

## Response to the Commission's proposal regarding Security of Supply

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During the meeting of the Gas Coordination Group, held on 23 February, the European Commission presented its proposal for the revision of the Security of Supply Directive (2004/67/EC). The Commission requested GIE, along with other industry bodies, to make, by 20 March at the latest, proposals regarding security of supply standards.

GIE is glad to contribute to the debate on Security of Supply standards and has set up a task force, open to all GIE members, in order to prepare the proposals which are presented in this document.

After a brief analysis of the transposition by Member States of the Security of Supply standards defined in Directive 2004/67/EC, GIE focus on the need to share a common level of risk. Then GIE is exposing its comments regarding the three proposals that the Commission presented to the Gas Coordination Group:

- In case of failure of the largest infrastructure and/or supply source into a Member State (entry point, production field, LNG terminal, storage etc.) the domestic demand should be covered by the capacity of the remaining infrastructures (minus one rule) ;
- Bi-directional flows with sufficient capacity to provide all protected consumers ;
- Security of supply margin in all interconnectors and import infrastructure as a percentage (e.g. 5%) of the total interconnector capacity, on top of the booked capacities.

Afterwards, GIE is presenting its own additional suggestions regarding Security of Supply and is pointing out some issues which GIE is considering of major concern.

### **Transposition of currently applicable Security of Supply standards**

The analysis of the transposition of the Security of Supply standards defined in Directive 2004/67/EC by Member States unsurprisingly shows a great diversity, which appears in every parameter taken into account:

- Scope of customers protected
- Definition of supply disruption in terms of scope and duration
- Definition of a peak day and peak winter to be covered

Furthermore this great diversity among countries can be spotted in all elements related to gas industry:

- Market
- Use of gas
- Possibility of alternative fuels
- Gas quality standards
- Sources of supply
- Interconnections
- storage availability

- Use of storage
- LNG facilities availability
- Legal framework

Such a diversity witnesses that the level of harmonisation is to be enhanced to improve the overall Security of Supply of the European countries. However any further harmonisation of Security of Supply standards should take into account the diversity of the gas infrastructures and the specificities of the gas markets (consumption, structure) in each Member State and then secure that the relevant level of harmonisation is targeted.

### **Need to share a common level of risk**

First of all, to improve Security of Supply, it is necessary to define and share a common level of risk. Nevertheless, given the varied situation across Member States, definition of one rule applicable to all countries seems to be rather difficult. This work should begin at every member state level with an analysis of the gas market and gas infrastructures, including gas utilization, the fuel switch possibilities, the panel of protected customers, the demand in extreme winter conditions, the reliability of gas supplies, the need for infrastructures. This analysis should define clearly several supply disruption scenarios taking into account possible supply directions and sources, and which impact they have. This would lead to the definition of an acceptable level of risk that should be guaranteed in every country by the use of a panel of “tools” improving Security of Supply. Each country should be free to choose among these tools the individual measures which it deems the most suitable, taking into account country and regional specificity and the level of risk targeted (At any level, the country should discuss its analysis with the adjacent Member States and industry).

Furthermore, it would be useful to develop and agree on a set of common ratio characterizing Security of Supply (i.e. yearly consumption/capacity at entry points expressed in number of days or total existing daily capacity/peak daily demand). The setting of ratios would help monitoring the level of Security of Supply in a country and could serve as a warning indicator.

To some extent, a well-functioning internal gas market should provide solutions for Security of Supply but infrastructure operators need clear signals to invest in Security of Supply. If the market doesn't give these signals, then it becomes necessary to define and enforce standards. On the other hand, a good investment climate and a good regulatory framework providing the appropriate incentives for investment are the prerequisite for providing Security of Supply.

In this context, the role played by commercial gas storages and LNG terminals in mitigating the effect of the gas crisis last January was significant. It proves the importance of LNG terminals as an instrument enhancing the security of supply as well as the diversification of gas supplies to Europe. It demonstrates that existing and new commercial storage is critical to guaranteeing security of supply, working alongside with other measures.

GSE remains an advocate for the development of additional commercial storage capacity within the EU gas network to increase storage duration and help dampen supply disruption. Strategic storage is expensive in absolute and relative terms and undermines the incentive for investment in existing and new commercial storage facilities. In effect strategic storage will lead to less investment in commercial storage, leading to a need for even more strategic storage thus creating a vicious circle.

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**Regarding the proposals made by the Gas Coordination Group, GIE main comments are the followings:**

*The minus one rule:*

This rule, which is a traditional security standard for some industries, appears to be a good approach as a first step to define preventive measures. Nevertheless, before going further, it is necessary to distinguish between a rule that could be applied to infrastructures and a rule for supply sources, as both issues require different solutions and mechanisms. GIE will limit its answer to the infrastructure issue.

Concerning infrastructures, GIE members would like to point out the following issues related to this particular rule, each of them having to be investigated further before it is implemented :

- the minus one rule can't be applied to all countries in a short term because today's design of existing infrastructure doesn't cover this risk ;
- it must be clearly defined which part of domestic demand the rule is applied to, and what probability of interruption / what risk is being covered ;
- it's implementation could lead to the construction of new infrastructures which would thus require huge investments and financing ; these investments shouldn't be detrimental to gas competitiveness and their financing should be cleared ;
- this rule is practically not applicable to countries with a high share of transit parting the total gas transportation neither to countries with a very low or inexistent supply diversification ;
- the underlying assumption of this rule should take into account domestic demand, duration, peak conditions, largest infrastructure and definition of customers which have to be supplied ;
- the rule would need some coordination with other industries (electricity production, possibility of alternative fuels, suppliers...) to be effective ;
- there is a need to take into account the difference between peak and volume infrastructures.

It is important to note that the process of building new infrastructures takes several years (roughly 5 years between decision and start-up).

In addition the capability of all the industry (i.e. steel pipe manufacturing, pipe laying, engineering) to cope with the implementation of national projects and new interconnections projects has to be investigated.

*Bi-directional flows*

From a general point of view, GIE considers that bi-directional flows can contribute to increase flexibility and interconnection among European gas markets. Furthermore, bi-directional flows can help providing back up supply to some countries and can be technically effective from now on some pipes. The recent dispute between Russia and Ukraine lead to the implementation of physical reverse flows on some interconnections (e.g. Greece to Bulgaria).

Allowing bi-directional flows could be a new European rule for the design of new infrastructures, but it will be necessary to define the relevant level of reverse flow, which could range from 10% to 100%, depending on the analysis of the situation of each interconnection. This measure could be added as a possible new instrument to the Annex to the current gas Security of Supply Directive presenting a non-exhaustive list of instruments to enhance the security of supply.

Nevertheless, GIE would like to point out the following issues dealing with this particular rule which should be investigated more deeply:

- it is necessary to determine which quantity of gas should flow backwards ; this would require, as a prerequisite the same approach concerning protected consumers and risk coverage ;
- the cost of such a rule is probably limited, but it might not always be marginal especially for existing infrastructures ; furthermore, in some cases, important investments in the core network of a country might be necessary to guarantee the bi-directional flows ;
- the tariff issue is essential : how will this extra investment be taken into account by national regulators into the tariffs? A specific difficulty consists in the fact that the investment in one country will be made for the benefit of other countries ;
- the gas quality issue will be essential ;
- the current economic downturn creates additional difficulties in terms of the decision making and of the financing of investments which don't create firm extra capacity ;
- the issue of transit capacities should be examined.

Following the Russia-Ukraine gas dispute last January, GTE has launched a study to analyse reverse flow capacity needed in Europe. The study is due by June 2009. It will seek to identify the necessary investments in Europe to enable technically the reversal of gas flows with a view to ensuring a better response to possible supply disruptions in the future. The study, which focuses on short term investments (in operation in 2011 at the latest) will also provide a cost estimate for the identified developments.

#### Security of supply margin

From a general point of view, this margin would increase flexibility and interconnectivity among European gas market and – as a consequence- would enhance Security of Supply. However, GIE experts reckon that the contribution of such a measure to the reduction of the assumed risks remains marginal, when comparing this margin to the real flows.

Furthermore, the contribution of such a measure to the reduction of the assumed risks is highly influenced by the availability of gas to flow in the case of a crisis and not only by the availability of capacity of the network, as the recent gas dispute showed. Moreover, it ought to be analysed if the market itself would accept the price of such a “Security of Supply” insurance.

Nevertheless, GIE would like to point out the following issues linked with this particular rule which should be investigated further:

- infrastructures are designed at their technical optimum in order to achieve the efficiency of the investment ; then, increasing the capacity would generate extra cost (investments and/or operational cost) uncovered by the booking of extra firm capacity ;
- for interconnection pipes, the tariff issue is essential to avoid sunk costs. A specific difficulty consists in the fact that the investment in one country will be made for the benefit of other countries, and in finding a fair balance ;
- for import infrastructures, the financing of this extra capacity is also essential ;
- the application of this rule to existing infrastructures would lead to important investment costs or to a reduction of existing capacities ;
- it is probably more relevant to create a margin globally at a country or regional level rather than for each entry point ;
- although the extra capacity is not demanded by the market (whose demand would be covered by normal commercial investments) the additional capacity could be made available to the market on an interruptible basis.

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## **GIE Proposal for other Security of Supply measures**

In addition to the commission's proposals, GIE would like to propose some complementary measures. In the future, the Security of Supply dimension will be included in ENTSOG 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. It is very crucial that these specific supply disruption scenarios are developed and agreed on the regional/European level as a basis for the further creation of European instruments and mechanisms.

But, first of all, each Member State should carry out its own analysis of the Security of Supply situation, and a definition of a common and shared level of risk accepted should be established. Here too, a regional coordination will make this risk analysis more coherent and would allow to develop a bottom-up approach up to the European level to lead finally in the existence of an European wide emergency mechanism.

GIE would be glad to provide further input related to the coordination of the actions at regional/European level in order to improve interconnection capacities between countries and with sources of gas (import pipes, LNG terminals and commercial gas storages). A regional approach (involving more than one country) for implementing Security of Supply criteria could be a good answer in most situations. This coordination could be based on a defined level of transparency, enhanced cooperation, and building of supply shortage scenarios.

For example, coordinated developing of infrastructures that helps reinforcing the diversity of supply is a way to answer to security of supply concerns. This development can consist in LNG terminals, commercial storages, interconnections to give a better access to LNG and storages for countries which need it and interconnections with main European supply pipes. Nevertheless, this development shouldn't be a standard by itself. It is necessary to analyse the security of supply situation at regional level in order to define which solution is the most effective.

Thus, GTE+, together with GSE and GLE could have an important role of coordination at the prevention stage and could, through its Transparency Platform, monitor security of supply by following some relevant ratios related to the use of interconnection capacity, to consumption and to aggregated stock levels.

## Conclusion

In order to improve the Security of Supply it is necessary to define and share a common level of risk among European countries. The variety of situations encountered in Member States makes it undesirable to adopt detailed rules that can be applied to all. In consequence, at each member state level an analysis of the security of supply condition shall be made. Such risk analysis would be as well much improved if conducted in addition at regional level. It would lead to the definition of an acceptable level of risk that should be guaranteed in every country by the use of a panel of “tools” improving Security of Supply. This step necessitates agreeing on more precise definitions related to security of supply.

The market can provide solutions to some extent for Security of Supply but infrastructure operators need clear signals to invest in Security of Supply. If the market doesn't give these signals, then it becomes necessary to define some common standards. The implementation of these standards and the development of the resulting infrastructures should be coordinated at regional/European level; ENTSOG, together with GSE and GLE could contribute significantly to this coordination.

However, GIE would like to highlight that a good investment climate and a good regulatory framework providing the appropriate incentives for investment are the prerequisite for providing Security of Supply.

It is important that the answers to security of supply concerns shall be examined under their economical and regulatory aspects. The former shall check that the economic impact of projects for security of supply remains acceptable by the market, the latter shall guarantee that infrastructure operators will be paid back for their extra investments and operational costs related to security of supply improvement (through the tariffs or through other means).

In addition GIE would like to point out that the following issues are of major concerns:

- Transparency: in order to conduct the relevant analysis for the statement of preventive measures and in order to manage a crisis, transparency in capacity and flow data is necessary for infrastructures. GTE+, GLE and GSE, through their transparency initiatives, have started the process to produce the necessary tools. This can go further in order to monitor security of supply, in surveying, for example, transparent capacity/consumption ratio. Through these transparency platforms GIE could also help in making analysis of the Security of Supply situation at regional and European levels and in making regional or European solution to emerge.
- Security of supply is a topic concerning infrastructure operators, suppliers, regulators, customers and member states. Then, the question of responsibility and control is essential: who will be responsible to set up prevention measures and operational measures in emergency. It is important to point out that, practically, it is impossible for infrastructure operators to control the suppliers' compliance with security of supply criteria (in case of a supply crisis, infrastructure can't solve every problems; in particular, someone has to put the gas in the system).
- For GIE, a crisis has to be managed at 3 levels dependent on the impact of the crisis: gas industry alone; member state level ; EU level. It would be useful to establish some principle related to the management of a supply crisis, in particular to help future decisions when it has to be chosen who should benefit from the capacity and from the volumes. Here as well, GTE+ and in the future ENTSOG, together with GSE and GLE could play a central role in management of crisis.