26 May 2009

Ref: 09GIE157

GIE comments on the Commission's proposal regarding Security of Supply and "N-1" rule

During the meeting of the Gas Coordination Group, held on 13 May 2009, the European Commission presented an updated proposal for the revision of the Security of Supply Directive (2004/67/EC), detailing the expected approach and the main issues, including in particular the "N-1" rule standard. The Commission requested GIE, along with other industry bodies, to make, by 26 May at the latest, comments on this proposals.

GIE is glad to continue contributing to the debate on Security of Supply standards.

Need to share a common level of risk

As previously stated in the paper dated 18 March 2009[1] and the answer to Mr Piebalgs letter[2] regarding the prevention and the management of gas crises, GIE strongly believes that defining and sharing a common level of risk should be the basis for the development of Security of Supply standards at European level. This work should begin by establishing agreed definitions of the minimum reference conditions for Security of Supply, in particular, with regard to the following parameters:

- peak demand conditions, including climatic risk and peak industry consumption ;
- demand reduction possibilities (fuel switching, protected customers…) ;
- capacity at interconnection points (in particular for LNG terminals and storages) ;
- duration of the crisis.

The definition of the level of risk acceptable at country level, the minimum reference condition as well as the measures to cover the risk is normally part of the Member State competences.

However, given the variety of situations encountered in Member States, it is undesirable to adopt uniform detailed rules in all countries. This diversity speaks in favour of the use of agreed standards allowing each Member State to conduct its own analysis of Security of Supply conditions, under the coordination of the European Commission through the Gas Coordination Group.

Analysis of Security of Supply conditions

The last January crisis showed a good response from the gas industry thanks to existing emergency procedures, which worked in accordance with expectations for anticipated crisis scenario, and the good willingness of stakeholders. However, even though the answer to the crisis scenario was quick and produced good results, it confirmed that it is hard to cope with non forecasted events. This demonstrates the importance to build Security of Supply scenarios to

[1] Response to the Commission's proposal regarding Security of Supply – Ref 09GIE087 – 18 March 2009
[2] GIE views regarding the prevention and the management of gas crises – Ref 09GIE130 – 30 April 2009

define preventive measures and to carry out an analysis at supra national level, either regional or European.

The analysis of Security of Supply conditions should be made by each Member State and should differentiate technical crises from commodity supply crises as both approaches are complementary:

- Technical crises may consist for example in the failure of an entry point infrastructure and should be examined country by country, keeping in mind that the worst crisis in a country may not be caused by the loss of the biggest entry point ;
- Commodity supply crises are for example political crises, general strikes, major breakdowns in upstream or major interconnection facilities. They generally impact several countries and the analysis of their consequences should be conducted at regional or European level through the study of supply disruption scenarios.

For analysis purposes, the use of some ratios characterizing Security of Supply conditions could be relevant. At the request of the Gas Coordination Group, GIE made calculations of a very simple ratio proposed by the Commission and presented the results and its conclusion during the last meeting, held on 13 May. These conclusions are the following:

- the use of a single ratio can give a distorted picture of the reality which could lead to a misleading feeling of security :
  - some countries that experienced difficulties during the crisis have higher ratios than those that have not been affected ;
  - the ratio is overestimated for transit countries ;
  - although the ratio can be positive for a group of countries, it could mean that the situation of Security of Supply could be not that good for the whole ;
- this ratio should not be considered as a mandatory rule but as an input for further analysis at Member State and European level taking into consideration the following aspects:
  - the specific case of transit countries ;
  - the need to make additional assumptions for calculation because of the complexity of gas systems (internal congestions not shown) and because it is difficult to make a distinction between transit and domestic
  - the existence of other constraining conditions that should be analysed as well (summer, end of winter…)
  - the loss of other entry points than the biggest one should be examined
- the need to find a balance between representativeness and simplicity (if to some extent a simple ratio is preferable, its limits should be clearly recognized and it should only be used as a basis for further analysis).

Despite its drawbacks when used alone, a simple ratio can raise relevant issues for a Member State and can contribute to a good level of analysis with the combination of supply disruption scenarios.

During the recent meeting of the Gas Coordination Group, GIE presented an example of a scenario and offered to provide further contributions by conducting calculations in the framework of complementary scenarios to be taken into account when carrying out an analysis at Member State level. These analyses, made at Member State level, could be conducted also at regional level for improvement.

Following the adequate analysis, the acceptable level of risk should be guaranteed in every country by choosing appropriate measures from a list of Security of Supply standards, e.g. possibility of reverse flows, design margin, volume and flow capacity of commercial storage, fuel switching, interruptible customers, alternative supply source, new gas routes, increase of national production capacity.

Comments on the new ratios presented during Gas Coordination Group meeting

The Commission presented 2 ratios, separating capacity and commodity issues and thus taking into account the issue of transit capacities and export capacities, which were lacking in the initially proposed ratio.

Capacity ratio

This new ratio increases complexity and might require additional assumptions (see in appendix some diagrams illustrating the possible assumptions):

- treatment of outlet flows for transit countries: in case of the transit inflow disruption, it might be difficult to know which outflow capacity has to be reduced
- treatment of reverse flows.

TSO cannot make distinctions between transit inflows and domestic imports (respectively transit outflows and exports); nevertheless, it is possible to get round this difficulty by taking into account the sum of all entry capacities (respectively exit capacity). This would simplify the ratio by removing two parameters.

The proposed ratio seems to have some paradoxical behaviour: when increasing security of supply for its neighbour countries, in increasing reverse flows, or outlet capacity, one country would downgrade its own ratio (for illustration, compare in appendix 1 assumptions 1 and 3).

The assumptions related to the peak day conditions and the reduction of demand have to be assessed by Member States in their process to share a common level of accepted risk.

When choosing a ratio, GIE would recommend striking a balance between representativeness of the ratio and simplicity of its calculation. As the ratio would be used as input to the assessment of Security of Supply conditions of each Member State, GIE would suggest trying to define a simple ratio which would be more helpful for further analysis.

Commodity ratio

The previous comments made about the capacity ratio remain valid for the commodity ratio.

The commodity ratio is more complex than the capacity ratio, as it requires more assumptions and the involvement of several other stakeholders to collect the information for instance relating to:

- fuel switching;
- treatment of storage capacity.

In addition, the commodity ratio based on contracted capacity can be misleading as having capacity does not imply automatically having commodity (gas). This is most evident in particular in the case of a major supply crisis when gas is not available.

Furthermore, contracted capacity can be very close to technical capacity and therefore, the commodity ratio would not give much more information than the capacity ratio.

The assumptions related to weather conditions and the related duration should be assessed by Member States in their process of establishing a common shared level of accepted risk.

For this commodity ratio, GIE would recommend using the capacity ratio and adopting principles for commodity (i.e. duration of the crisis, risk related to weather conditions).

GIE Proposal

GIE is of the opinion that Security of Supply at European level should be based on the shared common level of accepted risk, defined and agreed by Member States, constituting a basis for standards as well as on the study of supply disruption scenarios which should be developed and agreed at regional/European level.

Thus GIE would propose the following approach, to which GIE would be glad to contribute:

1. define and share among Member States a common level of accepted risk related to Security of Supply, which would require prior agreement on definitions and standards to be met.
2. elaborate specific supply disruption scenarios combining demand conditions and supply disruption, agreed at regional/European level
    - In the future, the Security of Supply dimension will be included in ENTSOG's work on the efficiency of European infrastructure network. In particular, the European 10-Year Network Development Statement should also include in the future an assessment of the network resilience against clearly pre-defined and agreed set of crisis scenarios.
    - During the recent meeting of the Gas Coordination Group, GIE presented an example of a scenario and offered to provide further contributions by conducting calculations in the framework of complementary scenarios.
3. carry out, at each member state level, an analysis of the security of supply situation. This analysis should rely on predefined European scenarios, use simple and representative ratio(s) and take into account capacity and commodity issues. Moreover, such risk analysis would be enhanced if it is conducted and coordinated at regional and/or European level.
4. identify where risk is higher than the accepted level at Member State level and European level.
5. propose adequate solutions at Member State level and/or European level and agree on financing and regulatory framework for further implementation (the solutions should include emergency plans and/or new investments in infrastructures).

Appendix 1 : illustration for capacity ratio

Capacity

In : capacity of imports points

In1 : biggest import point

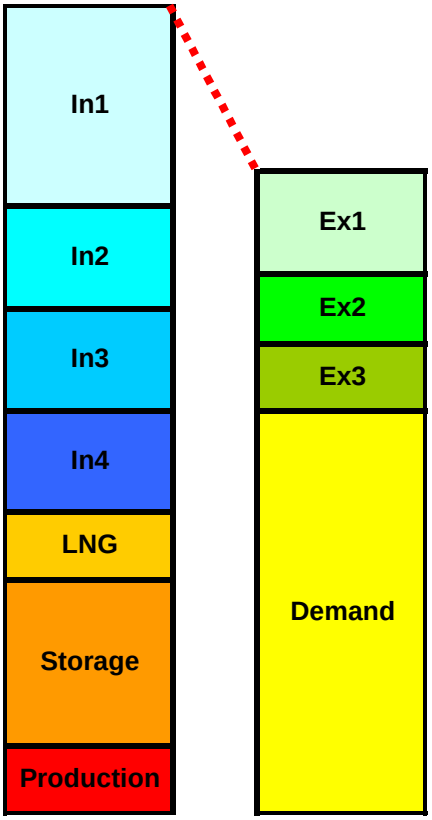
LNG : capacity of LNG terminals

Storage : capacity of storage

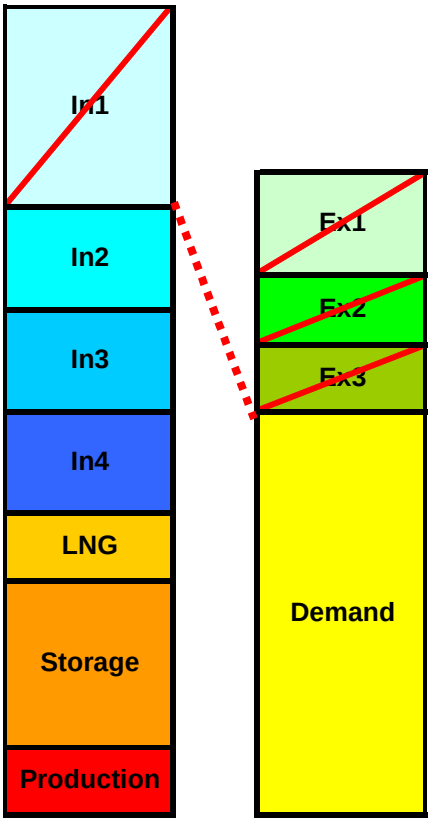
Production : capacity of production

Ex : capacity of export points

Demand : peak demand



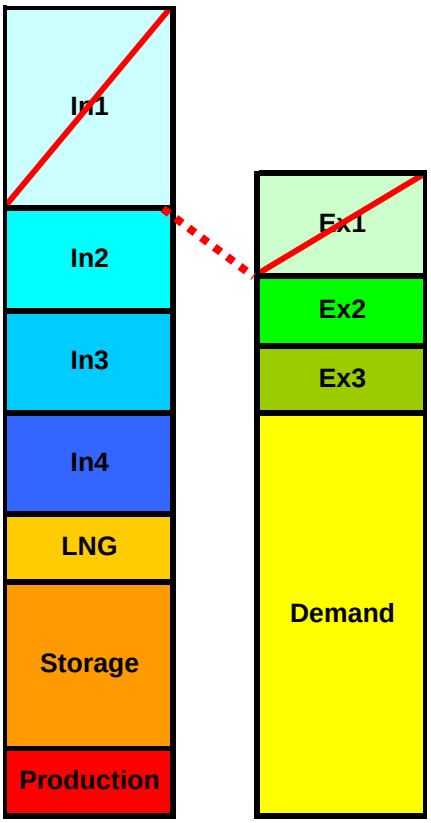
<u>Ratio presented on 2 April in GCG</u>



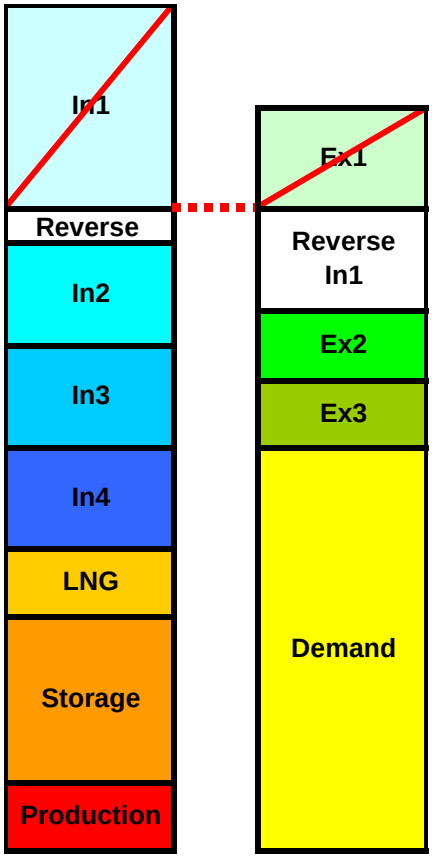
Ratio presented on 2 April

ratio >> 1

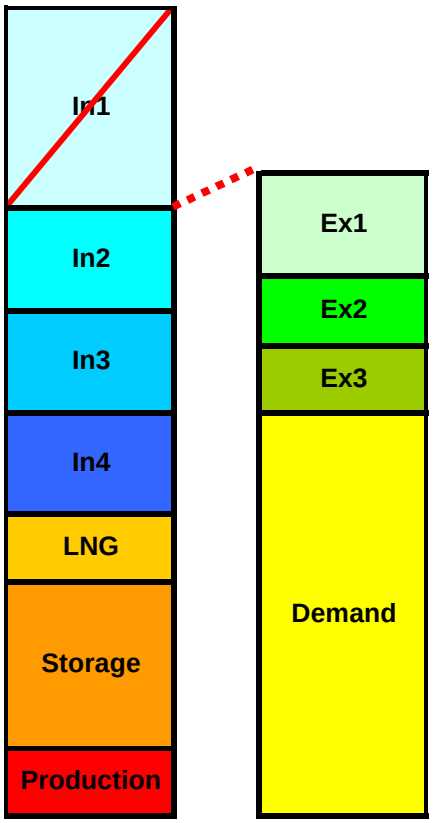
New ratio presented on 13 May in GCG



New ratio Assumption 1
- no flow at biggest entry
- no flow at biggest outlet
ratio > 1



New ratio Assumption 3
- reverse flow at biggest entry
- reverse flow at biggest outlet
ratio = 1



New ratio Assumption 2
- no flow at biggest entry
- flow at every outlet
ratio < 1