EVALUATION OF THE TEN-E REGULATION – BACKGROUND INFORMATION

The societal relevance: Secure, sustainable & competitive energy

The European Union has implemented several policies to make energy supply more sustainable, secure, competitive and affordable. Adequate infrastructure for energy transmission is key to reaching these objectives. The Energy Union also acknowledges the importance of appropriate energy transmission infrastructure as "a precondition for completing the energy market, integrating renewables and security of supply".

Reliable energy transmission infrastructure and interconnections should ensure that electricity and gas can be transported across Europe without physical constraints in order to facilitate the further integration of energy systems and markets which remain, to a certain extent, organised at national level. The development of appropriate cross-border transmission infrastructure will help enable markets to become more integrated and enhance competition within the energy sector, thus creating downward pressure on energy prices. It will also support a more sustainable energy supply as intermittently available renewable energy can be more easily integrated into highly interconnected systems and markets. These positive effects not only benefit the energy sector, but also the wider economy, enhancing economic growth and employment (in particular in the energy-intensive industries) and reducing carbon emissions. In addition to this, energy interconnections promote security of energy supply as countries gain access to new sources of energy, which can be particularly important during emergency situations.

Despite the clear benefits of enhanced interconnection, cross-border infrastructure projects often face additional barriers to national infrastructure projects. This is due to the complicated nature of working with two separate national regulatory and permitting systems. The financing of projects that cross borders can also be more complicated. There are also barriers that are faced by all large energy infrastructure projects, such as a lack of public acceptance. Addressing these barriers in order to realise the potential of a more fully integrated energy market is the core rationale for the TEN-E Regulation.

In addition to electricity and natural gas networks, the TEN-E Regulation also facilitates the development of oil infrastructure corridors as well as the development of smart grids and networks for the transport of Carbon Dioxide (captured from power plants), where these have cross-border potential.

The policy response: Framework of Trans-European Energy Networks (TEN-E)

To cope with the challenges described above, specific policies and instruments have been put in place at European level to support the development of energy infrastructure in selected corridors.

The TEN-E programme started in 1995 with a focus on co-financing studies to support proposed projects to enhance cross-border interconnections. The guidelines were revised in 2006 and then again in 2013, as part of a wider infrastructure package aimed at considerably up-scaling the EU's activity in this area. The new TEN-E regulation were adopted along-side the 'Connecting Europe Facility' which made EUR

5.4 billion available for studies as well as works for energy infrastructure projects that are deemed 'projects of common interest'.

TEN-E Regulation (2013) and Projects of Common Interest (PCIs)

The guidelines for trans-European energy infrastructure (TEN-E) regulation¹ identifies priority corridors and thematic areas of trans-European energy infrastructure and provides guidelines for the selection of Projects of Common Interest (PCIs). The Regulation lays down rules for the timely development and interoperability of energy networks in the EU and sets guidelines for streamlining the permitting processes for major energy infrastructure projects that contribute to European energy networks.

Annex I of the TEN-E regulation identifies **priority corridors** which require "urgent infrastructure development in order to connect EU countries currently isolated from European energy markets, strengthen existing cross-border interconnections, and help integrate renewable energy." There are nine priority corridors identified. Four of these are for **electricity**, four are for **gas** and one is for **oil**. Each of these corridors covers a number of Member States, i.e. a geographically distinguished region.

The Regulation also provides the following three priority thematic areas for energy grid infrastructure which are relevant to all MSs:

- Smart grids deployment to efficiently integrate end users in the electricity system, in particular via distributed generation and demand response;
- **Electricity highways**, in view of supporting a system that is capable of accommodating increasing renewable energy sources (RES), connecting RES hubs with storage capacities, and coping with an increasingly variable and decentralised electricity supply and flexible electricity demand;
- Cross-border carbon dioxide network in view of the deployment of carbon dioxide capture and storage.

The TEN-E regulation also provides guidelines for the selection of Projects of Common Interest (PCIs) to speed-up the development of a pan-EU electricity and gas infrastructure. PCIs are selected by twelve regional groups, established under Article 3 of the Regulation. The regional groups select projects for inclusion on the 'Union List'. The list of PCIs is updated every two years and the latest update was finalised in November 2015.² To be classified as a PCI, a project must:

- Be necessary for at least one priority corridor or area;
- Have significant impact on the energy markets of at least two EU countries;³
- Have potential benefits that outweigh its costs.

¹ Regulation 347/2013 on guidelines for trans-European energy infrastructure

² C(2015) 8052 regarding the European Union list of projects of common interest

³ By directly crossing the border of two or more MSs, be located on the territory of one MS and have significant cross-border impact or cross the border of at least one MS and a EEA country.

A PCI should also enhance security of supply by allowing countries to source energy from diverse origins, contribute to the energy and climate goals (e.g. by integrating RES into the grid) and increase competition by offering alternatives to consumers. The agreed electricity PCIs should help MSs to meet their 10 % interconnection target by 2020.

The TEN-E Regulation establishes that PCIs can benefit from:

- Accelerated licensing by having a single national authority acting as a one-stop-shop for permitting procedures in each
 concerned country the directive (each MS has three schemes to choose from regarding how the single competent authority
 combines the work and decisions of the relevant bodies), including a binding time limit of 3.5 years for granting a permit;
- Improved regulatory conditions and cost-allocation, including a system for the allocation of costs for projects across borders and encouragement for national regulators to offer incentives to support these investments;
- Financial support from the Connecting Europe Facility (CEF), which offers grants and access to finance at rates (and with conditions) which offer benefits over finance available on a commercial basis;
- Lower administrative costs thanks to more streamlined environmental assessment procedures, including guidance on public participation and engagement; and
- Increased transparency, public participation, visibility and attractiveness for investors.

Article 17 of the Regulation requires the Commission to provide the European Parliament and the Council with a report no later than 2017 on the implementation of PCIs, the respective Union funds dispersed and the impacts of improved interconnection in Member States. The report should also assess the results of the permit granting and regulatory provisions of the TEN-E Regulation as well as its overall impact on market integration and sustainability.

In addition to these points the Commission is taking the opportunity to consider the wider impact of the TEN-E Regulation and the future options for policy action in this area.