

**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**

**THIRD PARTY ACCESS TO STORAGE FACILITIES**

**16.1.2004**

**1. DEFINITIONS AND SCOPE**

The scope of the directive covers common rules for the transmission, distribution, supply and storage of natural gas (Article 1(1)). Although the wording of this paragraph is identical to the respective provision of the 1<sup>st</sup> IGM Directive (see Article 1), the relevant definitions entail a larger scope.

Pursuant to Article 2(9),

*“storage facility” means a facility used for the stocking of natural gas and owned and/or operated by a natural gas undertaking, including the part of LNG facilities used for storage but excluding the portion used for production operations, and excluding facilities reserved exclusively for transmission system operators in carrying out their functions.*

The definition restricts the scope of the application of the directive’s provisions on access to storage to those storage facilities that are not exclusively reserved for transmission system operators (TSOs) in carrying out their functions. In addition, the portion of storage facilities used for production operations would also be excluded from the scope of the directive.

With a view to clearly defining storage facilities and the portion of storage facilities falling under the scope of the directive in the sense of Art 19, it is necessary to delimit storage facilities and their portion available to third parties from those not available to third parties.

This may raise the question of what should be considered functions of TSOs in the sense of the directive and relevant in the present context. Putting aside Article 8(1) listing tasks and duties for all system operators, the definition of “transmission system operators” pursuant to Article 2(4)

*means a natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transportation of gas;*

while Article 8(2) stipulates that

*Rules adopted by transmission system operators for balancing the gas transmission 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 25(2) in a non-discriminatory and cost-reflective way and shall be published.*

and Article 8(4) requires that

*Transmission system operators shall procure the energy they use for the carrying out of their functions according to transparent, non-discriminatory and market based procedures.*

This would mean that, in addition to what is covered by the definition of a TSO balancing including the procurement of the necessary energy for carrying out its functions would sufficiently describe the functions of a TSO.<sup>1</sup>

As a consequence and with a view to defining storage capacities available for TPA, TSOs must clearly indicate which storage facilities or portion of storage facilities should be exclusively reserved for carrying out these functions. This should be done as accurately as possible by, for example, reference to historical data. Even the exclusively reserved capacity, as long as not used by the TSO, should, in the view of the Commission, be made available on interruptible terms to the market.

Furthermore, storage operators running facilities used for both production and stocking of gas would have to indicate and substantiate which portion of the storage facility concerned would be necessary for production purposes and would therefore not be available for TPA.

If a TSO wants to reserve a specific storage facility exclusively for carrying out its function, the Commission takes the view that it should clearly substantiate to the relevant national authorities, why the entire capacity of the facility is needed. The relevant national authorities should then have to approve the decision of the TSO. They should, however, examine whether the needs of the TSO would allow offering this storage capacity on an interruptible basis to the market.

A similar procedure should be carried out for “dual use” storage facilities, i.e. facilities used as gas storage, but also for production purposes.

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<sup>1</sup> It is worth pointing out that these provisions are only relevant for non-market based balancing regimes. In market-based balancing regimes, TSOs would probably buy (sell) energy they (do not) need for balancing purposes through competing bids from market participants. Under such a balancing regime, there would be no need for TSOs to exclusively reserve storage capacity.

To sum up: in case of non-market based balancing regimes, i.e. where TSOs want to exclusively reserve storage facilities or a portion of them for carrying out their functions, relevant national authorities should make sure that there is a clear cut delimitation of storage capacity available to TPA from that not available to TPA on the grounds of TSO needs. As for the latter, it should be made available to the market on an interruptible basis.

## **2. DESIGNATION AND TASKS OF SYSTEM OPERATORS**

Pursuant to Article 2(13),

*“system” means any transmission networks, distribution networks, LNG facilities and/or storage facilities owned and/or operated by a natural gas undertaking, including linepack and its facilities supplying ancillary services and those of related undertakings necessary for providing access to transmission, distribution and LNG;*

Contrary to the 1<sup>st</sup> IGM Directive, the definition of “system” in the 2<sup>nd</sup> IGM Directive explicitly includes “storage facilities”. As a consequence, all provisions referring to “system” would equally apply to storage facilities and, if case may be, their operators respectively.

Article 7 requires Member States to designate system operators, including storage system operators, and stipulates that the designated system operators act in accordance with Article 8 to 10.

Article 8 lays down the tasks of system operators including storage system operators.

The provisions contained in Article 8(1) are as follows

- 1. Each transmission, storage and/or LNG system operator shall:*
  - (a) operate, maintain and develop under economic conditions secure, reliable and efficient transmission, storage and/or LNG facilities, with due regard to the environment;*
  - (b) refrain from discriminating between system users or classes of system users, particularly in favour of its related undertakings;*
  - c) provide any other transmission system operator, any other storage system operator, any other LNG system operator and/or any distribution system operator, sufficient information to ensure that the transport and storage of natural gas may take place in a manner compatible with the secure and efficient operation of the interconnected system;*
  - (d) provide system users with the information they need for efficient access to the system.*

and cover the following principles:

- General obligations of storage system operators (SSO) would include operating, maintaining and developing the system under economic conditions in a secure, reliable and efficient manner with due regard to the environment. The Commission takes the view that efficient operation of storage systems would exclude capacity hoarding, which would take away capacity from the market and would thus not comply with what could be considered economic or efficient from a storage operator's point of view.

Security of supply requirements must be taken into account, but they have to be transparent and non-discriminatory, in order to comply with the objectives and underlying preconditions of the directive. Appropriate mechanisms should be determined with a view to ensuring security of supply without impeding the development of a competitive market for natural gas.<sup>2</sup>

- The principle of non-discrimination also strictly applies to SSOs. As a consequence, each user requesting access to storage facilities must be given access in the same manner as access is granted to networks, i.e. applying a corresponding level of non-discrimination and transparency. Hence, non-discriminatory treatment of third parties must be ensured in line with the requirements of a fully operational and competitive internal market.
- Transparency vis-à-vis system operators is a general duty for the sake of the secure and efficient operation of the interconnected systems. It constitutes an obligation to exchange the necessary information required for the technical operation of the system.
- Finally, SSO have to provide system users with the information they need for efficient access to the system. From the Commission's point of view, such information would at least include
  - information on available firm and interruptible capacities in relevant storage facilities over a certain period of time
  - information on access conditions including tariffs
  - information on services available

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<sup>2</sup> Guidance on this matter would be provided from the proposed directive concerning measures to safeguard security of natural gas supply

### 3. CONFIDENTIALITY

Relevant provisions of the Directive

#### *Article 10*

#### ***Confidentiality for transmission system operators***

1. *Without prejudice to Article 16 or any other legal duty to disclose information, each transmission, storage and/or LNG system operator shall preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business, and shall prevent information about its own activities which may be commercially advantageous from being disclosed in a discriminatory manner.*

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The provisions of Article 10 explicitly mention storage and imply that storage operators will be committed to confidentiality the same manner as any other gas undertaking.

The requirement of confidentiality and as a consequence, the set-up of “Chinese walls” would be particularly important, if a SSO forms part of a vertically integrated company containing storage and supply undertakings. The legal and functional unbundling provisions laid down in Articles 9 (transmission), 13 (distribution) and 15 (combined operator) would efficiently separate the natural monopolies of network operators from the supply business and thus provide the necessary independence and incentives for grid operators to act in accordance with the overall objectives of the directive. Storage facilities would not necessarily be separated from the supply business.

For this reason and in order to achieve the overall objectives of the directive, the confidentiality requirement of Article 10 is fundamental, in order to avoid distortion of competition in cases where storage facilities are not legally separated from the supply business. With a view to ensuring compliance with the confidentiality requirement, the relevant authorities may at least require sufficient evidence from the companies concerned so as to prove an effective establishment of Chinese walls between the SSO and the supply branch of the vertically integrated company.

As for combined operators encompassing SSO, the confidentiality requirement of Article 10 would apply in the same manner. However, one may argue that it is less relevant, since it is difficult to imagine that the storage operator as part of a combined operator would dispose of commercially sensitive information that is not available to the TSO, DSO or LNG operator. The only exception to that rule is a SSO in a vertically integrated company also comprising LNG facilities and which runs its storage facility completely separated in terms of technical and economic operation from the LNG facilities. In such a case, the confidentiality requirement assumes the same importance as for vertically integrated companies running storage and supply.

#### 4. ACCESS TO STORAGE FACILITIES

Article 19 is the core provision as far as the regulatory framework for operating storage facilities under the new competitive environment is concerned. It represents the most important implementation of what is announced in consideration 19, according to which

*...additional measures should be taken to clarify the provisions for access to storage and ancillary services.*

Consequently, Article 19(1) constitutes the right for access to storage while leaving it to Member States, whether a negotiated or regulated access regime should be implemented. Irrespective of the system chosen (negotiated or regulated), it has to operate in accordance with objective, transparent and non-discriminatory criteria.

“Objective” in this respect would mean that the criteria have to relate to the factual characteristics for access to storage facilities, such as existing technical features, quality requirements etc, they have to be comprehensible for any third party and need to be technically justified.

“Transparent” would mean that all criteria have to be published ex-ante, in order to allow a third party evaluating the technical and economic consequences of TPA to storage facilities. They also have to allow insight into derivation of the criteria, i.e. the underlying technical and economic reasons for establishing them.

“Non-discriminatory” would mean that services required from a third party would, in absolute terms and under the same circumstances, result in the same economic consequences for all third parties requiring the same service.

In addition to these criteria, Article 19(1) restricts access to storage only “when technically and/or economically necessary [...]for the supply of customers”. The term “technically and economically necessary” would be best explained by referring to the variation of demand over a given period of time. It represents one of the most characteristic features of the gas business and can be attributed to a number of reasons, such as:

- structure of the demand: the share of gas used by households with a more structured demand profile vis-à-vis, for instance, the share of gas used for base-load power generation would clearly influence the fundamental structure of the demand;
- temperature: usually, in winter times the demand is higher as more gas is used for heating purposes. On the other hand, as it is the case in the US, gas may be used for air conditioning on hot summer days or in hot regions. Depending on the share of temperature sensitive demand, a change of one or two degrees may considerably increase/decrease daily demand profiles, while it predetermines the demand picture over the year (seasonal variation).
- working time: demand may also depend on working times of factories (week ends, holiday periods) and habits of people.
- general economic factors: a high scale of operations in industrial production processes obviously affects the level of demand for industrial purposes.

As a consequence, a certain level of flexibility in supplying gas to consumers is indispensable for the gas business. While storage is not the only tool offering flexibility to network users for the supply of their customers, it is one of the most important ones and considering the underlying economics, often the only suitable one. Supply flexibility in the sense of production or import flexibility, line pack and spot gas may also be in principle available, but would often not suit the needs of the customer/network user due to either the scale and the short notice of the flexibility required or the economics underlying. For instance, providing the entire seasonal flexibility by import flexibility would imply considerable pipeline capacity is left unused thereby exorbitantly increasing capital costs and rendering gas supply uneconomic and not competitive anymore. Production flexibility would usually not allow covering short-term demand hikes, no matter whether they are foreseen or not. Such kind of flexibility requirements are usually, but not exclusively, provided by different kinds of storage facilities, which are designed for different purposes. While large aquifer or depleted field storage facilities are usually designed to match seasonal variations of demand and supply, salt caverns and specific peak shaving facilities would allow covering more short-term flexibility requirements, often appearing at shorter notice. Such storage facilities would also allow an annual cycling rate (filling and withdrawal) higher than one.

In a competitive market with a full range of transportation services emerging (firm, interruptible, short-term, long-term), access to flexibility tools including storage facilities is indispensable for its well functioning. In particular, the different flexibility scales of different kinds of storage facilities would enable network users to provide or procure tailor made supplies according to the needs of the consumers. This may include short term and long term, firm and interruptible services as well as, if the market requires, the development of additional storage services, such as parking.

The Commission takes the view that, if access to storage is related to a planned or existing supply contract, it would always comply with the requirements of technical and economical necessity. By contrast, access to storage under Article 19 does not extend to situations in which it can be proved that the purpose or intention of having such access is not related to the supply of customers. This is notwithstanding the provisions of Article 21 (Refusal of access).

It is worth noting that the storage facilities to which access is requested to and the customer who is supplied through TPA to this storage facility must not necessarily be situated in the same Member State.

The Directive allows both a negotiated and a regulated access regime without discriminating against any of them. The above criteria would apply to either regime. While in the case of negotiated access the storage system operator has to publish the main commercial conditions, regulated access to storage facilities will have to be provided on the basis of published tariffs and/or other terms and obligations. This also means that the results of both regimes should be equal, in order to comply with the principle of non-discrimination and competition embedded in the Directive.

Against the background of the above, it is obvious that SSO would need to offer a range of services, in order to enable access to storage facilities that complies with the criteria laid down in the directive, in particular Art 19. The yardstick could be what kind of services must be offered in order to allow all network users requesting access to storage for the supply of customers economically doing their business.

The development of the internal market including hubs and more flexible trading forms underpinned by weekly and daily transportation services would call for adapting storage services to the requirements of the market. Beside annual contracts, storage contracts with shorter duration allowing fully exploiting the commercial potential of the market would constitute a logical supplement to the emerging shape of the single market for natural gas. Bundled and unbundled services with different time scales, accompanied by a sufficient degree of information and transparency with respect to available capacities, procedures on capacity allocation and congestion management, anti-hoarding mechanisms as well as market based mechanism may constitute minimum requirements in that respect.

It is also worth bearing in mind that the provisions of the directive<sup>3</sup> indicate that access to storage facilities represents an important instrument of achieving a well functioning internal market for gas. The wording of the relevant articles of the Directive implies an approach for access to storage that at least with respect to the result of the access, albeit not with respect to the procedure, is similar to the access to networks. Third party access conditions and relevant services offered to them, transparency requirements, capacity allocation mechanisms, the role of storage for (further) developments of market based balancing and other mechanisms are likely to play an important role for a regulatory regime for access to storage facilities compatible with the provisions of the Directive.

## **5. REFUSAL OF ACCESS**

According to Article 21, access to storage facilities can be refused on the same grounds as access to the network system, i.e. lack of capacity, public service obligations (PSO) and take-or-pay (ToP) problems. A number of pre-conditions must be met to ensure that access is refused in a manner compatible with the overall objectives of the directive.

In order to justify refusal of access to storage facilities on the grounds of lack of capacity, these pre-conditions are from the Commission's point of view

- a) objectivity and transparency: the storage operator must comprehensibly prove that no capacity is available. Minimum requirements of such a prove would include regularly published data on available capacity (injection, withdrawal, volume) over a certain period of time including historical data and distinguishing, if case may be, between firm and interruptible storage capacity. The data should show that the entire working capacity of the storage facility concerned is contractually booked (no availability of firm capacity) or physically used (no availability of interruptible capacity).
- b) non-discrimination: this would mean that the outcome of a request for access to storage submitted to a SSO or a combined operator running a storage facility would be the same (i.e. refusal on the grounds of lack of capacity), no matter who is behind the third party submitting a request (marketing affiliate of SO or a company not related to SO). It would also mean that a change in terms of available capacities would be made known to all parties concerned/interested in a non-discriminatory manner, so that all parties

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<sup>3</sup> See consideration 20 in connection with Article 19

concerned/interested would be enabled to submit their request under a non-discriminatory capacity allocation mechanism.

- c) depending on the situation in each Member State lack of available remedy through cost-efficient measures, as laid down in Art 21(2). According to this provision, Member States may decide not to allow refusal of access to storage facilities on grounds of lack of capacity if the required capacity could be provided by enhancements as far as it is economic to do so or when a potential customer is willing to pay for them.

A clear and transparent definition of Public Service Obligations, as required by Article 3 (2), in terms of storage capacities is considered an indispensable prerequisite for refusal of access to storage facilities on grounds of PSOs. If PSOs are not in line with the requirements of Article 3(2), they cannot constitute grounds for refusing access to storage. In that respect, it should also be taken into account, whether the relevant PSOs (e.g. for security of supply) could be achieved by using other instruments, such as, in the case of security of supply, supply flexibility, spot markets, interruptible contracts etc., provided it can economically be justified. In determining the storage needs for fulfilling PSOs, there must be no discrimination against newcomers, i.e. new market entrants taking PSOs must be given the same right and their storage needs for PSOs must be taken into account in the same manner as for the incumbent companies.

TPA to storage is not likely to be refused on grounds of Take-or-Pay (ToP) obligations. For this reason, it is not treated in this paper. The Commission is, however, ready to discuss this matter with Member States upon request.