



First series of cross-border cost allocation decisions for projects of common interest: Main lessons learned

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Highlights

- Following the procedure introduced by the TEN-E Regulation, thirteen power
 and gas infrastructure projects from the list of "projects of common interest"
 have recently received a cross-border cost allocation decision. These decisions include twelve coordinated decisions by national regulatory authorities
 and one decision by the Agency for the Cooperation of Energy Regulators
 (ACER).
- For most projects, the countries that are expected to apply part of the investment on their own territory are also a net beneficiary of the project. In one case, the cost benefit analysis indicates that the costs clearly outweigh the benefits for one of the involved countries (i.e. net loser). The decision has been to compensate this country. In three cases, countries have agreed to a cross-border cost allocation with compensation, even if none of the involved countries is expected to be a net loser.
- In this brief, we determine the extent to which this first series of cross-border cost allocation decisions complies with the TEN-E Regulation, ACER's Recommendation, and FSR's recommendations. We find that the expected improvement in cross-border cost allocation decisions is ongoing, but the gap between practice and recommendations remains.
- To reduce the gap, we have updated our recommendations into six lessons learned: [1] revisit the significance threshold and the interaction with the Connecting Europe Facility, [2] promote the good practice of using market tests to improve the cross-border cost allocation decision, [3] require a complete cross-border cost allocation decision, [4] continue to use the results of the cost-benefit analysis to facilitate innovative cross-border cost allocation decisions, [5] continue coordinating these decisions for strongly interacting projects, and [6] start including binding commitments in the decisions, especially with respect to the commissioning date.

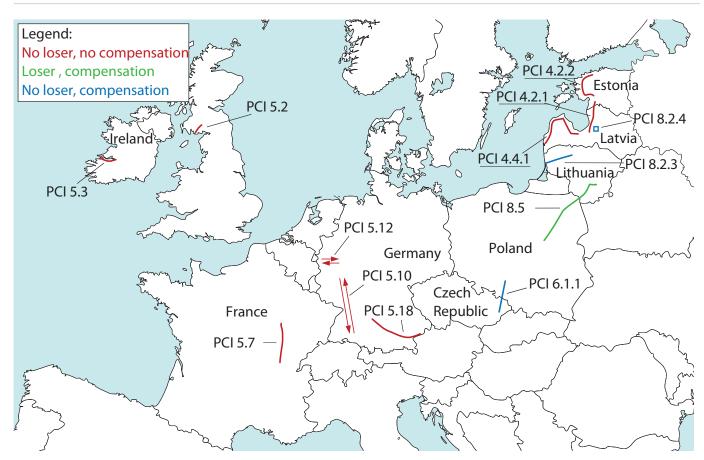


Introduction

In October 2013, the first list of 132 electricity and 107 gas projects of common interest¹ was adopted. These projects are strategically important to achieve the EU energy and climate policy objectives, and they typically involve several Member States as investor and/or beneficiary. The TEN-E Regulation² tries to accelerate the development of these important projects with several regulatory measures, including a procedure whereby national regulatory authorities have to agree on the cost allocation of sufficiently mature projects within six months, and if they cannot, the Agency for the Cooperation of Energy Regulators (ACER) is expected to decide on their behalf.

Thirteen projects of common interest have meanwhile received such a cross-border cost allocation decision: twelve coordinated decisions by national regulatory authorities, one decision by ACER because the national regulatory authorities did not agree within the 6 months deadline. As many more of these decisions will follow in the coming months and years under the TEN-E Regulation, this policy brief reviews the current practice³, and discusses the extent to which the first series of decisions comply with the requirements of the TEN-E Regulation, with ACER's Recommendation⁴ and with the FSR recommendations included in our previous policy brief⁵.

Figure 1: map of electricity (underlined) and gas projects of common interest according to their decision to compensate or not



Commission delegated Regulation (EU) No 1391/2013 of 14 October 2013 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure as regards the Union list of projects of common interest

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 715/2009.

^{3.} The European Commission provided its first evaluation of the cross-border cost allocations at the $26^{\rm th}$ meeting of the Madrid Forum.

^{4.} Recommendation of the Agency for the Cooperation of Energy Regulators No 07/2013 of 25 September 2013 regarding the cross-border cost allocation requests submitted in the framework of the first union list of electricity and gas projects of common interest.

Meeus, L., He, X., 2014. Guidance for Project Promoters and Regulators for the Cross-Border Cost Allocation of Projects of Common Interest. Florence School of Regulation Policy Brief Issue 2014/02, January 2014.



This brief is divided into two sections. In the first section, we map the first thirteen projects that received a cross-border cost allocation decision under the TEN-E Regulation. In the second section, we list our six most important observations and present the lessons learned for each of them.

1. The first series of cross-border cost allocation decisions

In this section, we map the thirteen projects of common interest that have received a cross-border cost allocation decision.

We distinguish three types of decisions (Figure 1). In nine projects, none of the countries that are expected to apply part of the investment to their own territory have costs that outweigh their benefits, and they have agreed that each country pays for the assets on its own territory (red color: "no loser, no compensation"). In one project, there is a net loser, and the cross-border cost allocation agreement includes a payment from the net beneficiaries of the project towards this net loser for part of the investment cost (green color: "loser, compensation"). In three projects, countries have agreed to a cross-border cost allocation with compensation, even if none of the involved countries is expected to be a net loser (blue color: "no loser, compensation").

In the annex to this brief, we provide a description of the projects, and their respective cross-border cost allocation decisions based on publicly available information. Note that most decisions are only published in native languages, so possible errors in the translation or interpretation are ours.

2. Lessons learned from the first series of cross-border cost allocation decisions

In what follows, we derive the lessons learned by considering to whom the costs can be allocated, what costs are being allocated, and how to allocate them.

2.1 To whom are costs to be allocated?

The spirit of the TEN-E Regulation is to implement the beneficiaries pay principle. The implementation of this principle has been simplified by ACER's Recommendation, which introduces a **significance threshold** of 10% of the total net positive benefits.

[1] Significance threshold

Five projects of common interest (i.e. PCI 4.2.1, PCI 4.2.2, PCI 4.4.1, PCI 5.2 and PCI 5.3) refer to ACER's significance threshold to justify their cross-border cost allocation decision.

There are sound economic reasons to apply a significance threshold: significance is a proxy⁶ for certainty and it makes sense to allocate costs only to countries that will benefit with sufficient certainty; involving many small beneficiaries in a coordinated cross-border cost allocation decision can be overly complex from a transaction cost perspective.

In practice, we observe that the threshold is also used to argue for EU funding, especially in projects where the benefits are dispersed over many small beneficiaries. In principle this is a valid argument, but the (unintended) consequence is that it opens the door to many EU funding requests, while the funding that is currently available in the Connecting Europe Facility is relatively limited. This fund has also not been set-up to deal with the consequences of this significance threshold.

Recommendation [1] Revisit the significance threshold and the interaction with the Connecting Europe Facility (or avoid that it is misused to justify an incomplete cross-border cost allocation, see Recommendation [3])

2.2 What costs are to be allocated?

Following the TEN-E Regulation, the efficiently incurred costs of projects of common interest shall be borne by those Member States to which the project provides a net positive impact, insofar as the costs are not covered by **congestion rents or other revenues**. Gas projects have to demonstrate that they are not commercially viable with a market test, whereas electricity projects do not.

[2] Commercial revenues

In four projects of common interest (i.e. PCI 5.3, PCI 6.1.1, PCI 8.2.4 and PCI 8.5) the commercial revenue of each project has been used to improve the cross-border cost allocation decision.

The projects require regulatory approval because they are commercially non-viable, but that does not mean that they do not have a commercial value. Commercial revenues are simulated in the cost benefit analysis, which can be complemented by a market test, and then used in the coordinated decision of the involved regulators. This should become common practice for all projects.

Recommendation [2] Promote the good practice of using market tests to improve the cross-border cost allocation decision

^{6.} Note that alternative implementations of the significance threshold might be conceived: e.g. a proxy for likelihood based on statistical methods.



Moreover, the TEN-E Regulation does not oblige the national regulatory authorities to allocate the full cost of a project. They can agree to rely on the **Connecting Europe Facility** for part of the costs, and reconsider their cross-border cost allocation according to the pending EU funding decision.

[3] Connecting Europe Facility

Seven projects (i.e. PCI 4.2.1, PCI 4.2.2, PCI 4.4.1, PCI 5.3, PCI 6.1.1, PCI 8.2.3 and PCI 8.2.4) have an incomplete cross-border cost allocation decision because they rely on a request for funding from the Connecting Europe Facility, the result of which is still pending.

The consequence is that the final decision is delayed and approximate because not all EU funding requests will be granted. This is unfortunate because the aim of the TEN-E Regulation is to expedite projects that are strategically important for the EU energy and climate policy objectives.

Recommendation [3] Require a complete cross-border cost allocation decision (considering the case with and without EU funding, and the case with and without commercial revenues)

2.3 How are costs to be allocated?

Following the ACER and FSR recommendations, the **minimum standard** is to compensate likely net losers based on the results of the cost-benefit analysis. However, as argued in our previous work, countries can have an interest in going beyond this minimum standard to improve the commitment of all involved in the project.

[4] Minimum standard

Most projects apply the minimum standard (i.e. Figure 1: red and green), except for three projects (i.e. Figure 1: blue) in which the involved parties have agreed to go beyond this standard based on the cost benefit analysis. However, some concerns have been expressed about the quality of the ad-hoc method that has been used to analyze the first list of projects of common interest. For a discussion on the method, please refer to our previous work⁷ on cost-benefit analysis.

Recommendation [4] Continue to use the results of the costbenefit analysis to design innovative cross-border cost allocation decisions Following the FSR recommendations, strongly complementary projects should be defined as a single project and cost allocation decisions for **interacting projects should have extensive coordination**.

[5] Coordination of strongly interacting projects

In three projects (i.e. PCI 6.1.1, PCI 8.2.3 and PCI 8.2.4), the interaction between projects has been acknowledged and considered in the corresponding cross-border cost allocation decisions. Based on the publicly available information, it is difficult to assess if all strongly interacting projects are covered. As suggested in our previous work on the topic, this information should be provided by an improved cost benefit analysis method.

Recommendation [5] Continue coordinating cross-border cost allocation decisions for strongly interacting projects

Following the FSR recommendations, the cross-border cost allocation decisions could be formalized as a binding contract between the involved parties.

[6] Binding contract

There are four projects (i.e. Figure 1: green and blue) that have a cross-border cost allocation decision that includes compensation. As far as we know, these projects did not make this compensation conditional to the delivery of the project on the expected commissioning date, which could have been considered. Also for the projects that do not include compensation, it could be opportune to formalize the commitment of the involved parties, especially with respect to the commissioning date.

Recommendation [6] Start including binding commitments in cross-border cost allocation decisions, especially with respect to the commissioning date

Annex: First thirteen cross-border cost allocation decisions

In this annex to the policy brief, we provide a description for each project, discussing what the project comprises, how the costs have been allocated among the concerned Member States and what has been the main motivation for that allocation (see the mapping below). Note that most decisions are only published in native languages, so possible errors in the translation or interpretation are ours.

Meeus, L., von der Fehr, N.H., Azevedo, I., He, X., Olmos, L., Glachant, J.M., 2013. Cost Benefit Analysis in the Context of the Energy Infrastructure Package. Florence School of Regulation Policy Brief, Issue 2013/02. January 2013.

Keyaerts, N., Glachant, J.M., 2014. Cost-benefit analysis for gas-infrastructure projects. Florence School of Regulation Policy Brief, Issue 2014/03. February 2014.



9 projects with "No loser, no compensation"

PCI 4.2.1 Latvian-Estonian electricity interconnector between Kilingi-Nömme and Riga (BEMIP electricity)

Project: The project comprises a 210 km cross-border line hosted by Estonia and Latvia and is complementary to an internal Estonian line (PCI 4.2.2, discussed next). The investment costs are estimated at 113 million euro with a capex of 102 million euro for Latvia and 11 million euro for Estonia.

Cost allocation: Latvia and Estonia agreed to each pay for their own assets, allocating 25 million euro to Latvia and 2.8 million euro to Estonia. They allocate the remaining 75% of the investment costs to the Connecting Europe Facility.

Motivation: There is no net loser. Latvia and Estonia capture roughly 35% of all benefits, shared equally between them. The remaining 65% of benefits is captured by seven other countries in the region and, lacking a detailed per-country cost-benefit analysis, it is assumed that these benefits are shared equally among them. Following this assumption, none of these non-hosting countries has a net benefit exceeding 10%. Arguing that the other beneficiaries cannot be required to pay for the project, the financing gap is allocated to the Connecting Europe Facility.

PCI 4.2.2 Estonian internal electricity line between Harku and Sindi (BEMIP electricity)

Project: The project comprises a 140 km internal line in Estonia. It is complementary to the Latvia-Estonia interconnector (PCI 4.2.1, discussed above). The investment cost amounts to 64 million euro.

Cost allocation: Estonia and Latvia agreed to allocate 16 million euro, or 25% of the investment cost to Estonia and the remaining 75% to the Connecting Europe Facility.

Motivation: Estonia has a positive net benefit, but the dominant share of net benefits is captured in non-hosting countries. Arguing that the per-country benefits of the non-hosting countries are below the 10% threshold and therefore these Member States cannot be required to pay, part of the investment cost is allocated to the Connecting Europe Facility.

PCI 4.4.1 Internal electricity line between Ventspils, Tume and Imanta (BEMIP electricity)

Project: The project comprises an internal line of 210 km in Latvia with an investment cost of 127 million euro.

Cost allocation: Latvia has decided to include 50% of the investment cost in the Latvian transmission tariffs.

Motivation: Latvia has a positive net benefit. Without a country-specific cost-benefit analysis, the net-benefits in the other Member States in the region are presumed to be below the 10% threshold, and therefore these Member States cannot be obliged to pay. Latvia counts on the Connecting Europe Facility grants-for-works to cover the 50% financing gap.

PCI 5.2 Gaslink twinning of the Southwest Scotland onshore system (NSI West Gas)

Project: The project comprises a 50 km reinforcement of a pipeline that is physically located in Southwest Scotland, but belongs to the Irish gas transmission grid. The investment cost amounts to 93.8 million euro.

Cost allocation: The concerned national regulatory authorities of Ireland, Northern Ireland and Great Britain agreed to allocate 100% of the investment cost to Ireland.

Motivation: Great Britain argues that there is no net loser. Northern Ireland argues that the extent of its benefits is uncertain and likely below the Agency's recommended 10% threshold. For this reason, it dismisses the project promoter's initial proposal for cost allocation that allocated 12% of the investment cost to Northern Ireland. Ireland agrees that it captures most benefits and that it should indeed pay for this internal project. To keep the expected tariff increase for Irish consumers at an acceptable level, Ireland argues that Connecting Europe Facility grants would be helpful.

PCI 5.3 Shannon LNG pipeline (NSI West Gas)

Project: The project comprises a 26 km internal gas pipeline connecting the Shannon LNG terminal to the Irish national gas grid with an investment cost of 69 million euro.

Cost allocation: Ireland, Northern Ireland and Great Britain agreed to allocate 7 million euro to Ireland and 56 million euro to the Connecting Europe Facility; 6 million euro will be paid from Shannon LNG terminal revenues.

Motivation: There is no net loser and the majority of benefits are located in Ireland; any benefits for Northern Ireland or Great Britain are deemed insignificant following the 10% threshold. To keep the tariff increase sustainable, the Irish contribution is limited to 7 million euro with the shortfall to be covered funding from the Connecting Europe Facility. A part of the commercial revenue of the Shannon LNG terminal is allocated to the Shannon gas pipeline, which connects the terminal to the main gas system.



PCI 5.7 Val-de-Saône gas pipeline (NSI West Gas)

Project: The project comprises a 220 km gas pipeline and a compressor station hosted in north east France to reinforce the connection from south to north. The investment cost amounts to 650 million euro.

Cost allocation: France and Spain agreed to allocate 100% of the costs to France.

Motivation: There is no net loser and the benefits for Spain are very uncertain, amounting to millions in some scenarios and zero in other scenarios. France argues that the tariff impact of the project will be significant and the Connecting Europe Facility grants-for-works could help to ease the impact.

PCI 5.10 Reverse flow interconnection on TENP pipeline in Germany (NSI West Gas)

Project: The project comprises enabling reverse flow on the existing TENP gas pipeline for the German segment between Wallbach and Bocholtz.

Cost allocation: Germany, Belgium and the Netherlands agreed to allocate 100% to Germany. France and Italy are concerned Member States, but they declined to participate in the coordinated decision.

Motivation: There is no net loser.

PCI 5.12 Reverse flow interconnection on TENP pipeline to Eynatten interconnection point (NSI West Gas)

Project: The project comprises enabling reverse flow on the existing TENP gas pipeline for the 11km German segment towards the Eynatten interconnection point.

Cost allocation: Germany, Belgium and the Netherlands agreed to allocate 100% of the costs to Germany. France and Italy are concerned Member States, but they declined to participate in the coordinated decision.

Motivation: There is no net loser.

PCI 5.18 Reinforcement of the German network to Austria: Monaco I gas pipeline (NSI West Gas)

Project: The project comprises a 90 km pipeline in Germany to reinforce the interconnection with Austria.

Cost allocation: Germany and Austria agreed to allocate 100% of the costs to Germany.

Motivation: Austria is a beneficiary, but Germany is not a net loser.

One project with "Loser, compensation"

PCI 8.5 Gas Interconnection Poland-Lithuania (BEMIP Gas)

Project: The project comprises a 534 km cross-border gas pipeline between Poland and Lithuania. The total investment costs amount to 558 million euro, of which 422 million euro is assigned to Poland and 136 million euro to Lithuania.

Cost allocation: Poland and Lithuania did not reach a coordinated decision within 6 months.

Agency decision⁸: ACER set the compensation for Poland at 85.8 million euro. The compensation is split among the net beneficiaries as follows: Lithuania pays 54.9 million euro, Latvia 29.4 million euro, and Estonia 1.5 million euro. ACER furthermore decided that, in the case that the commercial revenues for Poland exceed the expectations of the market test in the application file, this additional revenue for Poland shall first be used to offset the compensation paid by the beneficiary Member States. No additional compensation will be due if commercial revenues are lower than expected.

Motivation: The cost-benefit analysis of the project estimates the benefits to be more than twice as high as the costs. As per Member State, however, the cost-benefit analysis shows that Poland is a net cost bearer with a negative net benefit of -226.7 million euro, while Lithuania, Latvia and Estonia are net beneficiaries with their respective net benefits amounting to 578.8 million euro, 359.1 million euro and 118.5 million euro. According to the market test, Poland expects to record commercial revenues from capacity bookings of around 140 million euro with 20% of capacity underwritten. Considering these commercial revenues, the compensation for Poland is set at 85.8 million euro. Following ACER's own Recommendation, only Member states that have significant net benefits above the 10% threshold contribute to the compensation scheme.

Three projects with "No loser, compensation"

PCI 6.1.1 Poland-Czech Republic interconnection: Stork II (NSI West East)

Project: The project comprises a 107 km bidirectional pipeline between Libhost in the Czech Republic and Kedzierzyn in Poland. The project is part of a cluster of mutually dependent projects of common interest and domestic projects in Poland and Czech Republic. The total investment cost of the cluster

See ACER, 2014. 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.



amounts to 648 million euro, of which 391 million euro is an investment in Poland and 257 million euro an investment in Czech Republic.

Cost allocation: Poland and Czech Republic agreed to each pay for the infrastructure on their respective territories in combination with a mechanism of mutual revenue guarantees that will be effective for 20 years upon the commissioning of the project. A significant share of 30% of the costs is allocated to the Connecting Europe Facility.

Motivation: There is no net loser. To increase the stability of the investment and enhance commitment at both sides of the border, Poland and Czech Republic mutually guarantee a minimum profitability of the investment in case the project returns insufficient commercial revenues. The market test indeed indicated an interest in booking capacity, but only after existing long-term contracts have expired.

PCI 8.2.3 Klaipeda-Kiemenai pipeline (BEMIP Gas)

Project: The project comprises increasing the capacity of the internal pipeline between Klaipeda and Kiemenai in Lithuania. The investment cost amounts to 63 million euro and the project is complementary to the Latvian underground gas storage project (PCI 8.2.4, discussed next).

Cost allocation: Latvia and Lithuania agreed to allocate the costs as follows: Lithuania supplies 34 million euro, Latvia contributes 1.9 million euro, and the remaining costs are allocated to the Connecting Europe Facility.

Motivation: Even though there is no net loser, Latvia argues that its net benefit – and synergies with its domestic underground gas storage project – justifies a contribution to the investment costs not exceeding 1.9 million euro or 3% of investment cost. The allocation of costs to the Connecting Europe Facility is argued to be justified by pointing out the significant tariff impact for consumers in the absence of grants-for-works.

PCI 8.2.4 Incukalns Underground Gas Storage (BEMIP Gas)

Project: The project comprises the modernization and expansion of the underground gas storage in Incukalns in Latvia. The investment costs amount to 90 million euro and the project is complementary to the Lithuanian internal pipeline between Klaipeda and Kiemenai (PCI 8.2.3, discussed above).

Cost allocation: Latvia and Lithuania agreed to the following cost allocation: Latvia pays 5.6 million euro, Lithuania contributes 6.9 million euro, and 40% of the investment cost is allocated to the Connecting Europe Facility. The remaining part

of the budget is expected to come from commercial storage revenues.

Motivation: Even though there is no net loser, Lithuania argues that its net benefit – and the synergies with its domestic pipeline project – justifies a contribution to the investment costs amounting to 6.88 million euro or 7.5% of the investment cost. This compensation may be revised in the case of poor implementation of the project by Latvia. Finally, the project expects to make commercial revenues which can be used, in part, to reduce the allocated costs.



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