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# COMMISSION STAFF WORKING DOCUMENT

Accompanying the

legislative package on the internal market for electricity and gas

# **IMPACT ASSESSMENT SUMMARY**

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# Impact Assessment for the legislative package on the electricity and gas internal market

On 10 January 2007, the Commission presented a Communication to the European Parliament and the Council entitled "An energy policy for Europe". The document concluded that consumers and businesses were losing out because of inefficient and expensive gas and electricity markets. The Commission said it would follow up with action in individual cases under the competition rules and improve the current framework.

#### PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

Stakeholder consultation took place early 2007 with regulators, transmission system operators, associations of electricity and gas companies, independent producers' associations, consumer associations, industrial energy users' associations, traders and new entrants, trade unions and NGOs. Nearly 150 stakeholders provided input.

#### PROBLEM DEFINITION AND BASELINE SCENARIO

The issues to be resolved are: market concentration and market power; vertical foreclosure; lack of market integration; lack of transparency; price formation mechanisms; downstream markets for gas; balancing markets and liquefied natural gas markets. Many are linked to the existence of vertically integrated companies and to insufficient powers of many regulators. There is not enough co-ordination between national energy networks.

Although the measures taken so far to mitigate these problems have had a positive impact, they have proved insufficient. The European Council and the European Parliament called on the Commission to propose new legislative measures to improve the functioning of the internal market for electricity and gas.

#### **OBJECTIVES**

The European Council and Parliament reiterated in 2007 that a European energy policy was necessary, including the completion of an electricity and gas internal market. The proposed measures seek to contribute to this objective. A functioning internal energy market will help fulfil the objectives of the Lisbon strategy, in terms of competitiveness of the European economy and sustainability. There is also a link with other policies like the review of the Emissions Trading Scheme (ETS) or the reduction of CO2 emissions. The Commission has a role to play in ensuring that all EU citizens benefit from the liberalisation process. A range of secondary objectives will play an important role in the overall strategy.

Improving competition through better regulation, unbundling and reducing asymmetric information

The existence of different levels of unbundling in various Member States distorts competition among market players. Vertically integrated electricity and gas companies have largely maintained their dominant positions on their traditional markets. This has led many Member States to retain tight control of the electricity and gas prices charged to end-users, which is a serious constraint on competition and not in the long term interests of customers.

Improving security of supply by strengthening the incentives for sufficient investment in transmission and distribution capacities

Coordination of investments between TSOs

Security of supply and energy dialogue with our main suppliers of gas

Promotion of technological developments

*Improving consumer protection and preventing energy poverty* 

Improved competitive conditions and security of supply are in the interests of all consumers. All related options contribute to consumer protection.

#### POLICY OPTIONS AND ANALYSIS OF IMPACTS

# - TSO unbundling

"Business as usual" would rely on current legislation, including legal and functional unbundling for TSOs. Two options were considered for further unbundling of transmission activities. With ownership unbundling, the TSO would own the transmission assets, operate the network and be independently owned. With the independent system operator (ISO), the transmission network would be operated and developed by a third party, fully independent of vertically integrated companies. A further option, "regulated unbundling", granting further powers to the regulators, was presented at the March European Council.

With the baseline scenario, major shortcomings of the current unbundling requirements detailed in the Commission's communication would persist. Economic analysis shows that full unbundling stimulates investments, reduces market concentration and brings down prices. There is no indication that credit ratings, share prices of the companies or the relationship with external suppliers are negatively affected. There is generally less empirical evidence relating to the functioning of ISOs. This option does not negatively affect parameters of companies concerned, such as credit ratings and share prices.

- Strengthening of national energy regulators so that powers are harmonised

The current framework extended the power of national energy regulators in each Member State and called for the establishment of authorities with specific competences. The Commission also considered the extension of regulators' ex-ante powers in a number of areas.

Business as usual would undermine the credibility of regulators who are, according to a majority of stakeholders, not given sufficient powers to play their role. Strengthened regulator powers may tackle market distortions, resulting in more competitive energy markets. The public sector cost of regulation may increase somewhat.

# - Co-operation between EU energy regulators

Currently, regulators are cooperating through ERGEG (European regulators group for electricity and gas), created by a Commission Decision in November 2003. Although, the internal market for energy has developed considerably, a regulatory gap remains on cross-border issues. The options to tackle this deadlock include a gradual evolution of the current

approach, a European network of independent regulators ("ERGEG+") and a new body at EU level.

The assessment of the tasks which are required leads to the conclusion that the regulatory gap can only be solved by establishing a regulatory Agency which is able to adopt individual decisions which are legally binding on third parties. The economic impact is however difficult to assess. Changing the regulatory structure would cause the central costs of regulation to go up whereas the regulatory costs in Member States would go down.

## TSO coordination

Existing associations of TSOs (European Transmission System Operators – ETSO and Gas Transmission Europe – GTE) work on a voluntary basis. An enhanced level of TSO coordination would require a new legislative framework. The option examined by the Commission is to provide ETSO and GTE with new and more formalised tasks at the European level The focus could be on the two areas of competence: common planning of investments and drafting of harmonised technical rules.

The main elements of enhanced TSO cooperation are the development of market and technical codes, the coordination of grid operation and common investment planning. Gas and electricity could then be produced and transported much more according to the underlying economic and environmental conditions, increasing the overall efficiency of the sector. Granting existing TSO associations an institutional role would be beneficial (ETSO+\GTE+" solution).

# Increasing transparency

Efficient wholesale markets need reliable price formation, and sufficient market information needs to be available to market participants. One option would be the introduction of binding guidelines for transparency, or the improvement of transparency requirements for gas. Transparency should be expanded for network information and for information on the supply and demand balance of the market and on trading. The formal advice given by ERGEG in 2006 could be the starting point. The current regulatory framework has limited scope as far as transparency is concerned.

Current transparency requirements focus mainly on network capacity. Increasing transparency would increase the efficiency of the supply chain at very low cost. Trading in commodities is currently not covered by other legal instruments and is unlikely to be covered in the near future. Electricity and gas are essential products and differ from other commodities. It is useful and reasonable to develop trading rules for spot and future markets for gas and electricity which take account of the specificity of these sectors.

## - Pre-liberalisation long-term contracts for gas transmission

The current framework has created some confusion. One possibility would be to delete or change the provisions to make it clear that the legislation also applies to such contracts, but this may question the validity of pre-liberalisation contracts for import of gas into the EU.

The Commission has concluded that the Directive should not be amended on this issue. It is clear that all contracts concluded before the entry into force of Directive 2003/55/EC continue

to be valid insofar as they comply with Community competition law and that these contracts are equally subject to the provisions of the current framework.

 Enhanced DSO unbundling including more regulatory scrutiny and reviewing the 100 000 limit

Ownership unbundling for those DSOs that currently have the same legal regime as TSOs is a possibility. Another option would be to use Community guidelines to improve the functioning of the DSOs regarding management unbundling.

The Commission considered reinforcing the unbundling obligations for DSOs and applying mandatory legal and functional unbundling to all DSOs. This solution does not seem to be proportionate in the light of the cost-benefit analysis.

#### - Gas storage

Competition in the gas sector is limited by the availability of storage. Voluntary guidelines were agreed in 2004 but compliance is lagging behind. Measures might be needed to balance the need for effective access against maintaining incentives for new storage developments. This would imply a specific regulatory framework.

Implementing legal and functional unbundling for gas storage and LNG facilities and developing guidelines are favourable in terms of costs and benefits. Requirements to improve access to storage may also need to be extended to LNG terminals.

- Imposition of requirements for strategic gas storage

Following crises in the supply of gas in 2006 and 2007, the Commission considered whether the mechanism already in place needed to be reinforced. Three options were considered: impose mandatory strategic stocks on the companies; improve the existing mechanism; create a solidarity mechanism at regional level between Member States.

Imposing a gas storage obligation enhances the overall security of European gas supply, but also has negative effects. Given the complexity of the subject, the Commission will shortly launch a study on strategic gas stocks.

- Framework for new investments in gas infrastructure

Reinforcing security of supply and ensuring a competitive gas market are two objectives which the EU has to reconcile. The current possibility of exempting major new infrastructures from regulated third party access has sometimes proved difficult to implement. The second option is to improve the procedure and clarify the criteria for granting an exemption.

The baseline scenario would lead to increasing national differences in the way exemption requests for new infrastructure projects are treated. Specifying and clarifying the legislative framework through specific guidelines would reduce this risk and help to deal with cross-border exemption requests. It would be advisable to task the new Agency for the Coordination of Energy Regulators with dealing with exemption requests for pipelines crossing more than one Member State.

- Consumer protection and preventing energy poverty

The current directives require safeguards to protect consumers and include the concept of universal service for electricity. In addition to the measures related to the better functioning of the DSOs, two options were considered: additional new legislative measures or "soft law" (energy consumer charter).

The obligation to provide information is likely to contribute to consumer protection, contestability of the market and lower energy prices. Availability of data to consumers would have a positive impact on all costs and energy savings. The cost of installing such devices seems small relative to the potential benefits.

# - Control of third country investment in EU networks.

The Commission has analysed measures to control the investment of third country companies in the EU gas and electricity networks. Effective TSO unbundling could be undermined by third country companies active in both supply and network operation and, more generally, ownership unbundling would lead to a sell-off of European networks. Consideration was given to whether additional regulatory or ownership rules were needed.

Investment in the gas and electricity networks in the EU is welcome, and third country investments can be regarded as beneficial. Where the involvement of third country companies undermines effective TSO unbundling, or investment is driven by motives other than economic ones, it may counteract the pro-competitive effect of unbundling and jeopardise security of supply. Two approaches are conceivable: a restriction on ownership on the part of third country companies in EU networks, or a regulatory approach whereby the independence of a candidate TSO is monitored at national and/or European level.

# - Analysis of macroeconomic impacts

Econometric simulations of the macroeconomic impacts of further energy market liberalisation show a positive impact of the proposed options on prices and GDP. Efficiency improvements in the electricity and gas sectors lead to lower energy prices, which in turn impact on the rest of the economy.

# - Analysis of employment and social effects

Direct social impact, in terms of employment in the energy sector, of all proposed measures is likely to be very limited. Most companies in the sector are already in the process of restructuring to cope with liberalisation irrespective of the introduction of further unbundling and improved regulation.

Potential energy poverty is a concern in some Member States. Further liberalisation of energy markets should have a positive effect as electricity and gas prices are expected to come down.

## - Analysis of environmental effects

The primary aims of the proposed regulatory changes are economic, but repercussions on the environmental performance of the energy system and the European economy as a whole cannot be excluded. The anticipated intensified competition is broadly expected to eliminate profits arising from a lack of competition on the internal market for electricity. As a consequence, effects on the price of electricity introduced by the EU ETS may be higher, conveying a clearer and less distorted carbon price signal through electricity prices to the consumers.

#### **CONCLUSION: COMPARING THE OPTIONS**

- Further TSO unbundling: separation of ownership between the transmission networks and generation/supply interests (full ownership unbundling) offers the best guarantees from a competitive point of view. The ISO option is an alternative solution provided that it is coupled with more stringent regulation to monitor the operation of the transmission system.
- Enhancing the role and coordination of regulators: status quo is not a viable option. Increasing regulators' powers and independence should be very beneficial for competition, ensuring a level playing field for companies in Europe. The costs are very limited compared to expected benefits in terms of market function. The lack of coordination between regulators could be addressed by having a Community agency.
- Co-ordination between TSOs: formal coordination between TSOs can be best achieved through the "ETSO+/GIE+" option.
- Increased transparency of wholesale markets: a unified approach to greater transparency based on a set of pan-European high level standards of data disclosure for gas and electricity would be very useful and welcomed by market players.
- Action to regulate long-term contracts in gas: the cost-benefit analysis of further legislative measures on long-term contracts in gas was not conclusive.
- Access to gas storage facilities: potential benefits that could be expected from creating strategic stocks for gas at EU level need to be looked into. There is limited support from stakeholders for such measures.
- Changes to the framework for investment in gas import infrastructures: the current framework needs to be amended. There is clear added value from EU action at this level to create favourable conditions for investment.
- DSO unbundling: benefits from further unbundling are not overwhelmingly higher than costs at this stage. As the legal unbundling of DSOs took place in many Member States only recently, it would seem disproportionate now to impose ownership unbundling.
- Consumer protection: an Energy Charter would provide a suitable level of protection at EU level, in particular against energy poverty.
- Control of third country investment in EU networks: regulatory measures could ensure that
  the importance of the EU gas and electricity networks is taken into account and that EU
  third country companies abide by unbundling requirements.