

Status Report 2009 On Capacity Allocation Management and Congestion Management Procedures for Storage

Annex 2: Results of the questionnaire to storage users

March 2010



1 Glossary

This glossary provides the definition and the necessary explanations regarding the terms and concepts used in the questionnaire.

Storage capacity

Storage capacity is space (expressed in normal cubic meters or energy), injectability and deliverability (expressed in normal cubic meters or energy per time unit). Injectability and deliverability can be firm or interruptible.

Available storage capacity

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.

Interruptible storage capacity

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.

SSO

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.

Storage user

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.

Firm capacity

Firm capacity is storage capacity contractually guaranteed as uninterruptible by the SSO.

Firm services

Firm services are services offered by the SSO in relation to firm capacity.

Interruptible services

Interruptible services are services offered by the SSO, in relation to interruptible storage capacity.

Bundled services

Bundled services: storage products which bundle the right to withdraw, inject and hold gas in store, with determined technical ratios.

Unbundled services

Unbundled services: storage products where space, injectability, deliverability can be traded separately.

Seasonal storage:

Injection in months with low gas consumption (summer season), withdraw in the months with high gas consumption (winter season)

Peak Storage

Storing gas for dealing with daily/hourly peaks

Balancing

Balancing of deviations from nominations



Capacity allocation mechanism

Mechanism how storage capacity rights are allocated to the requesting parties.

Congestion management procedures

Contractual/physical congested storage capacity is made available by predetermined processes. These processes include mechanisms for identifying the unused storage capacity rights, releasing and reallocating the capacity rights.

PSO

PSO means Public Service Obligations.

Contractual Congestion

"Contractual congestion" means a situation where the level of the storage capacity demands exceeds the technical capacity. In other words, more firm storage capacity is demanded than can be made available.

Physical Congestion

"Physical congestion" means a situation where the demand resulting from the level of nominations for both firm and interruptible capacity exceeds the technical capacity available at some point in time. In other words, the nomination for flows against firm and interruptible storage services cannot be met. It is worth highlighting that physical congestion can only occur when contractual congestion occurs.

Terms relating to capacity allocation mechanisms and congestion management procedures

First committed, first served / First come, first served

Storage users are served in the order of contracting or requesting capacity rights.

Following the clients' customers' portfolio - Capacity goes with the customer

Storage users are granted capacity rights (within the national legislative and regulatory framework) to request storage capacities depending on their final customers' portfolio.

Auction

Available capacity is auctioned and allocated to the storage users making the best offers (based on price and sometimes also contract duration).

Pro-rata allocation

Capacity is allocated according to the share of the capacity request of a single storage user in relation to the total requests made by all storage users.

Lottery

All storage users requesting capacity participate in a lottery for certain pre-determined amounts of capacity, where bids can be made for one or more capacity "lots".

Primary storage market

Primary storage market means the market of the storage capacity directly traded by the SSO.

Secondary markets

Secondary market means the market of the storage capacity traded otherwise than on the primary market (resale or trade of already sold capacities (injection, withdrawal, volume, bundled or unbundled and/or gas in store between two or more storage users).

UIOLI

The original capacity holder looses the - in a predefined time period - unused capacity rights, the SSO can offer this unused capacity rights on the primary market, either on a firm or interruptible basis.



2 General

Please note that all data should refer to 2008.

Normal cm: The quantity of natural gas which, at a temperature of 15 degree Centigrade (273.15 K) and an absolute pressure of 1.01325 bar (101.325 kPa), occupies one cubic meter.

- 2.1 Contact details respondent (name, company, phone number, e-mail address):
- 2.2 To which category does your company belong? Tick multiple answers if relevant.

Wholesaler	13
Trader (at hubs)	14
Supplier to end-users	14
Industrial customer	1
Power plant / Heating plant	8
TSO (operational purpose)	1
Producer	4
Other: Local Supplier	1

2.3 How much gas in mcm did you sell and physically deliver to the following customer groups:

	Delivered gas in mcm
Households	
Small industrial customers	
Large industrial customers	
Power plants/Heating plants	
Suppliers to end-users	
Traders	
Others	

Comments: Calculation of the single numbers for customer groups were not possible because of lacking information by the storage users. But in total the gas sales of the respondents make up represents 356 bcm, this is about two third of the total gas consumption in EU 27.



2.4 In which countries do you sell and physically deliver gas and use storage facilities

Country	Customer groups (see the above categories)	Use of storage facilities

Comments: This information is used as background information for interpreting various statements. Thus the answers to this question are analyzed in connection with the discussion paper.

2.5 Are you integrated (being part of the same company, share in storage system operator (SSO), SSO as shareholder) with any of the storage operators you have contracts with?

Yes	8
No	11
No Answer	1

2.6 If yes, please describe with which SSO and in which way and to how many per cent.

100% Integrated with SSO	6
No Answer	14

2.7 Is the SSO you integrated with obliged to offer TPA?

Yes	8
No	2
No Answer	10

Centrica: The Use of the Rough facility by Centrica plc is subject to negotiated third party
access. 85% of storage capacity at the Rough facility operated by Centrica Storage Limited
and other companies in the group. The price and volume are negotiated between Centrica
Storage Limited as the storage operator and third party capacity users, while terms and
conditions are standard and regulated.

If Yes, is this negotiated or regulated access?



nTPA	6
rTPA	1
No Answer	1

2.8 Are there any separation arrangements in place between the SSO and you as the integrated storage user e.g. a cap of amount purchasing by the integrated storage user?

Yes	5
No	3
No Answer	12

If yes, please describe what kind of arrangement is in place:

Centrica:

Following the acquisition of the Rough storage facility by the Centrica group, the national competition authorities conducted an inquiry. Subsequently, a number of Undertakings were required to be given by the Centrica group to the UK Secretary of State. Operation of these undertakings is monitored by Ofgem, the national regulatory body and the Office of Fair Trading. The Undertakings cover 5 main areas: separation, protection of information related to Rough, information disclosure, sale of capacity and compliance monitoring.

Centrica may reserve for its own use only 15% of the standard bundled units (SBU's) and a proportion of the additional space available in the facility. Apart from this reservation, Centrica may not participate in the primary market for capacity at the Rough facility or procure an agent to do so on its behalf. Centrica is not prevented from acquiring additional capacity in terms of SBU's or space, but it must do this in the secondary market. Any incremental capacity or space created by investment may be retained for Centrica's use.

• RWE Transgas - Czech Republic:

Czech legislation stipulates that a part of the integrated undertaking of which the SSO is also a part can participate in an auction and obtain storage capacity only if it has booked less than 80 percent of the virtual storage of the given SSO and if the demand for storage capacity in the auction is smaller than the storage capacity offered.

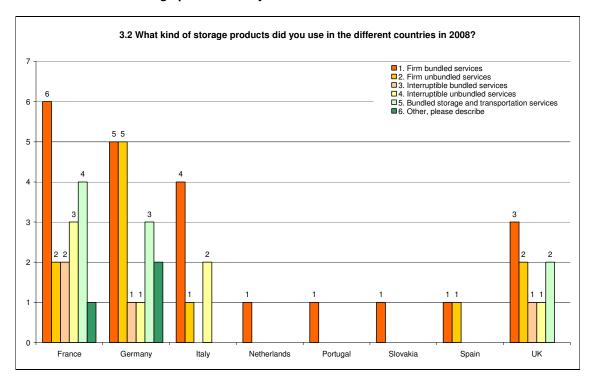
- 3 Data on use of storage products and competition
- 3.1 How much contracted storage capacity did you have in total in the different countries and with the different SSOs (2008 or part thereof)?

Country	SSO	Working gas volume in mcm	Withdrawal rate in cm/h	Injection rate in cm/h

Comments:



3.2 What kind of storage products did you use in the different countries in 2008?



3.3 How many percent of your contracted storage capacity (Working Gas Volume) belonged in 2008 to

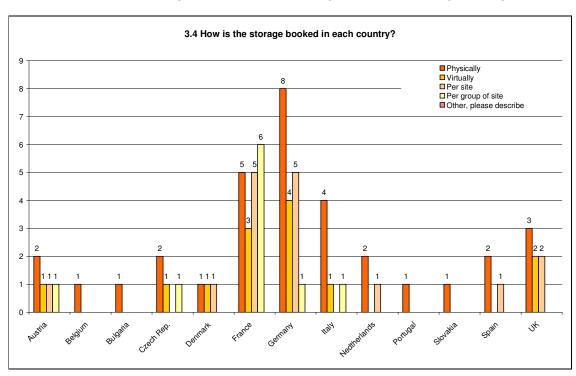
Country - % of contracted storage capacity (WGV)	1. long term contracts (over 5 years)	2. medium term contract length between 1 and 5 years	3. short term contracts (day, month, up to a year)
Austria	96%		4%
Belgium	0	100%	0
Bulgaria			100%
Czech Rep.	>90%	<10%	
Denmark		100%	
France	0	0	100%
France	0	20%	80%
France			100%
France			
France	0	0	100%
France			100%
France			100
France	10%	5%	85%(main part of it comes from automatic reconduction of rights year after year for security of supply obligations :e.g. F, It, Bel, Hung)
Germany	100%	0	0
Germany	100%	0	0
Germany	100%		



Germany	100(physical)		100(virtual)
Coumoni			1000/
Germany			100%
Germany		20%	80%
Italy			100%
Italy			100%
Italy			100%
Italy			100
Netherlands	0	0	100%
Portugal	0	0	100%
Slovakia	100%		
Spain	0	0	100%
Spain	0%	100%	0%
UK	0%	0%	100%
UK	0	100%	0

The figures show very well, that in countries where FCFS is applied as e.g. Germany or Austria, the capacity is booked in long term contracts, whereas in case of countries where CGWC is applied to allocate the capacity as e.g. France or Italy, the capacity is mainly booked on short term.

3.4 How is the storage booked in each country? Please tick, multiple ticks possible



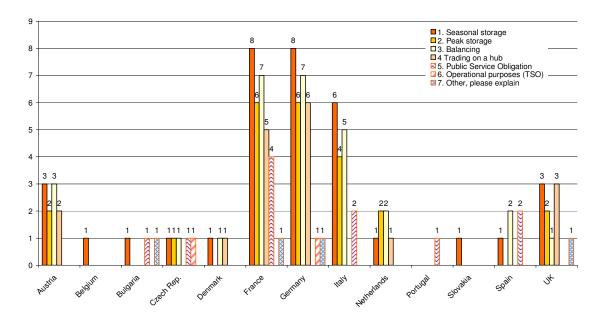
Comments:

A limited amount of storage capacity is available to third parties in the Netherlands. Storage capacity that is available in the Netherlands is sold in large units, and this disadvantages smaller operators who wish to buy smaller volumes. The secondary market in the Netherlands is illiquid and this adds to the risk of smaller operators who buy large volumes as they have no mechanism for disposing of the additional capacity they do not need.



3.5 What are the three main purposes you use storage for?

3.5 What are the three main purposes you use storage for?



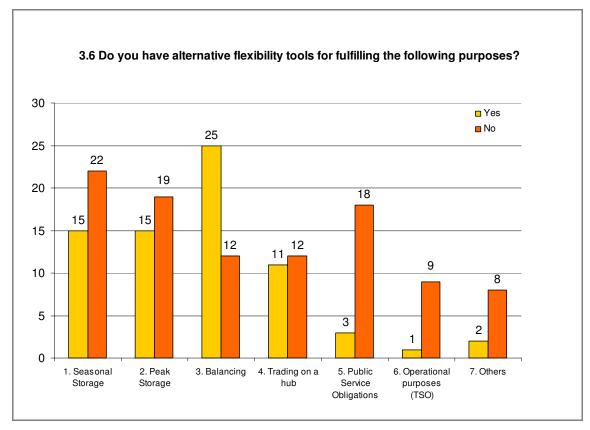
Others: Security of supply

Comments:

- Storages give us some flexibility for balancing issues, both on seasonal and short term horizons
- Security of supply
- flexibility for supply contracts
- Our primary use of storage is to ensure seasonal supply of our customers and cover any peak demand. On top of that, our activities also involve Balancing and Trading. It is worth noting that POWEO also has an obligation to store natural gas as a supplier to households as well as Public Service Obligations.



3.6 Do you have alternative flexibility tools for fulfilling the following purposes?



Others: Supply flexibility

Comments:

- France: The main other flexibility tool is spot purchases/sales via the wholesale market, which can provide security of supply, but where the price risk remains (i.e. we do not know the price until the day we buy or sell). Also there is a strong liquidity risk as even on the most liquid French VTP (PEG Nord) provides a lots less liquidity than other European Hubs, As for the other hubs (PEG Sud, PEG Nord B and TIGF), the liquidity is almost non-existent.
- **Germany:** The flexibility portfolio consists in general of different sources. These sources have different characteristics and interact and complement each other within the portfolio. No single source could replace another source to the full extent. However, storage capacity plays a vital role within the flexibility portfolio.
- The Netherlands: the lack of available seasonal storage leads to operators being
 exposed to high tariffs to avoid imbalance penalties. In Spain, while the gas in LNG
 tanks and underground storage can be traded, the limited amount of existing LNG
 storage capacity forces capacity holders to swap gas with other capacity holders in the
 LNG tanks continuously.

Nuon owns a peak storage facility in Epe, but the Dutch TSO (Gas Transport Services or GTS) offers an (obligatory service) which provides for peak flexibility at temperatures of below -9 degrees. This peak flexibility service is the so called "AMvB" or Algemene Maatregel van Bestuur for peak delivery.



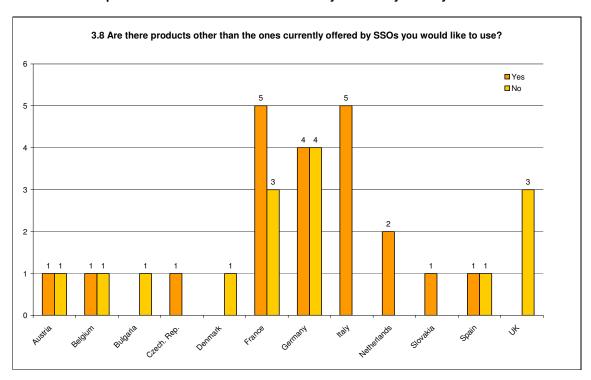
• Italy: Once (2 years ago) there was a flexibility tool which was "a sort of balance" after conguaglio process. That was only a compensation in gas volume following every monthly balance conguaglio publication for each user.

In Italy the space in storage only for residential users. No possibility to get space in storage for industrial customers having consumption per year >200000. This rule is a strong barrier to industrial customers. That needs more gas in winter time. This situation is negative for this kind of users because they have to buy natural gas at high prices with an import for the competition on their production sector in Europe. Of course we speak for international group that sells their products in to the EU.

3.7 If yes, please indicate which ones -Some examples:

- flexibility in supply contracts
- spot purchase
- balancing energy
- interruptible contracts

3.8 Are there products other than the ones currently offered by SSOs you would like to use?



If yes, please describe which ones and how the products can be improved.



- Czech Republic: Products providing higher injection, withdrawal rates and multi-cycle opportunities. This is not possible in CZ due to regulatory limitations as Czech SSOs must group their storages of various types (fast, slow turnaround) into a single virtual storage.
- France: Peak shaving, spot LNG purchases; Storage capacities can be booked for a short or medium period (1 or 2 years), we are interested in booking storage capacities for a longer period (> 2 years)

In general, the products offered by SSOs suit our needs. In some countries however, especially where spare storage capacity is available, it might be appropriate to design products that would better fit the specific needs for power plants.

• **Germany:** Storage offers; Short term (daily, monthly, quarterly and yearly) storage capacities, auction processes;

As a target model, we would like to see a balancing market develop, where the TSO as residual balancer purchases balancing energy on a traded intraday market. I.e. balancing energy should be offered by demand and supply side responses (interruptible costumers (green houses, dual fuel costumers), gas fired power stations, international trading. Prerequisites for the successful implementation of this model are (1) no hourly balancing but daily/continuous (see new Dutch model) (2) long term flexibility contracts of TSO only as back up. In Italy, a consistent load profiling system should be the first milestone to develop such a market based balancing regime.

• Italy: Daily capacity allocation, virtual exchange;

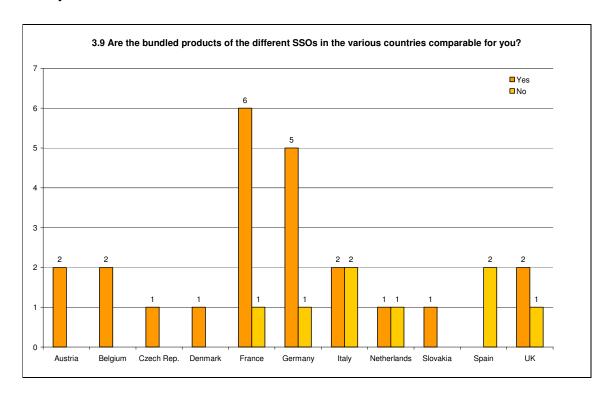
We would like a more flexible possibility of use of counterflow (injection during winter time or withdrawal during summer time): commercial counterflow should be less expensive than how it presently is, because it helps the system to a lesser fuel gas consumption

Bring back in use, "Balance after conguaglio"

- Increasing the storage facilities for industrial customers. More investments.
- **Netherlands:** Investing in Seasonal Storages, so far has not been commercially attractive, while contracting similar services is very difficult as seasonal storage capacity is hardly offered in the market. This is mainly due to the fact that major Dutch storage facilities like Norg, Grijpskerk & Alkmaar are characterised as production supportive storages. Because of this characterisation, the capacity from these storages does not have to be offered to the market and is only used by one single party. Next to this it is important to notice that the utilization level of these storages remain low.
- Slovakia: Products providing higher injection, withdrawal rates and multi-cycle opportunities; unfortunately, this is not possible in CZ due to regulatory limitations as Czech SSOs must group their storages of various types (fast, slow turnaround) into a single virtual storage
- Spain: secondary market capacity, firm unbundled services
- UK: In the Netherlands, we would like to use virtual storage (injection and withdrawal
 capacity and working volume). We would also wish to see the sale of smaller units of gas
 storage in the Netherlands. Further we would wish to see in the Netherlands less
 restrictive contract terms, for example terms regarding the minimum flow rate
 requirements of a facility that nominations are subject to.



3.9 Are the bundled products of the different SSOs in the various countries comparable for you?



If no, please describe why not.

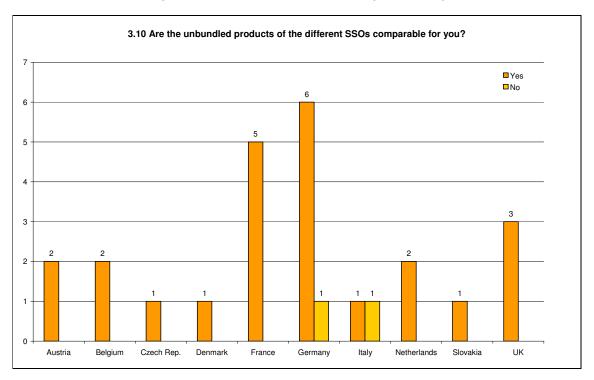
France: The bundled products (working volumes, withdrawal and injection curves) are not
comparable, in the first place because they reflect the differences in the geological
characteristics (depleted fields, acquifers, salt caverns) and physical possibilities of the
storages but also due to differences in the regulation related to access rules that may
impact the commercial structuring of the products.

In all these systems are sold bundled services, but in every system there are specific characteristics. The bundled products have different dates of injection and withdrawal periods, there could be adjustments of these and of capacity tolerances depending on the global fullfillment of the storage (Italy); there are different performances of the single storage plants (depending on their physical characteristics), ecc Because of all these matter we think it's very difficult to compare SSOs products, and it could be made only on some matters like the service to customers, deadline of renomination and bookings, simplicity of storage code, etc.

- Germany: Storage product at the VP vs entry/exit point and interruptible vs firm products
- **Italy:** Due to the geological particularity of each storage facility the single product offered might differ for the different storage type. But storage users are in most cases able to combine different products out of the product mix to receive comparable products. In Italy this product combination is not feasible due to insufficient transparency.
- Spain: There must be public regulation in order to compare the bundled products
- UK: Within the Netherlands, the products are not comparable because of the large differences in pricing structures. The different costs for balancing and transportation over the countries make comparison difficult.



3.10 Are the unbundled products of the different SSOs comparable for you?



If no, please describe why not.

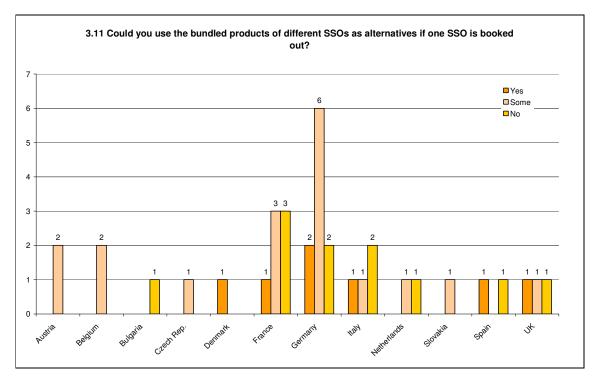
- **France:** Unbundled products are generally separate withdrawal and injection rates. They are not comparable, from one SSO to another, and even from one storage to another.
- Germany: Storage product at the VP vs entry/exit point and interruptible vs firm products
- Italy: insufficient transparency
- The Netherlands: the unbundled products in the Netherlands are more comparable as it is easier to compare space, injection or withdrawal rates and prices on an individual basis as opposed to bundled products where it is not always clear what is included/excluded in the bundled product

Comments:

• Due to the geological particularity of each storage facility the single products offered might differ. But storage users are in most cases able to combine different products out of the product mix to receive comparable products. In Italy this product combination is not feasible due to insufficient transparency.



3.11 Could you use the bundled products of different SSOs as alternatives if one SSO is booked out?



If no, please describe why not

• France: Due to the allocation rule, we have capacities when we have final customers. However, a shipper can obtain yearly capacities sold during auctions (outside of the main allocation process).

No under the current storage rights calculation method, and with additional capacities available through auctions; Storage capacity is congested and centrally administered for the whole market.

- **Germany:** The products may not be offered within the same network. For example, Germany has several networks with constraints for transferring gas between them therefore the products are not substitutable.
- Italy: Storage capacity is congested and centrally administered for the whole market.
- Netherlands: Access to storage in the Netherlands is limited and products are not comparable
- **Spain:** Due to the allocation rule, we have capacities when we have final customers. However, a shipper can obtain a yearly capacities sold during auctions (outside of the main allocation process). Anyway such capacity to get by auctions is very little.
- **UK:** In Great Britain, there are only three sites currently that offer third party access. These are not comparable because of the following characteristics. LNG storage facilities offered by National Grid are short range, 1-3 days services. The Hornsea facility of SSE is a mid range storage site, with an 18 day service. The Rough facility offered by Centrica Storage Ltd is a long range storage site, with a 67 day service. Other projects currently under development that would be comparable are not required to offer TPA.

If yes or some, please describe why



France: Different storage groups can be booked

It depends on the transportation system and / or to which hub the product is connected. Peak storage is very difficult to "transport", so only storages on the same network can be compared.

- **Denmark:** Most characteristics of certain storage type/site can be approximated by bundled and unbundled products of other SSOs.
- Germany: Most characteristics of certain storage type/site can be approximated by bundled and unbundled products of other SSOs

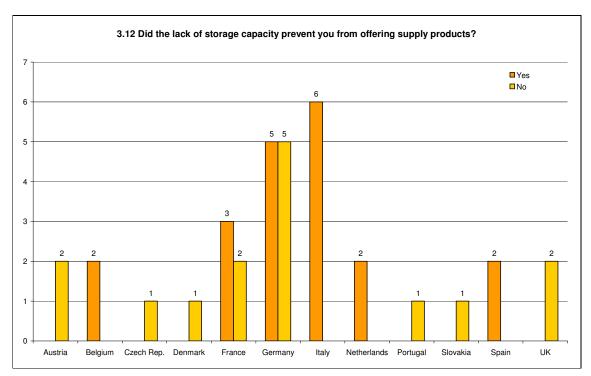
If the services are provided in the same grid then they could potentially be substituted, however the products and prices may not be comparable

Different gas qualities and different market areas

In Germany, most existing storage is committed to long term capacity holders. Smaller amounts that are made available to the market by auction are often not economical. Regulators have identified issues around access to existing storage but have not yet implemented binding provisions to tackle this. Additionally, gas balancing reforms may affect the commercial value of storage;

- Italy: The usability of each storage is strictly connected to its market area, in terms of liquidity of the market and price; this is why it's not so simple and sure that we can get the same results using alternative SSOs. It depends on the transportability and economic feasibility across the countries.
- **Netherlands:** Depends on various parameters: commercial attractiveness, transport capacity, portfolio match etc.
- Spain: All the SSOs offer the same products.

3.12 Did the lack of storage capacity prevent you from offering supply products?





If no, please describe why not.

- Austria: No lack of storage capacity
- Czech Republic: Storage capacity is adequate for domestic market needs.
- France: Due to the allocation rule, we have capacities when we have final customers. Moreover, we have some flexibility on our supplies that allow us to follow the growth of our customer portfolio. This could change in the future.

Especially in the German and Dutch markets, access to storage can be difficult and a hindrance to sales development.

 Germany: There is no lack of storage capacity. In case of we would use our flexible purchase contracts

Not a lack of capacity but too pricy and too many restrictions

sufficient storage capacity available

In Germany we suffered much more the low transportability than the lack of storage capacity.

- Portugal: In Portugal the main problem for offering supply products is not the lack of capacity but the lack of competition
- UK: In Great Britain, we currently have access to other flexibility services (production, flexible supply contracts). However as the volume of production gas from the UK Continental Shelf will decline still further over the next decade, the GB market will become increasingly dependent upon storage products for flexibility

Comments:

Instead in Italy and France the lack of storage capacity prevents offering bigger quantities of gas in winter time and flexible products.

Netherlands: In the Netherlands, the lack of access to storage capacity means limitations to the volumes and shape of products we are able to offer customers in order to minimise the risks and exposure to the GTS balancing tariff. The volumes offered for storage are too large for smaller players to accommodate in their portfolio. The extra capacity also cannot be sold due to the lack of a secondary market.



3.13 What characteristics are you looking for in a storage product?

- market access to a number of facilities offered by various SSOs that would allow us to build a portfolio of short, medium and long range storage products to meet the needs of our customer demand.
- similar characteristics of products offered by SSOs: bundled/unbundled; firm and interruptible products; different volumes; ability to change nominations day-ahead and within day; including and excluding transportation charges
- Long term contracts
- Possibility to move gas also in counterflow
- · Connection to a liquid market
- Simple rules of usage
- Flexible management of bundled and unbundled products
- Possibility of optimization among operators
- We are looking at the ratio between volume and injection / withdrawal rates, and the possibilities to renominate within day for balancing purposes
- Power plants have specific flexibility needs which are in general not covered by today storage market.

 For that reason, we usually appreciate bundled products for our peeds as a gas.

 The product of the product
 - For that reason, we usually appreciate bundled products for our needs as a gas supplier and trader but standardized bundled products offer rarely an appropriate solution for our power plants
- More flexibility, less restrictions and penalties. In Italy it is not possible to avoid penalties because the rules that exist are too restrictive.
- Multi-cycle possibility, high injection and withdrawal capacities, short switch-time
- no physical restraints: SSO should be able to offer virtual product without physical constraints
- We need a range of differing contract lengths and currently, with the exception of the UK market, there is a lack of medium term capacity being offered.
- Visibility on maintenance and good price/quality ratio to be able to structure a portfolio with various technical ratios
- High level of availability, high level of renomination possibilities, short renomination lead time, low costs, rational working gas volume, max. injection, withdrawal capacity, injection and withdrawal curves, price
- seasonal storage: working gas lots; peak storage: withdrawal and injection rate



4 Storage Capacity Allocation Management

4.1 Which information do you need for the assessment before the conclusion of a contract? (e.g. prices, tariffs, usage of storage capacities)?

Commercial Information

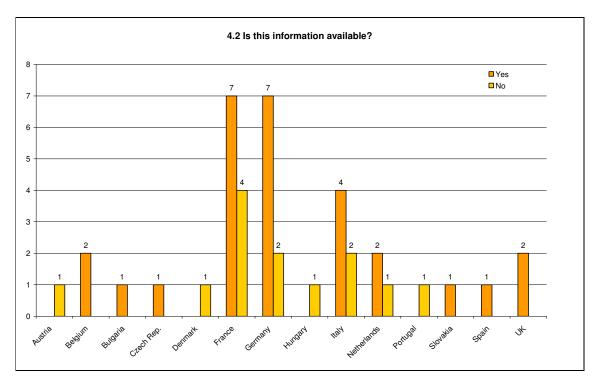
- → Transparent and comparable prices/tariffs
- → Availability of storage capacities
- → Terms and Conditions
- → Product characteristics (injection and withdrawal rates, storage space
- → Type of service (interruptible, firm)
- → Ability to sell the capacity on in the secondary market
- → Liquidity in the market
- → Regulation framework as well as the Transport terms and tariffs to the related grids
- → Customers load curve as the allocation rule takes it into account

Technical Information

- → Transport constraints
- → Physical constraints
- → Access to balancing zone where the storage is located
- → Intraday Capacity access
- → Sufficient information about utilization restrictions
- → Connection to market area / hub
- → Delivery point
- → Max. injection/withdrawal rate
- → Maintenance schedule that affects injections/withdrawals
- → Force majeure
- → Daily maximum technically/commercially available capacity
- → Daily booked capacity
- → Daily maintenance schedules and planned outage periods as soon as planned
- → Annual plan setting out all planned maintenance periods prior to the commercial deadline for making bookings for the next storage year
- → Storage inflows, outflows and inventory levels
- → Aggregated (i.e. public) flow information published for each storage site or group of storage facilities if these are commercially marketed as one facility
- → Historical data



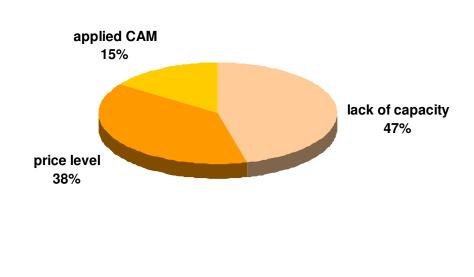
4.2 Is this information available?



- 4.3 How are you informed about available products/capacity? Please describe
 - Website
 - Post
 - E-Mail
 - Shipper Meetings
 - Telephone Call
 - Newsletter
 - User's Club
 - Sending indicative requests to SSO
 - Mostly via tenders subscribed or auctions posted on the Store-X platform
 - Press e.g. Heren Report
- 4.4 For 2008: In which countries did you apply for storage capacity but were not successful? For what reason? Please indicate the capacity allocation mechanism in each of these countries.



4.4. Reasons for being unsuccessful in applying for storage capacitities



Country	Reason for failure	CAM
Austria	capacity already booked out	FCFS
France	price too high	auction
France	applied CAM	Administered, pro-rata of supplied end costumer
Germany	price too high	auction
Germany	capacity already booked out	FCFS
Italy	applied CAM/industrial customers	Administered, pro-rata of supplied end costumer
Netherlands	sold out during negotiations	free market
Portugal	Lack of capacity	CGWC, Auction
Slovakia	Price	Auction
Spain	Lack of capacity	CGWC, Auction
UK	Price	Auction

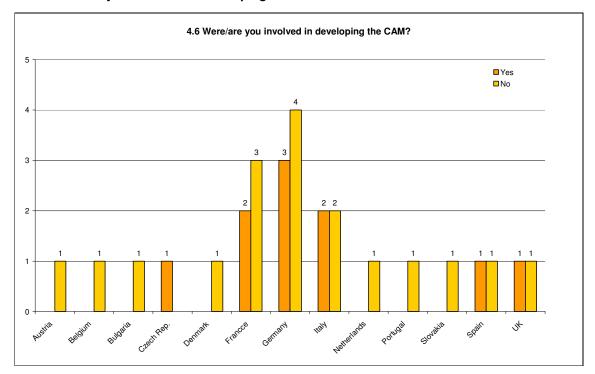


4.5 For 2008: In which countries did you apply for storage capacity and were successful? Please indicate capacity allocation mechanism in each of these countries (e.g.FCFS, auction).

Country	CAM	Comments
Belgium	capacity goes with reg. Customer	
Czech Rep.	FCFS	CAM in CZ has changed since then to auction
Denmark	Auction	
France	"Customer portfolio" allocation based method, auction, Administered, pro-rata of supplied end costumer	
Germany	Bilateral negotiation, virtual storage through bilateral contract in the secondary market from a trading counterparty	virtual storage: Gas Sales und Purchase Contract
Germany	Auction (for Virtual Storage)	
Italy	allocation related to delivering to final customers, Administered, pro- rata of supplied en costumer, additional capacity by auction	the allocated space is 31% of the year 2001 final customers domestic consumption, where "final customers" are customers that offtake less then 200'000 Smc/year. The storage has been assigned only for residential customers.
Spain	Auction, FCFS	We were successful in various tenders and other procedures.
UK	FCFS	



4.6 Were/are you involved in developing the CAM?



If yes, please describe for the specific country in which way.

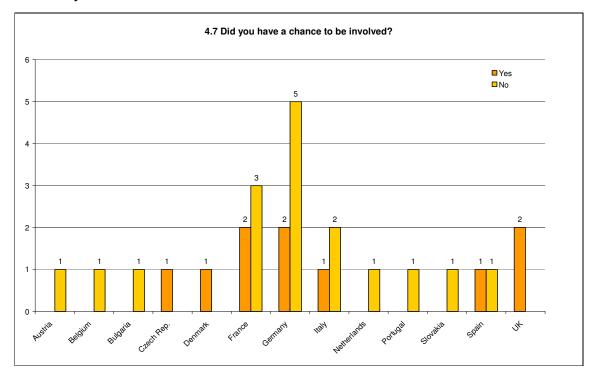
- Czech Republic: By consultation with National Regulatory Authority
- France: A storage stakeholder committee is hold by the French government and CAM is part of discussions.
- Germany: customer consultation
- **Italy:** Storage users take part in the Storage Committee who examines the storage code implementation problem
- **Spain:** Participating in working groups for the development of the net code, although the final decision is in the regulators hands
- UK: In Great Britain, the Rough, Hornsea and LNG storage facilities have capacity
 allocation mechanisms that were developed through consultation with the industry and
 the regulator.

Comments:

 No formal involvement to date. However, we have recently drawn the attention of the Belgian regulator on the problems caused by the current rules (excessive delay - up to one year - in getting the rights attached to the new clients). We have insisted on the review of the allocation rules and process.



4.7 Did you have a chance to be involved?



If yes, please describe for the specific country in which way.

- Czech Republic: Invited by National Regulatory Authority to comment on market model decree; invited by SSO to comment on storage code
- France: We were involved through the storage stakeholder committee
- Germany: customer consultation
- Spain: All traders were involved making suggestions
- UK: Meetings, Consultation events



Do you think that market based mechanisms (e.g. Auction) instead of administrative measures (e.g., FCFS, Pro rata) would provide you with a better opportunity to be allocated more storage capacity?

Yes	12
No	5
No Answer	3



Yes:

- · not only more but better in term of service need
- Market based mechanisms are more likely to lead to an objective, transparency and non-discriminatory allocation of capacity than administrative measures. In competitive markets, auctions provide the most efficient market solution for the sale of storage capacity. Where the supply of capacity is greater than demand, prices are low and the consumer does not suffer unnecessary costs. Where storage capacity is limited. storage operators are incentivized to build new storage facilities. Where a market is not competitive or the storage operator holds a dominant position in the market, mechanisms should be in place to prevent the storage operator from withholding capacity, charging excessive prices, or discriminating in favour of its own interests. This could be achieved through regulation that requires the storage operator to sell all capacity to third parties on reasonable terms. Where competition is not fully developed and the storage operator is owned by an integrated undertaking which also owns a competitive supplier, it is reasonable for the supplier to have pre-emption rights to at least some capacity taking into consideration its share of the market. In an evolving market, this arrangement must be flexible and kept under review. It is essential that where market competition is still developing that any arrangement takes due consideration to the expected needs of alternative suppliers and new entrants in such a way as to facilitate and encourage competition In the Netherlands and Germany, long term contracts without effective UIOLI can lead to artificially high prices for the small percentage of capacity which is made available
- It depends whether storage capacity is a lack resources or not. If it is so it is better using administrative measures.
- Allocation would be based on a market price and would reflect the current level of competition to get some capacities, or reflect the lack of available capacity in the considered area.
- We think that market based mechanisms are more flexible.

to the wider market.

- This also depends on the information gap the market parties may have. Only if all
 market parties have access to the same information market based mechanisms can
 function properly.
- An auction is the most non-discriminatory and transparent allocation mechanism, giving shippers the choice to determine the price and sending clear price-signals for necessary investments to the market.
- would allow for more short term allocation of capacities
- Auctions offer greater certainty and transparency for meeting our capacity requirements. Furthermore, they offer access to capacity through a nondiscriminatory mechanism, thus facilitating competition. More than one round in an auction is necessary to generate price discovery.
- FCFS is fine where capacity is abundant. It is not appropriate where capacity is scarce and congestion management would be needed, because it does not (as a lottery does not) reflect market needs. Pro rata allocation is not suitable to business needs, especially where no liquid intraday (balancing) market is established and therefore alternatives for the rest of ones flexibility requirements are not available. Pro rata allocation is a severe barrier to entry for trading companies and hence a barrier to develop liquidity.
- Auction processes are more transparent, and enable a fairer participation

No:

- The best way to act would be increasing capacities using open season procedures
- Not necessarily, as trading companies could get more values from storage capacities than supplier of end customers.

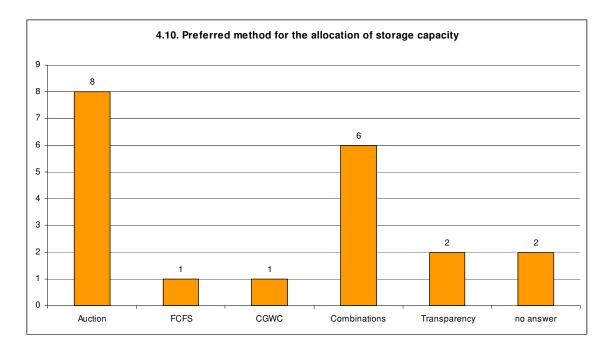


4.9 What are your experiences with the different CAM for storage capacity in different countries?

CAM	Advantages	Disadvantages
FCFS	Only advantageous to the parties who learn about the storage release first	potential for misuse i.e. partially discriminatory
	possibility to structure the portfolio; certainty of not having the risk of spot market	
	pre-determined price, no price risk	difficult to obtain storage for new entrants, and is non transparent
Auctions	market based pricing setting, sappropriated market signals	Prices can be very high
	those prepared to pay get capacity	lack of security of supply
	transparency	Limited capacity auctionned distorts players behaviour. SSO sets a reserve price to a minimum level equal to annual capacity that can be inconsistent with market value (France)
	competition	Auctions are organized for different storages at the same time, which leads to uncertainties on the total capacity bought if the auctions ends at the same tour
	Auctions are organized storage by storage (high visibility on the capacities booked)	
CGWC	Security of getting capacity	no additional capacity available for trading purposes
	Easier to have public service obligations	no security of supply
		No capacity for balancing
		barrier to entry for market participants not supplying end costumers, e.g. traders, limited flexibility market (Italy)
		few capacities are left for other purposes, and discussions for sharing capacities amongst types of customers are long. Moreover, the frequency of the allocation process is not sufficient (2 times per year). (France)
		Does not highlight the market value of storage, and prevents suppliers to end users with a strong portfolio growth to anticipate future needs (allocation process has to be as frequent as possible to match suppliers portfolio) Complexity of the process Price is not regulated even though there is an obligation to store for households, and there is no visibility on price evolution (France)



4.10 What would be your preferred method for the allocation of storage capacity and why?



Combinations:

- CWGC even in combination with auction
- auction, pro rata (not enough capacity)
- FCFS, pro rata



4.11 What is your opinion on open season procedures for developing storage facilities according to the market demand?

- bad if the rules privileges only seasonal storage
- Centrica is in favour of open season procedures as they give clear market signals for development and should allow for capacity to be allocated through an open, nondiscriminatory and transparent process.
- a very good way to increase storage capacities following needs of shippers
- open seasons are good mechanisms to secure and trigger investments.
- Open seasons are an efficient and transparent mechanism provided they set CAM rules that remain in all cases non-discriminatory and transparent, notably while defining the priority rules. So, whatever the procedure, the CAM rules are the most important element.
- Open seasons procedures do not deliver very reliable information. In these open season procedures market parties often behave strategically. Besides that; you can not count too much a market poll to build a business case
- A non-binding open season procedure may be a good way to gauge the interest of the
 market in new storage capacity, but may be problematic to market new long-term
 capacities due to the fact that shippers requesting capacities in open season
 procedures need to be sure that they will get exactly the product that their calculation
 has been based on. Hence, a bilateral agreement is likely to be more appropriate.
- OSP are useful, since they provide signals for investment and a sound assessment of how a) much capacity is to be developed and b) how much of it will be subscribed for how many years, i.e. it facilitates risk assessment. However, these signals could be derived from auction processes as well.
- Developing storage facilities according to market demand helps to create market based incentives to invest in storage through establishing a price for the capacity, which should better reflect the value of gas in store to stakeholders. It is important to note, however, that the open season process is not always linked to market demand and does not provide the same level of transparency or non-discriminatory access as auctions.



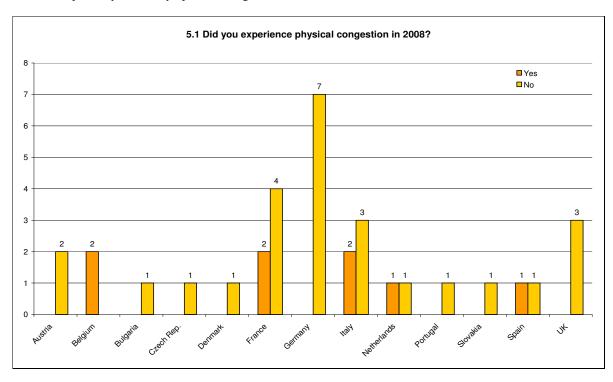
4.12 What is your opinion on the exemption from TPA for storage sites?

- strategic, it should be increased to 50%, minimum and in the same time guarantee higher return on investment
- In general there should be TPA, but there could be an exemption if the storage is very little
- We are in favour of an exemption when it is justified and allows the development of new infrastructures
- · Exemption from TPA shall be strictly controlled
- In very special cases, e.g. construction of new storage facilities where return on
 investment is not guaranteed to be sufficient and the capacity is needed for security of
 supply, a bilateral agreement with SSO providing limited access to third parties may
 be considered
- TPA exemption for storage facilities is often necessary as a means to underwriting
 investment in such a facility and, therefore, ensuring the correct incentives is in place
 to encourage investment, thus facilitating security of supply. We would, however, add
 caution that the TPA exemptions are a useful tool in a transparent, competitive market
 but only if applied correctly and do not give incumbent operators an unfair advantage
 in the market.
- In general, this is required in order for a storage developer to manage his budget for the development of what would usually be a long term project.
- It is unclear which form of legal exemption this questionnaire is referring to. We have therefore provided comments on both article 19(1) and article 22 of the Gas Directive. Article 19(1) of the Gas Directive states that TPA to storage capacity (new and existing) is only required where the Member State deems it is technically and/or economically necessary for providing efficient access to the system for the supply of customers as well as for the organisation of access to ancillary services. This therefore tends to apply to small sites, where TPA would be uneconomic. The criteria by which Member State make this decision is not always clear. Therefore we believe that the gas market would benefit greatly if guidance was provided on how Member States should carry out its technical and economic assessment, e.g. clarity on the size of facility that could be exempted and how to assess issues of cross ownership, alternative sources of seasonality and flexibility, competition, etc. Ofgem (the GB regulator) has recently published some information on the criteria it uses to assess TPA requirements under article 19(1). Article 22 of the Gas Directive offers the opportunity of time limited TPA exemptions for major new investments, subject to certain conditions which focus on security of supply, competition and investment risk. Exemption requests are assessed by the national regulatory authorities and the Member State. However, the final approval is given by the European Commission. which thus ensures a consistent application of the rules, and hence a more level playing field than which occurs under article 19(1). Article 22 exemptions allow developers to protect their investment by providing exemption from TPA for a limited time period. This encourages developers to invest in much needed new storage facilities.



5 Storage Congestion Management Procedures

5.1 Did you experience physical congestion in 2008?





How was it solved by the SSO?

France:

- Interruptible Day Ahead capacity (Short-term physical congestion can arise from unexpected maintenance, strike or other events. This has not occurred frequently in France and is therefore not a major concern for us so far.)
- pro-rata
- reducing the pro rata access

Italy:

- According to your definition physical congestion cannot occur as long as SSO do not overbook their systems. We are not aware of any overbooking. Storage users will not nominate above their booked capacity. This would exclude physical congestion as you define it. We would suggest to define contractual congestion as congestion due to unused capacity, i.e. a) technical available capacity is fully booked and demand exceeds these bookings and b) capacity not being used by original capacity holders is not being offered to the market. Physical congestion is to be assumed (as it cannot be monitored) whenever booking demand exceeds technical available capacity. We answered according to this (i.e. our) definition.
- pro-rata

Spain:

pro-rata

UK:

 Storage operators must consider physical characteristics when developing the site and selling contracts

Germany:

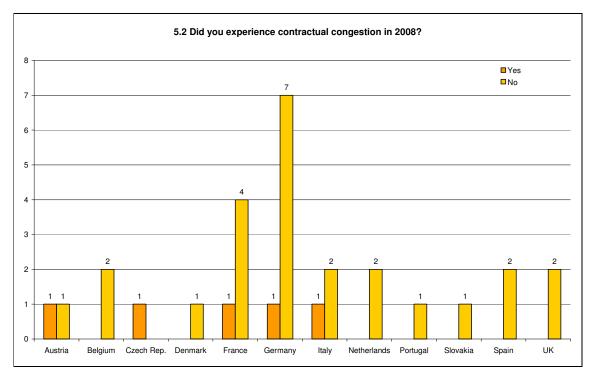
 IN Germany the Storage product we purchased was Virtual, and not affected by physical constraints

Without mentioning a country:

- Short term: small amount of capacities were offered Mid term: development of new infrastructure when possible.
- A lack of transparency means it is difficult to ascertain whether congestion is contractual or physical.



5.2 Did you experience contractual congestion in 2008?



How was it solved by the SSO?

Austria:

No solutions

Czech Republic:

• NRA has introduced a new CAM (auction) which should provide incentive for SSOs to build more capacity, and therefore solve contractual congestion in the longer run.

France:

- Transparency level with regards to flows does not allow for assessment
- Due to the allocation method, capacities are allocated for 1 year given customers portfolio

Germany:

No solutions

Italy:

- In Italy has been conferred less capacity than asked using pro-rata. In Germany and France there have not been contractual congestion but there has been an auction
- Transparency level with regards to flows does not allow for assessment

The Netherlands:

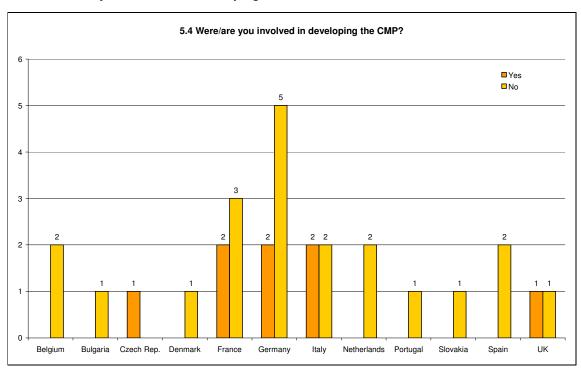
Information regarding the utilisation of storage in the Netherlands in 2008 is not
publicly available, as far as we are aware. Data published by the NMa for 2006-2007
showed low utilisation of withdrawal capacity (never more than 40%) which suggests
contractual congestion



5.3 What are your experiences with the different CMP for storage capacity in the different countries?

СМР	Advantages	Disadvantages
pro rata	non-discriminatory	Potential for misuse i.e. partially discriminatory. Generally speaking, market-based solutions work better than other solutions. Big players has, proportionally, more advantages
Interruptible Day Ahead Capacity	Short-term access to injection or withdrawal capacities	No visibility on availability
Conditional contractual capacity	Become Firm at D-1 Guaranteed for a number of days in a year	No visibility on availability

5.4 Were/are you involved in developing the CMP?





If yes, please describe for the specific country in which way.

Czech Republic: By consultations with National Regulatory Authority

France: Through storage stakeholder comitee held by french government, customer

consultation

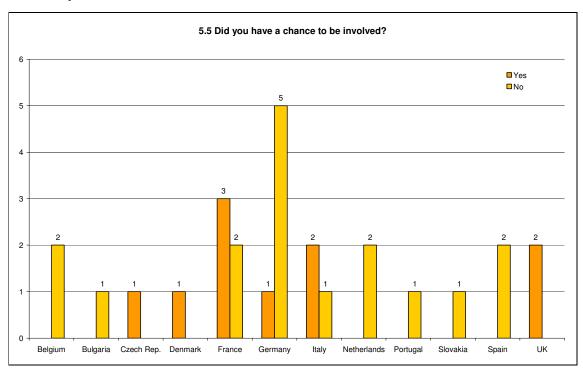
Germany: customer consultation

Italy: customer consultation

UK: In Great Britain, congestion management procedures were developed through

consultation with the industry and regulator

5.5 Did you have a chance to be involved?



If yes, please describe for the specific country in which way.

Czech Republic: Invited by SSO to comment on storage code

Denmark: customer consultation **France:** customer consultation **Germany:** customer consultation

Italy: We take part in the Storage Committee which is a junction between SSO and Authority.

It can suggest SSO modification and implementation about storage code.

UK: Meetings, consultation events

Comments:

France: No formal invitation to participate



5.6 Do the SSOs you have storage contracts with executing a use-it-or-lose-it principle (UIOLI)?

Yes	6
No	9
No Answer	

If yes, please indicate the SSO and describe how it works.

Centrica Storage Ltd/UK: If capacity holders fail to nominate then another customer can purchase withdrawal/injection rights; this happens most days

Enagas/Spain: Part of the capacity is lost if a minimum of gas corresponding to 80% of the rights has not been injected within 6 months after the allocation of capacity. However we doubt that it is a real UIOLI mechanism as there is no evidence that this lost capacity can be offered on time by the SSO on the market. It is more an initiative rule, the user trying to avoid this penalty.

Storengy/France: The "Day Ahead" offer can be compared to a UIOLI mechanism, with pro-rata. Any shipper can request Day Ahead capacity (interruptible only) for day D in day D-1 for specific storage sites. This capacity never becomes firm but pro-rata applies as time goes by.

5.7 How does this UIOLI affect the utilisation of your storage capacity?

- · By the construction of new infrastructure
- This encourages capacity holders to utilise their capacity
- Storage capacity goes with the consumer, if you lose consumers, you lose storage capacity belonging to them
- No real direct incidence at this stage
- Enables us to optimise our needs/usage of storage short-term. However, the lack of visibility on both the capacity offered and the actual availability makes this UIOLI an opportunistic usage only.
- UIOLI has not affected the utilisation of our storage capacity yet, since we have booked and used our storage contracts according to our portfolio needs.

5.8 How can the applied UIOLI mechanism be improved?

- make short term capacity available to the market
- Use it or lose it is essential to require capacity holders to make all unused capacity
 available to the market. If secondary markets were available and sufficiently liquid, this
 could reduce the need for storage operators to apply UIOLI as capacity holders would
 be actively encouraged to sell their own unused capacity.

Comments:

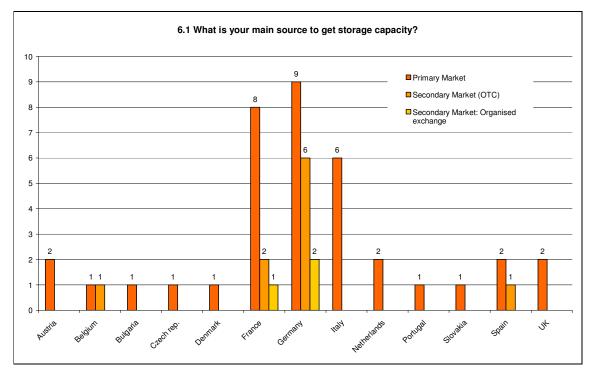


- As underlined, in ERGEG 2008 Status Review (E08-GST 03 -03) it is very difficult to address the question of how a practical and effective UIOLI or a similar mechanism can be designed for storage capacity. On this question, there is clearly a need for further reflection and in-depth analysis from all stakeholders. We would welcome if this consultation could help design innovative solutions that could be applied on a widerscale. In the meantime we would summarize our views as follows:
 - 1°) In order to ensure the respect of PSO, some countries already have special provisions setting for the storage users a rule of minimum use of their storage capacity, depending on their portfolio or on climatic conditions. Notably a minimum rate of injection in the storage at the beginning of winter is often laid down by the legal framework. Such a framework, driven by security of supply concerns, provides also for an effective use of storage capacity and is clearly consistent with the CGWC principle wherever it is applied.
 - 2°) There is also, probably, room for more proactive offer of interruptible capacity, as suggested with the example of Centrica in ERGEG Status Review. But the right of the user of the firm capacity to nominate until the very last moment is also very important and should be guaranteed as long as possible. One might imagine a more balanced system in which the nominating obligations of the firm user would depend on the characteristics of the storage or on the actual utilization rate of its rights. It could help optimize the injection and withdrawal interruptible capacities on a daily basis. But such a mechanism should be made very clear and described very precisely in the Tariff and terms conditions, including the way the SSO should monitor the utilization of their capacity by the storage users and implement this mechanism in order to grant fair and equal treatment to every storage user. Besides, such a mechanism would still be far from being a real UIOLI mechanism as one might be used to it when it comes to transport capacity on the transmission grid. In particular, if it could help solve lack of capacity problems for users on a day-to-day basis, it hardly suits their seasonal or peakneeds.
 - 3°) For such seasonal or peak-needs, it seems that the solution lays on a fair, proper and well-designed capacity allocation process on the primary market as well as on a mature and liquid secondary market, rather than on CMP tools such as UIOLI/UIOSI mechanisms which are designed in the first place for transmission grids.
- SSO could publish forecasts on availability beyond Day Ahead according to the shippers forecasts
- In our opinion, the application of UIOLI in gas storages is undesirable as storage capacities are primarily reserved for potentially cold winter periods and pipeline supply interruptions for which a prediction is nearly impossible
- When creating a UIOLI-rule it has to be considered, that all commercial functions of a
 gas storage, i.e. seasonal balancing, security of supply, fast-churn, portfolio
 optimisation, etc., are still possible and no user group is discriminated against.



6 Secondary Markets

6.1 What is your main source to get storage capacity? (multiple answers)



Comments:

 Italy: storage capacity "goes with the end consumer", so each switching implies an automatic transfer of storage capacity related to the (switched) end-user

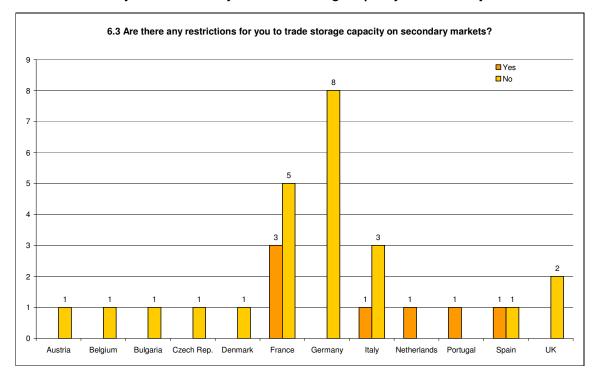
6.2 How much of your contracted storage capacity (in %) did you trade on secondary market in 2008?

0%	29*)
>0% <10%	3
>10%<50%	0
>50%<75%	0
>75%<100%	1
No Answer	1

^{*)} it is not possible to analyse if no capacity was traded or if this question was not answered by the storage customers



6.3 Are there any restrictions for you to trade storage capacity on secondary markets?



If yes, please describe for the country which restrictions (contractual, Public service obligations or security of supply obligations):



France:

- There are requirements of stocks levels for suppliers of domestic customers
- Contractual restrictions, let alone the fact that secondary market for storage capacity is not very developed in France
- Public service obligations and / or security of supply obligations concern more than 80% of our storage contracted capacity.

Portugal:

The only way to obtain storage capacity is from the TSO

Italy:

 PSO - the Regulator could open a formal inquiry on "improper" use of storage capacity allocated for modulation purposes. Security of supply obligations are in place, so that storage costumers have to keep a minimum stock available at the end of each month during the withdrawal period.

The Netherlands:

- In the Netherlands, there are contractual limitations to trading storage capacity. Access to the primary market in the Netherlands is already fairly limited and therefore unlikely that capacity holders would wish to sell their capacity on the secondary market.
- There is neither a primary nor a secondary market for storage capacity in The Netherlands. Furthermore, liquidity in the Dutch market for storage capacity is very limited. This is mainly due to the fact that most storage capacity in the Netherlands is not available to the market because it is characterised as production supportive capacity

Spain:

 The Spanish regulator does not allow the trading of capacity, except in underground storage. There are plans to change that regulation to create a secondary market for storage and transport capacity.

There are no restrictions to trading storage capacity on secondary markets within Great Britain. However, the volume of capacity sold on the secondary market is low, primarily due to the high demand (and therefore usage) of storage capacity. Certain arrangements are in place for the selling of gas in store to the next capacity holder as this can be more economical than withdrawing gas, but the trading of capacity itself is limited, or at least not transparent.

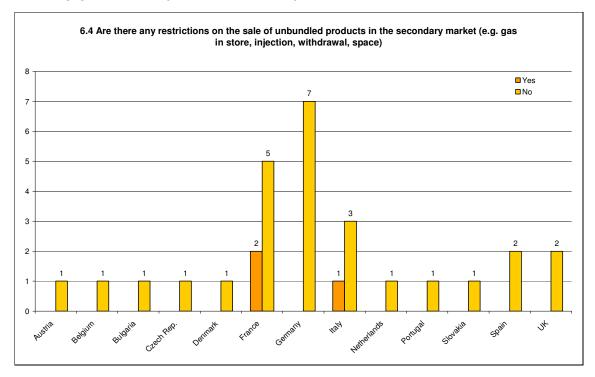
The development of a true and functioning secondary market in each market would be beneficial in ensuring that all capacity is efficiently used.

Comments:

Restrictions can apply on contractual base.

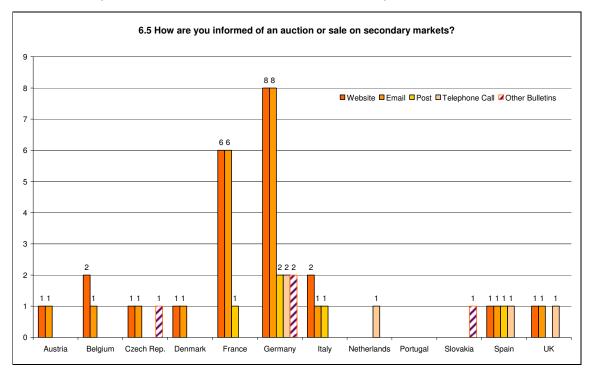


6.4 Are there any restrictions on the sale of unbundled products in the secondary market (e.g. gas in store, injection, withdrawal, space)



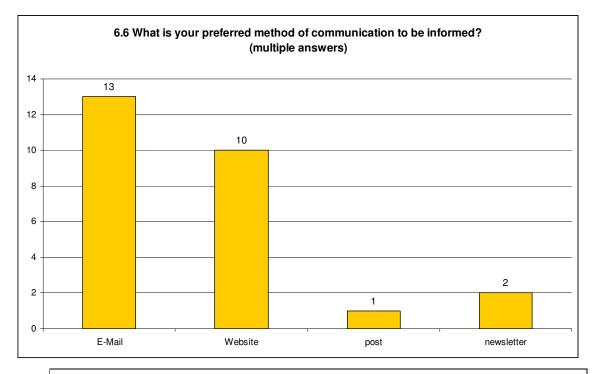
If yes, please specify:

- France: Sometimes, regulatory provisions restrain the possibility to sell unbundled products
- 6.5 How are you informed of an auction or sale on secondary markets?





6.6 What is your preferred method of communication to be informed?



Comments:

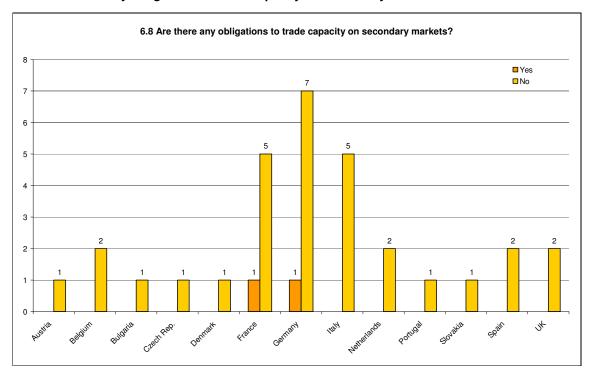
- Email as this tends to contain more information and can be referred back to if needed
- Email and post or newsletter: it prevents from missing an announcement on the web site
- website; email; as these methods are more likely to treat all capacity holders in a symmetrical way

6.7 How long should the invitation be open?

For a month	
For a week	5
Other:	
 The length of the procedure might depend on the level of the commitment needed. 	!
Longer terms are needed to allow for internal approval procedures	
 depending on the specific product parameters 	
 The length of the invitation period should relate to the length of the product, the complexity of the product etc; one month should be a minimum requirement for medium and long-term capacity. 	
for minimum 2 weeks	
 A length of time appropriate to the product being sold; There are a number of websites which enable parties to buy/sell secondary capacities (e.g. Store-X) 	



6.8 Are there any obligations to trade capacity on secondary markets?

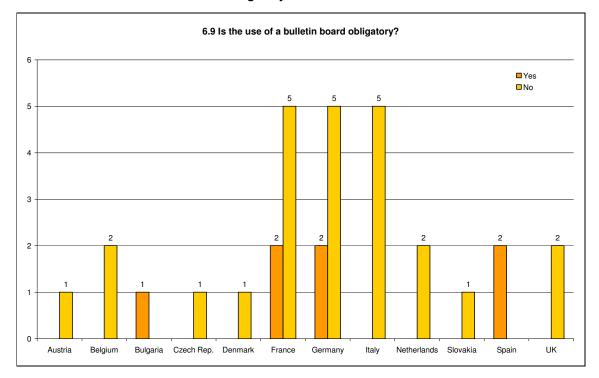


If yes, please describe per country which obligations (e.g. UIOSI)

- France: The implementation of a UIOSI rule remains a difficult task because the compliance of storage users is hard to assess
- Germany: terms and conditions imply UIOSI as preliminary stage to UIOLI



6.9 Is the use of a bulletin board obligatory?



6.10 If there is no obligation which kind of secondary market trading do you prefer most? (multiple answers)

Bulletin board (incl. trading platform)	13
Bilateral trade	6
No answer	4

Please specify why



Bulletin board (incl. trading platform)

- easier not discriminatory
- bulletin board is a transparent and non-discriminatory method of information dissemination
- it would be open to more operators, so it can improve liquidity, as Store-x
- more clearness of the rules and information movement
- · market based, transparent offer
- transparency provided by platforms (e.g. store-x) is crucial for efficient trading with market based prices

Bilateral trade

- In a bilateral trade, typically, contract terms can be more flexible, whereas a trading platform requires a more standardised approach. However, a trading platform may, in general, facilitate greater access to capacity. We do not consider that secondary market trading should be restricted to only one type of trading and so whilst bilateral trades have some advantages, we would also support the use of a trading platform.
- Liquidity for trading Storage capacity is too low, so that the best way to negotiate transactions is bilaterally. A parallel can be drawn with Transport capacity which trades almost exclusively bilaterally. On a sidenote, liquidity in infrastructure markets (transport, storage capacity) can only be developed if the natural gas market these infrastructures are connected to is liquid.
- 1 °) In all cases the SSO should be transparent on the effective use of the capacity booked and provide the best offer to optimize the use of the capacity
- 2°) Whenever possible, the SSO should provide a platform or at least a bulletin board in order to meet the two above mentioned principles and to allow every storage user willing to inform the gas market about its needs to do it at a minimum cost.
- 3°) Whenever relevant, the liquidity of the secondary market could be enhanced by provisions such as UIOSI/UIOLI or Use-it-or-lend-it, notwithstanding the difficulty to implement effectively such rules.
- 4°) But in no case the use of bulletin board or trading platform should be mandatory. This is not the right tool to boost trade on the secondary market as it does not suit the various needs of storage users and would even be, most probably, counterproductive. Indeed, some market players could be reluctant to go on the secondary market if they have to publically inform the gas market that the reservation made is at the end not fully used. Depending on what is at stake, bilateral trade is more flexible and can help to solve several issues at once, including the optimization of storage capacity. Finally, bilateral trade allows stakeholders to find comprises not only in an area where congestion is faced but also on a larger scale. If needed, bulletin board can help shippers to make public that they would be ready to find arrangements on storage capacity or can give

useful benchmarks that would act as a "market price" also for OTC deals. But bilateral trade should remain possible, as this trade can also cover issues broader than capacity issues.

Both

- depends on the situation
- no discrimination, one product standard
- bilateral trade mainly functions well in a market with a relatively limited number of players.
 The bigger the number of players the more suitable a market place is that is accesible to everybody



6.11 Why do you use secondary markets from a sellers/buyers perspective?

Sellers perspective:

- to make available capacities we don't use and to optimize costs
- to optimise storage capacity and TPA costs
- to optimize the portfolio
- · realisation fair market value
- short-term optimisation
- sell unused capacities
- ability to optimise storage needs and value optionally at market prices
- minimise costs of unused capacity

Buyers perspective:

- because we would be interested in improving our flexibility
- in order to get capacity we couldn't have through the CAM
- to have capacity for security of supply obligations and to optimise TPA costs
- to solve congestion issues in certain areas in Europe
- · realisation fair market value
- short-term optimisation
- it is often the only source available and can be more flexible
- sold out from SSO, no such product offered by SSO
- ability to secure additional storage capacity, which is more flexible than trading natural gas spreads (e.g. buy X MWh/d Winter09 and sell X MWh/d Summer09)
- make up for non available primary capacity, fine-tune positions on a shorter time frame

6.12 Please specify the price mechanism on the secondary markets in which you are active?

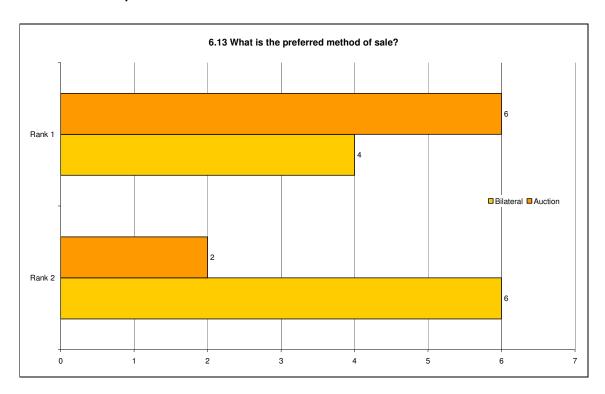
- France: Fixed fee in EUR/MWh of nominal storage capacity
- Germany: Auction, Winter Summer-spread, negotiated, Fixed price, which reflected the wholesale market price, at the point in time, auction, multi-auction, keyed procedure, buy-itnow, search procedures
- Italy: Bilateral negotiations
- UK: Winter/Summer-spread, negotiated

Comments:

Due to the very limited liquidity of secondary markets to date, we are not really active on those markets. We use bilateral trade when needed. In general such deals do not purely consist of capacity trade.



6.13 What is the preferred method of sale?



6.14 Do secondary markets in general need more regulation (be obligatory, standard contracts)?

Yes	4
No	12

If yes, please explain why and what kind of regulation:

The current system does not make storage capacity available to the (secondary) market. This could mean that more regulation is needed.

Obligatory standard product characteristics, delivery VP etc

Comments:

- Standard contractual terms should be developed by the storage operators, in consultation with stakeholders and customers. Regulation is needed if SSO's are unable to develop standard contract terms themselves. The development of standard contracts would facilitate the operation of a secondary market as the alternative of negotiated contracts for buying and selling capacity is more time consuming. To work well in case of contractual congestion, a secondary market needs a fully operational UIOSI / UIOLI mechanism. In case of physical congestion, we needs more investments...
- More obligatory, standard contracts are not needed however; regulation is needed to create an open, transparent and liquid market, with firm access to entry capacity.
- Parallels can be drawn from Transport Capacity secondary market. Secondary Storage capacity
 markets should be supported by SSO, with tools such as bulletin boards, e-mailing and easy
 operational procedures to assign storage capacity to counterparty. Also, the SSO should act as
 the counterparty for each side of the deal, and this in order to avoid the trading issue arising from
 each counterparty having to agree and sign bilateral master agreement contracts with each
 other. If this were not possible, the draft of a standardised contract drafted by a recognised body
 (e.g. EFET) would still be useful to facilitate secondary trading.



6.15 Do you have any suggestions for the improvement of secondary markets?

- Standard contracts; information transparency (available ahead of contract conclusion); greater enforcement of UIOLI and monitoring of any potential hoarding.)
- Before trying to improve market it is necessary to adapt the capacity offer to demand
- Less restriction given by primary contracts in addition to standardisation of storage contracts.
- As above this can be achieved by giving regulators greater independence from government and greater powers to enable them to implement the changes needed to develop a liquid market.
- Standardisation of products and centralisation of platforms are crucial.