





# Delivering Security of Gas Supply: Possible Practical Implementing Tools

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# Three implementing levels

"When implementing the measures provided for in this Regulation, the competent authority shall establish the roles and responsibilities of the different actors concerned in such a way as to ensure a three-level approach which involves, first, the relevant natural gas undertakings, electricity undertakings where appropriate, and industry, second, Member States at national or regional level, and third, the Union." - Art. 3(4)\*

### System features: per risk group

Gas consumption, peak demand, main flows, entry/exit capacity, utilisation rate, LNG facilities, import sources, storage facilities including cross-border access, domestic production, role of gas in electricity generation, efficiency measures (Annex IV.1.1)

<sup>\*</sup> Underline added. Quoted from: Text adopted by the European Parliament on 12 September 2017, <a href="http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P8-TA-2017-0327&format=XML&language=EN#BKMD-14">http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P8-TA-2017-0327&format=XML&language=EN#BKMD-14</a> visited on 18 September 2017.



# Risk type

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Political – Technological - Commercial / market / financial - Social – Natural (Annex IV.3)
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### Risk pattern

Likelihood - Type of impact - Degree of exposure (high / unacceptable) - Risk factors, relevance (scenarios, by source of risk)

(Annex IV.3.1)

### **Quantified risk impact**

Quantification of the impacts: e.g., volumes of unserved gas, socio-economic impacts, impacts on district heating, impacts on electricity generation (Annex IV.4)



### Mapping the first implementing level environment

#### Risk layer

Political – Technological -Commercial / market / financial -Social – Natural Likelihood - Type of impact - Degree of exposure (high / unacceptable) - Risk factors (scenarios)

Natural gas undertakings (incl. electricity where appropriate), industry



Outcome (perceived impact)

Quantified impacts (volumes of unserved gas, socio-economic impacts, impacts on district heating, impacts on electricity generation) will be different (asymmetric)

Gas consumption, peak demand, main flows, entry/exit capacity, utilisation rate, LNG facilities, import sources, storage facilities including cross-border access, domestic production, role of gas in electricity generation, efficiency measures

System layer



# Asymmetric perceptions of impact: good!

- Natural gas undertakings, industries are likely to see differently the risk exposure and the way in which they could serve protected customers, <u>place</u> <u>different value on the measures they could take to meet the supply standard</u>
- Different perceptions about the risk exposure and the value of the measures means an <u>opening for trades</u>
- Trades mean off-loading risk from an undertaking / industry to a broader pool of undertakings / industries, i.e. solidarity via market-based tools. Such market-based tools already exist and are commonly used in hedging risks: call options
- CAs shall require the natural gas undertakings to take measures to ensure the supply of gas to the protected customers of the Member State in certain cases (Art. 6.1), with supply standard to be met in a <u>non-discriminatory</u> way that shall <u>not impose an undue burden</u> on those undertakings (Art. 6.4), <u>at a regional or Union level</u> (Art. 6.5). "The competent authorities shall ensure that conditions for supplies to protected customers are established <u>without prejudice to the proper functioning of the internal energy market and at a price respecting the <u>market value of the supplies</u>" (Art. 6.6).</u>
- Call options fit the above very well, plus are conditional, only to be activated in emergency (not a substitute of preventive plans!)



# Must comply with the principles of solidarity\* Do call options comply?

- Last resort mechanism
- Member States should have the right not to ask for solidarity or reduce or suspend it based on their own needs
- It should be based as much as possible on market-based options
- It should not introduce perverse incentives
- Compensation costs should be paid by the beneficiaries
- Compensation should be in conformity with the Treaties, the Charter of Fundamental Rights of the European Union and applicable international obligations
- Proportionality in terms of burden and associated costs
- Framework to provide certainty and security to the actors involved
- Transparency in advance about the likely amounts of gas that could be covered under this provision
- It should not jeopardize the security of supply of the Member State providing solidarity.

<sup>\*</sup> The principles are those indicated in the discussion paper for the GCG meeting on 22 March 2017 (THE MAIN ELEMENTS OF THE COMMISSION GUIDANCE ON TECHNICAL, LEGAL AND FINANCIAL ARRANGEMENTS ON SOLIDARITY)



# Potential issues with non-market implementing tools: Do call options help resolve them?

- <u>Price / cost of delivered gas</u>: Market-based (e.g., by reference to a hub price, average of certain period before and after the date of delivery)
- All relevant costs included (tariffs / transportation, insurance, metering, etc.)
- <u>Delivery and takeover</u> terms and conditions: Known in advance, typically the same as the ones already used commercially
- <u>Volumes</u> available: Known in advance, notified to relevant CAs
- <u>No multiple transactions:</u> CA, other MS offices do not have to engage directly (administratively) in deliveries of emergency gas and associated call options transactions
- No impact on normally functioning markets: Can only be used when emergency is triggered, i.e. when solidarity is requested
- <u>Financial aspects:</u> Easy to resolve via normal banking practices (e.g., payment on CAD terms) no need for special financial arrangements, payments for gas directly between call option buyer / seller
- Complementary to any other emergency tool / arrangement which CA may deem useful or necessary



# Possible format of action: What could MS do to enable solidarity via call options?

- Consider the tool in the emergency plan (Art. 10), in particular in the context of Art. 10.d, e, f, h, j, m, n, and o:
  - ✓ Art. 10.d: "ensure that natural gas undertakings and industrial gas customers including relevant electricity producers are given sufficient opportunity to respond at each crisis level";
  - ✓ Art. 10.e: "identify, if appropriate, the measures and actions to be taken to mitigate the potential impact of a gas supply disruption on DH and the supply of electricity generated from gas...<..>"
  - ✓ Art. 10.f: "establish detailed procedures and measures to be followed for the crisis levels referred to in Article 11(1), including the corresponding schemes on information flow"
  - ✓ Art. 10.h: "identify the contribution of market-based measures for coping with the situation at alert level and mitigating the situation at emergency level"
  - ✓ Art. 10.o: "establish a list of predefined actions to make gas available in the event of an emergency, including commercial agreements between the parties involved in such actions and the compensation mechanisms for natural gas undertakings where appropriate"



# Possible format of action: What could MS do to enable solidarity via call options?

- Art. 10.j: "identify the contribution of non-market based measures planned or to be implemented for the emergency level, and assess the degree to which the use of such non-market based measures is necessary to cope with a crisis. <....>
- Art.10.m: "describe the technical, legal and financial arrangements in place to apply the solidarity obligations laid down in Article 13"



# Possible format of action: What could MS do to enable solidarity via call options?

- Specify a sample call option contract as part of the emergency plan (Art. 10.0):
  - "...including commercial agreements between the parties involved in such actions and the compensation mechanisms for natural gas undertakings where appropriate, taking due account of the confidentiality of sensitive data. Such actions may involve cross-border agreements between Member States and/or natural gas undertakings".
- How does a "real" gas call option used in the EU actually look like?
- <a href="https://www.theice.com/products/27998669/Dutch-TTF-Gas-Options">https://www.theice.com/products/27998669/Dutch-TTF-Gas-Options</a>
- Is there anything else needed in order to enable the use of call options?
- What other practical implementing tools could help within the framework of the <u>first implementing layer</u>?

