Trans-European energy networks: guidelines

2003/0297(COD) - 10/12/2003 - Document attached to the procedure

COMMISSION'S IMPACT ASSESSMENT

For further information about this issue, please refer to the summary relating to the Commission's proposal COM(2003)0742 on the revision of the Trans-European Energy Network guidelines.

1- POLICY OPTIONS AND IMPACTS

In this impact assessment exercise, four options are considered ranging from minimal action through balanced co-ordination to a fully regulatory approach:

1.1- Option 1: Minimum co-ordination. This option builds on the strength the free market, private industry and freely mobile capital taking into account environmental legislation and the adoption of the 'acquis' in the enlarged Union. The TEN-E guidelines in force are applied only where necessary. It is expected that a completely liberalised market with competition, profit maximisation and customer acceptance as the main driving forces will generate the funds for building the major gas and electricity interconnections with the desired quality and safety standards.

1.2- Option 2: Balanced Co-ordination - Continuation of current TEN-E Policy. The TEN-E guidelines contain a list of priority projects, which have priority for Community funding. The available budget is sufficient to fund up to 50% of the cost of feasibility studies and various studies during the development phase. In exceptional cases, a small percentage of financing can be granted to the construction phase. The influence of TEN-E financing is relatively minor effect on the overall budget of the project, but it can serve as an important stimulus at an early and risky stage of a project. The recognition of a project as being of European interest may also have generally positive effects regarding attracting project financing and gaining the acceptance of public authorities and other parties involved. These indirect effects can often be just as important as the actual direct financial input.

1.3- Option 3: Increased Co-ordination in Network Development. Increased co-ordination should provide the driving forces for optimising the use of existing networks and generating new investments. In addition, it is the appropriate instrument for linking strongly the objectives of the security of supply directive with the axes for priority projects in the TEN-E guidelines. In this "Increased co-ordination" option, a small part of the TEN-E funds would be used for network planning, in the form of studies covering the entire European network as well as regional parts of it. The aim is to develop a European-wide plan for energy networks. The need for European-wide plans arises from the objective of creating truly integrated electricity and gas markets where a national perspective is not enough to plan and justify network investments. A co-ordinated approach is also necessary for gas supply pipelines in order to avoid over-investment or under-investment. Increased Co-ordination allows the tackling of problems that affect the full implementation of TEN-E policy and the more effective implementation of TEN-E financed projects as, at present, no mechanism exists for creating a real link between the TEN-E Guidelines and the procedures for the effective implementation and the realisation of the projects. Thus, the success of the EU Guidelines for the development of transmission lines would be measured by the degree of effective realization of those projects – particularly cross border interconnections - listed in the TEN-E Guidelines.

1.4- Option 4: European Regulatory approach. Increasingly integrated and global energy markets, in conjunction with the disappearance of the national borders regarding the networks, might call for a stronger European regulatory approach for network investments. The expected long-term objective of the 'hydrogen economy' will make possible a vast redistribution of power, with far-reaching consequences for

society. Today's centralised, top-down flow of energy, controlled by global oil companies could become obsolete. It is envisaged that the transition from centralised power generation to distributed generation requires increased regulatory measures and sensible pricing policies. The role of the Community in monitoring and administering the regulations concerning CO2 emission targets and use of renewable energies will increase. Related revenues in form of energy taxes or transmission fees could be used for the construction in transmission capacities and new grid structures that might be required. Furthermore, there is the scenario of replacing imports of gas and oil by renewable energy sources and appropriate energy savings. In this context, financial or fiscal incentives would be needed throughout the Union.

Impacts

The likely positive and negative impacts of the selected options, particularly in terms of economic, social and environmental consequences are addressed. The issues of security of supply and construction of new infrastructure are also of crucial importance and, therefore, included explicitly.

Security of supply: The import of **natural gas** with increasing volume is facilitated by means of new and upgraded pipelines and LNG terminals. Private enterprise is seen as capable of organising and financing major supply routes from neighbouring countries and inside the Union. The projected major lines are expected to be financed through the market and, eventually by the consumer. The options of balanced co-ordination, increased co-ordination and the regulatory approach would perform equally well. Regarding the **electricity transmission network**, it is considered that the present level of co-ordination is not sufficient for constructing an adequate amount of new interconnections. Building interconnections is not the only way to resolve congestion; the construction of new generating plants in areas of high demand often constitutes a cost-effective alternative. Balancing the corresponding construction of power generation and grid extension, an increased level of co-ordination is called for. Neither the minimum co-ordination approach nor the regulatory approach is considered appropriate.

Construction of new infrastructure.The full liberalisation of the market is the dominant pre-requisite for the efficient use of existing and development of new infrastructure. Therefore, the focus should be on using the signals emerging from the industry as indications of the need for new investment. It has been observed that only by modelling demand and supply within the existing infrastructure network, the needs for new infrastructure will be correctly identified. This can be successfully achieved within the frame of establishing a European consolidated plan for energy networks.

Environment. Short-term environmental damage during the construction phase is expected to be off-set by environmental benefit of a more efficient pan-European energy infrastructure network. The long-term negative effects on the environment are expected to be very small, although some debate is ongoing with regard to High-Voltage electricity overhead lines, as well as their appearance.

Social impact. Short to medium term job creation is expected as the construction of projects gets under way, particularly in the New Member States. The process of opening markets should take into account employment prospects in the industry. A comprehensive assessment has to cover not only the restructuring or even job losses in the sector itself but also the positive effects on the economy and employment as a result of greater competitiveness and lower costs, particularly in energy-intensive industries. The key question is whether this job creation is sustainable and, more importantly, whether high-tech jobs are generated.

Economic impact. The effect of a higher level of transmission connection on competition will have two main beneficial effects. The first will be the immediate possibility to reduce prices in the high price regions of the European Community as far as electricity is concerned. The effect of a higher level of transmission connection on competition will have two main beneficial effects. The first will be the immediate possibility to reduce prices in the high price regions of the European Community as far as electricity is concerned. Similarly, as a longer term effect, the increase in cross border transmission of

electricity will also allow for more competition in the end-user supply market. This will have the effect of driving down customer service costs and reducing the retail supply margin.

CONCLUSIONS: The increased co-ordination option aims at combining the good elements of both market forces and regulatory supervision in future TEN-E policy. This 'increased co-ordination' option entails two new instruments, namely the Declaration of European Interest for the selection of important projects and the Commission-designated co-ordinator responsible for a given axis or project. The third component in the strategy to ensure the completion of the required infrastructure will be co-ordinated European-wide planning which will establish the tools for developing studies and simulations covering the entire European network.

2- FOLLOW-UP

The TEN-E Committee, which is composed by experts from the Member States, will supervise the implementation of the guidelines on the political and technical level and, in particular, will approve the funding of projects. Every two years, the Commission will draw up a report on the implementation of the projects of common interest as listed in the TEN-E Guidelines, which will be submitted to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. In this report, attention will be given to the implementation and progress made in the carrying out of priority projects which concern cross-border connections and how they were funded, especially regarding the Community contribution.