for the GIPL project are estimated at €1055.8 million, the significance threshold is therefore €105.6 million. A Contribution Indicator (CI) is applied to each net benefiting country proportionately to its share in the total positive net benefits over this threshold. The resulting compensations are presented in Table 2.

³⁰ Economic benefits are discounted at the SDR (4%). Costs are discounted at the FDR (8%).

³¹ Discounted at the Financial Discount Rate (8%).

Table 2 Compensations to be provided by net beneficiaries to net cost bearers

Values in € million, year 2018

Country	Net benefit	Benefit over 10% threshold of 105.6	Compensation indicator	Required total financial compensation	Value of financial revenues ^{a)}	Total financial cross-border compensation due after financial revenues	Cross-border cost allocation
Poland	n/a (cost bearer)	n/a (cost bearer)	n/a (cost bearer)	226.7	140.8	85.8	0
Lithuania	578.2	472.6	64.0%	0	31.6	0	54.9
Latvia	359.1	253.5	34.3%	0	0	0	29.4
Estonia	118.5	12.9	1.7%	0	0	0	1.5
GIPL Project Total	1055.8	739.0	100.0%		172.5	85.8	85.8

a) Discounted by the Financial Discount Rate (FDR, 8%).

Values in € million, year 2018, rounded to the nearest 1/10 million.

3.6. Impact on Network Tariffs

- (91) In examining the impact on tariffs, the project promoters exclude the effect of other projects being implemented in the region, except for the impact of the Klaipeda LNG terminal in Lithuania.
- (92) In the argumentation of the proposed CBCA, the project promoters do not sufficiently clarify the impacts of the project on tariffs if no external (grant) funding is available, or if the external funding turns out to be lower than expected. It is therefore difficult to ascertain what the real impact on tariffs and the burden on consumers would be from the implementation of the GIPL project. The absence of such an assessment makes the argument used by the project promoters, namely that external funding is indispensable for the implementation of the project, difficult to sustain, since a starting benchmark required for the determination of the need for external funding is not well defined. The approach taken by the project promoters is to foresee the maximum possible grant funding, equal to 74% of the eligible costs for works, and determine the CBCA from that assumption.
- (93) Pursuant to Article 12(5)(a) of Regulation (EU) No 347/2013, the Agency has recalculated the potential impact on tariffs of the GIPL project, assuming that no external funds are granted to the project. Scenarios “with CBCA” and “without CBCA”³² have been compared. Such scenarios depend on assumptions regarding tariff developments

³² For Poland and Lithuania, the Agency applies the depreciation rate used by the project promoters for the calculations of tariff effects. In Poland, the depreciation rate is 3.4% and the WACC is 9.12%. In Lithuania, the depreciation rate is 2.3% and the WACC is 7.09%. For Latvia and Estonia, a dummy depreciation rate of 5% is used, so that compensations are paid back (“depreciated” on a straight line) within the time horizon of the economic analysis (20 years, same as in the project promoters’ investment request) and a WACC of 8% is applied (identical to the Financial Discount Rate used by the project promoters).

in the relevant Member States over a 20 year period, which are currently unknown, and should therefore only be seen as indicative. The results, presented in Table 3, illustrate the potential impact on tariffs of the GIPL project with and without CBCA.

Table 3 Average potential tariff effects without and with CBCA during 2019-2038 (without external funding)

Country	Tariff increase without CBCA	Tariffs increase with CBCA	PPP coefficient	Tariffs increase without CBCA at PPP	Tariffs increase with CBCA at PPP	Unit cost of transportation increase with CBCA, € / tcm	Unit cost of transportation increase with CBCA, € / tcm at PPP
Poland	4.5%	3.5%	0.6	8%	6%	1.11	1.84
Lithuania	15.5%	22.8%	0.6	26%	38%	5.38	8.97
Latvia	-2.4%	15.8%	0.7	-3%	23%	1.36	1.94
Estonia	0.0%	1.0%	0.7	0%	1%	0.22	0.31

(94) The estimated average increase in gas transmission tariffs during the 2019-2038 period from the inclusion of the investment costs, with the effects of the CBCA decision and assuming no external funding (e.g., EU grants for work) would be 3.5% in Poland, 22.8% in Lithuania, 15.8% in Latvia and 1% in Estonia. The tariff effects are proportionately more significant in Lithuania and Latvia due to the project's large scale relative to the current regulatory asset bases (RAB) of those TSOs and to the gas markets in these countries. In nominal terms, the average increase equates approximately to €1.11 per thousand cubic meters of gas (tcm) in Poland, €5.38 per tcm in Lithuania, €1.36 per tcm in Latvia, and €0.22 per tcm in Estonia.

(95) The Agency has assessed the real value of the estimated increase in gas transmission tariffs by taking into account the purchasing power parity (PPP) of incomes in each of the countries impacted by the GIPL project³³, as also shown in Table 3.

3.7. Effect of Variations in Key Parameters on Transmission Tariffs by Member State

(96) Without prejudice to the need and the availability of any external financing to the GIPL project or the availability of such funding to the two project promoters and the TSOs in non-hosting countries, the Agency notes that external funding in the form of grants for works would effectively reduce the investment costs to be covered by the hosting countries, and therefore the extent to which GIPL's investment cost should be included in the RAB - and hence in the tariffs - of the hosting countries. Beneficial effects would be observed also in non-hosting countries, if external funding becomes accessible to them.

³³ Gross domestic product (GDP) purchasing power parity factors are those reported by the World Bank for last year reported: <http://data.worldbank.org/indicator/PA.NUS.PPPC.RE>, visited on 18 July 2014.

- (97) The Agency notes that transmission tariffs, as well as the amount of external funding needed for achieving the minimum required profitability (IRR of 8%) foreseen by the project promoters, are very sensitive to the expected utilisation rate of the pipeline, which the project promoters estimate at 20% of maximum technical capacity during Stage 1 of the GIPL project.
- (98) Thus, there is possibly a considerable upside to the project, despite the low probability assessed by the project promoters. For this reason, the Agency finds that, in case projected revenues from the project exceed the ones indicated by the project promoters, the contributing TSOs should have an opportunity to participate in the upside of the project by reducing their payments due as a result of the CBCA.

3.8. Regional and EU-Wide Positive Externalities of the Project

- (99) The Agency notes that the NPVs of the economic net benefits of the project, even though their possible range is considerable due to potential variations in the factors to which the project is sensitive, are estimated to be healthily on the positive side, regardless of the uncertainties associated with the project. In particular, the NPV of the total net benefits could vary between €448 million and €800 million, depending on whether daily gas demand in Poland deviates by -10/+10% from the level of demand projected by the project promoters for 2018, between €549 million and €698 million depending on the deviation of the duration of potential gas supply disruptions within -10/+10% from projected levels, between €581 million and €712 million depending on the deviation of the gas prices in the Baltic States by the same range. Overall the total net benefits generally remain in the range between approximately €480 million and €710 million with respect to -10%/+10% variations of the factors to which the project is most sensitive.
- (100) The Agency considers that the project generates positive externalities in terms of enhancement of competition and market integration, security of gas supply and sustainability in the Baltic States, and contributes to the European energy policy goals.

HAS ADOPTED THIS DECISION:

Article 1

Lump-sum payments shall be provided by the TSOs of the Member States to which the project provides a significant net positive impact, namely Lithuania, Latvia and Estonia, to the TSO of the Member State deemed to have a net negative effect from the implementation of the project, namely Poland, as defined in Table 4.

Table 4 Compensations between TSOs

Payer TSO	Recipient TSO	Compensation Payments	
		€ million, year 2018	%
AB Amber Grid (Lithuania)	Gaz-System S.A (Poland)	54.9	64.0
JSC Latvijas Gāze (Latvia)	Gaz-System S.A (Poland)	29.4	34.3
AS EG Vorguteenus (Estonia)	Gaz-System S.A (Poland)	1.5	1.7
Total compensation, (€million)		85.8	100

Payments shown in Table 4 are in Euro (€) million in values as of the year 2018.

Article 2

The lump-sum payments referred to in Article 1 are due on the day following the commissioning date of the project.

In the event that actual investment costs in Poland are below the investment cost in Poland indicated in the investment request, the compensations payments indicated in Table 4 shall be adjusted according the ratio between the actual investment costs of the GIPL in nominal terms in Poland and the expected costs of the GIPL in nominal terms in Poland³⁴. No adjustment of compensation payments shall be carried out in case the actual investment cost as of the commissioning date exceeds the cost indicated.

In case the commissioning date of the GIPL project pipeline occurs after 1 January 2020, the values in Table 4, column “Compensation payments” shall be adjusted for actual inflation for the Euro area as reported by Eurostat for the year of 2019 and for each subsequent year, pro rata for each day between 1 January 2020 and the commissioning date of the GIPL project pipeline. For the avoidance of doubt, no adjustment of compensation payments for inflation shall be carried out if the GIPL pipeline date of commissioning occurs in 2019.

Article 3

In case of upwards deviation of the capacity bookings and/or tariffs for capacity bookings for GIPL from the levels assumed by the project promoters in the investment request, the additional revenue resulting from such deviation(s) shall be distributed by the TSOs and monitored by NRAs, by using the following methodology:

- From the year of commissioning onwards, by the end of each financial year, and ending with the last day of the 20th year after the day of commissioning, the expected revenues in Poland according to the investment request, Cost Benefit Analysis of 19 May 2014, page 90, line 1.1 “Revenues”, shall be compared to the actual revenues in Poland from

³⁴ Where the expected nominal investments costs are €421.6 million, taking into account the €0.2 million the Polish promoter will receive from European funding for EIA.

GIPL pipeline capacity bookings on an annual basis. Revenues in Poland exceeding those expected in the investment request shall be distributed to the contributing TSOs of Lithuania, Latvia and Estonia according to their share in the total compensations stated in Article 1, Table 4, column “%” of this Decision. The distribution of revenues shall be limited up to the compensation payments by the contributing TSOs of Lithuania, Latvia and Estonia, each TSO separately, as indicated in Article 1.

- The settlement of the compensations adjustment account shall be annual by 31 March of each calendar year for the preceding calendar year.
- For monitoring purposes, the ex-post distribution of revenues shall be reported as a separate line item in the annual financial statements of the TSOs. The NRAs shall inform the Agency about any ex-post re-distribution of revenues.
- No re-distribution of the compensation payments is to be made in case of annual downwards deviation of the revenues from capacity booking levels from the levels assumed by the project promoters in the CBA.

Article 4

Pursuant to Article 12(1) of Regulation (EU) No 347/2013, the investment costs borne by the project promoters and the concerned TSOs of the impacted Member States, insofar as they are efficiently incurred, shall be taken into account in the regulatory asset base when network tariffs are fixed or approved.

Article 5

This cross-border cost allocation decision is addressed to the following TSOs:

- Gaz-System S.A.
- AB Amber Grid
- JSC Latvijas Gāze
- AS EG Völguteenus

Done at Ljubljana on 11 August 2014.

For the Agency:

(signed)
Alberto Pototschnig
Director