

ANNEX IV

Template for the common risk assessment

The following template shall be completed in a language agreed within the risk group.

General information

- Member States in the risk group
- Name of the competent authorities responsible for the preparation of the risk assessment⁽¹⁾

1. Description of the system

Provide a brief description of the gas system of the risk group, covering:

- (a) the main gas consumption figures⁽²⁾: annual final gas consumption (bcm) and breakdown per type of customers⁽³⁾, peak demand (total and breakdown per category of consumer in mcm/d);
- (b) a description of the functioning of the gas system in the risk group: main flows (entry/exit/transit), entry/exit point's infrastructure capacity to and out of the region and per Member State, including utilisation rate, LNG facilities (maximal daily capacity, utilisation rate and access regime), etc.;
- (c) a breakdown, to the extent possible, of gas import sources per country of origin⁽⁴⁾;
- (d) a description of the role of storage facilities relevant for the risk group, including cross-border access:
 - (i) the storage capacity (total and working gas) compared to heating season demand;
 - (ii) the maximal daily withdrawal capacity at different filling levels (ideally with full storages and end-of-season levels);
- (e) a description of the role of domestic production in the risk group:
 - (i) the volume of production with regard to the annual final gas consumption;
 - (ii) the maximal daily production capacity;
- (f) a description of the role of gas in the electricity production (e.g. importance, role as a back-up for renewables), including gas-fired generating capacity (total (MWe) and as percentage of the total generating capacity) and cogeneration (total (MWe) and as percentage of the total generating capacity).

2. Infrastructure standard (Article 5)

Describe the calculations of the N – 1 formula(s) at regional level for the risk group, if so agreed with the competent authorities of the risk group, and the existing bidirectional capacities, as follows:

- (a) N – 1 formula
 - (i) the identification of the single largest gas infrastructure of common interest for the risk group;
 - (ii) the calculation of the N – 1 formula at regional level;

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- (iii) a description of the values used for all elements in the $N - 1$ formula, including intermediate figures used for the calculation (e.g. for EP_m indicate the capacity of all entry points considered under this parameter);
- (iv) an indication of the methodologies and assumptions used, if any, for the calculation of parameters in the $N - 1$ formula (e.g. D_{max}) (use annexes for detailed explanations);
- (b) bi-directional capacity
 - (i) indicate the interconnection points equipped with bidirectional capacity and the maximal capacity of bi-directional flows;
 - (ii) indicate the arrangements governing the use of the reverse flow capacity (e.g. interruptible capacity);
 - (iii) indicate interconnection points where an exemption has been granted in accordance with Article 5(4), the duration of the exemption and the grounds on which it was granted.

3. Identification of risks

Describe the major transnational risk for which the group was created as well as the risk factors at several instances which could make that risk materialise, their likelihood and consequences.

Non-exhaustive list of risk factors that have to be included in the assessment only if applicable according to the relevant competent authority:

- (a) political
 - gas disruption from third countries because of different reasons,
 - political unrest (either in country of origin or in transit country),
 - war/civil war (either in country of origin or in transit country),
 - terrorism;
- (b) technological
 - explosion/fires,
 - fires (internal to a given facility),
 - leakages,
 - lack of adequate maintenance,
 - equipment malfunction (failure to start, failure during working time, etc.),
 - lack of electricity (or other energy source),
 - ICT failure (hardware or software failure, internet, SCADA problems, etc.),
 - cyber-attack,
 - impact due to excavation works (digging, piling), ground works, etc.;
- (c) commercial/market/financial
 - agreements with third-country suppliers,
 - commercial dispute,
 - control of infrastructure relevant for the security of gas supply by third-country entities, which may imply, among others, risks of underinvestment, undermining diversification or non-respect of Union law,
 - price volatility,
 - underinvestment,

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- sudden, unexpected peak demand,
 - other risks which could lead to structural underperformance;
- (d) social
- strikes (in different related sectors, such as the gas sector, ports, transport, etc.),
 - sabotage,
 - vandalism,
 - theft;
- (e) natural
- earthquakes,
 - landslides,
 - floods (heavy rain, river),
 - storms (sea),
 - avalanches,
 - extreme weather conditions,
 - fires (external to the facility, like nearby forests, grassland, etc.).

Analysis

- (a) describe the major transnational risk and any other relevant risk factors for the risk group, including their likelihood and impact as well as the interaction and correlation of risks among Member States, as appropriate;
- (b) describe the criteria used to determine whether a system is exposed to high/unacceptable risks;
- (c) set a list of relevant risk scenarios in accordance with the sources of risks and describe how the selection was made;
- (d) indicate the extent to which scenarios prepared by ENTSOG have been considered.

4. Risk analysis and assessment

Analyse the set of relevant risk scenarios identified under point 3. In the simulation of risk scenarios include the existing security of gas supply measures, such as, the infrastructure standard calculated using the N – 1 formula as set out in point 2 of Annex II, if appropriate, and the gas supply standard. Per risk scenario:

- (a) describe in detail the risk scenario, including all assumptions and, if applicable, the underlying methodologies for their calculation;
- (b) describe in detail the results of the simulation carried out, including a quantification of the impact (e.g. volumes of unserved gas, the socioeconomic impact, the impact on district heating, the impact on electricity generation).

5. Conclusions

Describe the main results of the common risk assessment, including the identification of risk scenarios that require further action.

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- (1) Where this task has been delegated by any competent authority, indicate the name of the body/(ies) responsible for the preparation of the present risk assessment on its behalf.
- (2) For the first assessment, include data from the last two years. For updates, include data from the last four years.
- (3) Including industrial customers, electricity generation, district heating, residential and services and other (please specify the type of customers included here). Indicate as well the volume of consumption of protected customers.
- (4) Describe the methodology applied.

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