



EUROPEAN COMMISSION

Brussels, 19.10.2011  
SEC(2011) 1234 final

**COMMISSION STAFF WORKING PAPER**

**Executive Summary of Impact Assessment**

*Accompanying the document*

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on guidelines for the implementation of European energy infrastructure priorities  
repealing Decision No 1364/2006/EC**

{ COM(2011) 658 final }  
{ SEC(2011) 1233 final }

## 1) Problem definition

The Commission Communication on energy infrastructure priorities for 2020 and beyond<sup>1</sup> confirmed the need to revise the TEN-E policy and financing framework, identified priority corridors and areas to be implemented by 2020 and proposed a new method to identify projects of common interest (PCIs) to implement these priorities. The supporting impact assessment highlighted the **scale change in investment volumes and delivery times with investments worth** about EUR 140 bn in electricity networks of European significance, about EUR 70 bn in gas networks, as well as EUR 2.5 bn for CO2 transport infrastructure to be delivered by 2020. It also identified obstacles with regard to permit granting.

The problem analysis is further refined by this complementary impact assessment accompanying the legislative proposal on energy infrastructures.

### *Problems with permit granting procedures and public opposition*

They are amongst the major reasons impeding the timely implementation of energy infrastructure projects, in particular of electricity overhead lines. **Administrative procedures are complex and inefficient**, notably with regard to the organisation of procedures and the competences of involved parties, remain fragmented and lack clear time limits and upfront planning and coordination of the implementation of EU environmental legislation<sup>2</sup>. **The opposition of affected population** relates to the unclarity about the added value of a project, real or perceived impacts on the environment and landscape, health and safety concerns, late and insufficient involvement of the public and stakeholders.

### *Problems related to the regulatory framework*

The existing framework is not geared towards delivering the identified European infrastructure priorities. Tariff setting and regulatory incentives remains nationally focused on short-term cost efficiency without taking into account the corresponding long-term Europe 2020 investment challenge. Key decisions on cross-border projects are taken on the basis of national priorities only. This is in particular a problem, where benefits and costs are asymmetric among the Member States with cross-border investment approvals resulting in complex or delayed processes.

### *Problems related to financing*

In view of the scale change in investment volumes and the urgency to deliver the energy infrastructure priorities until 2020 network operators are to face significant financing challenges. The financial crisis puts constraints on companies to raise debt capital at favourable terms, while country risks go up and credit ratings down. Current regulation or ownership structures make it difficult for TSOs to effectively attract new institutional investors. At the EU level, the existing TEN-E programme with its limited focus on grants for feasibility studies and lack of adequate risk mitigation instruments is not suitable to facilitate access of to debt/equity finance and to leverage public and private investment in energy networks for the future.

## 2) Analysis of subsidiarity and EU added value

The EU's competence in the area of energy is enshrined in the Treaty on the Functioning of the European Union (TFEU), in particular in the energy Article 194. Energy networks are covered under Article 170 and 171 TFEU. Concerning permit granting, Article 171-2 TFEU

---

<sup>1</sup> COM/2010/0677

<sup>2</sup> Directives 2001/42/EC, 85/337/EEC, 92/43/EEC, 2009/147/EC, 2000/60/EC

stipulates that "Member States shall, in liaison with the Commission, coordinate among themselves the policies pursued at national level which may have a significant impact on the achievement of the objectives referred to in Article 170". Moreover, Article 194-2 TFEU allows the EU to establish the measures necessary to promote the interconnection of energy networks.

### 3) Objectives of EU initiative

The general objective of this initiative is to ensure sufficient and timely development of energy infrastructures across the EU and in its neighbourhood in order to meet the EU's energy policy objectives of market integration, security of supply and sustainability. The initiative aims specifically at implementing, by 2020, the trans-European energy infrastructure priority corridors by:

- streamlining permit granting procedures to significantly reduce their duration for projects of common interest and increase public involvement and acceptance for the implementation of such projects;
- facilitating the regulatory treatment of projects of common interest in electricity and gas by allocating costs depending on the benefits provided and ensuring allowed returns are in line with risks incurred;
- providing eligibility rules for Union financial aid in the form of market-based and direct EU financial support to projects of common interest.

This initiative is to replace the existing TEN-E guidelines and complements the proposal for a Regulation establishing the "Connecting Europe Facility" (CEF) covering all infrastructure sectors (energy, transport, telecommunications) and setting common rules for granting Union aid in form of both grants and new financial instruments.

### 4) Policy options

The following policy options are discussed for the three policy areas covering the problems identified:

<b>Policy area A: Permit granting, stakeholder involvement and compensation</b>		
Option A.0	Business as usual	
<i>Option A.1</i>	<i>Establishment of a regime of Common European Interest</i>	
<i>Option A.2</i>	<i>Organisation and limitation in time of the permit granting process</i>	
	<b>Element A.2.1: Organisation of the permit granting process</b>	
	Suboption A.2.1.a	Leading Authority without decision-making power at national level ("light one-stop shop")
	A.2.1.b	Leading Authority with decision-making power ("full one-stop shop")
	A.2.1.c	Cross-border Leading Authority with European Authority of Last Resort and European permit granting procedure
	<b>Element A.2.2: Limitation in time of the permit granting process</b>	
	A.2.2.a	Requirement for Member States to establish time limits for each individual PCI
	A.2.2.b	Legally-binding time limits established by stakeholders in the framework of regional cooperation
	A.2.2.c	Legally-binding time limit established by the EU legislative act

<i>Option A.3</i>	<i>Establishment of a regime of Common European Interest and organisation and limitation in time of the permit granting process</i>	
<b>Policy area B: Regulation</b>		
Option B.0	Business as usual	
<i>Option B.1</i>	<i>Cost allocation</i>	
	B.1.a	EU transmission tariff
	B.1.b	Ex-ante cost allocation
	B.1.c	Ex-ante cost allocation with ex-post adjustment
<i>Option B.2</i>	<i>Investment incentives</i>	
	B.2.a	Risk-related incentives for PCIs
	B.2.b	Penalty and enforcement action for PCIs
<i>Option B.3</i>	<i>Ex-ante cost allocation and risk-related incentives for PCIs</i>	
<b>Policy area C: Financing</b>		
Option C.0	Business as usual	
<i>Option C.1</i>	<i>Risk sharing instruments</i>	
<i>Option C.2</i>	<i>Risk capital instruments</i>	
<i>Option C.3</i>	<i>Grant support for project construction</i>	
<i>Option C.4</i>	<i>Combination of grants, risk sharing and risk capital instruments</i>	

Following a preliminary analysis, the suboptions A.2.1.a, A.2.1.c, A.2.2.a, A.2.2.b and B.1.a were discarded as the related measures were considered to be ineffective or disproportionate compared to their impact.

## 5) Assessment of impacts

Under **business as usual (BAU)** persistent delays of new infrastructure projects, notably in electricity, will persist due to the financing, regulatory and permit granting problems. European priorities would not be addressed sufficiently by the market operators and Member States. The Commission estimates that a significant share of the needed **investment of approximately EUR 200 bn until 2020 will not be delivered** on time under the existing framework, jeopardizing the EU's ability to meet its energy and climate policy objectives by 2020. Lack of interconnections will reduce opportunities for system optimisation, increase the risk of disruption and trigger additional costly back-up and balancing generation investments. Assuming their mere continuation, TEN-E and other EU funds would not be able to make a significant impact on the investment challenge.

### 5.1. Permit granting

#### **OPTION A.1: Establishment of a regime of common European interest**

This option is expected to have intermediate positive effects by contributing to the timely delivery of more projects than under BAU. Citizens would be potentially affected in the limited opportunity to question the necessity of a project in the permit granting procedures. The impacts on the environment are not expected to increase greatly under the new regime vis-à-vis the current one, given the assumption of earlier completion of projects. With successful project delivery strong positive effects on climate objectives are expected. Investors' certainty will be increased and positively contribute to the projects' viability. Regarding administrative costs, the reduction of resources needed for processing a given

number of projects is estimated at about 3% on the promoters' side, and 12% on the authorities' side.

**OPTION A.2: Rules on the organisation and duration of the permit granting process (suboptions A.2.1b "full one-stop shop" and A.2.2.c "time limit of 4 years")**

The impact of this option is expected to be strong and positive, allowing a large majority of projects to be delivered on time. The number of projects realised on time would be higher than with option A.1, but not all PCIs would get the priority. The option would significantly improve conditions for citizens to participate in the decision-making process as the Leading Authority and/or promoters would need to ensure early consultation. Compliance costs would be higher than under option A.1. Positive impacts on administrative costs are also expected to be more significant under this policy option, with 26% of administrative cost savings.

**OPTION A.3 Establishment of a regime of common European interest and rules on the organisation and duration of the permit granting process**

The overall impact of this policy option, which combines the impacts of options A.1 and A.2, is considered to be the most positive of all options, as it would lead to the on-time completion of almost all the needed projects by 2020, provided appropriate measures on regulation and financing are in place. Environmental impacts, social impacts on employment and economic impacts on GDP are expected to be stronger under this policy option as all projects would be completed, while administrative cost savings would amount to 31%.

**Resulting from this analysis, policy option A.3 is the preferred option.**

#### **4.2. Regulatory measures**

**OPTION B.1: Cost allocation**

*Ex ante cost allocation* would enable certain investments, for which no viable cost sharing would be possible under the BAU with distributional and social impacts on market participants and final consumers. Limited administrative impacts are expected with the requirement for NRAs to cooperate with others and TSOs from different Member States.

The impacts of *ex ante cost allocation with ex post adjustment possibility* would only differ in the final economic and distributional impacts. While it would render more precise the allocation, it would create a downside revenue risk for TSOs and external investors. The implementation could trigger additional administrative costs, as TSOs and NRAs could have to re-evaluate benefits and renegotiate cost allocation.

**As a result, suboption B.1.b is the preferred suboption.**

**OPTION B.2: Investment incentives**

*Incentives for PCIs with higher risks* would create a positive economic impact for infrastructure delivery by recognising the challenges posed by certain investments. The financial impact of such an adder on network tariffs would remain very limited, given the low expected volume of eligible investments, the limited administrative impact and the overall low share of transmission costs in the final energy prices.

*Penalties and enforcement action for PCIs* by forcing TSOs to deliver agreed priority projects could potentially increase social welfare at EU level. Such measures would require conferring new powers to NRAs. The measures could also trigger strong opposition from TSOs, as the economic impact could be negative, either because of reduced revenues through

the penalties in case of non delivery, or because of additional uncovered risks taken up in case of project delivery. The added value of such a compulsory scheme compared to an incentive-based scheme seems therefore limited.

**As a result, suboption B.2.a is the preferred suboption.**

#### **OPTION B.3: Ex-ante cost allocation and risk-related incentives for PCIs**

**This option would be the preferred option**, as it would combine the positive impacts of both preferred suboptions and allow covering the largest number of PCIs.

## **4.2. Financing**

#### **OPTION C.1: Risk sharing instruments**

Introduction of risk sharing instruments would improve access to capital and new financing sources and risk capital (e.g. bonds or guarantees) at more adapted terms, improving the commercial viability of projects towards a positive investment decision. Such support would come at a lower expense to the public budget than direct grants with a high multiplying effect (up to 25). This option requires cooperation with financial institutions which lowers the administrative burden of the Commission.

#### **OPTION C.2: Risk capital instruments**

Provision of equity would result in a very positive impact on the financial capability and attraction of new investors. By assisting projects in their early phase, the pipeline of mature projects would be accelerated, especially if they are more complex, innovative and involve a multitude of stakeholders. A high leverage of the EU budget could be expected with a multiplying factor between 1 and 10. If investments are outsourced to a financial institution, this will create substantial resource needs within these financial institutions.

#### **OPTION C.3: Grant support to project construction**

Grants would provide large positive economic and social impacts, supporting the delivery of PCIs which would not be developed by market forces or regulation alone, while mitigating the impact on network tariffs. Grant intervention would target those PCIs which are particularly vital for the achievement of the 2020 energy and climate policy objectives and the internal market and security of supply of the Union. The administrative impact will be directly correlated with the number of projects and the EU budget available to support them.

#### **OPTION C.4: Combination of grants, risk sharing and risk capital instruments**

As this option combines options C.1, C.2 and C.3, it would cumulate the positive impacts of the individual options. But providing a toolbox of market-based instruments (C.1 and C.2) and direct financial support (C.3) will also lead to synergies and efficiency gains, as it will be possible to flexibly provide the most cost-effective solution for specific project risks.

**As a result, option C.4 is the preferred one.** It reflects the proposals concerning the future EU budget as made by the European Commission on 29 June 2011 and fully reflects the proposed Connecting Europe Facility.

## **6) Comparison of options and final conclusions of the impact assessment**

As a result of the analysis, the impact assessment presents a **set of preferred options**: 1) establishment of a regime of common European interest, full one-stop shop and time limit of

4 years for projects of common interest; 2) ex ante cross-border cost allocation and risk-specific incentives for PCIs; and 3) a combination of grants, risk sharing and risk capital instruments. **None of them alone is capable of delivering the necessary investments** which calls for the coordination of policy action for the preferred options.

Overall, the negative impacts on the environment, individual citizens and tariffs will be largely outweighed by the benefits expected from the completion of the trans-European networks. This will allow the EU to achieve the energy and climate targets agreed at EU level, notably the 20% renewables share and the 20% GHG emission reduction by 2020. Adequate infrastructure will also facilitate the full integration of the internal energy market in electricity and gas, thereby creating new opportunities for system optimisation and efficiency, competition and choice for the final consumer and hence exerting an overall lowering effect on energy prices. The set of measures will also make our energy supplies more secure, by providing diversification of sources, routes and counterparts and by increasing system stability, but also by improving the security and climate resilience of our networks.

All this will contribute to the significant positive overall effect on GDP and employment already identified in the 2010 impact assessment (+0.42% of growth and 410,000 additional jobs compared to the baseline scenario over the period 2011-2020).

The table below summarises the impacts of all options and suboptions.

Options	Economic and social impacts	Environmental impacts	Other impacts
<b>A.1</b>	+	=	Legal feasibility: -
<b>A.2</b>	++	+	Legal feasibility: -
<b>A.3</b>	+++	++	Legal feasibility: -
<b>B.1</b>	++	+	Administrative: -
<b>B.2</b>	++	+	Tariff impact: -
<b>B.3</b>	+++	++	Administrative and tariff impact: -
<b>C.1</b>	+++	+	
<b>C.2</b>	++	+	Administrative: -
<b>C.3</b>	+++	++	Administrative: -
<b>C.4</b>	+++	++	Administrative: - Tariff: +
<b>A.3 &amp; B.3 &amp; C.4</b>	+++	+++	Legal, administrative: - Tariff: +

**Summary of impacts** (= equivalent to baseline; + to +++ improvement compared to baseline; - to - - - worsening compared to baseline)