

Guidelines for Good TPA Practice for Storage System Operators (GGPSSO)

23 March 2005

Scope and objective of the GGPSSO

The GGPSSO concern Third Party Access (TPA) to storage facilities in accordance with Articles 2(9) and 19 of the European Directive 2003/55/EC (the Gas Directive). They intend to give a minimum set of rules required for the organization of the market for storage capacity. They are forward looking and should be flexible enough to account for developments in market arrangements. They are addressed to all Storage System Operators (SSOs) as well as the storage users and relate to the implementation of the Gas Directive. The GGPSSO do not go beyond the Gas Directive in creating or restricting TPA rights to any storage facility or part thereof.

The purpose of these GGPSSO is to ensure that SSOs provide the services needed by storage users on a fair and non-discriminatory basis. Systems and processes shall facilitate the sustainable development of competition in gas supply. These tasks are pursued taking into account technical constraints and the economically efficient use of the storage infrastructure.

The GGPSSO are not legally binding, and consequently no requirement can be made under the GGPSSO that contravenes national or European legislation.

In the event that any party believes that there is a conflict between the requirements of the GGPSSO and national legislation that will materially affect either its interests or its ability to comply with the GGPSSO, it will notify without any unreasonable delay the relevant national regulatory authority, specifying in detail the exact nature and extent of the conflict. This notification will be made public unless the relevant national regulatory authority is satisfied, on the basis of objective justification provided to it, that to do so would unacceptably infringe on commercial confidentiality.

It shall be incumbent upon each SSO to demonstrate to the relevant national regulatory authority upon its request that it meets the following guidelines. The relevant national regulatory authority should check that results in both regimes (nTPA and rTPA) are equivalent in terms of non-discrimination, transparency and competition.

An overriding principle is that storage systems and processes implemented by the SSOs maintain secure, reliable and efficient operation of the storage system (Article 8(1.a) of the Gas Directive).

Subject to compatibility with national requirements, SSOs will provide TPA to storage according to the following principles by 1 April 2005 unless another date is specified below. Where implementation by 1 April 2005 is not achievable the SSO will make public the fact and notify the relevant national regulatory authority, and will pursue implementation at the

earliest possible date, but in any event not later than the deadlines specified in the relevant sections.

1. Roles and responsibilities of Storage System Operators

1.1. SSOs, be they separate entities, part of a combined operator in the sense of Article 15 of the Gas Directive, or part of a vertically integrated company in the sense of Article 2(20) of the Gas Directive, shall act in accordance with the principles of non-discrimination, transparency and competition. They are responsible for the provision and management of technical storage capacity, storage services and information as well as the technical integrity and safety of storage facilities.

1.2. SSOs shall inter alia:

- a. operate and maintain under economic conditions secure, reliable and efficient storage facilities;
- b. offer third party access services on a non-discriminatory and transparent basis to all storage users requesting access to storage, including own affiliated companies, either using standard storage contracts or a storage code, developed by the SSOs in proper consultation with users, and approved or monitored as appropriate by the relevant national regulatory authority;
- c. aim at accommodating market demand on a non-discriminatory basis, without imposing barriers to customer supply and to trade, whilst granting efficient and competitive access taking into account § 3.4 and 4.2;
- d. establish rules on the use of capacity aimed at facilitating competitive and efficient use of that storage facility, in particular to discourage storage capacity hoarding. Maximise the use of available capacity and offer unused capacity at least on an interruptible basis, and services according to § 3.3;
- e. treat commercial information confidentially, especially with regard to any affiliated company, in order to avoid any discrimination between storage users;
- f. provide in a timely fashion the information required by storage users and transmission system operators;
- g. co-operate with TSOs through interoperability agreements in order to ensure efficient and secure operation of storage and transportation networks;
- h. when asking or providing guarantees to storage users with respect to creditworthiness, ensure that these guarantees are non-discriminatory, transparent and proportionate and do not constitute any undue market entry barrier.

1.3. In the case of a SSO being part of a vertically integrated company, the SSO should draw up a document setting out all the terms and conditions relating to storage use by the affiliate company to be made available to the relevant national regulatory authority upon request by 1 September 2005. This requirement in no way limits any rights that the relevant national regulatory authority may have under national or European law to require information provision before 1 September 2005.

2. Role of Storage Users

2.1. Storage users shall inter alia:

- a. be responsible for making nominations and for providing gas for injection into and accepting gas on withdrawal from storage facilities in accordance with prevailing contractual specifications, technical rules and agreed procedures;
- b. provide all data required that are necessary for the SSO to carry out its duties as specified in the storage code and/or storage contract;
- c. not use capacity rights in a manner that is intended to restrict, distort or prevent competition, for example through capacity hoarding;
- d. put relevant IT in place in order to be able to communicate with SSOs via agreed interfaces and standards.

3. Necessary TPA services

- 3.1. Storage capacity not excluded from TPA pursuant to the Gas Directive, when technically and economically necessary for efficient access to the network, shall be offered to storage users on a non-discriminatory basis that facilitates competition and trade. Therefore, the SSO shall offer to storage users the technical storage capacity, excluding the portion used for production operations and capacities reserved exclusively for transmission system operators in carrying out their functions, according to rules made transparent by the relevant national regulatory authority. Exclusion of storage capacity from TPA shall be approved or monitored by the relevant national regulatory authority.
- 3.2. Any storage capacity needed for any PSO should be offered on a TPA basis; requirements of non discrimination still apply. Depending on national law, if a party is responsible for PSOs, it shall demonstrate upon request to the relevant national regulatory authority that their requested capacity reservation is no more than what is required to satisfy the relevant PSO.
- 3.3. The SSO shall offer to storage users the storage capacity in a way that facilitates competitive, non-discriminatory, and efficient access to best meet storage users' needs and that facilitates trade in storage services in secondary markets. Specifically the SSO shall offer in the primary market, pursuant to its responsibilities under § 1, a menu of services, including the following:
 - a. bundled services (SBU) of space and injectability/deliverability with determined technical ratios and with an appropriate size;
 - b. unbundled services supplementing SBUs at least for available storage capacity at the beginning of the storage year;
 - c. long-term (≥ 1 year) and short-term services (<1 year) down to a minimum period of one day;
 - d. both firm and interruptible storage services. The price of interruptible services may reflect the probability of interruption.
- 3.4. Services offered under § 1 and § 3.3 shall:
 - a. be developed with proper consultation with storage users to take into account market demand;

- b. take into account storage technical constraints and the economically efficient use of the storage infrastructure. Any limitation on the offer of services on the grounds of these criteria should be made public under the process of 3.4.a and be duly substantiated.
- 3.5. Where compatible with the balancing regime of the interconnected gas transportation system, the SSO shall offer a service which includes an obligation to allocate the gas which has been nominated, including deemed nominations, if the nomination has been accepted by the SSO.
 - 3.6. SSOs shall offer services that are consistent with the use of the interconnected gas transportation systems and facilitate easy access through cooperation with the TSO, in compliance with § 10.
 - 3.7. If consistent with PSOs, taking into account technical constraints and the economically efficient use of the storage infrastructure, all services shall be offered without restriction on the starting date and the prevailing physical flow and without any unjustified additional costs in compliance with § 7. Subject to the same constraints, injection and withdrawal of gas should, in principle, be possible at any time.
 - 3.8. Limits on the required minimum size of storage capacity rights shall be justified on the basis of technical constraints and permit smaller storage users to gain access to storage services. Storage users should be allowed to pool their nominations with each other with a view to overcome potential technical capacity thresholds. Moreover there should be no undue restrictions based on historical patterns.
 - 3.9. The SSO should develop information systems and electronic communication to provide adequate data to storage users and to simplify transactions (such as nominations, capacity booking and transfer of capacity rights between storage users). The SSO shall respond to storage users in a time frame compatible with the storage users' reasonable commercial needs.
 - 3.10. Each SSO shall meet the following timetable:
 - 3.1, 3.2, 3.3.a, 3.3.c (long term), 3.4, 3.5, 3.6, 3.7 and 3.8: 1 April 2005;
 - 3.3.b, 3.3.c (short term), 3.3.d: 1 April 2006;
 - 3.9: 1 April 2005. Where substantial IT developments are necessary, implementation should be made no later than: 1 April 2006.

4. Storage capacity allocation and congestion management

- 4.1. Storage capacity allocation mechanisms and congestion management procedures shall:
 - a. facilitate the development of competition and liquid trading of storage capacity and be compatible with market mechanisms including spot markets and trading hubs while being flexible and capable of adapting to evolving market circumstances and discourage hoarding;
 - b. take into account the integrity and the maintenance of the storage system concerned as well as security of supply where relevant legal rules are incumbent upon the SSO;

- c. not create undue barriers to market entry and not prevent market participants, including new market entrants and companies with a small market share, from competing effectively;
 - d. ensure the maximum availability and efficient use under economic and non-discriminatory conditions of technical storage capacity;
 - e. be subject to consultation with storage users.
- 4.2. In case of congestion:
- a. non discriminatory, market-based solutions shall be applied by the SSO or by the relevant national regulatory authority, where appropriate;
 - b. alternative solutions such as pro-rata mechanisms may be considered if they ensure equivalence in terms of non-discriminatory and competitive access;
 - c. the SSO or the relevant national regulatory authority shall appropriately balance the portion of storage capacity contracted under long-term contracts and short term contracts, with the aim of promoting effective competition.
- 4.3. In no circumstances should the provisions of § 4.1 and 4.2 prevent customers from changing suppliers at any time of the year.
- 4.4. The SSO shall actively endeavour to discourage hoarding and facilitate re-utilisation and trade of storage capacity by all reasonable means, including at least the offer on an interruptible basis of all unused capacity (e.g. day-ahead release of non-nominated injectability and deliverability).
- 4.5. If, in spite of all measures aimed at preventing capacity hoarding, capacity remains unused and significant and prolonged contractual congestion occurs, the relevant national regulatory authority may according to national law introduce measures to ensure the efficient functioning of the market, including the efficient use of storage capacity.

5. Confidentiality requirements

- 5.1. SSOs should take steps to ensure appropriate arrangements are in place to protect the confidentiality of information, at least including that:
- a. commercially sensitive information from storage users' account remains confidential. Databases related to storage operations should be kept separate. New IT systems being developed in vertically integrated undertakings should be developed separately for the storage business;
 - b. no information available to the SSO concerning its storage business shall be passed to other parts of any affiliate of the company in advance of being provided to all market participants; staff working for any affiliate business (e.g. supply) must have no access to information which could be commercially advantageous, such as details on actual or potential storage users, and is not made available to all market parties. The arrangements to implement this requirement should include a code of conduct for staff and a compliance programme, supervised by a Compliance Officer;
 - c. if supply and storage are part of an integrated company, regardless of the internal structure of the company, or when there are no separate computer systems, specific confidentiality duties must be clearly defined. It shall be

incumbent upon the companies concerned, upon request of the relevant national regulatory authority, to prove an effective establishment of firewalls between the SSO and the supply branch of the vertically integrated company. The arrangements to implement the above requirements should include a code of conduct for staff (including a compliance programme), supervised by a Compliance Officer;

- d. cost effective solutions should be implemented to ensure that the SSO and the supply business are not located in the same place. The SSO and the supply business should be located in separate buildings, provided such a measure is proportionate.

6. Transparency requirements

- 6.1. SSOs should implement user-friendly systems to make public the information specified below in a timely manner in national language and in English on the Internet. Information shall be disclosed in a meaningful, quantitatively clear and easily accessible way and on a non-discriminatory basis.
- 6.2. Non-confidential information must be provided promptly and on the same time scale to all users on a non discriminatory basis. User(s) may request the SSO not to publish information about the aggregate use of storage if such publication would harm the commercial interest of user(s). In cases of non-publication, the relevant national regulatory authority will, when requested by relevant parties, review the decision not to publish. In doing so it will balance the commercial sensitivity of information against the public interest for transparency. If it considers that the reasons for non-publication are not proportionate, are unfair, or discriminatory, the relevant national regulatory authority can require that the SSO publishes the information. In any respect, information should always be published by the SSO when three or more storage users have been allocated capacity by virtue of contractual or any other similar arrangements, excluding the portion used for production operations, and excluding capacities reserved exclusively for transmission system operators in carrying out their functions.
- 6.3. The SSO shall notify the relevant national regulatory authority, without any unreasonable delay, where it has not published specific data (e.g. for reasons of costs, to avoid any potential market abuse or to avoid significant harm to their commercial interests). The relevant national regulatory authority can require further details from the SSO, including substantiated reasons, for non-publication. If the reasons for non-publication are not proportionate, are unfair, or discriminatory, the relevant national regulatory authority can require that the SSO publishes the information. In any case, according to article 19(3) of the Gas Directive, the main commercial conditions are to be published. In case of non publication, the information should be made available to the relevant national regulatory authority upon its request.
- 6.4. The following commercial terms should be published on the internet:
 - a. in rTPA, the tariffs and tariff methodologies for each service offered shall be published ex ante. In nTPA, the main commercial conditions including the prices for standard services must be published and updated whenever the SSO

- changes them; prices and underlying criteria (if applicable) should be made available to the relevant national regulatory authority at least in case of disputes;
 - b. services offered, the storage code (if applicable), the main storage standard conditions for each service outlining the rights and responsibilities of all users (including rules for counter flows during injection or withdrawal and the rules (if any) of storage capacity transfer in case of customer switching);
 - c. storage capacity allocation, congestion management and anti-hoarding and re-utilization provisions, auction terms where applicable and rules applicable for storage capacity trade on the secondary market vis-à-vis the SSO;
 - d. the rules and the charges applicable to storage penalties from storage users and compensation payments from the SSO to storage users.
- 6.5. The following operational information shall be published, for a given storage facility or for a group of storage facilities in the same balancing zone where access is provided to this group, via an online information system (in energy units or normalised cubic meters, according to interoperability criteria) to provide system users with sufficient and timely information in order to gain effective and efficient access to storage facilities:
- a. technical, available and contracted or held storage capacity (firm and interruptible where applicable);
 - b. for each storage site or group of storage facilities, aggregated inflows and outflows and historical utilization rates at least on a weekly basis for the immediately preceding week;
 - c. user-friendly instruments for calculating charges for a specific service (e.g. a tariff calculator) and for verifying online the level of available and/or unused storage capacity;
 - d. maps indicating the location of their storage facilities and the connecting points of the storage facilities to the relevant network;
 - e. the rules (if any) of transfer of storage capacity and injection and withdrawal capacity in case of customer switching.
- 6.6. The following information shall be published:
- a. the method of determining available storage capacity and the operational parameters, including the rules of ownership and use of working gas;
 - b. TSO's pre-emptive rights with operational rules and processes attached;
 - c. any storage capacity not available to TPA on the grounds of article 2(9) of the Gas Directive with substantiated reasons.
- 6.7. Information described in § 6.4, 6.5 and 6.6 shall be updated in an appropriately timely fashion.
- 6.8. The SSO shall publish at least once a year, by a pre-announced deadline, all planned maintenance periods that might affect storage users' rights from storage contracts and the corresponding operational information with adequate advance notice. Where unplanned disruptions in access to the storage services occur, the SSO shall ensure current system users are notified of that disruption as soon as possible. During maintenance periods, the SSO shall regularly publish updated information on details,

expected duration and effect of the maintenance. The SSO shall maintain and make available upon request to the relevant national regulatory authority and/or to those affected by any disruption information concerning the maintenance and disruptions that have occurred.

- 6.9. Storage users shall not be separately charged for information requests and transactions associated with their contracts according to standard rules and procedures (e.g. nominations). Expenses for requests not linked to general SSO roles and responsibilities and transparency requirements can be separately charged.
- 6.10. SSOs shall meet the deadlines on 1st April 2005. Where substantial IT developments are necessary, implementation should be no later than 1 April 2006.

7. Tariff structure and derivation

- 7.1. Where regulated, the tariff structure of the SSO should:
 - a. reflect efficiently incurred costs of access to storage facilities including a fair return on investment, both in the case of direct access to a specific storage site and access to a group of storage sites;
 - b. reflect the geological nature of the storage facility or facilities;
 - c. avoid cross subsidies between storage users;
 - d. promote efficient commercialisation and use of storage;
 - e. promote adequate and efficient investments according to users' needs, feasibility and technical constraints;
 - f. be clear and transparent;
 - g. be reviewed on a regular basis taking into account developments in the market; and
 - h. where appropriate, international benchmarking of tariffs may be taken into account and applied in a non-discriminatory manner.
- 7.2. Where negotiated, SSOs shall adopt any charging principles and/or tariff structures compliant with non-discrimination principles (e.g. that shall not restrict market liquidity of storage capacity, create undue barriers to market for new entrants or cross-subsidies between system users). Pursuant to Article 25 of the Gas Directive, in case of disputes, the relevant national regulatory authority shall determine appropriate arrangements. The SSO shall maintain records to enable the relevant national regulatory authority to determine the conditions of access including costs and prices already levied on other users of that facility for the similar services. In nTPA regimes, charges shall:
 - a. be non-discriminatory; prices should be the same for any storage user for the same service contracted for at the same time and under the same conditions; they should only vary subject to adaptations/changes on the grounds of varying circumstances;
 - b. promote efficiency and facilitate competition in the use of storage services;

- c. provide for appropriate incentives on new investments according to storage users' needs, feasibility and technical constraints;
- d. be negotiated in a time frame compatible with the storage users' reasonable commercial needs.

8. Storage penalties

- 8.1. Storage penalties may be established to ensure that the SSOs and the storage users respect their contractual obligations:
 - a. the SSO may be exposed to storage penalties (such as compensation payment to the storage users) in the event that it fails to fulfil contractual obligations, as set out in the storage code/contract;
 - b. storage users may be exposed to storage penalties (such as overrun and scheduling charges) as an incentive to ensure they nominate and use storage capacity consistently with the capacity rights they have procured either on the primary or secondary market.
- 8.2. Where they are established, storage penalties shall:
 - a. be proportionate and designed in a non-discriminatory and transparent manner, based on objective criteria;
 - b. not hamper the entry of new participants into the market;
 - c. be cost-reflective to the extent possible, whilst providing incentives for the appropriate use of storage capacity.

9. Secondary market

- 9.1. The SSO shall allow and facilitate bundled and unbundled services to be freely tradable between registered users in a secondary market without any undue restrictions, develop standardised contracts and procedures on the primary market to facilitate secondary trade, and recognise the transfer of rights where notified by storage users. SSO must allow the new owner to aggregate such storage capacity with its existing storage capacity operationally as long as it is compatible with the kind of services available on the primary market.
- 9.2. Once there is a market demand SSOs shall provide cost-reflective services (such as an electronic platform or bulletin board) to facilitate secondary storage capacity trading and associated transfer of storage capacity rights between storage users.
- 9.3. SSOs shall meet the following timetable:
 - 1 April 2005: bulletin board without title transfer;
 - 1 April 2006: implementation of the other provisions to allow for title transfer. Where substantial IT developments are needed the implementation of the other provisions shall be no later than 1 December 2006.

10. Cooperation with TSOs

- 10.1. SSOs should co-operate with the TSOs in order to ensure interoperability between both systems, e.g.:
 - a. provide services consistent with those offered by the adjacent TSO and required so as to ensure the efficient use of the interconnected transmission system;
 - b. render operational procedures, such as nomination, compatible with those of the adjacent TSOs;
 - c. ensure re-nomination procedures match market participants' requirements;
 - d. ensure consistency in matching relevant storage arrangements with the balancing requirements of the adjacent transmission system.

Annex: Definitions

1. Available storage capacity means the part of the technical storage capacity that is not contracted or held by storage users at that moment and still available to the storage users for firm and interruptible services, and is not excluded from TPA under Article 2(9) of the Gas Directive.
2. Deemed nomination is a request for the use of storage capacity which has been made by the storage user or on behalf of it by an agreed third party, for example in relation to national balancing requirements.
3. Deliverability is the amount of gas that can be delivered (withdrawn) from a storage facility per time unit. The deliverability of a given storage facility is variable, and depends on factors such as the amount of gas in the reservoir at any particular time, the pressure within the reservoir, compression capability available to the reservoir, the configuration and capabilities of surface facilities associated with the reservoir, and other factors. In general, a facility's deliverability rate varies directly with the total amount of gas in the reservoir: it is at its highest when the reservoir is most full and declines as working gas is withdrawn.
4. Final customer means customers purchasing natural gas for their own use.
5. Firm capacity is storage capacity contractually guaranteed as uninterruptible by the SSO.
6. Firm services are services offered by the SSO in relation to firm capacity.
7. Injectability is the complement of the deliverability or withdrawal rate. It is the amount of gas that can be injected into a storage facility per time unit. The injection capacity of a storage facility is also variable, and is dependent on factors comparable to those that determine deliverability. By contrast, the injection rate varies inversely with the total amount of gas in storage: it is at its lowest when the reservoir is most full and increases as working gas is withdrawn.
8. Interruptible services are services offered by the SSO, in relation to interruptible storage capacity.
9. Interruptible storage capacity is storage capacity that can be interrupted by the storage system operator according to the conditions stipulated in the storage contract/storage code. The contract/code may specify the permitted duration, frequency and timing of the interruptions. It may also specify the previous notice required and possibly a fee related to the duration of the interruptions.
10. National regulatory authorities are the bodies as assigned by national law with the responsibilities as defined by Article 25 of the Gas Directive.
11. Nomination means the prior reporting by the storage user to the SSO of the actual flow that he wishes to inject into or withdraw from the system.
12. Primary storage market means the market of the storage capacity directly traded by the SSO.
13. PSO means Public Services Obligations.

14. Re-nomination means the reporting of a corrected nomination.
15. SBU means Standard Bundled Unit. Storage capacity may be sold in SBUs, which gives customers the right to withdraw, inject and hold gas in store, with determined technical ratios. SBUs should reflect the technical characteristics of the storage facility or a group of storage facilities (aquifer, peak-shaving...).
16. Secondary market means the market of the storage capacity traded otherwise than on the primary market.
17. Storage capacity is space (expressed in normal cubic meters or energy), injectability and deliverability (expressed in normal cubic meters or energy per time unit). All of them can be firm or interruptible.
18. 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 (Gas Directive).
19. Storage penalty is the additional charge that storage system operators/storage users may have to pay after not respecting their contractual obligations.
20. Storage system operator (SSO) means a natural or legal person who carries out the function of storage and is responsible for operating a storage facility.
21. Storage user means a customer of a SSO which would sign the relevant storage code or enter into storage contracts with SSOs for storing gas. Storage users may include, but are not limited, to final customers, supply undertakings, wholesale customers, traders and TSOs, to the extent that storage is necessary for the TSOs and DSOs to carry out their functions.
22. Technical storage capacity is the maximum storage capacity (injectability, deliverability and space) that the SSO can offer to storage users, excluding storage capacity for SSOs operational needs.
23. TSO means transmission system operator.
24. Unbundled storage service means that space, injectability, deliverability can be traded separately.
25. Unused Storage Capacity is any part of the technical storage capacity contracted or held by users that has not been nominated for use, and is not excluded from TPA under Article 2(9) of the Gas Directive.
26. Withdrawal rate: see Deliverability.