7 September 2010

GSE's 2010 Survey on Capacity Allocation Mechanisms and Congestion Management Procedures: Main findings and conclusions

Ref: 10GSE072

Introduction

The present report is an outcome of an internal GSE survey regarding Capacity Allocation Mechanisms and Congestion Management Procedures (CAM&CMP) for storage, carried out in May 2010. This is already the second report on the subject; the first one was released in July 2008[1]. The report is accompanied by a separate presentation[2] which outlines the main findings and conclusions of the survey and takes stock of the developments of the past 2 years.

The recent work of GSE on CAM&CMP is intended to provide input to the ongoing discussion on CAM&CMP and in particular to the work launched by ERGEG with the aim of amending the Guidelines of Good Practice for Storage System Operators (GGPSSO).

The report gathers responses from 24 Storage System Operators (SSOs) representing over 60 bcm of commercial working gas volume, which accounts for approximately 80% of the total commercial gas storage capacity in the EU. The report provides a statistical analysis of the responses received for each of the questions and includes a qualitative commentary.

Main findings

The main findings of the 2010 internal survey show a significant progress in the area of Capacity Allocation Mechanisms and Congestion Management Procedures since 2008 and confirm a high degree of transparency in the storage market.

- In terms of Capacity Allocation Mechanisms, the survey indicates a general move towards a greater transparency and market-based rules. A case in point is the sharp increase in the use of auctions, in particular for planned capacity, and a decreasing application of First Committed First Served as an allocation method.

[1] GSE Position Paper on Capacity Allocation Mechanisms and Congestion Management Procedures ; 9 July 2008; Ref.: 08GSE209

[2] " Key Messages from GSE's 2010 Survey on Capacity Allocation Mechanisms and Congestion Management procedures", August 2010

- In terms of Congestion Management Procedures, the survey indicates a continuous facilitation of the secondary market by SSOs: in comparison to 2008, SSO-based electronic platforms and/or bulletin boards or wider secondary market tools are increasingly available. Use-It-Or-Lose-It (UIOLI) remains the most common anti-hoarding procedure. However, when applied, UIOLI is most often used on a day-ahead and interruptible basis. This is due to the arbitrary nature of determining non-use of capacity in gas storage.

- In terms of transparency, the survey indicates a high degree of data availability, both in terms of the scope of the information and the frequency of its publication (predominantly on daily basis). Storage data is also available in English.

- In terms of storage use, the survey indicates an increase in the number of users since 70% of SSOs in the past 2 years have experienced the coming of 6 new users on average; it shows also that half of the working gas volume is contracted for one year or less.

Conclusions

The 2010 CAM&CMP survey shows a significant positive development trend in the past years in the European storage market. This development will undoubtedly continue as markets become more liberalized and liquid. However, as there is still room for improvement, GSE would like to stress anew its readiness to contribute to the ongoing discussion on CAM&CMP so as to propose solutions that best facilitate market development.

In the context of the planned amendment of the CAM & CMP provisions of the Guidelines for Good Practice for Storage System Operators, GSE would like to highlight that any evolution of the regulatory framework should take into account the principles of the market-based approach, transparency and non-discrimination. Any proposal should not be detrimental to any of the market parties involved. In this regard, EU-wide harmonized principles to create CAM/CMP aimed at providing non-discriminatory and transparent access to storage may be beneficial as opposed to standardizing the CAM/CMP procedures themselves. The procedures reflect the market situation and the position of NRAS in individual Member States and their design should therefore be left to the national level.

Furthermore, GSE would like to note the variety of anti-hoarding tools which have been put in place by SSOs. Majority of SSOs that apply UIOLI do so on an interruptible day-ahead basis – any other use of UIOLI seems arbitrary given the nature of gas storage and the role it plays in Security of Supply. It is also worthwhile stressing the facilitating role that SSOs are playing in actively promoting secondary markets.

GSE also considers that priority mechanisms, the use of which has increased due to regulatory requirements, should not be discriminatory.

GSE believes that the above mentioned points should be taken into account while amending the CAM&CMP provisions of GGPSSO and is looking forward to a constructive discussion with ERGEG and other stakeholders.

Annex 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.

PSO
PSO means Public Services Obligations.

Storage capacity allocation
Assignment of the bundled or unbundled storage capacity on a firm and interruptible basis, as defined in the GGPSSO, to potential storage users.

Technical capacity
The term "technical capacity" means the maximum firm capacity that the SSO can offer to storage users, taking into account the integrity and the operational requirements of the storage system. The "technical capacity" thus explicitly refers to "firm capacity".

Maximum capacity
The term "maximum capacity" means the maximum of both firm and interruptible capacity that the SSO can offer to the storage users, taking into account the integrity and the operational requirements of the storage system.

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.

UIOLI
"UIOLI" is a tool designed to ensure that capacity is not "hoarded" but made available to market participants. It involves using or taking capacity from a storage customer in order to make it available to other customers on a temporary or permanent basis. Other instruments may as well discourage capacity hoarding without taking or borrowing capacity directly from the customers but such instruments will not be referred to as UIOLI.

Backward-looking UIOLI involves the release of capacity that has not been used for a significant period of time. It can involve a trigger level (certain amount not used for a certain time period) or some other mechanism in order to determine a Use-It-Or-Lose-It situation. Forward-looking or Interruptible UIOLI is normally applied on the day and involves lending forecast unused capacity to another user on interruptible terms.

Annex 2

Statistical Summary of the answers to GSE CAM&CMP Practices Questionnaire

Questions

(For explanation of terms, please see Annex 1)

SECTION 1 - GENERAL

1.1 What is your regulatory regime?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	rTPA	nTPA
Yes	9	15
% / answer	38%	63%
$Mm^3(n)$	21128	39198
% of WGV	35%	65%

35% of the total GSE respondents' commercial working gas volume is offered under regulated TPA, while the rest is offered under negotiated TPA. This corresponds to a small step towards more regulated TPA compared to 2008 where 30% was offered under regulated TPA.

1.2 Does the regulatory regime in your country provide for the following TPA exemptions?

		Answers
Answers	24	73%
Members	33	

	Art.22	production purposes	TSOs	'de minimis' rule: "not technically and or economical necessary for…"
Yes	18	13	16	5
% / Yes	75%	54%	67%	21%

The regulatory regime most commonly provide for art. 22, TSO-obligations and to a certain extent production purposes as TPA exemptions.

1.3 Is there a common regulatory regime for all the SSOs in your country [contrary to different regulatory regimes applying to different SSOs] and for all storages that you operate?

		Answers
Answers	24	73%
Members	33	

	Yes	No
Answers	21	3
% / answer	87,5%	12,5%

Like in 2008 there is a common regulatory regime applicable to all SSOs except for the United Kingdom and the Netherlands, where the rules are defined by a "case by case" basis.

1.4 Is the regulatory regime regarding CAM&CMP expected to change in the near future?

		Answers
Answers	24	73%
Members	33	

	Yes	No
Answers	9	15
% / answer	37,5%	62,5%

Close to 40% of the SSOs expect the regulatory regime to change in the near future. In 2008 only 11% of the SSOs did likewise. Changes are expected in the United Kingdom, Denmark, Italy, Slovakia and Poland.

1.5 Are there any arrangements with regard to Public Service Obligations (PSO) that may affect the CAM that you apply?

		Answers
Answers	24	73%
Members	33	

	Yes	No
Answers	10	14
% / answer	42%	58%

PSOs are fulfilled by a little less than half of the SSOs. In 2008 PSOs were fulfilled by 52% of the SSOs.

1.6 Does your Member State require strategic gas stocks to be maintained by SSOs? CAM that you apply?

		Answers
Answers	24	73%
Members	33	

	Yes	No
Answers	8	16
% / answer	33%	67%

One-third of the SSOs are required to maintain strategic gas stocks.

1.7 What is the average number of storage users per storage facility or storage group?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	≤ 3	4 ≤ X ≤ 10	> 10	Has the number of storage users increased in the past two years?	Number of users added in the past two years?	Percentage of total capacity contracted by the three largest users?
Yes	5	9	10	16	6	84%
% / answer	21%	38%	42%	70%	(average)	(average)
$Mm^3(n)$	5641	13916	40769			
% of WGV	9%	23%	68%			

70% of the SSOs have experienced an increase in the number of storage users - on average 6 storage users added per SSO in the past two years. This means that measured in working gas volume two-thirds of the storage capacity is in storages that have more than 10 primary capacity users and 91 % is in storages that have at least 4 storage users. In 2008 these figures were 56% and 84%, respectively.

SECTION 2 - CAPACITY ALLOCATION MECHANISMS (CAM)

2.1 Who designs the CAM rules applied by your SSO?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	SSO by itself	regulator
Yes	18	10
% / answer	75%	42%
$Mm^3(n)$	40854	26412
% of WGV	68%	44%

Three out of four (two-thirds when measured in percentage of working gas volume) SSOs design their CAM rules by themselves, in some cases in cooperation with the regulator.

2.2 If the answer is a., do you consult with storage users when designing CAM rules?

		Answers	WGV in Mm3(n)
Answers	18	55%	40854
Members	33		

	Yes	No
Yes	15	3
% / answer	83%	17%
$Mm^3(n)$	37896	2958
% of WGV	93%	7%

Apart from three exceptions corresponding to 7% of the working gas volume, SSOs do consult with storage users when designing CAM rules by themselves.

2.3 What is the kind of CAM in use by your SSO and the working gas volume related to each kind of CAM in percent?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

type of CAM	First committed - first served	First come - first served	Following the clients' customers' portfolio	Auction	Other	Total
Yes	5	6	6	13	8	
$Mm^3(n)$	10582	12131	21886	7210	8517	60326
% of WGV	18%	20%	36%	12%	14%	100%

SSO priority
Pro-rata

Compared to 2008 there is today more diversification in the kind of CAM in use by SSOs. Following the clients' customers' portfolio and FCome/ComittedFS are still the most used CAM but auctions and other CAMs now account for 26% of the total storage capacity compared to 13% in 2008.

2.4 What is the length of contracts?

		Answers
Answers	24	73%
Members	33	

	less than one year	one year	more than one year	
Yes	13	20	19	
% / Yes	54%	83%	79%	
$Mm^3(n)$	68	25361	25901	WGV in Mm3(n)
% of WGV	0,1%	49,4%	50,5%	51329

Half of the total commercial capacity is contracted under annual contracts as in 2008.

2.5 Do you use priority mechanisms when allocating capacity?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	Yes	No
Answers	13	11
% / answer	54%	46%
$Mm^3(n)$	33173	27153
% of WGV	55%	45%

Compared to 2008 there has been a huge increase in the use of priority mechanisms.

2.6 Do you use Open Seasons or Open Subscription Periods to assess market demand for storage capacity?

		Answers
Answers	24	73%
Members	33	

	Yes	No
Answers	9	15
% / answer	38%	63%

OS and OSP are used to a certain extend as market based tools in order to assess market demand.

2.7 What is the CAM for planned storages if already decided?

		Answers
Answers	16	48%
Members	33	

type of CAM	First committed - first served	First come - first served	Following the clients' customers' portfolio	Auction	Other
Yes	2	3	5	9	6
% / Yes	13%	19%	31%	56%	38%

Open seasons with pro-rata allocation

Even more diverse use of CAM for planned storage capacity compared to existing storage capacity. In 2008 GSE observed the same trend with more diverse use of CAM for planned storage but in 2010 auction and other instruments play an even more important role.

SECTION 3 - CONGESTION MANAGEMENT PROCEDURES (CMP)

3.1 Who designs the CMP rules applied by your SSO?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	SSO by itself	regulator
Yes	18	9
% / answer	75%	38%
$Mm^3(n)$	40854	22872
% of WGV	68%	38%

Three out of four SSOs design CMP rules by themselves, some in direct cooperation with the regulator. This corresponds to the situation in 2008.

3.2 If the answer is SSO by itself, do you consult with storage users when designing CMP rules?

		Answers	WGV in Mm3(n)
Answers	17	52%	38724
Members	33		

	Yes	No
Yes	15	2
% / answer	88%	12%
$Mm^3(n)$	35844	2880
% of WGV	93%	7%

Apart from two exceptions corresponding to 7% of the working gas volume, SSOs do consult with storage users when designing CMP rules by themselves. This corresponds to the situation in 2008.

3.3 What kind of CMP tools do you use in case of contractual congestion of primary firm capacity (for definition, please see glossary at the beginning of this questionnaire)?

		Answers
Answers	24	73%
Members	33	

type of CMP	First come - first served	First committed - first served	Following the clients' customers' portfolio	Pro-rata	Auction	Other
Yes	4	3	3	10	9	8
% / answer	17%	13%	13%	42%	38%	33%

Interruptible services

UIOLI

secondary market economic value priority

Wide use of different CMP instruments in case of contractual congestion. Pro-rata and auction are the preferred instruments which correspond to the situation in 2008.

3.4 What kind of CMP do you use in addition to the above list in case of physical congestion (for definition, please see glossary at the beginning of this questionnaire). An example would be discontinuing interruptible services.

Discontinuing interruptible services is the instrument of choice among SSOs in case of physical congestion. The same situation applied on 2008.

3.5 What are the arrangements with regard to the secondary market for capacity?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	electronic platform or bulletin board	OTC	secondary market covering more than one SSO
Yes	22	13	9
% / Yes	92%	54%	38%
$Mm^3(n)$	59184	48557	32589
% of WGV	98%	80%	54%

All SSOs facilitate secondary trading either by one or several arrangements (electronic platform, OTC and secondary market covering more than one SSO). Compared to 2008 OTC has increased significantly (from 56% to 80%). Likewise, today 9 SSOs are engaged in secondary market covering more than one SSO compared to 4 in 2008.

3.6 What is the percentage of contracted working volume relative to the total working volume?

		Answers	WGV in Mm3(n)
Answers	22	67%	57289
Members	33		

	For the 2009/2010 gas year	For the 2010/2011 gas year
Average	99,62%	98,29%

This can be interpreted as SSOs have successfully sold their capacity for this gas year but it says little about future availability.

3.7 How often have you experienced physical congestion in the 2009/2010 gas year?

		Answers	WGV in Mm3(n)
Answers	22	67%	58305
Members	33		

	0% of the time	Less than 10% of the time	Between 10% and 50% of the time	More than 50% of the time
Yes	15	6	1	0
% / Yes	68%	27%	5%	0%
$Mm^3(n)$	43575	11190	3540	0
% of WGV	75%	19%	6%	0%

Physical congestion seems to be a minor issue since 3 out of 4 SSOs did not experience physical congestion in the 2009/2010 gas year and among those who did the majority experienced this in less than 10% of the time.

3.8 Do you expect to experience physical congestion in the future?

		Answers	WGV in Mm3(n)
Answers	23	70%	58383
Members	33		

	Yes	No
Answers	8	15
% / answer	35%	65%
$Mm^3(n)$	15430	42953
% of WGV	26%	74%

The future confirms the present situation.

3.9 In order to discourage capacity hoarding what are the measures in use by your SSO?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	Limitations on the contracted capacity	Limitations on the capacity dedicated for long term contracts	Cap on the duration for long term contracts	None	Other
Yes	5	6	11	3	12
% / Yes	21%	25%	46%	13%	50%
Mm^3(n)	16829	11337	22521	4121	31738
% of WGV	28%	19%	37%	7%	53%

UIOLI
Day Ahead non nominated service pro rata capacity allocation

penalties

Apart from facilitating secondary trading several SSOs use measures to discourage capacity hoarding in addition to UIOLI.

3.10 Do you apply any type of UIOLI in your storage business?

		Answers	WGV in Mm3(n)
Answers	24	73%	60326
Members	33		

	Yes	No
Answers	17	7
% / answer	71%	29%
Mm^3(n)	44059	16267
% of WGV	73%	27%

Almost 3 out of 4 SSOs have UIOLI measures in place.

3.11 Which type (if any) of UIOLI is applied by your SSO?

		Answers	WGV in Mm3(n)
Answers	17	52%	44059
Members	33		

	Backward looking	Forward looking	Lose it or trade it
Yes	11	9	7
% / Yes	65%	53%	41%
Mm^3(n)	22830	25370	27452
% of WGV	52%	58%	62%

Several SSOs have more than one UIOLI mechanism in place.

3.12 How do you define non-use of storage capacity for the purposes of UIOLI?

Concerning forward-looking UIOLI non-nominated spare capacity is offered mostly on a day-ahead and interruptible basis.
Concerning backward-looking UIOLI SSOs typically define a percentage non-usage over a specific period of time.

3.13 Regarding UIOLI, please specify in the blank box below:
- Who decides on the non-use?
- Who decides on the notice period?
- At which timescales do you apply UIOLI (daily, weekly, monthly or yearly)?

		Answers
Answers	16	48%
Members	33	

	Who decides on the non-use?			Who decides on the notice period?		
Answers	SSO	14	88%	SSO	12	75%
Answers	Regulator	1	6%	Regulator	2	13%
Answers	According to the contract	1	6%	According to the contract	2	13%

		Answers
Answers	13	39%
Members	33	

	At which timescales do you apply UIOLI ?				
	Hourly	Daily	Weekly	Monthly	Yearly
Yes	1	6	0	1	5
% / Yes	8%	46%	0%	8%	38%

Daily is connected to forward looking UIOLI and monthly/yearly is connected to backward looking UIOLI.

3.14 If UIOLI is applied will this mean that the capacity will be taken from the customer on a permanent basis or only on a temporary basis?

		Answers	WGV in Mm3(n)
Answers	17	52%	44059
Members	33		

	Permanent effect	Temporary effect
Yes	9	11
% / Yes	53%	65%
$Mm^3(n)$	19476	33630
% of WGV	44%	76%

The possibility of SSOs taking back storage capacity on a permanent basis is only associated with backward looking UIOLI.

3.15 Do you think that UIOLI is a functioning tool that can be applied as effectively in the storage business as it is in the transmission business?

		Answers
Answers	21	64%
Members	33	

	Yes	No
Answers	11	10
% / answer	52%	48%

50/50 split in opinion on this matter.

3.16 Have you ever used UIOLI in a specific situation?

		Answers	WGV in Mm3(n)
Answers	23	70%	58383
Members	33		

	Yes	No
Answers	7	16
% / answer	30%	70%
$Mm^3(n)$	23626	34757
% of WGV	40%	60%

SSOs have only practical experience with forward looking UIOLI where non-used firm capacity can be distributed to other users on short-term (daily) interruptible conditions. This provides both the SSO and the users with an optimal use of the storage capacity.
SSOs have no experience with the use of backward looking UIOLI. This type of UIOLI is very difficult to implement in practice since a historic non-use of capacity by a storage user may not be a result of capacity hoarding but rather a consequence of market and/or climatic conditions. In practice, backwarding looking UIOLI is therefore of very little use when ensuring a fair and equal access to storage capacity.

SECTION 4 – TRANSPARENCY

4.1 Please specify what data you make available on your website:

		Answers
Answers	24	73%
Members	33	

	Yes	% / Yes
Total working gas volume	24	100%
Contracted working gas volume	23	96%
Available working gas volume	22	92%
Withdrawal and injection rates per storage or group of storages	22	92%
Planned capacity development	19	83%
Available interruptible capacity	14	67%
Planned maintenance	21	88%
UIOLI	12	71%
Type of CAM to be used for specific storage facilities or their groups	22	92%
Type of CMP to be used for specific storage facilities or their groups	21	88%

4.2 Do you publish information on the duration of congestion periods?

		Answers
Answers	23	70%
Members	33	

	Yes	No	If yes: Only for the current gas storage year	If yes: Until congestion period is expected to terminate (could be more than a year)
Answers	11	12	6	5
% / answer	48%	52%	55%	45%

4.3 How often do you update data on your website (daily, weekly, monthly)?

		Answers
Answers	22	67%
Members	33	

	Hourly	Daily	Weekly	Monthly	Quarterly	When required
Answers	1	14	3	1	1	2
% / answer	5%	64%	14%	5%	5%	9%

4.4 How do you advertise that storage capacity will become available?

	Answers
Answers	24
Members	33

	Answers	73%

	Website	Trade publications	Letter/email to existing/potential storage users	Other	Other
Yes	24	6	19	13	12
% / Yes	100%	25%	79%	54%	50%

Via IT platform
Conferences, other events
Regular meetings with shippers
GSE Investment Database, GSE Storage Map

4.5 Do you provide the same information also in English?

	Answers
Answers	24
Members	33

	Answers	73%

	Yes	No
Answers	23	1
% / answer	96%	4%

Transparency main findings:

Nearly all SSOs publish data concerning contracted and available storage capacity, withdrawal and injection rates, type of CAM and CMP in use and planned maintenance periods. A huge majority also publish additional data concerning planned capacity development, UIOLI in place and available interruptible capacity. This data is most often updated daily and almost all SSOs provide the information in English. All SSOs advertise when storage capacity becomes available on the website and through other means such as direct mail, trade publications, meetings etc.