



Calculation of Available Capacities: Understanding and Issues - An EREG Conclusions 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]¹ (hereinafter ERGEG 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 TSO's 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 the light of 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

¹ http://www.erggeg.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 10th August 2007.

1.2. RESPONSES RECEIVED

EREGG Public Consultation Paper received 13 responses². 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 website³.

Table 1: List organisations responded to the public consultation

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

² In addition to this ERGEG Conclusions Paper, there is an ERGEG Evaluation of Comments Paper [C06-CAP-06-03a] which spends more time addressing the individual responses.

³ http://www.ergreg.org/portal/page/portal/EREGG_HOME/EREGG_PC/ARCHIVE1/Capacity%20Calculation%20PC

DSOs	GEODE		Barcelona, Spain
TSOs	GTE	Gas Transport Europe	Brussels, Belgium

EREGG 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. ERGEG CONCLUSIONS⁴

2.1. General conclusion

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 require also 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 for 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.

⁴ The ERGEG conclusions are drawn from the ERGEG Evaluation of Comments Paper [C06-CAP-06-03a].

The next section of this Conclusions Paper addresses the market signal drawn from the responses to the following nine main set of questions put forward in the public consultation. ERGEG will take these requests and messages of the market on board. 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 maximisation?
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?

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

It is right that the first phase of ERGEG's work in the area of capacity calculation was focused on the achievement of a common level of understanding with TSOs and other stakeholders. ERGEG is now able to build on this common understanding and common interest in order to examine guidelines to meet market requests.

2.3. Importance of capacity calculation?

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 recommend on these issues.

That the market supports greater transparency, greater consistency and optimisation of available capacity calculation throughout the EU's gas transmission network is not surprising. However, thanks to ERGEG initiatives so far in this area, the issue of capacity calculation is now a debated one with stakeholders around the table sharing some joint level of understanding. Capacity calculation issue climbs in the ranking of priorities. Interferences with the EC adopted 3rd package of legislative proposals will be carefully addressed.

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

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

2.5. Understanding of transparency?

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 into the underlying inputs.

Effective transparency is only met if the quality of published data is controlled. Quality control of available capacity levels needs a specific approach.

In particular, transparency at cross-border connection points was highlighted. Differences of AC at each side of the border should be transparent for the market and matching of AC should be pursued.

2.6. Understanding of capacity calculation?

The stakeholders, and this holds also for the TSOs, are aware of the importance of parameters and scenario-building underlying the capacity calculation methods used by the TSOs. This is an important achievement in the debate on capacity calculation and opens a door for further initiatives in order to enhance coherence and convergence.

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. The importance of clarity on underlying network scenarios and assumptions is emphasised.

2.7. Understanding of capacity maximisation?

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.

Some stakeholders are cautious regarding the introduction of advanced instruments for optimising AC. In general buy-back mechanisms are considered as adequate but firm Use-it-or-Lose-it (UIOLI) is not recommended.

Stakeholders endorse incentive mechanisms to encourage TSOs to operate transmission grids on a European scale in the most effective way.

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

There is an overall request for *ex ante* regulation in the area of available capacity calculation. This 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 NRAs to approve assumptions and methodologies while other stakeholders emphasise the role of incentives for proper calculation of available capacities.

2.9. Instruments for available capacity maximisation?

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.

Some market parties warn for possible distortion if innovative instruments for capacity creation are not properly used or implemented. For instance, care needs to be taken to ensure that the buy-back rules do not encourage gaming. The market is also reluctant for the use of firm UIOLI-mechanisms.

2.10. Frequency of capacity re-calculations?

The stakeholders would welcome an agreement on the frequency of available capacity re-calculations.

There is also an overall need that published available capacities should be effectively available when requested (published available capacities should be binding to the TSO).

3. WAY FORWARD

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 3rd 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 questionnaire seeks to gain knowledge about the role of NRAs with regard to calculation of available capacity. In addition, a questionnaire will be addressed to the TSOs. However, in the first instance it is important to determine what the role of regulators is in capacity calculation as there are a number of regulators with powers in this field. Once a clearer picture in this regard has been gained, a more refined and useful questionnaire addressed to TSOs could be prepared.

The outcome of both questionnaires will contribute to ERGEG's work on the development of practices for coherence and convergence of capacity calculation in Europe. The primary target is the improvement of transparency, regarding AC levels as well as the underlying methods and network scenarios, and consistency of AC calculations. ERGEG will search together with the stakeholders, in particular the TSOs, for standards or guidelines that ensure consistency in AC calculation inputs, modelling assumptions and data exchange among TSOs. Consistency should be achieved between data and modelling assumptions for AC calculations that are consistent with that used for the planning of operations and system expansion, and in line with existing legislation and regulation.

GTE has expressed, in its letter of 27 November 2007 to the chair of the CEER Capacity Work Stream, the recognition of the importance of transparency in parameters and scenarios underlying the capacity calculation methodologies used by the TSOs. There is also a common interest to continue the productive cooperation. This cooperation is important in order to identify parameters and assumptions for which standards or guidelines are appropriate.

These assessments and discussion should lead to a public consultation paper on Guidelines for Good practice on Calculation of Available Capacities (GGP CAC).

The work on available capacity calculation will continue in 2008 in the Gas Capacity Task Force (GCA TF) within the GCA-1 work stream on capacity calculation.

An indicative timeline for the next steps and the work in 2008 are presented below. This calendar assumes a continuous and smoothly process. Other activities, for instance in the framework of the 3rd Legislative Package, may change priorities of work. Therefore, the proposed steps are quite straightforward but, however, the timing is rather optimistic.

2007Q4	- Circulation to NRAs of the questionnaire on European Regulators involvement in calculation of available capacities.
2008Q1/2	- Paper on the outcome of the NRA responses; and - Circulation of questionnaire to TSOs in order to gain knowledge of current calculation practices and to identify issues for which standards or guidelines may be appropriate.
2008Q2/3	- Paper on the outcome of the TSO responses.
2008Q3/4	- Public Consultation Paper on Guidelines for Good Practice (GGP CAC) and; - Public consultation (8 weeks).
2008Q4	- Evaluation of Comments Paper; and - ERGEG Conclusions Paper.
