



# **Calculation of Available Capacities: Understanding and Issues - An EREG Evaluation of Comments Paper**

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## 1. INTRODUCTION

### 1.1. Background

On 15 June 2007 ERGEG launched a public consultation on Calculation of Available Capacities: Understanding and Issues – An ERGEG Public Consultation Paper [C06-CAP-06-03]<sup>1</sup> (hereinafter “ERGEG Public Consultation Paper”).

This public consultation focussed on the understanding of the various issues related to capacity calculation and was not yet a consultation on any kind of guidelines or recommendations. Whether there is a request for guidelines and any role for National Regulatory Authorities (NRAs) in the area of capacity calculation was dependent on the outcome of this public consultation.

The problem-setting is as follows. Adequate calculation of Available Capacity (AC) is crucial for effective capacity allocation and congestion management. Variations in the way available capacity is calculated generate risks for undue discrimination of new entrants and create obstacles for trading. The current capacity calculation practice across Europe is based on network scenarios (assumptions) per operational control area chosen by Transmission System Operators (TSOs) pursuant to their own judgements and policy. This flexibility in the hands of individual TSOs raises some concerns about proper available capacity calculation such as:

- there is no guarantee for coordination between TSOs;
- no industry-wide guidelines for network scenario selection exist;
- there is no guarantee that the TSOs’ judgements in the selection of the network scenario are in line with the objective of creating a more fluid and more competitive market;
- there is no guarantee for consistency over time and across European networks;
- there is no guarantee that the generated level of available capacity corresponds to the maximum capability of the system; and
- there is no transparency concerning possible residual risks of interruption associated with the network scenario (reliability).

In light of the above mentioned concerns, ERGEG sought views on ways for greater transparency, greater consistency and optimisation of available capacity calculation throughout the EU’s gas transmission networks. Particularly, stakeholder’s views were sought on the following areas:

- transparency and communication of available capacity calculation across European networks;
- need for the regulation of capacity calculation and on the nature of recommendations for proper capacity calculation;
- consistency and coordination of available capacity calculation over both time and networks; and

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<sup>1</sup> [http://www.ergreg.org/portal/page/portal/EREGG\\_HOME/EREGG\\_PC/ARCHIVE1/Capacity%20Calculation%20PC](http://www.ergreg.org/portal/page/portal/EREGG_HOME/EREGG_PC/ARCHIVE1/Capacity%20Calculation%20PC)

- calculation process of available capacity and ways to optimise the level of available capacity and the use made of it.

EREGG invited all interested parties to comment on the understanding and issues. The public consultation closed on 10<sup>th</sup> August 2007.

## 1.2. Responses received

The ERGEG Public Consultation Paper received 13 responses. Out of these responses, 10 were non-confidential and three respondents requested confidentiality. Table 1 shows the list of responded organisations. All non-confidential responses are published on ERGEG's website<sup>2</sup>.

**Table 1: List organisations responded to the public consultation**

	AEP	Association of Electricity Producers	London, UK
Consumers	IFIEC Europe	International Federation of Industrial Energy Consumers	Essen, Germany
Integrated gas and electricity companies	EnBW	Energie Baden-Württemberg Energie AG	Karlsruhe, Germany
	<i>(confidential)</i>		
	SSE	Scottish and Southern Energy	Perth, UK
Shippers Suppliers	Centrica		UK
	EDISON		Milano, Italy
	EUROGAS		Brussels, Belgium
	Gas Natural		Madrid, Spain
	<i>(confidential)</i>		
	RWE Gas Midstream		Essen, Germany
	<i>(confidential)</i>		
	Statoil		London, UK
Producers	Shell	Shell Energy Europe B.V.	The Hague, Netherlands
DSOs	GEODE		Barcelona, Spain

<sup>2</sup> [http://www.ergreg.org/portal/page/portal/EREGG\\_HOME/EREGG\\_PC/ARCHIVE1/Capacity%20Calculation%20PC](http://www.ergreg.org/portal/page/portal/EREGG_HOME/EREGG_PC/ARCHIVE1/Capacity%20Calculation%20PC)

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TSOs	GTE	Gas Transport Europe	Brussels, Belgium
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EREGEG would like to thank all these organisations for their thoughts and suggestions. The support received from this public consultation helps ERGEG to organise its work in this matter.

## 2. CONSIDERATION OF RESPONSES

### 2.1. General outcome

There is a large degree of consistency in the responses of the different stakeholders.

The public consultation shows in particular:

- a recognition of how ERGEG considers the issues surrounding the calculation of available capacities. ERGEG Public Consultation Paper is accepted as a common basis for next steps;
- an increased interest and awareness of the importance of adequate capacity calculation as a prerequisite for many Third Party Access (TPA) areas. For instance, transparency of data is only relevant if there is quality control of the information; congestion management may only be adequate if capacity is properly calculated, etc.;
- requests for more transparency relating to the input parameters for the capacity calculations and the methodologies. Network users also require transparency on the information behind AC figures;
- overall support to develop guidelines;
- overall support for *ex ante* approval of methodologies and key assumptions by NRAs. This is in addition to *ex post* investigations of TSO's refusals of capacity.

There is a clear signal from the consultation that ERGEG is on the right track and that the market looks forward to the next steps: a public consultation on draft guidelines for capacity calculation.

ERGEG has now an adequate basis to consider recommendations to improve the transparency and consistency of capacity calculation across the EU in a general context to improve the capability of the networks.

The next section of this Evaluation of Comments Paper addresses the individual responses to the following nine main set of questions put forward in the public consultation. It is recommended to consider the online published individual non-confidential responses for first-hand details.

These main set of questions addressed in this evaluation report relate to:

- A common ground of understanding?  
*Does ERGEG Public Consultation Paper correctly address the main issues surrounding the calculation of available capacities?*

- The importance of capacity calculation?  
*Is capacity calculation an important issue? Are ERGEG's initiatives in this area important?*
- Consistency and need for guidelines?  
*How to achieve consistency of AC calculation across networks? Is there support for guidelines?*
- The understanding of transparency?  
*What is the understanding of transparency and how should greater transparency be achieved?*
- The understanding of capacity calculation?  
*What is your understanding of capacity calculation and how should greater consistency be achieved?*
- The understanding of capacity maximisation?  
*What is the understanding of transportation capacity maximisation and how should greater network efficiency be achieved?*
- Validation of inputs for capacity calculation?  
*The network simulation model and assumptions used by the TSO to simulate network scenarios for capacity calculation should be adequate and accurate. Is there a need to validate these network models and assumptions by an independent organisation? What should be the role of the NRA? What about any responsibilities and liabilities?*
- Instruments for capacity maximization?  
*Would capacity buy-back/operational options be an option so that the TSOs may apply in order to guarantee the effective availability of capacity when requested? What about capacity maximisation?*
- Request for periodical recalculations? What about parameter setting for scenario-building?  
*Should published capacity be binding to the TSO?*

## 2.2. Is there a common ground of understanding?

Table 2 presents the responses to the set of questions addressing the validity of the understanding of capacity calculation as discussed in the ERGEG Public Consultation Paper.

The ERGEG Public Consultation Paper is perceived as a comprehensive paper on issues surrounding the calculation of available capacities. Stakeholders consider the paper as a common ground for understanding and as a basis to continue ERGEG's work in this area.

**Table 2: Does the ERGEG Public Consultation Paper correctly address the main issues surrounding the calculation of available capacities? Is there a common ground of understanding?**

Consumers	AEP	The paper is very detailed in nature. AEP does not aim to provide comments on all the questions raised. Rather they generally offer support for greater transparency and standardisation of capacity information in support of efficient markets and development of competition across the EU.
	IFIEC Europe	-
Integrated gas and electricity companies	SSE	Yes
Shippers Suppliers	Centrica	Yes. The paper addresses the main issues surrounding the calculation of available capacities.
	EDISON	Huge document: consultation paper covers many issues and faces the risk to be too all-comprehensive and, consequently, too generic. Paper needs the involvement of different company departments, because different competencies are required (engineering, logistic and supply, risk management, etc.).
	EUROGAS	Yes. The paper is very balanced and well considered. Eurogas is pleased that its input from previous discussions has been taken into account.
	Statoil	Yes
Producers	Shell	Yes
DSOs	GEODE	GEODE agrees that the assessment of available capacities is crucial for the functioning of the internal gas market.
TSOs	GTE	GTE is overall reluctant. There is no formal statement that the paper presents a common understanding. Reference is made to their own work in this field.
Confidential responses	1	There are a large number of questions raised in the consultation paper. Response is concentrated on one issue

		because of the opinion that a lot of questions have to be answered by the system operators or their European associations. In a first step to increase transparency it would be helpful for all market participants if the system operators would publish the main parameters and methods which are used to calculate the available capacity.
2	-	
3		Paper points out many important issues regarding the calculation of available capacities.

### 2.3. Importance of capacity calculation?

Table 3 shows the responses on questions addressing the importance of capacity calculation and whether ERGEG's initiatives in this area are important.

The responded organisations support, some very strongly, ERGEG initiatives to make the issue of capacity calculation accessible to the market and to consider the opportunity to make recommendations on these issues.

**Table 3: Is capacity calculation important? Are ERGEG initiatives in this area important?**

Consumers	AEP	Supportive of ERGEG initiatives to progress understanding of the issues relating to the determination of available capacities and to seek more consistency in approach.
	IFIEC Europe	The capacity assessment process is crucial.
Integrated gas and electricity companies	SSE	SSE firmly believes that the market is greatly assisted by having transparent arrangements for the calculation and publication of available capacity together with market based arrangements for buy-back when capacity has to be curtailed.
Shippers Suppliers	Centrica	Yes, network users and other market participants need easy, timely and non-discriminatory access to capacity and flow information in order to plan and carry out their activities. Given the importance of cross border flows in the EU gas market there needs to be consistency in the methodology behind the calculation of capacity information across Member States.
	EDISON	Edison strongly agrees with ERGEG's warning for greater transparency, greater consistency and optimisation of available capacity calculation throughout the EU's gas transmission networks.
	EUROGAS	Yes. Eurogas totally endorses the objective of maximising existing capacities. An effective and pragmatic approach has to be developed



	Statoil	Statoil supports EREGG's notion that adequate available capacity calculation is crucial for effective capacity allocation and congestion management.
Producers	Shell	-
DSOs	GEODE	The problem of third party access in general can only be properly addressed by determining available capacities as a prerequisite for all measures targeted at decreasing congestion and increasing effective competition.
TSOs	GTE	No priority for GTE. Their priority of work is now on harmonisation of capacity products.  However, GTE states that if the consultation should show an increased interest in more transparency relating to the input parameters for the capacity calculations, e.g. the supply and demand patterns that are being used, then GTE is willing to develop a general framework for defining the requirements on the methodologies to be published by each TSO.
confidential responses	1	-
	2	The calculation of available capacity and the criteria applied to calculate it is of utmost importance, in particular in those systems that are congested.  The minimum requirement for TSOs would be that all the information needed is available to the market so as to allow shippers to check the assumptions and calculation made by TSOs.
	3	Appreciation of the basic message towards increased transparency and comparability

#### 2.4. How to achieve consistency – is there support for guidelines?

Table 3 presents the stakeholders' responses on questions addressing paths to achieve consistency of available capacity calculation and whether there is support for guidelines.

The request to EREGG for developing guidelines to guarantee transparency and consistency in available capacity is put forward by almost all of the responding organisations. Stakeholders are co-operative in EREGG approach and are looking forward to a next public consultation round focussing on guidelines.

**Table 3: How to achieve consistency of available capacity calculation across networks? Is there support for guidelines?**

Consumers	AEP	AEP hopes that a consistent approach can be achieved by defining guidelines for the calculation of capacity rather than direct regulation of the methodologies and scenarios. They
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		would therefore support an approach where the NRA investigates when a capacity request has been refused or a complaint has been made.
	IFIEC Europe	-
Integrated gas and electricity companies	SSE	While the actual calculation is complex, a consistent methodology should ensure consistent results in terms of baseline capacity which is particularly important for interconnections between TSOs. There is a support for guidelines.
Shippers Suppliers	Centrica	Centrica welcomes the development of capacity calculation guidelines by ERGEG.  TSOs should be obliged to follow Guidelines established by DG TREN/ERGEG. If properly implemented, the various Guidelines should promote a coherent approach.
	EDISON	Edison supports ERGEG's suggestion to elaborate common guidelines on generic rules for calculating available capacities. Edison stresses the lack of coordination by TSOs in determining the network available capacities. The same value of AC in different countries can have different significance according to the scenario adopted.
	EUROGAS	Yes, guidelines would be useful. There should be full implementation of the Regulation 1775/2005, transparency of the capacity calculation process and procedures for establishing which should involve appropriate regulatory scrutiny and user consultation.  TSOs should be obliged to follow Guidelines established by DG TREN/ERGEG with appropriate technical input from industry. The various Guidelines should promote a coherent approach.
	Statoil	Statoil supports ERGEG's plan to draft calculation capacity guidelines that will provide the market with a framework for the methodology as well as the day to day activities surrounding capacity calculation and the interaction between shippers and TSOs.
Producers	Shell	NRA might require the TSO to consult on any modelling assumptions it has made, especially in relation to the likely nature of system flows.
DSOs	GEODE	GEODE shares ERGEG's view that the TSOs' discretion in calculating available capacities is broad and the calculation therefore is hard to reconstruct by other market participants.  GEODE agrees that the harmonisation of rules for calculating available capacities should be aspired. However, the calculation of available capacities in an interconnected and meshed system is complicated and the relevant factors for effective guidelines can only be assessed by the TSOs

		themselves.
		GEODE supports the idea if ERGEG creating guidelines on calculation of available capacities. The basis for these guidelines should be the outcome of this consultation.
TSOs	GTE	Not a priority for GTE but GTE is willing to change priorities according to the outcome of this consultation.
confidential responses	1	-
	2	There is room for harmonisation of calculation methodologies among TSOs. This would provide consistency and it will improve the creation of a single European energy market.
	3	-

## 2.5. Understanding of transparency?

Table 4 addresses the responses to questions relating to transparency of issues surrounding the calculation of available capacities.

There is an overall request to make the issues behind available capacity levels transparent to the market, to some practical extent. The market is not only interested in adequate data on available capacity levels but wants some insights on the underlying inputs.

**Table 4: What is the understanding of transparency and how should greater transparency be achieved?**

Consumers	AEP	In particular, more transparency in capacity calculation is required in order to have matching of AC at each side of the border.  However, whilst more transparency of the calculation process may be desirable it may not always be practical, given the detailed level of knowledge required.
	IFIEC Europe	IFIEC Europe requests that regulation must ensure the timely release of data to all market participants on an equitable basis.
Integrated gas and electricity companies	SSE	Whatever the degree of transparency of the calculation itself, it is vitally important that the results of the calculation are published for several years ahead so that the market participants can see where there is capacity available for purchase. Transparency required on network scenarios as well as on assumptions.
	Centrica	Provision of timely and accurate data by individual TSOs is a basic requirement.
	EDISON	Edison strongly agrees ERGEG’s statement “not only the

Shippers Suppliers		knowledge of AC is important for the market participants but also transparency about the method and the main rules governing the levels of AC contributes to a better understanding and level playing field". Transparency of the calculation process allows operators to become aware of their choices, in their day by day activities.
	EUROGAS	The success of current transparency initiatives (e.g. GTE's transparency platform) will depend on the quality of data made available by individual TSOs.
	Statoil	Information on the methodology of AC calculation should be available to all shippers for a general understanding of the AC levels and firmness. Also transparency on maintenance.
Producers	Shell	-
DSOs	GEODE	Since from GEODE's experience there is hardly transparency and/or communication of available capacities calculation across European networks, it is difficult to comment on ways to coordinate calculation processes.
TSOs	GTE	-
confidential responses	1	-
	2	-
	3	-

## 2.6. Understanding of capacity calculation?

Table 5 presents the responses to questions dealing with the understanding of calculating available capacities and the way to achieve consistency.

There is a strong request for more coordination among TSOs to calculate available capacities. Especially the cooperation of adjacent TSOs in calculating the available capacity at cross-border points is perceived as an important short-term target.

**Table 5: What is the understanding of capacity calculation and how should greater consistency be achieved?**

	AEP	
Consumers	IFIEC Europe	It is preferred to have one basic model for the EU, or at least for the Northwest European region. The prerequisite for a model is the timely and uniform implementation of European regulation into national laws. This means for example, national transmission constraints are not projected on national borders. And for example, input parameters with regard to security of supply are defined in a uniform way.

Integrated gas and electricity companies	SSE	-
	Centrica	A more coordinated approach among both TSOs and NRAs on the assumptions and methodologies used in the calculation of available capacities is required.
Shippers Suppliers	EDISON	-
	EUROGAS	EUROGAS emphasises the importance of achieving clarity on the assumptions.  Importance of achieving greater consistency: a more coordinated approach among TSOs has to develop.  Agreed guidelines could be a useful tool to help consistency and co-ordination.
	Statoil	-
Producers	Shell	-
DSOs	GEODE	GEODE supports the idea of enhancing the cross-border cooperation of NRAs, since coordinated capacity calculation procedures could increase the amount of available capacities significantly. Also TSOs could be demanded to coordinate where their networks are aligned in order to maximise the amount of available capacities.
TSOs	GTE	Consistency and harmonisation are valuable goals but they should not be addressed without having a thorough analysis of the implementation costs.
Confidential responses	1	-
	2	First, each TSO should provide all the information on a uniform basis and under equivalent criteria.
	3	-

## 2.7. Understanding of capacity maximisation?

Table 6 shows the responses to questions addressing the understanding of available capacity maximisations and instruments at the TSO's disposal.

Since the public consultation covered many issues, stakeholders generally emphasised the importance of transparency and consistency in capacity calculation and spent somewhat less attention to the range of instruments suggested for capacity maximisation. However, the need for optimal network performance and enhancing the capability of the system were important issues for the stakeholders.

**Table 6: What is the understanding of transportation capacity maximisation and how should greater network efficiency be achieved?**

Consumers	AEP	-
	IFIEC Europe	There should be an incentive mechanism in place that encourages TSOs to operate transmission grids on a European scale in the most effective way meaning enhancing of supply options for end users.  Only if all TSOs have the same incentives and operate in the same regulatory and statutory framework, a maximisation of capacity can be achieved.
Integrated gas and electricity companies	SSE	-
Shippers Suppliers	Centrica	TSOs should be incentivised to maximize utilisation of existing capacity.
	EDISON EUROGAS	- There should be incentives as well as requirements on TSOs to achieve an optimal utilisation of existing capacity.
	Statoil	-
Producers	Shell	-
DSOs	GEODE	-
TSOs	GTE	Different solutions have been made by TSOs at an appropriate national level to increase the amount of capacities available to the market (examples are capacity buy-back, interruptible capacities, Use-it-or-Lose-it (UIOLI), etc.). GTE will continue working towards harmonisation of these measures.
Confidential responses	1	-
	2	-
	3	The maximisation of capacities should not be restricted to single TSOs. Furthermore, incentives for improved efficiency should be developed.

## 2.8. Need for approval procedures and the role of the NRA?

Table 7 presents the responses to a set of questions addressing the need to introduce a kind of validation of network models and network scenarios. The potential role of the NRA and the issue of responsibilities and liabilities are also discussed.

There is an overall request for *ex ante* regulation in the area of available capacity calculation. This is in addition to *ex post* regulation focussing on the regulatory assessments of capacity refusals. However, there is some range in the role the market gives to the NRA. Some wants NRA's to approve assumptions and methodologies while other stakeholders emphasise the role of incentives for proper calculation of available capacities.

**Table 7: Validation of inputs for capacity calculation? The network simulation model and assumptions used by the TSO to simulate network scenarios for capacity calculation should be adequate and accurate. Is there a need to validate these network models and assumptions by an independent organisation? What should be the role of the NRA? What about any responsibilities and liabilities?**

	AEP	
Consumers	IFIEC Europe	IFIEC Europe supports a strong pan European regulation with competences in all issues which can help to ensure that market opening is not hindered by cross border or interoperability issues. IFIEC believes that as long as a clear incentive mechanism for TSOs to maximise cross border capacity is not fully implemented and operational, the network models – including input variables and parameters – need to be validated by an independent organisation on a European level.
Integrated gas and electricity companies	SSE	SSE believes that the NRA's role should be limited to methodology approval rather than detailed management of the calculation. Also any refusal of requests for access or other complaints should be referable to the NRA for resolution. No validation by independent organisation but publication of simplified network simulation (through online simulator).
Shippers Suppliers	Centrica	<ul style="list-style-type: none"> <li>- Model and assumptions need to be transparent and discussed with the NRA and network users</li> <li>- Assumptions should be reviewed on a yearly basis, as part of an annual consultation process</li> <li>- NRA should be responsible for approving the model's assumptions, methodology and its outputs</li> <li>- TSO must be responsible for publishing accurate and timely capacity information</li> <li>- Formal ERGEG guidelines on how TSOs and NRAs should share information to ensure that capacity calculations are consistent and reflect developments on neighbouring networks</li> <li>- Improve the level of AC through increased harmonisation and sharing of best practice in the implementation of TPA</li> </ul>
	EDISON	The role of ERGEG, and of the NRAs, should be encouraged not only in order to have an additional

regulatory framework: network simulation models, such as the calculation methodology of operating margins and linepack values, should be finally validated by NRAs in order to ensure they are made adequately.

- EUROGAS
- Assumptions should be transparent, justified and open to regulatory scrutiny as well as consultation with users.
  - GTE+ should have a role in ensuring consistency of modelling principles and assumptions and enable TSOs to share best practice.
  - The NRAs should have the possibility to scrutinise the assumptions and calculation methodology, but ultimately the responsibilities and liabilities for the capacity calculations rest with the individual TSOs.
  - Eurogas favours a process open to regulatory scrutiny and end user consultation.

Statoil

TSOs are best placed to understand and run their network models. However, it's Statoil's opinion that regulation of capacity calculation is necessary to guarantee a methodology of capacity calculation which is non-discriminatory and combines the security and reliability of the system with a maximised use of the available system.

The NRA should approve the calculation method.

Producers	Shell	<p>TSO should be required to consult with system users on any methodology and have any methodology approved by the relevant NRA.</p> <p>A validating role for an external and independent organisation would be welcome.</p>
DSOs	GEODE	<p>Who will be determined responsible to take a view of calculation values and methodologies set out in guidelines can only be decided after gaining a profound overview on which factors are taken as a basis by the TSOs and what will be included in the guidelines.</p> <p>Since there is no supranational regulatory body, GEODE agrees that the NRA would be the appropriate organisation to review and control the calculation of available capacities by the TSOs.</p>
TSOs	GTE	<p>With regard to the calculation of available capacities, the TSOs have the full responsibility for the determination of firm capacity amounts. TSOs calculate such capacities using state-of-the-art methods in line with the respective legal, regulatory and contractual framework. GTE members are willing to explain the calculations to their national regulatory authority, should there be any requirement to do so. If considered necessary and efficient, the NRA could review capacity calculation methods applied by the relevant TSOs.</p>



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confidential	1	-
responses	2	- TSO is responsible for the operation of its network and therefore the TSO should define the network scenario. - The NRA could oversight the assumptions made by the TSO.
	3	- The methodology and their use should be approved by the regulators and be compared on a European level. - Scenario's and assumptions should be approved by the NRA. - <i>Ex ante</i> approval of the methods would ensure more legal certainty than if the NRA only acts based on complaints.

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## 2.9. Instruments for available capacity maximisation?

Table 8 presents the responses to questions addressing instruments to maximise the availability of capacity.

There is an overall support to use market-based mechanisms like capacity buy-back and “commitments to flow” as long as firm capacity is guaranteed to be firm.

**Table 8: Would capacity buy-back/operational options be an option that the TSOs may apply in order to guarantee the effective availability of capacity when requested? What about capacity maximisation?**

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	AEP	-
Consumers	IFIEC Europe	In order to maximise the efficiency of the transmission system, IFIEC does not believe the most conservative network model should be used. This means that if certain constraints exceed the maximum expected values, the TSO should have to act to ensure the system integrity by market based mechanisms, such as capacity buy-back, interruptible contracts and/or re-dispatch of gas flows.
Integrated gas and electricity companies	SSE	SSE believes that capacity buy-back is essential and encourages TSOs to consider the value of the capacity. It's also the only feasible means to compensate users if capacity has to be curtailed.
	Centrica	- Encourage the use of discretionary rights by the TSO to sell firm capacity beyond an agreed baseline level. The NRA should ensure that the TSO's financial incentives encourage this.
Shippers Suppliers		- Capacity buy-backs could be used as a methodology; however care needs to be taken to ensure that the buy-back

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		rules do not encourage gaming.
		- Operational options are a potential tool but care needs to be taken in attributing a value to such contracts and validating their delivery: there is always a risk that the shipper's supply could be interrupted upstream.
	EDISON	Edison welcomes mechanisms in order to guarantee the effective availability of capacity. Nevertheless, all those mechanisms that could affect contractual flexibilities and liabilities of the shippers and limit their contractual opportunities (for example firm UIOLI) should be avoided.
	EUROGAS	- Eurogas encourages the use of discretionary rights by the TSO to sell additional firm capacity, and capacity buy-back is an option.  - At no time should network users lose firm capacity rights.  - Concerns about the use of operational options since shippers because of problems upstream may not be able to meet commitments.
	Statoil	Statoil welcomes the suggestion of "operational options" in the consultation. This would lead to increasing physical capacity at certain points in the system.
Producers	Shell	The market-based approach is a legitimate means of maximising available capacity. However, care should be taken to ensure that the specific model chosen does not encourage the TSO to take advantage of any incentives in a way that may be to the detriment of system users. For instance, buy-back is fine but not recommended.
DSOs	GEODE	-
TSOs	GTE	-
confidential responses	1	-
	2	- In favour of using market-based mechanisms, like buy-back, for dealing with effective availability of capacity.  - Operational options (e.g. commitments to flow) are a good tool for the TSO.
	3	- Capacity buy-back can be an option to guarantee availabilities, but only if there is a sufficiently liquid market for capacities, which is not yet the case in most areas in Europe.  - "Operational options" contracts should be actively requested from shippers by the TSO based on actual individual flow patterns and/or based on auctions and other tender procedures. Shippers should be encouraged to submit proposals for such services to TSOs.

## 2.10. Frequency of capacity re-calculations?

Table 9 presents the responses to questions dealing with the issue of periodical recalculations, parameter setting for building network scenarios and whether published available capacities should be binding to the TSO.

The stakeholders would welcome an agreement on the frequency of available capacity re-calculations. There is also an overall need that published available capacity should be effectively available when requested.

**Table 9: Is there a request for periodical recalculations? What about parameter setting? Should published capacity be binding to the TSO?**

Consumers	AEP IFIEC Europe	- IFIEC believes a periodical re-calculation throughout the region should be implemented. To achieve maximum AC this should be done on a monthly basis. On the other hand, one single contract might have such an impact on the whole system that a re-calculation of ACs is required. Such an incidental re-calculation should be an additional possibility.  IFIEC believes that published AC should be binding for the TSOs.
Integrated gas and electricity companies	SSE	- SSE makes a distinction between “baseline capacity” and “operational capacity”. Baseline capacity is calculated for a longer period while operational capacity is recalculated on a day-ahead or on the day basis.  - Baseline capacity should take account of different flow patterns of the year (seasons)  - Published AC should be binding for the TSOs. Capacity buy-back may be applied.
Shippers Suppliers	Centrica	- A common timetable for periodical recalculations across TSOs networks could be agreed: ideally monthly but quarterly would be an acceptable minimum;  - Real time publication of firm and interruptible AC on basis of new bookings;  - There should be consistency between parameter values used for different calculations by the TSOs (network planning, security of supply, etc.). Parameter values should be published;  - Users need to have confidence that the published AC reflects the firm capacity that is available for them to book at the time; and  - The NRA should have the responsibility for ensuring that the TSO is not overly cautious in its AC calculations and that the regulatory regime is giving the TSO the correct financial

		incentives to maximise capacity available.
	EDISON	Edison supports the idea of periodical recalculation, instead of the automatic method, trying to harmonise the period throughout the EU. Recalculation should be at least annual. A more frequent period should be carefully evaluated, taking in mind the trade off between the accuracy of the AC and the reliability of the scheduling done by operators.
	EUROGAS	- The process involves agreement on a common timetable including periods of sharing assumptions between TSOs before recalculation.
	Statoil	-
Producers	Shell	Periodical calculations are adequate as long as existing contracts are not undermined.
DSOs	GEODE	-
TSOs	GTE	-
confidential responses	1	-
	2	-Periodical recalculations could be appropriate and could be made every three months; and - Network scenarios should be set according to the season of the year: summer, winter, spring and autumn.
	3	- Periodical recalculations could be an option; - Seasonal network scenarios are definitely necessary as flow patterns may change extremely between seasons; and - Published capacities must be binding.

### 3. CONCLUSIONS

#### 3.1. Insights gained from the consultation

The outcome of the public consultation on the understanding and issues related to available capacity calculation provides a request to ERGEG to continue the work it started in this important area and to propose guidelines. ERGEG will take this message on board.

ERGEG will carefully consider the issues for which guidelines may be appropriate. The development of guidelines will be subject to further assessments within ERGEG and considered in cooperation with the stakeholders.

According to the requests of the market, the emphasis will be put on considering guidelines to enhance transparency and consistency of the inputs for calculating available capacities. It should be possible to propose a set of recommendations to guide the choice of parameters and scenario-building for calculating available capacities. This approach corresponds to the market request for some type of *ex ante* regulation in the area of capacity calculation besides *ex post* regulation where capacity refusals are investigated.

In light of these market requests, more debate is necessary to gain insight in the current practice of capacity calculation and to identify key parameters for scenario-building suitable for recommendations. Another issue for further debate are the roles and responsibilities between the stakeholders, especially between the TSOs and the NRAs.

The extent and the nature of the guidelines as well as the framework in which the guidelines may be presented are still open for discussion and are considered in the second phase of work that ERGEG will undertake in the area of calculation of available capacities. Any interferences with the EC adopted 3<sup>rd</sup> package of legislative proposals will be carefully addressed.

### **3.2. Next steps**

As announced in the public consultation and depending on the outcome, ERGEG will develop a public consultation paper on guidelines for good practice in the area of calculating available capacities. Given the positive outcome of the first public consultation, ERGEG will start the second phase: moving from common understanding of capacity calculation issues and market requests to the development of guidelines. The paper on guidelines for good practice will be subject to public consultation and is foreseen for 2008.

In the process to develop guidelines for good practice, a survey among the NRAs in the EU will be carried out at the end of 2007 in order to assess the involvement of European regulators in capacity calculation. This survey will be followed by a questionnaire to TSOs. The aim of both questionnaires is to gain knowledge of the roles and responsibilities of NRAs and TSOs in the area of capacity calculation and should provide insights on issues for which guidelines are recommended in order to get greater coherence and convergence.

ERGEG would like to thank the co-operation of the stakeholders for the constructive discussions and thoughts in the complex area of calculating available capacities. ERGEG is aware that appropriate guidelines can only be achieved if they are also supported by the market stakeholders. ERGEG looks forward to continuing the productive cooperation.