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The role of the EU and ACER to ensure an adequate regulatory framework for projects of common interest

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Highlights

- Projects of common interest are important high-value projects for achieving EU energy and climate policy objectives. To the extent that these projects have higher risks, we need to make sure that the regulatory frameworks also incentivize investment at the high end of the risk spectrum.
- In this brief we discuss whether an adequate framework for projects of common interest implies moving towards a dedicated regulatory framework, concluding that this is not necessarily necessary.
- Some Member States might prefer to apply their default regulatory framework to projects of common interest. This approach avoids the additional costs of administering another framework. However, the conventional default framework provides the same return for all infrastructure investment, implying a risk of underpaying for high-risk investment and overpaying for low-risk investment.
- Other Member States might prefer to apply a dedicated regulatory framework for important infrastructure investment to projects of common interest. These dedicated frameworks allow dealing with underpaying for important investment as well as mitigating the risk of overpaying by adjusting incentives to the value and risk of a project.
- In both cases, the EU and ACER have important roles to play in ensuring that the regulatory framework applying to projects of common interest is adequate. Their roles could include assessing the applicable frameworks, assisting NRAs with multi-jurisdictional coordination, ensuring dedicated frameworks for investment of national importance apply also to projects of common interest, and assisting NRAs on a voluntary basis with performing case-by-case assessments.



Background

The default national regulatory frameworks that apply to transmission system operator (TSO) investments predominantly provide the same return to all electricity infrastructure projects, irrespective of their value and irrespective of their risk profile. If transmission planning works well, only high-value projects are retained for investment, but they can be very heterogeneous in terms of their risk profile. Therefore, the higher the return that applies to all investments, the higher the risk of overpaying for low-risk high-value projects, but the lower the return on investment, the higher the risk of underpaying for high-risk high-value projects. Moreover, independent of the level of return, the current practice implies a bias towards low-risk projects and delays or leads to underinvestment in high-risk projects that in some cases can be very important electricity infrastructure projects.

The fundamental problem of the default national regulatory frameworks applies especially to projects of common interest. Indeed, these projects tend to be riskier than an average project for two main reasons. First, they are typically multi-jurisdiction projects involving multiple authorities. Such projects typically take longer to develop in terms of permit granting, cost approval, project routing etc., leading to higher development cost risk. Second, projects of common interest tend to be of larger scale and use more innovative technology, like HVDC submarine cables, leading to higher construction cost risks. Despite the higher cost uncertainty, we want these projects to be built because they are, by definition¹, strongly welfare improving for Europe and of strategic importance to achieve the EU climate and energy policy objectives.

Some Member States have started to address the problem of their default national regulatory frameworks by developing a dedicated framework for important investments. Other countries continue to rely on their default frameworks. In this brief, we argue that it could be left to the national level to decide whether or not to develop such a dedicated framework, but in both cases there is a role for the EU and ACER to ensure that the applicable regulatory framework is adequate for projects of **common interest**. A lack of adequate investment incentives for TSOs to carry out these investments is indeed an EU issue rather than a purely national issue.

This brief is structured in three parts. We first discuss why some countries have introduced dedicated regulatory frameworks for important electricity infrastructure investments. We then analyze the main differences between these frameworks and the default national regulatory frameworks. Finally, we discuss the role of the EU and ACER to ensure an adequate regulatory framework for projects of common interest for Member States with and without a dedicated framework.

1. Why some countries have introduced dedicated regulatory frameworks for important electricity infrastructure investments

At first sight, the dedicated frameworks seem to be motivated by temporary exceptional challenges. Countries refer to promoting competition, electricity market integration or prioritizing strategically important or socially desirable investment at national level. They argue that to meet their challenges, it is necessary to temporarily speed up the needed “exceptional investments”.

In Box 1 we analyze dedicated regulatory frameworks of Italy, the US, Germany, the Netherlands, the UK² and France in terms of their motivation and what investments they consider eligible for their respective dedicated frameworks. We find that they all are at least partially motivated by national policy objectives such as a reliable grid, a competitive market, or an integrated market. These investment are thus of strategic national importance to these countries.

Interestingly, most countries define quite explicitly what projects they consider important and thus eligible. The projects countries have in mind have higher risks: they are multi-jurisdictional (interconnectors); larger scale (large domestic lines); or more innovative (off-shore lines, electricity storage) than traditional investment. Some countries even mention these risks as additional motivation for having a dedicated framework.

By setting up their respective dedicated regulatory frameworks for important investment that tends to have higher risk, countries explicitly or at least implicitly acknowledge that the bias towards low-risk projects created by default national regulatory frameworks is really leading to underinvestment in important high-value higher-risk projects.

1. This is the case to the extent that we already have a good method and procedure for evaluating and selecting projects of common interest: 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.

2. The UK has a dedicated framework for interconnectors (see Ofgem, CREG, 2011. Cap and floor regime for regulation of project NEMO and future subsea connectors. Consultation 86/11, 28 June 2011.), which is discussed in this brief, and one for domestic investment that is called Strategic Wider Works and is part of the RIIO framework for transmission (see Ofgem, 2011. Guidance on the Strategic Wider Works arrangements in the electricity transmission price control, RIIO-T1. 21 October 2013).



Box 1: Countries background

Italy

Introduced: 2004;

Motivation: speeding up investment for national strategy to promote competition, but framework also followed in the aftermath of a countrywide blackout on 28 September 2003;

Eligible investment: interconnectors and congestion reducing domestic lines, technology deployment, and electricity storage technology.

US

Introduced: 2006;

Motivation: a major blackout on 14 August 2003, decades of declining infrastructure investment, and inadequacy of the default regulatory framework;

Eligible investment: interstate investment for improving regional reliability and reducing regional congestion.

Germany

Introduced: 2007;

Motivation: speeding up significant grid expansion of *superior public interest* (e.g. *Energiewende*);

Eligible investment: cross-regional, cross-border and off-shore grid expansion.

The Netherlands

Introduced: 2010;

Motivation: facilitating large investment that is socially desirable;

Eligible investment: all grid expansion necessary for achieving energy policy objectives.

UK

Introduced: 2011;

Motivation: speeding up EU market integration, promote commercially-driven investment (an alternative to the “exemption” track), addressing the coordination risk of multi-jurisdictional projects, and adjusting remuneration to the higher risks of this type of investment;

Eligible investment: NEMO (Belgium-UK interconnector) and future subsea interconnectors.

France

Introduced: 2013 (only first principles);

Motivation: EU market integration, addressing additional complexity of multi-jurisdictional projects, moving towards value-driven remuneration;

Eligible investment: interconnectors.

2. Main differences between the dedicated regulatory frameworks for important electricity infrastructure investments and the default national frameworks







Countries³ have addressed underinvestment in important higher-risk projects by reducing the risk for TSOs to invest in these projects, and by increasing their return. As we illustrate in what follows, Netherlands and Germany only do the former, while Italy, France, the UK, and US do both (Table 1); yet it is too soon to tell what combination of measures works best and what does not work:

- Germany and the Netherlands have similar approaches. They both provide more regulatory stability and thus lower investment risk by exempting important investment projects from their respective default capex efficiency benchmarking for one regulatory period. Additionally, they both advance the timing of construction cost recognition by allowing cost recovery based on estimates before costs are final after construction.
- Italy provides regulatory stability by extending its regulatory period for important investments to twelve years compared to just four years in the default national regulatory framework. Additionally, Italy gives a fixed premium on the return on investment of two percent to all eligible investment.
- France has extended the regulatory period of its planned dedicated framework to ten years. It is also planning to increase the return on investment for important high-risk projects by giving a combination of a flat lump-sum premium and variable bonuses and penalties that will be established after a case-by-case assessment of the investment’s value.
- The UK and the US both have defined a regulatory period that in principle matches the lifetime of the important investment with twenty five years for the UK and an undefined period for the US, respectively. Both also advance the approval for cost recovery on certain development costs such as study costs. The US additionally foresees in progressive recovery of construction costs while the project is under construction. Both countries also increase the return on investment. The UK sets a revenue cap and floor for important investment, while the US gives a case-by-case premium on the return on investment, like France.

3. See also the survey results in “Recommendation of the Agency for the Cooperation of Energy Regulators No 03/2014 of 27 June 2014 on incentives for projects of common interest and on a common methodology for risk evaluation.”



Table 1: Country experiences with dedicated regulatory frameworks for important electricity infrastructure investments

						
Reduced investment risk for important high-risk projects						
Exemption from default capex efficiency benchmarking	v	v				
Increasing regulatory period			v	v	v	v
Advance timing of development cost recognition					v	v
Advance timing of construction cost recognition	v	v				v
Increased return on investment for important high-risk projects						
Fixed premium			v			
Case-by-case premium				v	v	v
Controlling cost efficiency (avoid overpaying)						
Assessment of eligibility	v	v	v			
Case-by-case assessment of eligibility, reduction of investment risk and increase of return on investment				v	v	v

In addition, these countries have also taken measures to keep the cost efficiency of these dedicated regulatory frameworks under control. Some regulators only control the costs by limiting eligibility for the dedicated framework to certain types of projects, e.g. interconnectors or off-shore infrastructure, while others also assess case-by-case to what extent projects are entitled to claim reduced risk and/or higher returns.

- Germany, the Netherlands, and Italy only assess whether an investment is eligible for access to the dedicated regulatory framework.

- France, the UK and the US do a case-by-case project assessment. In the US, the federal regulator (FERC) received new competences to do this and is now assessing all projects claiming additional incentives under the dedicated⁴ framework. It reviews evidence of the project eligibility, and justification for additional incentives to complete the project (see Box 2).

4. FERC, 2006. Promoting Transmission Investment Through Pricing Reform. 116 FERC. Order 679. Docket No. RM06-4-000, 20 July 2006; FERC, 2012. Promoting Transmission Investment Through Pricing Reform. 141 FERC. Docket No. RM11-26-000, 15 November 2012.



Box 2: FERC experience with case-by-case assessment

Section 219 of the Federal Power Act gives FERC new competences to oversee important interstate investment for which it had to introduce a dedicated regulatory framework (Orders 679 and 679A). FERC has been developing new skills to do case-by-case assessments, and has ruled on more than 85 cases, representing over 60 billion USD in potential investment, since 2006.

To access the dedicated framework, a project promoter has to submit a case file to FERC, that: identifies the project, provides evidence of the investment's eligibility (e.g. project's inclusion in a regional transmission plan that assesses reliability impact), motivates the incentives requested, and demonstrates the link between each individual incentive and the project and between the total incentive package and the project (e.g. with feasibility studies, testimony, etc.). Furthermore, to get a premium return on investment, the project promoter must demonstrate that risk has been minimized as much as possible (e.g. by requesting risk-reducing incentives, by implementing best practices, by studying alternatives, etc.).

FERC then reviews the case file, deciding if the proposed project is eligible and to what extent the claimed incentives are effectively granted. A review of past cases shows that FERC does not refrain from declining eligibility due to insufficient evidence of a project's "importance", sometimes still granting the claimed incentives – fully or partially – conditional on a second review of additional evidence of a project's importance.

FERC typically grants all risk-mitigating incentives requested, but tends to adjust the claimed premiums on return on investment downwards (e.g. 1.50% claimed, but only 1.00% granted) after taking into account the risk-mitigating incentives that have been granted as part of the total incentive package. A typically claimed risk-mitigating incentive is the possibility to recover all costs from a stranded investment. FERC is aware that such incentive can imply significantly overpaying for bad projects and therefore makes this incentive conditional on the stranding being beyond the control of the project promoter and on the costs having been incurred efficiently. FERC then reviews both conditions when a promoter asks to activate the incentive after a project has stranded.

Over time, FERC has build up experience that makes case-by-case rulings on incentive packages more transparent and more predictable. With the burden of proof lying with the project promoters and FERC having knowledge from all proposed projects, the typical information asymmetry between regulatory authority and project promoter reduces or might even reverse, giving the information advantage to the competent regulatory authority.

A case-by-case approach is superior, especially if the risk profiles of the projects are very heterogeneous. A case-by-case assessment indeed allows mitigating the risk of underpaying for very high-value high-risk projects as well as avoiding overpaying for high-value moderate-risk projects⁵, whereas a regime that only controls access, giving the same return to all eligible investment irrespective of heterogeneous risk profiles, is subject to the same deficiencies as the default regulatory frameworks. This approach can however be costly to implement administratively, and it requires also new skills from the regulatory authorities that are doing the assessments and from the project promoters who have to submit substantiated project proposals. In comparison, the default national regulatory frameworks are much simpler and easier to administer for the involved National Regulatory Authorities (NRAs) and TSOs.

3. The role of the EU and ACER to ensure an adequate regulatory framework for projects of common interest

In this section, we first discuss the role of the EU and ACER for member states without a dedicated regulatory framework for projects of common interest, and then for member states that do have such a dedicated framework or want to implement one.

Member States without a dedicated regulatory framework for important investments

NRAs might prefer to apply their default national regulatory framework to projects of common interest, motivated by the advantage of a simple framework and by the avoidance of the costs to administer additional dedicated frameworks and to develop new skills.⁶

This could be justified in member states with few projects of common interest that are not significantly more risky than other investments; or in member states with predominantly multi-jurisdictional investments so that all investments are like projects of common interest; or in member states with very strong return on equity incentives and/or risk mitigation incentives. Note that in the latter case, there is no risk of underpaying, which is an EU issue, but there is a risk of overpaying, which is a national issue.

5. The "Deliberation of the French Energy Regulatory Commission of 3 April 2013 deciding on the tariffs for the use of a high-voltage public electricity grid", for instance, foresees variable bonuses and penalties linked to the project's performance that can even become negative to the extent that the flat lump-sum premium on return is reduced or negated.

6. E-Control, 2014. Financing of Infrastructure Projects - Provision of adequate Incentives for PCIs. Position Paper.

The role of the EU and ACER

The EU and ACER can do sunshine regulation by assessing all national frameworks that apply to projects of common interest, checking the adequacy to support high-value high-risk investment.^{1,2}

This assessment report can support ACER when it has to rule on a cross-border cost allocation (CBCA) where disagreement on incentive packages on either side of the border might be one of the reasons why NRAs fail to agree to a CBCA. It is indeed natural to discuss incentive packages when negotiating CBCA.³

ACER can assist with multi-jurisdictional coordination by spreading good practices such as the UK-Belgium experience with a joint incentive package for the NEMO interconnector.

1. This could be done by mapping the national frameworks, see for instance: Glachant, J.M., Sagan, M., Rious, V., Douguet, S., 2014. Harmonizing electricity TSO regulation to ensure financeability of massive transmission investment plan: the case of North-West EU. FSR Policy Brief 2014/01. January 2014.
2. The ACER Recommendation No 03/2014 of 27 June 2014 already provides some sunshine regulation by recording what current regulatory frameworks of Member States do in terms of risk evaluation and in terms of granting incentives.
3. 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.

Member states with a dedicated regulatory framework for important investments

A dedicated regulatory framework with a high degree of case-by-case assessment of whether and to what extent a project is entitled to “dedicated” incentives allows covering the full investment-risk spectrum. It deals with both the risks of underpaying and of overpaying for investment: a high-value high risk project can then claim more incentives to mitigate additional

risks and/or increase return on investment, than a project that has only moderate risk, and low-risk projects can be granted an adequate return on investment that is lower than under the default regulatory framework.

The additional roles of the EU, ACER and ENTSO-E

The dedicated regulatory frameworks that have been developed to achieve national policy objectives must also apply to projects of common interest that are important to achieve the EU policy objectives. Art 7 paragraph 3 of the Regulation¹ could be extended to granting the status of highest national significance to projects of common interest in the context of their regulatory treatment.

To avoid that each NRA needs to develop the necessary skills to do case-by-case project assessments, ACER could be given the competence to assist NRAs on a voluntary basis. For some NRAs the costs of implementing their own dedicated framework might indeed exceed the benefits, while they might still prefer to have a dedicated regulatory treatment for projects of common interest. Likewise, ENTSO-E could do the same for skills-bounded TSOs.

1. Art. 7.3 Regulation (EU) No 347/2013: Where such status exists in national law, projects of common interest shall be allocated the status of the highest national significance possible and be treated as such in permit granting processes — and if national law so provides, in spatial planning — including those relating to environmental assessments, in the manner such treatment is provided for in national law applicable to the corresponding type of energy infrastructure.

In other words, some countries will move towards a dedicated regulatory framework for projects of common interest and others will not. In both cases, there is a role for the EU and ACER to play because projects of common interest play an instrumental supporting role for achieving important EU energy and climate policy objectives.

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