## Guidelines for Good TPA Practice for Storage System Operators (GGPSSO) EUROGAS storage users comments

## ERGEG Version 2004-10-06

Eurogas propose to add for clarity the following basic principles to the scope and objectives of these guidelines on which principles our comments are based.

- 1. Storage access should be based on at least the requirements specified in the directive 2003/55/EC and/or its implementation by the respective Member State especially in terms of transparency and non discrimination.
- 2. These guidelines should support the functioning of a competitive commodity and service market to match supply and demand for delivery to customers in coherence with the principles expressed in the Directive 67/2004/EC.
- 3. A storage operator and the regulatory authority or authorities must consult existing and potential storage user representatives on the implementation of these guidelines for the respective storage facility and/or combined facilities.
- 4. Storage operators should provide storage services that make efficient use of their facilities and will respect legally binding contracts.
- 5. Storage operators will offer access services on the primary market on the basis of these guidelines. The secondary market will have to be facilitated by storage operators for the storage users and others to trade storage rights (whole or partly).

- 6. Access to storage on the primary market should be offered within the technical constraints and the efficient use of the storage system.
- 7. The implementation of these guidelines should be in support of investors decisions to create new storages and/or expand existing facilities.
- 8. The functioning of the facility in the relevant market, including the available alternative options for its services by its users should be reflected in the access rules.

ORIGINAL TEXT	AMENDMENTS	<u>Comment</u>		
Scope and objective of the GGPSSO	Scope and objective of the GGPSSO			
The GGPSSO are forward looking and should be flexible enough to account for developments in market arrangements. They intend to give a minimum common set of requirements for the organization of the storage facilities and operators.	The GGPSSO are forward looking and should be flexible enough to account for developments in market arrangements. They intend to give a minimum common set of requirements for the organization of the storage facilities and operators.			
They are addressed to all Storage System Operators (SSOs) falling under the scope of the European Directive 2003/55/EC (the Gas Directive) as well as to the users of these systems.	They are addressed to all Storage System Operators (SSOs) as well as to the users of these systems and are based on falling under the scope of the European Directive 2003/55/EC (the Gas Directive) and its implementation in Member States	Also access rules etc. are based on this directive and not only the Storage Operators functioning.		
The purpose of these GGPSSO is to ensure that SSOs provide the services needed by storage users on a fair and non-discriminatory basis, taking into	The purpose of these GGPSSO is to ensure that SSOs provide the services needed by storage users on a fair and non-discriminatory basis, taking into			

account technical constraints. Systems and processes shall facilitate the sustainable development of competition in gas supply.	account technical constraints. Systems and processes shall facilitate the sustainable development of competition in gas supply as well as investment, maintenance and development of the facilities.	
It shall be incumbent upon the SSOs, on a case by case basis, to demonstrate to the relevant national authorities that arrangements at storage facilities meet the following guidelines in terms of the desired outcomes. The regulatory authorities should check that results in both regimes (nTPA and rTPA) are equal in terms of non-discrimination, transparency and competition.	It shall be incumbent upon the SSOs, on a case by case basis, to demonstrate to the relevant national authorities that arrangements at storage facilities meet the following guidelines in terms of the desired outcomes. The regulatory authorities should check that results in both regimes (nTPA and rTPA) comply with Directive 2003/55/EC and are comparable equal in terms of non-discrimination, transparency and competition.	Desired outcomes of guidelines is unclear without further specifications.
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).	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).	
1. Roles and responsibilities of Storage System Operators	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 principle of	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 principle of non-	

	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.	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.	
		1.1a The SSO functioning shall be sufficiently separate from affiliated supply and/or transportation companies, to ensure non-discriminatory access. The SSO shall establish a compliance programme to ensure effective implementation of separation measures for non-discrimination	Detailing further previous paragraph
1.2.	SSOs shall among others:	1.2. SSOs shall among others:	
	a. operate and maintain under economic conditions secure, reliable and efficient storage facilities;	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, including proper consultation with users and overseen by the national	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, using standard either storage contract provisions or a storage code, developed by the SSOs, including proper consultation with users and overseen by the national	Consultation with users is very important.  We would like to add consultation on the services offered and changes to existing services to ensure that the SSO is offering what users need. This is to the benefit of the SSO as well, as it can then be sure it is not offering unnecessary services.  Standard contractual provisions instead of contracts might prove to be more flexible provided in consultation with users reps.

regulatory authorities;	regulatory authorities; - consult with users on the services the SSO offers and substantial changes to existing services;	
c. establish rules on the use of capacity aimed at ensuring competitive and efficient use of that storage facility by system users, in particular to discourage storage capacity hoarding;	c. establish rules on the use of capacity aimed at ensuring competitive and efficient use of that storage facility by system users, in particular to discourage storage capacity hoarding;	
d. treat confidential information, especially with regards to any affiliated company, in order to avoid any discrimination between storage users, as stated in § 5 on confidentiality requirements;	d. treat confidential information, especially with regards to any affiliated company, in order to avoid any discrimination between storage users, as stated in § 5 on confidentiality requirements;	
e. provide the information required by storage users and system operators as stated in § 6 on transparency requirements;	e. provide the information required by storage users and system operators as stated in § 6 on transparency requirements;	
f. co-operate with TSOs through interoperability agreements in order to ensure efficient and secure operation of storage and transportation networks;	f. co-operate with TSOs through interoperability agreements applicable at the interface in order to facilitate ensure efficient and secure operation of storage and transportation networks; redeliver stored gas to meet the entry specifications of the interconnected transmission system;	The SSO has no responsibility beyond the interface neither has the TSO a responsibility beyond the interface into the storage facility.  The SSO must be responsible for redelivering users' gas into the connected transmission network at the correct entry specification.

g. when asking guarantees to storage users with respect to their creditworthiness, ensure that these guarantees are non-discriminatory, transparent and proportionate and do not constitute any undue market entry barrier.	g. when asking for guarantees from storage users with respect to their creditworthiness, ensure that these guarantees are non-discriminatory, transparent and proportionate and do not constitute any undue market entry barrier.	
		One of the main responsibilities of the SSO is to maximise the amount of available capacity, including offering unused capacity on an interruptible basis. This is done without affecting the rights of the firm capacity holder.
	g. plan storage facility maintenance avoiding periods when major market impact can be expected to maximise the availability of its storage services.	Planned maintenance (and where possible unplanned maintenance) should be scheduled in a manner to maximise the availability of storage to meet the requirements of users.
2. Role of Storage Users	2. Role of Storage Users	
2.1. Storage users shall among others:	2.1. Storage users shall among others:	
a. be responsible for making nominations to the SSOs and for the injection and withdrawal of gas from storage facilities in accordance with prevailing contractual specifications, technical rules and agreed procedures;	a. be responsible for making nominations to the SSOs and for the injection and withdrawal of gas from storage facilities in accordance with prevailing contractual specifications, technical rules and agreed procedures;	
b. provide all data required that is necessary for the SSO to carry out its duties as specified in the	b. provide all data required that is necessary for the SSO to carry out its duties as specified in the	

storage code and/or in the storage contract;	storage code and/or in the storage contract;  c. In cases where the SSO is obliged to provide priority access rights in connection to (legal) obligations approved by national authorities for storage user(s) under i.e. PSOs, Security of Supply, balancing and/or license obligations, then these storage users can be required to account for their storage capacity requests in relation to the obligation(s) imposed on them	SSO's need to know what they are required to reserve under an obligation imposed on them and how to justify its reservation to the Regulatory Authorities. under 3.1
c. not use capacity rights in a manner that is intended to restrict, distort or prevent competition, for example through capacity hoarding;	d. not use capacity rights in a manner that is to result in an abuse of a dominant position. (i.e. capacity hoarding)	Clearer on what basis users are to be judged.
d. put relevant IT in place in order to be able to communicate with SSOs via agreed interfaces and standards.	e. Put relevant IT in place in order to be able to communicate with SSOs via agreed interfaces and standards.	
3. <u>Necessary TPA services</u>	3. <u>Necessary TPA services</u>	
3.1. Storage capacity not excluded from TPA pursuant to Article 2(9) of the Gas Directive, when technically and economically necessary for efficient access to the network, shall be offered to storages users on a non-discriminatory basis that promotes competition and facilitates trade. Therefore, the SSO shall offer to	3.1. Storage capacity not excluded from TPA pursuant to Articles 2(9) and 19 of the Gas Directive, shall be offered to storages users on a non-discriminatory basis that encourages and facilitates competition and trade. Therefore, the SSO shall offer to storage users the maximum available storage capacity according to rules	To be complete 2003/55/EC art 19 specifies TPA conditions regime(s)

	storage users the maximum available storage capacity (i.e. technical storage capacity), apart from that part of the storage capacity used for operational needs related to transmission and/or production, according to rules made transparent by the national regulatory authorities. Exclusion of storage capacity from TPA shall not be the decision of the SSO and/or the beneficiary of the storage capacity exempted from TPA and shall be approved by the national regulatory authorities, with the publication of substantiated reasons.	made transparent and approved by the national regulatory authorities, including publication of any obligations under which TSO's or others are to be given priority access. Access must be non discriminatory for all users and not be linked to evidence of contracts with end-consumers unless priority storage access for certain suppliers is legally obliged to be provided by the SSO.	
3.2.	The amount of storage capacity needed for PSO and security of supply, when imposed on storage users should be offered on a TPA basis; requirements of non discrimination still apply.  Whichever party is responsible for PSOs, it shall demonstrate upon request to the national regulatory authority that their requested capacity reservation is no more than what is required to satisfy the relevant PSO.	3.2 Delete	Dealt with under 2.c and 3,.1
3.3.	The SSO shall offer to storage users the storage capacity in a form that facilitates competitive, non- discriminatory, and efficient access	3.3. The SSO shall offer to storage users the storage capacity in a form 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, in consultation with storage users and taking into account storage technical constraints, a menu of services, including the following:	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, in consultation with storage users and taking into account storage technical and economical constraints for efficient use of the storage, a menu of services, including the following shall be offered:	
a. bundled services (SBU) of space and injectability/deliverability with determined technical ratios;	a. bundled services (SBU) of space and injectability/deliverability with predetermined technical ratios and as small as possible in size and time for flexible use and tradability in the market and/or similar services for combined storage services.	
b. unbundled services in an appropriate range with SBUs;	b. unbundled services in an appropriate range with SBUs  To negotiate on the basis of SBU any deviating ratios required by the user based on indicative tariffs for the unbundled services and within the technical/economical constraint of an efficient use of the storage facility.	
c. an appropriate range of both long-term (> 1year) and short-term firm services (<1year) down to a minimum period of one day;	c. upon demand and without contract duration restrictions appropriate range of both longterm (> 1year) and short-term firm storage services, (<1year) down to a minimum period of one day if technical possible and not	Whatever the user wants.

	hampering the efficient use of the system;	
d. short term interruptible storage contracts and services.	d. short term interruptible storage contracts and services. Storage users shall be notified in advance of the terms and conditions of interruptible storage services including its price, if fluctuating at reasonable notice. Interruptible services shall not modify any of the rights of the firm capacity holders.	Hourly storage services are generally provided to ensure flexibility to market suppliers: flexibility use, for its nature, is difficult to be planned, even on a short term basis: consequently, existing firm contracts should be granted for all the paid services.  Therefore capacity re-allocation should be preferentially left to voluntary offers by the capacity owners on the secondary market for the following reasons:  • availability of paid withdrawal capacity is necessary even within the gas day, due to weather fluctuations during the winter, for balancing purposes; released capacity would imply additional risk for shippers with firm contracts and may not be justified;in case the withdrawal capacity is booked to fulfil public service obligations (supply modulation for non eligible market), capacity release managed by the operator could create a discriminatory cost regime with possible effects on market dynamics;  • when available working gas capacity is seasonally injected by the shippers, capacity with gas can not be available on a UIOLI principle; but when most gas is withdrawn, available space can be used for 'counterflow injection'; this should be managed by the SSOs with additional services.  • injection capacity during the summer

			is generally not such a relevant problem to imply any 'use it or lose it' clause.  Additional flexibility such as interruptible storage services shall be offered where possible [given the above constraints in the absence of a properly functioning secondary market and where technically possible, ]
3.4.	When 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.	3.4. When 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.	Further discussion may on this text nonetheless be necessary, to reflect the understanding that the gas allocated should generally match storage users' nominations.
3.5.	SSOs shall offer services that are consistent with the use of the interconnected gas transportation systems.	3.5. SSOs shall offer services based on the efficient use of the storage that are compatible with the interconnected transportation system(s) at the interface.	
3.6.	Taking into account technical constraints and if consistent with PSOs obligations, the SSO shall offer all services without restrictions on the starting date and the actually prevailing physical flow. With the same constraints, injection and withdrawal of gas should, in principle, be possible at any time. Limits on the required minimum size of storage capacity rights shall be justified on the basis of technical	3.6. Taking into account technical constraints, the efficient use and TPA rules under the Directive 2003/55/EC, the SSO shall offer on the primary market its storage services without undue restrictions on the starting date and the actually prevailing physical flow. With the same constraints, injection and withdrawal of gas should, in principle, be possible at any time. Limits on the required minimum size	See possibility of pooling resolving this.

	constraints and permit small shippers to gain access to storage services. Storage users should be allowed to pool with each other with a view to overcome potential technical capacity thresholds.	of storage capacity rights shall be justified on the basis of technical constraints to and permit small shippers to gain access to storage services. Storage users should be allowed to pool with each other with a view to adapt services to their needs including the possibility to allow netting of capacity rights.	
3.7.	The SSO should develop information systems and electronic communication to provide adequate data to storage users and simplify transactions (such as nominations, capacity booking and transfer of capacity rights between storage users).	3.7. The SSO should develop information systems in consultation with the users to provide transparency for both the users and the SSO and to simplify transactions (such as nominations, capacity booking and transfer of capacity rights between storage users).	
3.8.	Deadline for the implementation of such requirements is 1 April 2005; if SSOs have problems in implementing measures envisaged under § 3, in particular with regard to IT systems, they shall provide an explanation to the national regulatory authorities setting out the problems in implementing this deadline and present a concrete action plan for their implementation, taking into account, if applicable, the size of the company.	3.8. A realistic feasible deadline for the implementation of such requirements should be agreed after consultation by the SSO with the users on the specifications, taking into account its cost and where applicable the necessary regulatory consultation process. Where SSO's have problems in implementing measures envisaged under § 3, in particular, with regard-to IT systems, they shall provide this an explanation to the national regulatory authorities and the users setting out the problems in implementing based on an action plan their implementation, taking	As a user we would like to see rapid implementation of these requirements and tailored to our needs. The text provides a process for any TSO that has problems with the implementation date, but stakeholders should encourage this to be the exception rather than the rule. Problems in implementing one specific requirement should not unduly delay implementation of other requirements.  Where a problem occurs, SSOs and users should be encouraged to share experience in implementation to help speed the process up throughout the industry. This could also have a cost benefit.

	into account, if applicable, the size of	
	the company.	
4. Storage capacity allocation management and congestion management	4. Storage capacity allocation management and congestion management	
4.1. Storage capacity allocation mechanism and congestion management procedures shall:	4.1. Storage capacity allocation mechanism 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;	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 of the storage system concerned as well as security of supply where relevant legal rules are incumbent upon the SSO;	b. take into account the integrity 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;	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	d. ensure the maximum available storage capacity and efficient use under economic and non	In line with definition 1

conditions of technical storage capacity;	discriminatory conditions of technical storage capacity under the conditions :	
e. generate the right signals for investment in new infrastructures;	e. generate the right signals for investment in new storages and its interconnection with the transportation system infrastructures;	
f. be subject to consultation with storage users.	f. be subject to consultation with storage users.	
	4.2 Services offered by the SSO shall be firm up to the available capacity and not affected by interruptible services.	
4.2. In case of physical congestion, non discriminatory, market-based solutions shall be applied by the SSO or by the national regulatory authorities, where appropriate. Also, the SSO or the national regulatory authorities shall appropriately balance the portion of storage capacity contracted under multiannual long-term contracts and short term contracts, with the aim of promoting effective competition. Alternative allocation procedures such as pro-rata mechanisms may be considered if they ensure equivalence in terms of non-discriminatory and competitive access.	4.2. In case of physical congestion due to Force Majeur, pre-agreed non discriminatory capacity allocation procedures shall be applied by the SSO and/or by the national authorities, where appropriate. For congestion and thereby non compliance by the SSO with the terms and conditions for firm capacity right, the SSO will be held liable for consequential damage based on market-based exposures Alternative allocation procedures such as pro-rata mechanisms may be considered if they ensure in this situation equivalence in terms of non-discriminatory and competitive access.	
4.3. The SSO shall actively endeavour to	4.3. 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 interruptible basis of all unused capacity (e.g. day-ahead release of non-nominated injectability and deliverability).	discourage hoarding and facilitate re- utilisation and trade of storage capacity by all reasonable means, including at least the offer on interruptible basis of all unused capacity (e.g. day-ahead release of non-nominated injectability and deliverability).	However, there has to be a common understanding on the definition of "unused"
4.4. If, in spite of the measures aimed at preventing any commercial incentives to hoard capacity, namely secondary market and interruptible storage services, capacity contracted under existing storage contracts remains unused and significant and prolonged contractual congestion occurs, the national regulatory authorities shall require the SSO to introduce additional mechanisms to free up this capacity.	4.4. DELETE	Competition law to be applied with serious consequences (penalties of up to 10% turn over) No longer the competence of the regulatory authority unless the competition authority is given a mandate on the basis of competition law?
	4.5 Information on any reduction or increase of capacity (firm or interruptible) must be provided to users as much in advance as possible on a non-discriminatory basis.	
5. <u>Confidentiality requirements</u>	5. <u>Confidentiality requirements</u>	
5.1. The SSO shall meet the confidentiality provisions of Article 10 of the Gas Directive, by guaranteeing that:	5.1. The SSO shall meet the confidentiality provisions of Article 10 of the Gas Directive, by guaranteeing that:	
a. commercially sensitive information from storage users'	<ul> <li>a. commercially sensitive information from storage users'</li> </ul>	This level of detail is needed because users need to have complete confidence in the

account remains confidential. Any information available to the SSO concerning its storage and processing business shall not be passed to other possible parts of the company in advance of being provided to all market participants; staff working for the affiliate business if any (e.g. supply) should 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	account remains confidential.  Any information available to the SSO concerning its storage and processing business shall not be passed to other possible parts of the company in advance of being provided to all market participants including TSO's that have to acquire their storage with market based instruments. Staff working for the affiliated businesses if any (e.g. supply) should have no access to information which could be commercially advantageous, such as details on actual or potential storage users, and is not made	robustness of the confidentiality provisions.
parties. The arrangements to	as details on actual or potential	
b. in case of an integrated company operating supply and/or production and storage business or when there are no separate database systems, specific confidentiality duties must be clearly defined; the relevant national regulatory authorities shall at least require sufficient evidence from companies concerned so as to prove an effective establishment of	b. in case of an integrated company operating supply, transmission, distribution and/or production and storage business or when there are no separate database systems, specific confidentiality duties must be clearly defined; the relevant national regulatory authorities shall at least require sufficient evidence from companies concerned so as to prove an effective establishment	This level of detail is needed because users need to have complete confidence in the robustness of the confidentiality provisions.

	Chinese walls between the SSO and the supply and/or production branch of the vertically integrated companies. The arrangements to implement this requirement should include a code of conduct for staff/compliance programme, supervised by a Compliance Officer, which should embody the principles behind the Chinese walls concept. Cost effective solutions should be implemented to ensure that the SSO and the supply business are not located in the same place. Preferably, the SSO and the supply business should be located in separate buildings, provided such a measure is proportionate given the size of the activity concerned.		of Chinese walls between the SSO and the supply, transport and/or production branch of the vertically integrated companies. The arrangements to implement this requirement should include a code of conduct for staff/compliance programme, supervised by a Compliance Officer, which should embody the principles behind the Chinese walls concept. Cost effective solutions should be implemented to ensure that the SSO and the supply business are not located in the same place. Preferably, the SSO and the supply business should be located in separate buildings, provided such a measure is proportionate given the size of the activity concerned.	
6.	Transparency requirements	6.	Transparency requirements	It is not in the users interest that individual information on their storage use is transparent in the market. It is in their interest to know what capacity is available for the market.  (Most members of ESUG wants to limit transparency to a situation with three or fewer users.)
6.1.	SSOs should implement user- friendly systems to publish the information needed by storage users in a timely manner in the national	6.1.	SSOs should implement user- friendly systems to publish the information needed by storage users in a timely manner in the national	

	language and in English on the Internet. Information should be provided on a real time basis, if required by storage users. Information shall be disclosed in a meaningful, quantitatively clear and easily accessible way and on a non-discriminatory basis.		language and in English on the Internet. Information should be provided on a real time—regular and cost efficient basis in consultation with if required by storage users. Information shall be disclosed in a meaningful, quantitatively clear and easily accessible way and on a non-discriminatory basis.	
6.2.	Information relating specifically to a storage user's account must be kept confidential. Non confidential information must be provided promptly and on the same time scale as to all users on a non discriminatory basis. Where a SSO considers that it is not entitled for confidentiality reasons to make public all the data required, it shall provide clear evidence to the national regulatory authorities and seek its authorization to limit publication. The relevant national authorities shall grant or refuse the authorization on a case by case basis and publish the substantiated reasons. This assessment should be renewed on a regular basis.	6.2.	Information relating specifically to a storage user's account must be kept confidential. Non confidential information must be provided promptly and on the same time scale as to all users on a non discriminatory basis. Where a SSO considers that it is not entitled for confidentiality reasons to make public all the data required, it shall provide clear evidence to the national regulatory authorities and seek its authorization to limit publication. The relevant national authorities shall grant or refuse the authorization on a case by case basis and publish the substantiated reasons. This assessment should be renewed on a regular basis.	
6.3.	The SSO shall submit for approval to the national regulatory authorities any request not to publish specific data (e.g. for reasons of costs or to avoid any potential market abuse). The relevant national authorities	6.3.	The SSO shall submit for approval to the national regulatory authorities any substantiated request and in case of a dispute, the reasons why not to publish specific data (e.g. for reasons of costs or to	

author	grant or refuse the rization on a case by case and publish the substantiated as.	Th sh au ba	oid any potential market abuse). The relevant national authorities all grant or refuse the athorization on a case by case as and publish the substantiated asons.	
should	ollowing commercial terms d be published with online nation system:	sh	ne following commercial terms could be published with online via e internet information system:	
ser ex cri un ecc est ma inc sta pu the an ma	rTPA, the tariffs for each rvice offered shall be published ante with the derivation iteria attached (i.e. the inderlying technical and onomic reasons for tablishing them). In nTPA, the ain commercial conditions cluding the prices for core andard services must be ablished and updated whenever to e SSO changes them; prices and underlying criteria should be ade available to the national gulatory authorities at least in se of disputes;	a.	in rTPA, the tariffs for each service offered shall be published ex ante with the criteria attached (i.e. the underlying technical and economic reasons for establishing them). In nTPA, the main commercial conditions including the indicative prices for core standard services must be published and updated whenever the SSO changes them; prices and underlying criteria should be made available to the national regulatory authorities at least in case of disputes;	
(if sta ser res inc (e.	rvices offered, the storage code applicable) and/or the main andard conditions for each rvice outlining the rights and sponsibilities for all users cluding flexibility tolerances g. counter flows during jection or withdrawal) and the	b.	services offered, the storage code (if applicable) and/or the main standard conditions for each service outlining the rights and responsibilities for all users including flexibility tolerances (e.g. counter flows during injection or withdrawal) and the	

	rules of transfer storage capacity in case of final customer switching;	rules of transfer storage capacity in case of final customer switching;	
	c. method of determining available storage capacity and the operational parameters including transparency on the rules of ownership and use of working gas;	c. method of determining available storage capacity and the operational parameters including transparency on the rules of ownership and use of working gas;	
	d. storage capacity allocation, congestion management and anti-hoarding and re-utilization provisions, including auctions terms where applicable and rules applicable for storage capacity trade on the secondary market vis-à-vis the SSO;	d. storage capacity allocation, congestion management and anti-hoarding and re-utilization provisions, including auctions terms where applicable and rules applicable for storage capacity trade on the secondary market vis-à-vis the SSO;	
	e. the rules and the charges applicable to storage penalties due by storage users and compensation payments by the SSO to storage users.	e. the rules and the charges applicable to storage penalties due by storage users and compensation payments by the SSO to storage users.	
6.5	The following operational information shall be published with online information system (in energy units, according to interoperability criteria) to provide system users with sufficient and timely information in order to gain effective and efficient access to storage facilities:	6.5 The following Operational information shall should be published with online information system—via the internet-(in energy units, according to interoperability criteria) to provide system users with sufficient and timely information in order to gain effective and efficient access to storage facilities based on consultation with the main storage system user representatives. Information could be for commercial	Some ESUG members consider regional information is insufficient.

	confidentiality reasons on at least an aggregated regional level. This may include;	
a. storage level, including working gas, technical, booked and available storage capacity (firm and interruptible where applicable);	a. storage levels, including working gas, technical, booked and available storage capacity (firm and interruptible where applicable);	
b. daily aggregated inflow and outflows and historical utilization rates;	b. daily aggregated inflow and outflows and historical utilization rates;	
	<ul> <li>delivery and redelivery quality specifications;</li> </ul>	
c. user-friendly instruments for calculating charges for a specific service (e.g. tariff calculator) and for verifying online the level of available capacity, including net and available firm and interruptible capacities;	c. user-friendly instruments for calculating charges for a specific service (e.g. tariff calculator) and for verifying online the level of available capacity, including net and available firm and interruptible capacities;	
d. maps indicating the location of their storage facilities and the connecting points of the storage facilities to the relevant network;	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 switch.	e. The rules (if any) of transfer of storage capacity, injection and withdrawal rights related to PSO in case of customer switch.	Only relevant for specific a PSO for the SSO
6.6 Information described in § 6.3 and § 6.4 shall be made available and updated whenever changed as relevant on a real time, daily, monthly,	6.5. Information described in § 6.3 and § 6.4 shall be made available and updated whenever changed as relevant on a real time or daily,	Cost should be discussed both at SSO and users.

quarterly or annual basis.	monthly, quarterly or annual basis as agreed between storage users representative organisations and the SSO .	
6.7 The SSO shall publish at least once a year, by a predetermined 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 facility occur, the SSO shall ensure actual system users are notified of that disruption as soon as possible. The SSO shall maintain and make available to the national regulatory authorities and/or to those affected by any disruption upon request, a daily log of the actual maintenance and disruptions that have occurred.	6.7 The SSO shall publish at least once a year, by a predetermined 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 facility occur, the SSO shall ensure actual 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. Such information shall also be made available on request to those affected by any disruption. The SSO shall maintain and make available to the national regulatory authorities and/or to those affected by any disruption upon request, a daily log of the actual maintenance and disruptions that have occurred.	This information is essential for users to plan how they manage their portfolio whilst unable to use a facility for maintenance reasons.  By setting out detailed requirements in advance, it allows the SSO to know exactly what users require and the SSO is then prepared to deliver the right information.
6.8 At least the provisions of § 6.5.a, b, and d shall apply also to any storage capacity not required to provide TPA according to Article 19 of the Gas Directive or any other storage facility connected to a transmission system	6.8 Delete	Not in line with the directive 2003/55/EC and potentially undermining the investment climate

and for which there is no TPA.		
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's roles and responsibilities and transparency requirements can be separately charged.	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's roles and responsibilities and transparency requirements can be separately charged.	
6.10 SSOs shall comply with these provision by 1 April 2005; if SSOs have problems in implementing measures envisaged under §6, in particular with regard to IT systems, they shall provide an explanation to the relevant national authority setting out the problems in implementing by this deadline and present a concrete action plan for the implementation taking into account, if applicable, the size of the company.	6.10 SSOs shall comply with these provision by 1 April 2006 latest; if SSOs have problems in implementing measures envisaged under §6, in particular with regard to possibly required IT systems, they shall provide an explanation to the relevant national authority setting out the problems in implementing by this deadline and present a concrete action plan for the implementation taking into account, if applicable, the size of the company.	The storage year starting 1 April 2006 is more realistic. But to remain ambitious this should be seen as the latest date for most paragraphs It must be taken into account that there are the lengthy procedures introduced here. Besides to have regulatory authority's competences clearly defined under the implementation of 2003/55/EC in Member States and its resulting function and PSO's for storages and the available capacity will take longer than a couple of month Also we like to see for each (combined) storage facility, a proper and thorough consultation process with users, Also the definition of PSO's with implications for storages are not yet clear in many cases, and its implementation will take time too The implementation of information systems will not be ready before 1 March either This date is necessary for users to have time before 1 April to decide what under the new regime is required from storages.

7. Tariff structure and derivation	7. <u>Tariff structure and derivation</u>	
7.1. Where regulated, tariffs structure of the SSO should:	7.1. Where regulated tariffs structure of the SSO is applied, it should:	
a. reflect efficiently incurred costs of access to storage facilities including fair return on investment, both in the case of direct access to a specific storage and access to virtual storages;	a. reflect efficiently incurred costs by access to storage investors facilities including fair return on investment and reflecting market conditions, both in the case of direct access to a specific storage and access to virtual combined storages;	Storage is functioning in the relevant market in more or less competition with other storages and other tools.
b. reflect the geological nature of storages;	b. reflect the geological nature of storages;	
c. avoid cross subsidies between storage users;	c. no <del>avoid</del> cross subsidies between storage users;	
d. promote efficient commercialisation and use of storage;	d. promote efficient commercialisation and use of storage;	
e. promote adequate and efficient investments according to users' needs, feasibility and technical constraints;	e. promote adequate and efficient investments according to users' needs, feasibility and technical constraints;	
f. be clear, transparent and reviewed on a regular basis taking into account developments in the market;	f. be clear, transparent and reviewed on a regular basis taking into account developments in the market;	See therefore also addition in a
g. where appropriate, international benchmarking of tariffs may be taken into account and applied in non discriminatory manner.	g. where appropriate, international benchmarking of tariffs may be taken into account and applied in non discriminatory manner.	See therefore addition under a

7.2. Where negotiated, SSOs shall not adopt any charging principles and/or tariff structures that would restrict market liquidity of storage capacity, create undue barriers to market for new entrants, crosssubsidies between system users or hamper system enhancements and integrity. Pursuant to Article 19 of the Gas Directive, in case of disputes, the relevant regulatory authority shall determine appropriate arrangements. The SSO shall maintain records to enable the regulator to determine costs of provision and prices already levied on other users of that facility for the similar services. In nTPA regimes,	7.2. Where negotiated, SSOs shall not adopt any charging principles and/or tariff structures that would restrict market liquidity of storage capacity, create undue barriers to market for new entrants, crosssubsidies between system users or hamper system enhancements and integrity. Pursuant to Article 19 of the Gas Directive, in case of disputes, the relevant regulatory authority shall determine appropriate arrangements. The SSO shall maintain records to enable the regulator to determine costs of provision 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;	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;	b. promote efficiency and facilitate competition in the use of storage services;	
c. provide for appropriate incentives on new investments according to users' needs, feasibility and technical	c. provide for appropriate incentives on new investments according to <b>storage</b> users' needs, feasibility and technical	

constraints;	constraints;	
d. negotiations should happen in a time frame compatible with commercial needs;	d. negotiations should be reasonable and happen within a reasonable time frame compatible with <b>the storage</b> users' commercial needs;	Agreement should not be unreasonably withheld or delayed.
8. Storage penalties	8. <u>Storage penalties</u>	
8.1. Storage penalties may be established to ensure that the SSOs and the storage users respect their contractual obligations.	8.1. Storage penalties may be established to ensure that the SSOs and the storage users respect their contractual obligations.	
8.2. Storage penalties may apply to:	8.2. Storage penalties may apply to:	
a. SSOs for compensation to be paid to the storage users in the event that the SSO fails to fulfil contractual obligations, as set out in the storage code/contract; and/or to	a. SSOs for compensation to be paid to the storage users in the event that the SSO fails to fulfil contractual obligations (e.g. if the SSO delivers more or less gas than the storage user's contractual rights within the predetermined reasonable tolerance levels) set out in the storage code/contract; and/or to	For clarification
b. storage users for providing effective incentive to ensure that they nominate and use storage capacity consistently with the capacity rights they have procured either on the primary or secondary market.	b. storage users for providing effective incentive to ensure that they nominate and use storage capacity consistently with the capacity rights they have procured either on the primary or secondary market.	It should be clear that when the user has made a valid nomination and this amount has not been allocated, there should be no penalties for the user.
8.3. Storage penalties shall:	8.3. Storage penalties shall:	

a. be designed in a non discriminatory and transparent manner, based on objective criteria;	<ul> <li>a. be designed in a non         discriminatory and transparent         manner, based on objective         criteria;</li> </ul>	
b. be aimed at providing effective incentive on storage users to ensure the safe functioning of storages and where necessary, to ensure that PSOs are met;	b. be aimed at providing effective incentive on SSOs to ensure the safe functioning of storages and where necessary, to ensure that its PSOs are met;	It is only the SSO that can ensure the safe functioning of storage facilities and its PSO's.
c. not hamper the entry of new participants into the market;	c. not hamper the entry of new participants into the market;	
d. ensure that, in case of penalties collected by the SSO, the SSO remains broadly cost neutral; penalties over and above the actual efficiently incurred costs, shall be redistributed to the storage users on a non discriminatory basis, any costs that cannot be targeted should be allocated back to users in a non discriminatory manner.	d. ensure that, in case of penalties collected by the SSO, shall be reasonable and discussed with to be (partly) refunded in consultation with the users. the SSO remains broadly cost neutral; penalties over and above the actual efficiently incurred costs, shall be redistributed to the storage users on a non discriminatory basis, any costs that cannot be targeted should be allocated back to users in an agreed non discriminatory manner.	See comment on 8.2.6.
8.4. When needed, national regulatory authorities should ensure compatibility of storage penalties with transmission balancing regimes.	8.4. When needed, national regulatory authorities should ensure compatibility of storage penalties with transmission balancing regimes.	
9. <u>Market based mechanisms such as</u>	9. Market based mechanisms such as	

	secondary market		secondary market	
9.1.	The SSO shall allow and facilitate bundled and unbundled services to be freely tradable between registered shippers in a secondary market without any undue restrictions and 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.	9.1.	The SSO shall allow and facilitate to be freely tradable without undue operational and contractual barriers, the storage services offered on the primary market. Separate trading of injection, withdrawal and storage volume should be facilitated between registered shippers in a secondary market. Thus the SSO will without any undue restrictions develop standardised main contractual terms 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.	
	Where requested and paid for by storage users, 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.		Where requested in consultation with the users about their needs the SSO's shall provide 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.	Cooperation with TSOs	10.	Cooperation with TSOs	
10.1	. SSOs and TSOs should co-operate in	10.1	SSOs and TSOs should co-operate	At the interface only

order to ensure interoperability between both systems, e.g.:	in order to ensure interoperability between both systems at the interface trough interoperability agreements, 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;	a. provide services compatible and consistent with those offered by the adjacent TSO and required so as to ensure the efficient use of the interconnected transmission system;	Do not understand why this can be the SSO responsibility.
b. render operational procedures, such as nomination, compatible with those of the adjacent TSOs;	b. render operational procedures, such as nomination, compatible with those of the adjacent TSOs;	
c. ensure re-nomination procedures match market participants requirements;	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.	d. ensure consistency if technically possible without affecting the efficient use of the facility and if requested by users of the storage, to offer matching relevant storage arrangements with the balancing requirements of the adjacent transmission system.	
Annex: Definitions	Annex: Definitions	IN GENERAL TO BE FULLY BROUGHT IN LINE WITH THE DIRECTIVE DEFINITIONS AND TO DELETE THOSE DEFINITIONS THAT WILL NOT RETURN IN THIS PGGSSO
1. Available storage capacity means the	1. Available storage capacity means	To clarify

2.	part of the technical storage capacity that is not contracted or allocated to production and transport and is still available to the storage users at that moment.  Cushion gas means the minimum technical volume of gas intended as permanent inventory in a storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal season.	2.	the part of the technical storage capacity that is not contracted or allocated to production and transport and is still available to the storage users at that moment.  Cushion gas means the minimum technical volume of gas intended as permanent inventory in a storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal season.	Delete
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.	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 (Gas Directive)	4.	Final customer means customers purchasing natural gas for their own use (Gas Directive)	Directive

5.	Firm capacity is storage capacity contractually guaranteed as uninterruptible by the SSO;	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;	<b>6.</b> Firm services are services offered by the SSO in relation to firm capacity;	
7.	Flexibility is the availability of gas and/or capacity (transmission, storage, LNG capacity) needed to: adapt supply to foreseeable volume variations in demand and to adjust the erratic fluctuations of demand; exploit market opportunities with the market opening to competition, i.e. using different combinations of flexibility tools in order to achieve cost advantages or enjoy new market businesses; comply with public service obligations and strategic objectives.	7. Flexibility is the availability of gas and/or capacity (transmission, storage, LNG capacity) needed to: adapt supply to foreseeable volume variations in demand and to adjust the erratic fluctuations of demand; exploit market opportunities with the market opening to competition, i.e. using different combinations of flexibility tools in order to achieve cost advantages or enjoy new market businesses; comply with public service obligations and strategic objectives.	Delete
8.	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	8. 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	

	gas is withdrawn.		withdrawn.	
9.	Interruptible services are services offered by the SSO, in relation to interruptible capacity;	9.	Interruptible services are services offered by the SSO, in relation to interruptible capacity without in any way affecting any of the firm capacity rights	
10.	Interruptible storage capacity is storage capacity that can be interrupted by the transmission 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.	Interruptible storage capacity is storage capacity that can be interrupted by the transmission 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.	Short long term no difference
11.	National regulatory authorities are the bodies as defined by Article 25(1) of the Gas Directive.	11.	National regulatory authorities are the bodies as defined by Article 25(1) of the Gas Directive, unless national law defines diferently	Implementation Dir 2003/55/EC by Member States
12.	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.	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.	
13.	Primary storage market means the market of the storage capacity directly traded by the SSO.	13.	Primary storage market means the market of the storage capacity directly traded by the SSO.	

14.	PSO means Public Services Obligations.	14.	PSO means Public Services Obligations.	
15.	Re-nomination means the reporting of a corrected nomination.	15.	Re-nomination means the reporting of a corrected nomination.	
16.	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.	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). in consultation with storage users based on market needs.	
17.	Secondary market means the market of the storage capacity traded otherwise than on the primary market.	17.	Secondary market means the market of the storage capacity traded otherwise than on the primary market.	
18.	Storage capacity is the space (expressed in normal cubic meters or energy) and flow (expressed in normal cubic meters or energy per time unit) to which the storage user is entitled in accordance with the provisions of the storage contract. Storage capacity refers to space, injectability and deliverability. All of them can be firm or interruptible.	18.	Storage capacity is the space (expressed in normal cubic meters or energy) and flow (expressed in normal cubic meters or energy per time unit) to which the storage user is entitled in accordance with the provisions of the storage contract. Storage capacity refers to space, injectability and deliverability. All of them can be firm or interruptible.	
19.	Storage facility means a facility used	19.	Storage facility means a facility used	Directive

	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).		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).	
20.	Storage penalty is the additional charge that storage system operators/storage users may have to pay after not respecting their contractual obligations.	20.	Storage penalty is the additional charge that storage system operators/storage users may have to pay after not respecting their contractual obligations.	
21.	Storage system operator means a natural or legal person who carries out the function of storage and is responsible for operating a storage facility.	21.	Storage system operator means a natural or legal person who carries out the function of storage and is responsible for operating one or more storage facility(ies).	Why this addition? What does it add?
22.	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.	Storage user means a customer of a SSO using TPA right under article 19 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, supply undertakings, wholesale customers, transportation shippers, traders, larger final customers and TSOs, to the extent that storage is necessary for the TSOs and DSOs to carry out their functions.	Irrelevant but also they probably do not not sign contract or code other wise just

				as any other user.
23.	System user means any natural or legal persons supplying to, or being supplied by, the system (Gas Directive).	23.	System user means any natural or legal persons supplying to, or being supplied by, the system (Gas Directive).	Delete, nothing to do with storage and does not show up in this GGPSSO
24.	Technical storage capacity is the maximum storage capacity that the SSO can offer to storage users, on firm basis, taking into account the system integrity and the operational requirements of the storage infrastructures. It is determined by the physical characteristics of the reservoir and installed equipment.	24.	Technical storage capacity is the maximum storage capacity that the SSO can offer to storage users, on firm basis, taking into account the system integrity and the operational requirements of the storage infrastructures. It is determined by the physical characteristics of the reservoir and installed equipment.	Delete only available capacity is relevant for this GGPSSO?
25.	TPA services means Third Party Access Services. TPA to storage is either regulated (rTPA) or negotiated (nTPA).	25.	TPA services means Third Party Access Services. TPA under art 19 of the directive 2003/55/EC to storage is either regulated (rTPA) or negotiated (nTPA).	
26.	TSO means transmission system operator.	26.	TSO means transmission system operator.	
27.	Unbundled storage product means that space, injectability, deliverability can be traded separately.	27.	Unbundled storage product means that space, injectability, deliverability can be traded separately.	
28.	Unused Storage Capacity means that part of the Available Storage Capacity, plus that part of the Contracted Storage Capacity that	28.	Unused Storage Capacity means that part of the Available Storage Capacity, plus that part of the booked storage capacity that has	Interruptible storage can only be offered in case the available capacity has been sold out under firm commitments. Unused capacity definition is used for interruptible services and anti-hoarding measures.

	has not been nominated for use.		not been nominated for use.	Definition probably needs further discussion.
29.	Virtual storage means a storage service sold in the form of traditional storage product, but not directly linked to a physical storage. A supplier may also use both physical storage and other flexibility tools as well as spot and other supplies and capacity margins resulting from a pool of customers in order to offer virtual storage.	29.	Virtual Combined storage service means a system of physical storages including transmission services of the interconnecting grid.	TPA to virtual storage system not possible and not obliged as only access to facilities can be defined and subject to this GGPSSO
30.	Withdrawal rate: see Deliverability.	<del>30.</del>	Withdrawal rate: see Deliverability.	Delete not in text
31.	Working gas means the volume of gas in the reservoir above the level of cushion gas that can be withdrawn and re-injected.	31.	Working gas means the volume of gas in the reservoir above the level of cushion gas that can be withdrawn and re injected.	Delete not in text