

**NOTE OF DG ENERGY & TRANSPORT ON DIRECTIVES  
2003/54/EC AND 2003/55/EC ON THE INTERNAL MARKET  
IN ELECTRICITY AND NATURAL GAS**

**THIS DOCUMENT IS NOT BINDING ON THE COMMISSION**

**THE ROLE OF THE REGULATORY AUTHORITIES**

**14.1.2004**

**1. INTRODUCTION**

The new package of measures relating to the gas and electricity market require Member States to give responsibility for a number of decisions to designated “regulatory” or “competent” authorities. The most important of these authorities is the one described in Article 23 [25] of the electricity [gas] Directive, which will have responsibility for supervision of network access (“the regulatory authority”). These regulatory authorities are required to ensure non-discrimination, effective competition and the efficient functioning of the market. This represents a key change compared to the previous legislation in that the new legislation firmly adopts regulated third party access as the basic model.

**2. STATUS AND TASKS OF THE REGULATORY AUTHORITY**

**2.1. Designation of the regulator and its resources**

When setting up the regulatory authority, the Directive requires that *Member States shall designate one or more competent bodies with the function of regulatory authorities. These authorities shall be wholly independent from the interests of the electricity [gas] industry.* This, therefore, does not necessarily require the regulator to be separate from existing government structures, even though a separate regulator is the most common and desirable model. The Directive does allow for the possibility that a Regulator’s decision can be reviewed by the relevant Ministry.<sup>1</sup>

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<sup>1</sup> More specifically the Ministry should be permitted to either accept or reject the decision; it may not amend the decision of the regulatory authority.

The requirement also allows local regulators to deal with certain responsibilities since it states there may be more than one regulator. It is also possible for Member States to use the same regulatory body as another Member State, for example by having a regional regulator. It may also be possible for one regulatory authority to deal with one issue, say network tariffs, and a different body to be established to deal with other issues, for example, for example the requirements on unbundling. This note, however, assumes that Member States will designate a single body to deal with most or all of the relevant tasks.

In terms of resources, Member States have a general duty to “*ensure..on the basis of their institutional organisation...that...electricity [natural gas] undertakings are operated in accordance with the principles of this Directive with a view to achieving a competitive and sustainable market in electricity [natural gas]..*”. This implies an obligation for the regulatory authority to be given adequate human and financial resources to carry out its duties and for it to have access to all the information it needs from the regulated company, whether financial or technical.

## **2.2. The regulatory authority’s core duties**

The Regulator’s duties are covered by two passages in Article 23[25]. These constitute a minimum set of competences although Member States may give the regulatory authority additional powers to those specified.

As stated in paragraph 2, approval of network access tariffs and conditions, including transmission, distribution and LNG facilities, will be the key task of the specific regulatory authority. The regulatory authority must approve methodologies for tariff setting in advance for both network use and balancing services. It will also have the right to require changes to individual tariffs on an ex-post basis.

Paragraphs 1 and 4 taken together give Regulators responsibility over the following items for which they must both monitor current practice and intervene if necessary:

- management and allocation of interconnection capacity;
- mechanisms to deal with congested capacity within the national system;
- the time taken by transmission and distribution undertakings to make connections and repairs;
- publication of appropriate information;
- the effective unbundling of accounts to avoid cross subsidies and the unbundling compliance programme;
- connecting new producers;
- the access conditions to storage, linepack and to other ancillary services;
- overall compliance of transmission and distribution system operators with the Directive;
- the level of transparency and competition.

As well as this, Article 23(5) also requires the Regulator to be able to settle complaints against the transmission or distribution system operator on any of the issues above.

Furthermore, under the Regulation on cross border electricity exchanges, the regulatory authority must:

- approve of operational and planning standards including schemes for the calculation of the total transfer capacity;
- decide on exemptions to normal access rules for new investments;
- ensure compliance with all guidelines adopted under the Regulation.

These core duties already constitute a very significant set of responsibilities for the regulatory authority will. Even the items which are not covered by Article 2 and where, in theory, the regulatory authority only intervenes ex-post will, nevertheless, require them to be involved in the design and implementation of access regimes. A key example of this third party access to gas storage.

### **2.3. Other possible duties for the regulatory authority**

In addition to these core tasks, there are a number of other issues that Member States may also assign to the regulator authority, or a different competent authority:

- issuing authorisations and licenses
- monitoring of security of supply;
- organisation, monitoring and control of the tendering procedure for generation;
- deciding on derogations in relation to take-or-pay commitments for gas;
- dispute-settlement arrangements for access to upstream gas pipelines.

Member States might also give additional tasks to the regulator not specifically required in the Directive, such as ensuring consumer protection, monitoring levels of service or adopting measures to protect vulnerable customers.

### **2.4. Sanctions**

Regulators need to ensure that its decisions are implemented by network operators. If companies are able to ignore regulatory decisions without penalty, this would not meet with the requirement that “undertakings are operated in accordance with the principles of this Directive with a view to achieving a competitive and sustainable market in electricity [natural gas].” and that “regulators are able to carry out their duties referred to in paragraphs 1 to 5 in an efficient and expeditious manner”.

Regulators should therefore be able to impose some sanctions on companies that do not comply with its instructions on a range of issues; for example on unbundling or transparency.

Legislation relating to the regulation of the sector should clearly set out the obligations on network operators to co-operate with the regulatory authorities and implement its decisions. The penalties for not doing so should be clearly spelt out in the legislation. Any appeals procedure must also be clearly established.

Although the question of sanctions is one for subsidiarity, some penalties that could be envisaged are the following:

- public letter to the chief executive of the network company concerned;
- publication of comparative reports demonstrating insufficient performance by the network company concerned;
- financial penalty in the form of a reduction in the network access tariffs allowed by the regulators.

In an extreme case regulators might, if relevant, consider the removal of the operating licence which, in effect, would require the former holder of the licence to cede operation of the network to another company. However the conditions under which this may take place must be clearly set out in advance in order that network operators are not exposed to unnecessary regulatory risks.

## **2.5. Co-operation between Regulators**

The Commission has indicated its intention to set up a European Regulators Group for Electricity and Gas which would constitute a suitable advisory mechanism for encouraging co-operation and co-ordination of national regulatory authorities, in order to promote the development of the internal market for electricity and gas, and to contribute to the consistent application, in all Member States, of the provisions set out in this Directive and Regulation. This will be the subject of a forthcoming Commission Decision.

## **3. SOME OF THE KEY ELEMENTS OF REGULATOR'S DUTIES**

### **3.1. Network Access**

The duties of the regulator in relations to network access are set out in the Articles 20 [18] dealing with the arrangements for third party access, which states that:

*Member States shall ensure the implementation of a system of third party access to the transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. Member States shall ensure that these tariffs, or the methodologies underlying their calculation, are approved prior to their entry into force in accordance with Article 23[25] and that these tariffs, and the methodologies - where only methodologies are approved - are published prior to their entry into force.*

*Rules adopted by transmission system operators for balancing the electricity system shall be objective, transparent and non-discriminatory, including rules for the charging of system users of their networks for energy imbalance. Terms and conditions, including rules and tariffs, for the provision of such services by transmission system operators shall be established pursuant to a methodology compatible with Article 23[25] (2) in a non-discriminatory and cost-reflective way and shall be published.*

Likewise, Article 23 [25] paragraph 2 repeats the role of the regulatory authority, noting that:

*the regulatory authorities shall be responsible for fixing or approving, prior to their entry into force, at least the methodologies used to calculate or establish the terms and conditions for:*

- (a) connection and access to national networks, including transmission and distribution tariffs;*
- (b) the provision of balancing services.*

*Regulatory authorities shall have the authority to require transmission and distribution system operators, if necessary, to modify the terms and conditions, tariffs, rules, mechanisms and methodologies referred to in paragraphs 1, 2 and 3, to ensure that they are proportionate and applied in a non-discriminatory manner.*

There is, therefore, a clear demarcation that needs to be drawn between what the regulator needs to do in advance of tariffs entering into force, and what can be left to ex-post decision making.

The key ex-ante function relates to the approval of methodologies used for network access charges and balancing regimes. Given the regulators also must monitor “the effective unbundling of accounts...[and]...ensure that there are no cross-subsidies between generation, transmission, distribution and supply activities, any ex-ante decision on the methodology used to set tariffs must be based on a comprehensive understanding of the cost drivers of the regulated businesses.

This implies that part of the regulator’s role in approving a methodology should be a certain degree of ex-ante evaluation by the regulator of the main cost items so as to avoid excessive cost recovery and potential cross subsidies; that is to say,

- the value of the capital stock of the regulated company on which a return should be earned and any additions to the capital base in the form of net investments over the period being considered,
- an appropriate rate of return on that capital, taking into account the low risk nature of a regulated business,
- an appropriate depreciation rate on these assets to be collected through annual revenues,

- the operating costs of the regulated business.

However, there are a number of methods at the disposal of regulators to perform such an evaluation of costs. It may not always be necessary or appropriate for the tariffs to be built up directly from the costs of the network business.

For example, one possibility is to begin with an assessment, from first principles, of how the “ideal” network would be designed and would function given the local characteristics such as population density and topology. Alternatively, where there are numerous regional or local networks a common approach is to compare the cost structure of the companies concerned and require those which appear to have the highest costs to progressively improve their performance. International benchmarking of this type is also a valid methodology.

Although network tariffs need to be cost reflective in a general sense, this does not necessarily mean there should be a rigid and automatic correspondence between the costs of the regulated business and the revenues collected from network tariffs. Regulators are likely, for example, to wish to provide incentives to improve efficiency or to encourage ongoing investment or extension of the networks. Some discussion of the investment needs will need to be conducted at the time when the overall price setting methodology is being approved by the regulator. A situation where companies have an incentive to preside over a deterioration of the assets should be avoided and regulators should be able to monitor the condition of assets on a regular basis as part of their work. This is mentioned in Article 3(2) of the Directives which notes that “...measures may include, in particular, the provision of adequate economic incentives.....for the maintenance and construction of the necessary network infrastructure, including interconnection capacity. The regulatory formula should also take account of forecast increases in the amount of energy to be transported. Network businesses should not simply get additional revenue as the overall demand for energy increases. The additional costs of additional traffic should be explicitly considered in the methodology.

Regulators will also need to consider, as part of the methodology, whether the structure chosen produces individual tariffs for network users that are non-discriminatory and reasonably reflective of the costs incurred. The concept of cost-reflectiveness also requires a flexible approach in this case. For example, many tariff systems incorporate a degree of postalisation of tariffs whereby customers in a particular region will face a similar charge not dependent on their geographic location. Such an approach to the allocation of costs is acceptable for reasons of simplicity even if it could be argued that different network users in fact induce somewhat different cost levels. Member States are also required to “protect customers in remote areas” (Article 3(5), The important point is that the tariffs as a whole do not lead either involve cross subsidies or discrimination between competing suppliers.

Finally regulators retain their ex-post dispute settlement function. This may involve the verification that the actual tariffs charged correspond to the methodology as well as resolving technical issues relating to network access conditions. This may well involve some regulatory oversight of the network codes of the regulated businesses.

### **3.2. Balancing and Storage**

For the balancing regime, regulators would have to approve the basic methodology for determining charges and have the right to intervene ex-post on the level of charges produced by the methodology in question. There is a distinction to be drawn here between the procurement by the TSO of balancing energy for real time system operation (Article 11(6) of the electricity Directive and 8(4) of the gas Directive) and the charges placed on system users which are themselves out of balance.

The regulator clearly has jurisdiction of the latter question as set out in Article 23[5] (2b). In approving the methodology for balancing charges it would normally be expected that the regulator would follow an approach reflective of the TSOs procurement methodology. Alternatively the regulator may choose to intervene more directly in the price determination process, particularly if the market for balancing energy is illiquid and concentrated.

Under the Regulation on cross border electricity exchanges there may eventually be a requirement in the guidelines for Member States to harmonise their approach in order to ensure effective congestion management.

For storage of gas, the Directive envisages a choice between regulated or negotiated access. However, as already noted, even under the latter the regulator retains the task of monitoring the tariffs and methodologies used, and may intervene on these issues as set out in Article 25(4).

### **3.3. Unbundling**

Under the Directives, the regulatory authority will also have another set of competences relating to ensuring effective unbundling. As already noted the regulatory has a duty to, at least, monitor:

*the effective unbundling of accounts, as referred to in Article 19, to ensure that there are no cross-subsidies between generation, transmission, distribution and supply activities; and*

*the overall compliance of transmission and distribution system operators with the Directive.*

The regulator is assured access to these unbundled accounts “*insofar as necessary to carry out their functions*”. The regulator is also responsible as the main customer for reports on compliance with the requirements for management unbundling in that:

*the transmission system operator shall establish a compliance programme, [and] an annual report, setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority referred to in Article 23[25](1) and shall be published.*

In order to fulfil these duties for vertically integrated companies, one possibility is that the regulator could, based on its right to collect information from the regulated business, establish guidelines on how separate accounts should be drawn up by the regulated company, including rules for the allocation of costs, for example relating to common services. It may also imply involvement of the regulator in drawing up the terms of reference of any review of compliance with the measures to ensure functional unbundling.

### **3.4. System Operation and Transparency**

Both the Directives and the Regulation give the regulatory authority responsible for network access a series of tasks relating to the operation of the transmission network, in particular relating to the rules for congestion management. In particular the Directive gives the regulator a general duty to monitor and potentially intervene concerning:

*the rules on the management and allocation of interconnection capacity, in conjunction with the regulatory authority or authorities of those Member States with which interconnection exists;*

*any mechanisms to deal with congested capacity within the national electricity system;*

*the publication of appropriate information by transmission and distribution system operators concerning interconnectors;*

*the level of transparency and competition.*

Clearly, therefore, the regulator's powers will go beyond merely the monitoring of allocation rules since, by its decisions in dispute cases and its interventions in the market ex-post, the regulatory authority will establish what permissible practice in terms of capacity allocation is, and what is not.

Furthermore, for electricity, in relation to congested interconnectors, or internal connections, which affect interconnection capacity, the Regulation expands the duties of regulators, in particular stating that :

*the regulatory authorities, when carrying out their responsibilities, shall ensure compliance with this Regulation and the guidelines adopted pursuant to Article 8,*

*[the] scheme for the calculation of the total transfer capacity and the transmission reliability margin based upon the electrical and physical features of the network.... shall be subject to the approval of the regulatory authorities.*

Therefore, once guidelines are adopted under the procedure envisaged in the Regulation, the regulatory authority will have the duty, not just of monitoring the rules adopted by the TSO, but to ensure that these comply with the adopted guidelines.

Regulators will also be required to ensure that revenues resulting from the allocation of interconnection shall be used for the purposes set out in the regulation, namely;

- (a) *guaranteeing the actual availability of the allocated capacity;*
- (b) *network investments maintaining or increasing interconnection capacities;*
- (c) *as an income to be taken into account by regulatory authorities when approving the methodology for calculating network tariffs, and/or in assessing whether tariffs should be modified.*

This effectively requires the regulator to maintain some kind of audited account of the revenues collected by any market based allocation mechanisms.

### **3.5. Security of Supply**

Regarding Security of Supply, the Directives contain explicit duties for Member States which may, or may not, be assigned to the regulatory authority. In particular, *the monitoring of security of supply issues*. In addition where, in special circumstances, the tendering option is activated, the regulatory authority may be *responsible for the organisation, monitoring and control of the tendering procedure*.

There may be certain advantages in giving these tasks to the regulatory authority, particularly the implementation of a tendering procedure. The regulator could thereby ensure that the process was non-discriminatory and proportional to the security or supply issue being faced.

### **3.6. Concentration and Market Dominance**

As already noted the regulatory authority must approve methodologies for balancing and retains the right to intervene in the market. Balancing markets are potentially subject to manipulation by dominant generators or the incumbent gas supplier. Therefore the regulators role creates something of an overlap with the obligation on Member States to:

*create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour.*

Until 2010, the relevant authorities of the Member States have to provide, by 31 July of each year a report on market dominance, predatory and anti-competitive behaviour to the Commission.

### **3.7. Derogations in relation to take-or-pay commitments (gas)**

The Gas Directive allows for a temporary derogation from the requirement to provide third party access in cases where:

*a natural gas undertaking encounters, or considers it would encounter, serious economic and financial difficulties because of its take-or-pay commitments accepted in one or more gas-purchase contracts.*

These applications are made to the government of the Member State concerned or a designated competent authority. The latter could clearly be the regulatory authority. Given that the specified regulatory authority is responsible both for the terms and conditions for third party access, and dealing with disputes, it would seem natural that this body is also assigned the task of examining the effect of take or pay contracts. Ultimately such decisions need to be reviewed by the Commission which inevitably require the opinion of the regulatory authority in any case.

### **3.8. Access to Upstream Gas Pipelines**

Upstream gas pipelines are something of an exception to the overall rules concerning third party access. Although Member States shall

*apply the objectives of fair and open access, achieving a competitive market in natural gas and avoiding any abuse of a dominant position,*

they may also take into account:

*the need to refuse access where there is an incompatibility of technical specifications which cannot be reasonably overcome;*

*the need to avoid difficulties which cannot be reasonably overcome and could prejudice the efficient, current and planned future production of hydrocarbons, including that from fields of marginal economic viability;*

*the need to respect the duly substantiated reasonable needs of the owner or operator of the upstream pipeline network for the transport and processing of gas and the interests of all other users of the upstream pipeline network or relevant processing or handling facilities who may be affected; and*

*the need to apply their laws and administrative procedures, in conformity with Community law, for the grant of authorisation for production or upstream development.*

The effect of these clauses is that a negotiated access regime is retained for upstream pipelines.

Member States have to provide dispute-settlement arrangements, including “an authority independent of the parties with access to all relevant information, to enable disputes relating to access to upstream pipeline networks to be settled expeditiously”. Again this may be the regulatory authority.

### **3.9. Licences and Authorisations**

The Directives only discuss licensing for electricity generation or for the construction or operation of natural-gas facilities and these decisions are to be made by a designated competent authority. However, in many Member States, the issue of licences and authorisations is often handled by regulatory authorities and licences are also required by network operators and retail suppliers. Licensing provides a means for regulators to implement their decisions on, for example, methodologies and to deal with issues such as standards of performance.

## **4. CONCLUSIONS**

The Directives imply a set of new minimum standards for the involvement of a specific regulatory authority in determining network access conditions which will imply a change in practice in some Member States. To comply fully with the Directive, the regulator should have the responsibility, resources and full access to information to enable it to:

- approve a suitable methodology for access tariffs which takes into account the costs of the business and other parameters and provides appropriate incentives;
- approve either the structure of the balancing market, or the methodology for setting fixed charges for the purchase and sale of balancing energy;
- in some cases, determine rules for allocation of costs for unbundled businesses and to take an active role in setting out the requirements of the compliance audit;
- determine and implement rules for the transparent and non-discriminatory allocation of congested infrastructure, especially those affecting capacity between Member States;
- carry out an audited account of the use of any revenues from capacity allocation mechanisms;
- have an involvement in the investment decisions of the network operators through the revenue setting procedure and to decide (with Member States if appropriate) on possible exemptions for third party access for new investments;
- co-operate closely with competition authorities or competition law implementing authorities

There are also a number of areas where it is recommended that the Regulator may also take over responsibility. In particular:

- monitoring and reporting to the Commission on security of supply issues,
- deciding on exemptions to TPA relating to old take-or-pay contracts,
- acting as dispute settlement authority for the upstream gas industry,
- issuing, amending and policing the licences of generator, gas operators, network companies and retail suppliers.