ANNEX

# **EMERGENCY PLAN**for security of natural gas supply in Romania



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#### LIST OF ACRONYMS:

CA Competent Authority within the meaning of Article 2 point 7 of the

Regulation

ANRE National Regulatory Authority for Energy

CE European Commission

cm cubic meters

DS Distribution System

DSO Distribution System Operator/Operators

EGSC Interdisciplinary team for crisis management in natural gas supply

ENTSO-G European Network of Transmission System Operators for Gas

EP Entry points

EU European Union

GMS Gas Metering Station

INECP Integrated National Energy and Climate Plan

LNG Liquefied natural gas

mil. Milion

NTS National Transmission System

RET Electric Transmission Network

SEN National Electric Power System

Toe Tons of oil equivalent

TSO Transmission System Operator

TYNDP 10-year Network Development Plan

UGS Underground gas storage

UR NTS or DS network user

#### 1. INTRODUCTION

The emergency plan for gas was developed in order to establish a set of measures and procedures, including information and actions flow schemes, taken to cancel, reduce or eliminate the effects of possible disruptions in the supply of natural gas in Romania in individual crisis levels, that is: early warning, alert and emergency and clearly established fixed responsibilities for all the stakeholders in case of a disruption of the natural gas supplies. The implementation of the Emergency Plan is intended to cancel, mitigate or eliminate the effects of a disruption in order to deal with situations in which the supply of natural gas on the internal gas market could no longer be guaranteed to all customers, especially protected customers.

Security of natural gas supply is a shared responsibility of natural gas undertakings, Member States and the European Commission.

In this context, Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (hereinafter "the Regulation") defines the responsibilities and obligations for natural gas undertakings, national authorities and the European Commission and requests on the Member States to establish effective crisis management in advance and to put in place measures in the form of preventive action and emergency plans.

The Emergency Plan sets out in detail the operational arrangements that will be taken up in case of a crisis in the supply of natural gas in Romania and focuses on interactions with the European Commission through the Gas Coordination Group (GCG).

In this sense, the the Emergency Plan was elaborated, that meets the requirements of the Regulation and was made in accordance with the provisions of Article 10, the model in Annex VII to the Regulation and includes:

- description of the role and responsibilities of the Competent Authority (CA) at each of the crisis levels;
- definition of crisis levels, the body responsible for the declaration of each crisis level and the procedures to follow in each case;
- indicators used to analyze and decide upon the declaration of a certain crisis level;
- a detailed description of the procedures and measures adopted for each crisis levels, including the corresponding information flow schemes between the participating entities;
- the contribution of market-based measures for coping with the situation at early warning level/alert level and mitigating the situation at emergency level;
- 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;
- description of the role of the designated crisis manager;



- description of the measures and actions to be taken to mitigate the potential impact of a disruption of gas supply on the electricity sector and on district heating;
- description of the role and responsibilities of the involved entities per crisis level;
- description of the measures and procedures regarding undue consumption by customers who are not protected customers and indicate actors involved;
- description of the emergency preparedness tests, respectively the calendar for the real time response simulations of emergency situations, indicate actors involved, procedures and concrete high and medium impact scenarios simulated;
- stakeholders consultations;
- regional dimension, including the description of the mechanisms used for cooperation with other Member States for each crisis levels and the exchange of information between Competent Authorities, as well as the description of the mechanisms agreed with the Member States with which Romania is directly connected, in order to ensure the application of the solidarity principle according to Article 13 of the Regulation.

#### 2. GENERAL INFORMATION

Under the provisions of Article 8 paragraph (2) letter b) of the Regulation, the competent authority of each Member State, establishes "an emergency plan containing the measures to be taken to remove or mitigate the impact of a disruption of gas supply", elaborated in accordance with Article 10 and, after consulting the natural gas undertakings, the relevant organisations representing the interests of household and industrial gas customers, including electricity producers, electricity transmission system operators.

In accordance with Article 102 letters l) and o) of the Law of energy and natural gas no. 123/2012, as amended and supplemented (hereinafter "the Law no. 123/2012"), the Ministry of Energy exercises the quality of competent authority within the meaning of Article 2 point 7 of the Regulation and, in this capacity, draw up the Emergency Plan, in accordance with the provisions of Regulation, which shall be updated every four years or more frequently if the situation requires it. The Competent Authority also has a coordinating role with regard the measures and actions to be taken during an emergency situation to mitigate the impact on the continuity and safety of natural gas supply in Romania, also having the responsibility to ensure information exchange with the European Commission and the Competent Authorities of the Member States of the risk group to which Romania belongs, as well as with the Competent Authorities of the Member States with which Romania is directly connected, to ensure that the details of such a disruption are immediately communicated in accordance with the provisions of the Regulation.

The Emergency Plan constists of a framework of emergency situations management as provided by the Regulation. The measures, actions and procedures contained in this Emergency Plan are tested at least once between its four-year updates. In order to test this the Emergency Plan, the Competent Authority will simulate high and medium impact scenarios and responses in real time in accordance with the Emergency Plan and the results of the tests shall be presented at the GCG meetings.

#### 3. CRISIS LEVELS

#### 3.1. Definition of crisis levels

The Regulation defines in Article 11 paragraph (1) three crisis levels, namely:

- early warning level (hereinafter 'early warning'): where there is concrete, serious and reliable information that an event which is likely to result in significant deterioration of the gas supply situation may occur and is likely to lead to the alert or the emergency level being triggered;
- alert level (hereinafter 'alert'): where a disruption of gas supply or exceptionally high gas demand which results in significant deterioration of the gas supply situation occurs but the market is still able to manage that disruption or demand without the need to resort to non-market-based measures;
- *emergency level* (hereinafter '*emergency*'): where there is exceptionally high gas demand, significant disruption of gas supply or other significant deterioration of the gas supply situation and all relevant market-based measures have been implemented but the gas supply is insufficient to meet the remaining gas demand so that non-market-based measures have to be additionally introduced with a view, in particular, to safeguarding gas supplies to protected customers.

The occurrence of the individual crisis levels depends on the severity of the disruption, the anticipated economic and technical implications and the urgency of remedial action at the national level. The levels do not need to be declared in succession. The alert or emergency level could be declared immediately depending on the severity of the disruption, the urgency and the types of measures required to restore the situation or remove the risk.

#### 3.2. Procedure to activate/to end to one of the crisis levels

The Emergency Plan is effectively activated when one of the crisis levels described previously is declared. This subchapter sets out the procedures to activate/declare the end applicable to each crisis level and identifies different events that would trigger a certain crisis level, as follows:

#### 3.2.1. Early Warning

1. The natural gas undertakings (natural gas transmission system operator (TSO), natural gas producers, distribution system operators (DSO), underground storage system operators, natural gas suppliers) shall immediately notify, using the available communication channels,



the Competent Authority (CA) and the National Regulatory Authority for Energy (ANRE) information on possible events that would significantly impair the situation in the natural gas supply. The indicated information, in accordance with the competence of each entity, should contain the following data:

- cause of the disruption;
- estimated time until disruption occurs (the gas day and the time at which the limitation/suspension will become effective);
- estimated quantity of natural gas which will be limited/suspended as a result of the disruption;
- information on any interruption in the supply of natural gas to protected customers in Romania in the event of a disruption;
- specific information on the anticipated effects of market-based actions.
- 2. The CA will centralize the concrete and serious information referred to in point 1.
- 3. The CA will analyze together with the natural gas TSO and ANRE the information centralized in point 2.
- 4. If the analysis reveals the possibility of deterioration of the gas supply situation, the CA may convene a Interdisciplinary team for crisis management in natural gas supply (EGSC) meeting, described in Chapter 7. In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Early Warning level, according to Article 11 paragraph (1) letter a) of the Regulation. The decision on declaring the Early Warning level is made, within 24 hours of its adoption, by Order of the Minister of Energy.
- 5. During the Early Warning level, the CA shall monitor and request daily operational information on the implementation of the measures contained in the Emergency Plan and the fulfillment of obligations by the natural gas undertakings.
- 6. During the Early Warning level, the natural gas undertakings will transmit information to the natural gas TSO and ANRE.
- 7. The decision regarding the end of the Early Warning level is taken by the CA, after consulting the EGSC, and is carried out, within 24 hours of its adoption, by Order of the Minister of Energy.
- 8. Information with regard to the declaration/ end of the Early Warning level, as well as the Orders of the Minister of Energy regarding the declaration/ end of the Early Warning level are published on the website of the Ministry of Energy and on the websites of natural gas suppliers, natural gas TSO and DSO.
- 9. The CA informs about the declaration or the end of the Early Warning level the European Commission, the Competent Authorities of the Member States with which Romania is directly connected, the Competent Authorities of the Member States in the Risk Group of which Romania is part, as well as the Gas Coordination Group (GCG) and provide them all the necessary information, in particular information on the action the CA intends to take.
- 10. After ending the Early Warning level, the CA provides the European Commission, according to Article 14 paragraph (4) of the Regulation, a detailed assessment, based on

information provided by the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers).

Figure 1. shows the entities involved in the Early Warning level, the actions to be taken, as well as the information flow scheme between the participating entities.



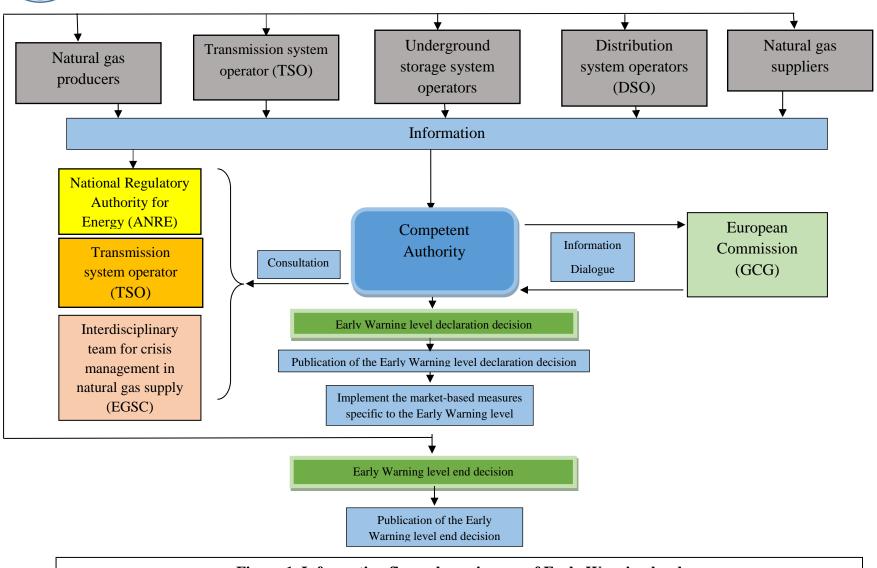


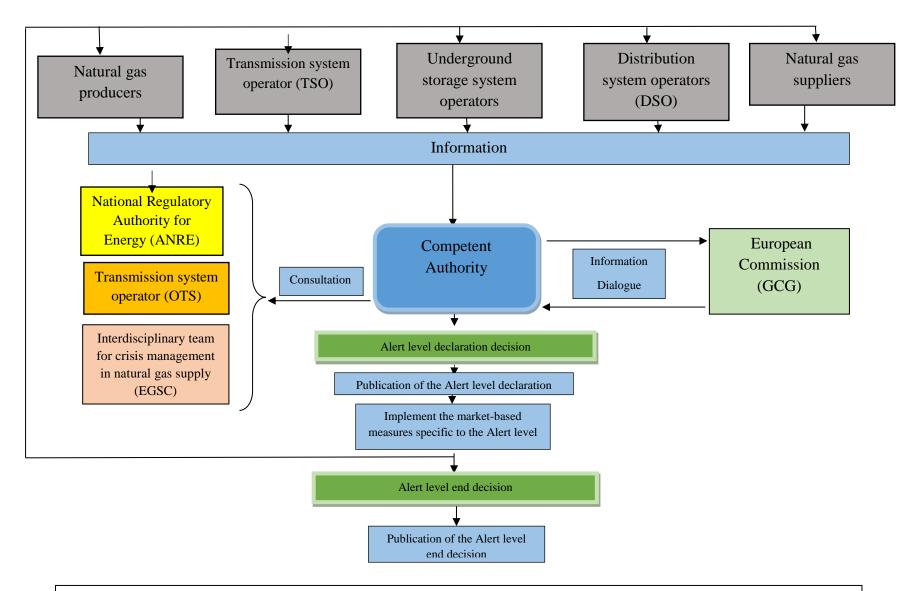
Figure 1. Information flow scheme in case of Early Warning level

#### 3.2.2. Alert

- 1. The natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers) shall immediately notify, using the available communication channels, the Competent Authority (CA) and the National Regulatory Authority for Energy (ANRE) information on possible disruptions of natural gas supply or an exceptionally high gas demand that significantly affects the gas supply situation. information on possible interruptions in the supply of natural gas or an exceptionally high gas demand that significantly affects the gas supply situation.
- 2. The CA will centralize the concrete and serious information referred to in point 1.
- 3. The CA will analyze together with the natural gas TSO and ANRE the information centralized in point 2.
- 4. If the analysis reveals the possibility of triggering of the events mentioned in the definition of the Alert level, the CA may convene a EGSC meeting. In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Alert level, according to Article 11 paragraph (1) letter b) of the Regulation. The decision on declaring the Alert level is made, within 24 hours of its adoption, by Order of the Minister of Energy.
- 5. During the Alert level, the CA shall monitor and request daily operational information on the implementation of the measures contained in the Emergency Plan and the fulfillment of obligations by the natural gas undertakings.
- 6. During the Alert level, the natural gas undertakings will transmit information to the natural gas TSO and ANRE.
- 7. The decision regarding the end of the Alert level is taken by the CA, after consulting the EGSC, and is carried out, within 24 hours of its adoption, by Order of the Minister of Energy.
- 8. Information with regard to the declaration/ end of the Alert level, as well as the Orders of the Minister of Energy regarding the declaration/ end of the Alert level are published on the website of the Ministry of Energy and on the websites of natural gas suppliers, natural gas TSO and DSO.
- 9. The CA informs about the declaration or the end of the Alert level the European Commission, the Competent Authorities of the Member States with which Romania is directly connected, the Competent Authorities of the Member States in the Risk Group of which Romania is part, as well as the Gas Coordination Group (GCG) and provide them all the necessary information, in particular information on the action the CA intends to take.
- 10. After ending the Alert level, the CA provides the European Commission, according to Article 14 paragraph (4) of the Regulation, a detailed assessment, based on information provided by the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers).

Figure 2 shows the entities involved in the Alert level, the actions to be taken, as well as the flow of information between the participating entities.





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#### 3.2.3. Emergency

- 1. The natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers) shall immediately notify, using the available communication channels, the Competent Authority (CA) and the National Regulatory Authority for Energy (ANRE) information on an exceptionally high gas demand or a significant disruption of gas supply or a significant impairment of the delivery situation, relative to consumer demand.
- 2. The CA will centralize the concrete and serious information referred to in point 1.
- 3. The CA will analyze together with the natural gas TSO and ANRE the information centralized in point 2.
- 4. If the use of market-based measures does not restore the continuity and security of gas supply and the analysis reveals the possibility of of triggering of the events mentioned in the definition of the Emergency level, the CA may convene a EGSC meeting. In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Emergency level, according to Article 11 paragraph (1) letter c) of the Regulation. The decision on declaring the Emergency level is made, within 24 hours of its adoption, by Order of the Minister of Energy.
- 5. During the Emergency level, the CA shall monitor and request daily operational information on the implementation of the measures, including administrative non-market-based measures, contained in the Emergency Plan and the fulfillment of obligations by the natural gas undertakings, as well as by electricity TSO and electricity producers in gas-fired power plants.
- 6. During the Emergency level, the natural gas undertakings will transmit information to the natural gas TSO and ANRE.
- 7. The decision regarding the end of the Emergency level is taken by the CA, after consulting the EGSC, and is carried out, within 24 hours of its adoption, by Order of the Minister of Energy.
- 8. Information with regard to the declaration/ end of the Emergency level, as well as the Orders of the Minister of Energy regarding the declaration/ end of the Emergency level are published on the website of the Ministry of Energy and on the websites of natural gas suppliers, natural gas TSO and DSO.
- 9. The CA informs about the declaration or the end of the Emergency level the European Commission, the Competent Authorities of the Member States with which Romania is directly connected, the Competent Authorities of the Member States in the Risk Group of which Romania is part, as well as the Gas Coordination Group (GCG) and provide them all the necessary information, in particular information on the action the CA intends to take, especially on the launch of non-market-based measures.



- 10. The CA may modify the measures, if the European Commission so requests following verifications made, at the request of another competent authority, natural gas undertakings or on its own initiative, if they are considered to be contrary to the conditions provided in Article 11 paragraph (8) of the Regulation.
- 11. The AC declares the end of the Emergency Level if the European Commission so requests, on the conclusion that its declaration is not or is no longer justified.
- 12. Within three days of notification of the European Commission request, the CA shall modify the measures and shall notify the European Commission thereof, or shall inform the Commission of the reasons for which it disagrees with the request.
- 13. In the absence of the consent of the CA, if the European Commission does not decide, within three days, to amend or withdraw its request, the CA follows the convocation of the European Commission in order to set out its detailed reasons for requesting any modification to the measure.
- 14. The CA shall take full account of the position of the European Commission. Where the final decision of the CA diverges from the European Commission position, the CA shall provide the reasons underlying such decision.
- 15. After ending the Emergency level, the CA provides the European Commission, according to Article 14 paragraph (4) of the Regulation, a detailed assessment, based on information provided by the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers).

Figure 3 shows the entities involved in the Emergency level, the actions to be taken, as well as the flow of information between the participating entities.

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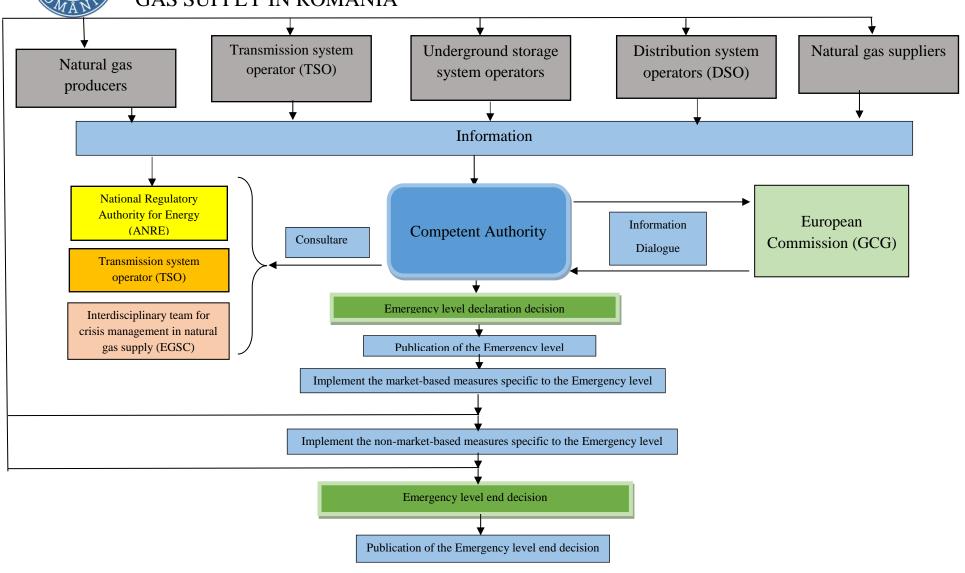


Figure 3. Information flow scheme in case of Emergency level

#### 3.2.4. Indicators used to analyze the declaration of a certain level of crisis

The Competent Authority examines, together with the EGSC, specifically the conditions for declaring the crisis levels on the basis of some indicators (occurring individually or jointly) presented in Table 1.

Table 1. Indicators used to declare crisis levels

	EARLY WARNING	ALERT			EMERGENCY		
•	Limiting/ stopping of natural gas flow at key/ important physical entry points;	•	Significant limiting/ stopping of natural gas flow at key/ important physical entry points;	•	Supplimentary large-scale supply disruptions can be expected in the long term and there is no adequate		
•	Low extraction capacity from warehouses during periods of high consumption;		Low extraction capacity from warehouses during periods of peak consumption;	•	alternative supply option; Market-based measures are no longer sufficient for the stability of the Romanian		
	Stopping of important sources of supply; Technical problem/ technical failure of major infrastructure (eg pipelines and/ or compressor stations); Extreme weather conditions coupled with high demand; Risk in long-term natural gas supply;		Stopping of important sources of supply;  Technical problem/ technical failure, over a long period of time, of a major infrastructure (eg pipelines and/ or compressor stations);  Extreme weather conditions coupled with very high demand;  High risk in long-term	•	gas system; Not enough balancing energy is available across the entire market and cannot be purchased in the short term or trade in balancing energy has been suspended; Deterioration of the supply situation to the extent that the supply of natural gas to the protected customers and		
	Declaration of crisis levels in a Member State with which Romania is directly connected.	•	natural gas supply; Solidarity request from a Member State with which Romania is directly connected.		to cover vital needs are at risk;  Technical problem/ technical failure of the main pipelines and/or the compressor stations without a quick alternative supply option (disaster);  Market-based measures		



have been exhausted.
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The assessment of indicators and information will take into account the following aspects:

- Immediate actions needed to prevent the escalation of the crisis;
- Medium- and long-term actions needed to manage the consequences of a crisis situation;
- Actions and any requirements to implement the necessary administrative measures to solve the Emergency level.

#### 3.2.5. Incidents that can trigger a crisis situation

A crisis situation regarding the supply of natural gas can be triggered by incidents inherent in the natural gas supply chain or by external threats and dangers that can have an impact on the natural gas supply in Romania.. These incidents reprezent the main elements for the decision to declare one of the crisis levels and also which crisis level to be declared.

In this regard, the CA analyzes, together with the EGSC, the incidents identified in the gas market and reported by natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers) in order to make the decision to declare a crisis level.

Table 2. presents a non-exhaustive list of incidents that may trigger one of the crisis levels, depending on the time period and impact, which will be used by the CA to decide which crisis level will be declared.

Table 2. List of incidents that can trigger a crisis level

No	Incident	The area where it appears	The entity that provides the information
1.	Gas supply system incidents	Gas supply deficit (insufficient amounts of gas to meet demand)	Natural gas TSO/ Natural gas suppliers/ Natural gas producers
		Constraints on the national natural gas transmission system  Technical problems with major	Natural gas TSO/ Natural gas suppliers Natural gas TSO



		impact on infrastructure	
		Technical failures of some equipments from natural gas storage warehouses	Underground storage system operators
		Major imbalances in the gas market	Natural gas TSO/ ANRE/ Natural gas suppliers/ Natural gas producers
2.	Other types of incidents	Extreme weather conditions (abnormally low or high outside temperatures) that disrupt the gas supply	National Meteorological Administration
		The potential or actual threat of a terrorist attack	CA
		Reduction or interruption of natural gas supply from third countries	CA/ Natural gas TSO/ Natural gas suppliers
		The disruptions to the electricity supply	ElectricityTSO
		Sabotage, vandalism and theft in the facilities of the national natural gas transmission system	Economic operators responsible for the management of national/ European critical infrastructure
		Civil unrest, war, terrorism, natural disasters	Authorities with responsibilities in managing this issue
		Request for support from neighboring Member States or European Commission	CA

#### 3.3. Reporting obligations and exchange of information

In the event of a significant deterioration of the supply situation, the CA must ensure that it has, to the largest extent possible, all the relevant information to assess the situation and decide on the course of action to be taken.

Reporting and information obligations are provided in Article 11 paragraphs (2) and (4) and Article 14 of the Regulation. With regard to the type, scope of the information, as well as how that information is communicated to the European Commission, a distinction must be made according to crisis levels.

In accordance with Article 14 paragraph (1) of the Regulation, the natural gas undertakings, depending on their field of activity, must submit to the CA, on a daily basis, in the event of a declaration of one of the crisis levels, the following information:

- the daily gas demand and gas supply forecasts for the following three days, in million cubic metres per day (mcm/d);
- the daily flow of gas at all cross-border entry and exit points as well as at all points connecting a production facility, a storage facility, in million cubic metres per day (mcm/d);
- the period, expressed in days, for which it is expected that supply of gas to protected customers can be ensured.

All the information mentioned above will be provided by the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers) in an appropriate format agreed with the CA, any different requirements will be communicated to the natural gas undertakings. This process will allow the transmitted information to be easily assimilated for later communication.

At the same time, this process can help the CA to fulfill its obligation to exchange information with the European Commission in case of an emergency situation, in accordance with Article 14 paragraph (2), letter a) in conjunction with Article 14 paragraph (1) letter b) of the Regulation and and may provide daily forecasts on capacity demand, which may be used by the European Commission when considering natural gas supply and demand in accordance with Article 14 paragraph (1) letter a) of the Regulation.

In accordance with Article 14 paragraph (3) of the Regulation, at the end of one of the crisis levels, the CA provide the European Commission, within six weeks of the ending of the emergency situation, a detailed assessment with particular emphasis on conclusions, opportunities to improve the crisis procedures and development directions of the infrastructure to avoid similar events, including an assessment of the economic impact of the emergency situation, the impact on the electricity sector and the assistance provided to or received from, the European Union and its Member States, based on information provided by natural gas undertakings and interested market participants. Such assessment shall be made available to the GCG and shall be reflected in the updates of the preventive action plans and the emergency plans.

#### 4. MEASURES TO BE ADOPTED PER CRISIS LEVEL

The purpose of this section is to detail the crisis levels and to describe the predefined actions and measures to be taken in emergency situations to ensure the continuity and security of gas supply at the national level, in order to establish mechanisms for crisis management.

#### 4.1. Predefined actions to ensure the supply of natural gas in case of a crisis level

#### 4.1.1. Early warning

 The natural gas TSO and other natural gas undertakings in cooperation with energy companies identify all market-based measures that can be implemented for this level of crisis.

#### 4.1.2. Alert

- 1. If the Alert level is declared, the CA recommends to the undertakings in the natural gas sector to activate all available market-based measures.
- 2. To minimize the risks generated by this level of crisis:
  - natural gas TSO and DSOs monitor the state of balance of networks and take actions based on market measures to keep the systems in the technical parameters of operation;
  - natural gas underground storage system operators shall provide information on the maximum available extraction capacity of natural gas storage warehouses that can be made available to the market by market-based instruments;
  - natural gas producers check the availability to maximize natural gas production and inform natural gas TSO/ CA about the results;
  - natural gas suppliers check the availability of additional natural gas purchases and/ or the reduction of natural gas consumption of final customers (defined in accordance with the provisions of Article 100 point 25 of Law no. 123/2012; in the Emergency Plan, the terms "final customer" and "consumer" are equivalent), in accordance with the contracts concluded and informs the natural gas TSO and CA.
- 3. After the introduction of the Alert level, the CA continuously monitors, together with the support of natural gas TSO and ANRE, the fulfillment of the legal and contractual obligations of each undertaking in the natural gas sector and controls the use of market-based measures based on the information provided.



#### 4.1.3. Emergency

- 1. After the introduction of the Emergency level, the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers and end users) are obliged to comply with the administrative measures provided for in the Emergency Plan, which are not based on market mechanisms.
- 2. In case of Emergency level, leading to a threat to secure the supply of natural gas to protected consumers, the CA may apply administrative measures, which are not based on market mechanisms, including:
  - decides on the release of commercial stocks of natural gas, and after their exhaustion, the release of inactive stocks (gas cushion), with the consultation of natural gas TSO, if the technical conditions allow;
  - following the information provided by natural gas TSO on the maintenance of the state of imbalance in the NTS, in case of exhaustion of entry sources into the NTS, the CA may decide to introduce restrictions on natural gas consumption..
- 3. In case of Emergency level, the natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers), depending on their area of competence, submit the following information daily, until 10:00, to the CA, in accordance with Article 14 paragraphs (1) and (2) of the Regulation:
  - the period, the quantities and source of natural gas supplied to the natural gas market, using non-market-based measures;
  - the daily forecasts/ the forecasts for the following three days of daily gas demand and daily gas supply in millions of cubic meters per day (mcm/d) and in MWh/d;
  - the daily flow of gas at all cross-border entry and exit points as well as at all points connecting a production facility, a storage facility to the network, in million cubic meters per day (mcm/d) or in MWh/d;
  - the daily level of available stocks and the maximum available extraction capacity;
  - the period, expressed in days, for which it is expected that supply of gas to protected customers can be ensured;
  - the measures that each reporting entity intends and has already undertaken to take in order to mitigate the effects of the Emergency Level, as well as information on their effectiveness;
  - the requests made for additional measures to be taken by other competent authorities
- 4. If the application of all market-based and non-market-based measures does not eliminate the threat to security of gas supply in Romania, especially for the protected customers by virtue of the principle of solidarity, thus defined: household customers who are connected to a gas distribution network, heat producers, which cannot operate on fuels other than natural gas, if they have protected customer status and only insofar as they deliver heating to households or essential social services, as well as providers of essential social service,

if they have protected customer status, as defined in the Order of the Minister of Energy no. 692/2018 on the approval of the definition of the category "protected customer", the CA undertakes the necessary steps to activate the solidarity mechanism pursuant to Article 13 of the Regulation.

### 4.2. Measures adopted individually should the declaration of one of the crisis levels occurs

This section examines the market-based measures that could be used for the Early Warning and Alert levels, as well as the non-market-based measures that need to be taken if market-based measures are no longer sufficient to solve a crisis situation, respectively in the Emergency level. It should be noted that at each stage of the crisis levels, the proposed measures may be activated progressively or simultaneously depending on the evolution of the crisis situation.

In the implementation of the Emergency Plan, including the non-market-based measures, it is essential to ensure compliance with the requirements set out in Article 11 paragraph (6) of the Regulation:

- no measures are introduced which unduly restrict the flow of gas within the internal market;
- no measures are introduced that are likely seriously to endanger the gas supply situation in another Member State;
- cross-border access to infrastructure [...] is maintained as far as technically and safely possible.

#### 4.2.1. Early warning

In the Early warning level, there will be no direct intervention by the CA. This crisis level is declared when an event has occurred which could cause the natural gas TSO and other natural gas undertakings to be more vigilant, but there is no immediate threat to the security of supply. The event should only be managed by market-based measures.

Within the Early Warning level, the following market-based measure can be used:

#### 4.2.1.1. Management of the repair/investment programs

When developing the repair/ investment programs, natural gas TSO will ensure the adjustment of the schedule for the planned interruptions, in the sense that when such interruptions overlap with a crisis situation, the repair/ investment works can be rescheduled. Such measures can only be applied if there is a positive effect on the integrity of the natural gas NTS.



#### 4.2.2. Alert

Keeping the gas market in balance is done using market-based measures, in the case of the Alert level. Contractual obligations and available measures should be sufficient to cope with the Alert level.

However, due to the delay that may occur between the application of the measures by the Network Users (e.g. renominations following the requests from the natural gas TSO or National Natural Gas Dispatcher) and the effects generated by these measures on the physical gas flows, it might be necessary for the natural gas TSO to use new operational measures in order to protect the integrity of the NTS.

Within the Alert level, the following market-based measures can be used:

#### 4.2.2.1. Voluntary change of nominations

The natural gas TSO requires on Network Users to voluntarily change their nominations, as far as much as they can do this, in order to ensure the supply of natural gas, in particular, to protected customers.

### 4.2.2.2. Use of the extraction capacities/ the available stocks in underground natural gas storage warehouses

If extraction capabilities/ stocks are identified in underground natural gas storage warehouses, which are not used by undertakings holding rights to these capacities, the CA, with the consultation of natural gas TSO, may require to the underground storage system operators to use these capacities to inject more natural gas into the network. This measure is used to maintain, as far as possible, the physical balance in the natural gas network.

### 4.2.2.3. Reducing the consumption of customers that can be interrupted on the basis of commercial contracts with interruptibility clauses

The measure regarding the commercial interruption for final customers can be used as a measure to balance the NTS in the case of the Alert level, by decreasing the natural gas consumption, based on the activation of the interruptibility clauses in the commercial contracts. When necessary, the CA requests information from natural gas suppliers regarding the activation of the interruptibility clauses in commercial contracts, as well as the natural gas TSO and DSO on the effects of the application of the interruptibility clauses in the commercial contracts on the state of balance of networks.

The exchange of information that is carried out in the case of declaring the Alert level (see Chapter 4.1.2.) allows natural gas TSO and CA to assess whether the measure of commercial interruption has any effect, as an element of market instruments, which should be sufficient to overcome the Alert state.

#### 4.2.3. Emergency

The Emergency level differs significantly from the Early Warning and Alert levels in terms of available tools, whereas in the case of the two levels mentioned, all entities in the gas market act under their own responsibility, in accordance with legal rights and obligations, to overcome supply bottlenecks using their own set of market tools. The Emergency level will be activated by the CA when only market mechanisms and market-based measures are no longer sufficient to guarantee the supply of natural gas corresponding to the demand of final consumers, especially protected customers or in order to apply the Article 13 of the Regulation.

The restrictions on the consumption of natural gas consist in limiting the maximum hourly and daily consumption of natural gas on the territory of Romania or part of it, for a specified period.

The restrictions on natural gas consumption may be introduced in accordance with Article 176 paragraph (3) of Law no. 123/2012, which provides that "in crisis situations, during the emergency level, in order to ensure the security of natural gas supply, the competent authority may order the application of the administrative measures provided for in the Emergency Plan, which are not based on market mechanisms", corroborated with Article 4 of the Competition Law no. 21/1996, republished, as amended and supplemented, which provides that "[...] For certain targeted economic sectors and in exceptional circumstances, such as: crisis situations, major imbalance between supply and demand and obvious market failure, the Government may take temporary measures to combat the excessive rising prices or may even to block them. Such measures may be adopted by Government Decision for a period of 6 months, which may be extended successively for periods not exceeding 3 months, as long as the circumstances which led to the adoption of that Government Decision persist. [...]".

When restrictions apply, they must not cause:

- 1. threats to the safety of persons and the deterioration or destruction of technologies applicable to disruptions in the functioning of institutions, entrepreneurs and facilities;
- 2. fulfilling the tasks related to: national security or defense, health, education, production and supply of electricity and heat to household consumers and environmental protection.

At this stage the CA will declare the Emergency level, which provides the application of non-market-based measures, as follows:

#### 4.2.3.1. Non-market-based demand-side measures

### 4.2.3.1.1. Introduction of restrictions on natural gas consumption for unprotected customers

In case of declaring the Emergency level, the gas supply to the protected customers implies limitations/ interruptions in the supply of natural gas to unprotected customers. The implementation of restrictions on natural gas consumption is allowed only after all available market-based measures have been exhausted by natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers and final customers).

The CA's decision on the possible interruption of unprotected customers must be based on the following considerations:

- expected duration and magnitude of the Emergency level;
- the capability to supply natural gas to protected customers;
- the capability to supply natural gas to unprotected customers as well;
- options for reducing the consequences of possible disruptions on unprotected customers. The reduction or forced cessation of the supply of natural gas to an industrial final customer can lead to the shutdown of its technological/business processes, resulting in considerable economic losses.

Given the dynamics of customer portfolios at the level of natural gas suppliers, a continuous activity of identifying and monitoring unprotected final customers is required, to whom measures to limit/ stop the consumption of natural gas may be applied. As a consequence, DSOs together with each natural gas supplier will annually, until the 1<sup>st</sup> of October, make the list of unprotected final customers, including their consumption profiles, at daily and monthly level (expressed in energy units and volume units), highlighting both the consumption points where the supply can be safely reduced and the level to which it can be reduced.

Based on the lists thus drawn up, the natural gas suppliers will send to CA, DSOs and natural gas TSO, until the 31<sup>st</sup> of October, the aggregated situation of the consumptions of the unprotected final customers.

In the case of the Emergency level, the natural gas TSO determines the natural gas deficit in the NTS and, as a consequence, establishes the exit natural gas volumes from the NTS that must be reduced in order to keep at least the minimum technical parameters for the operation of the NTS, during the Emergency level.

Based on the volumes determined by the natural gas TSO, which must be reduced, corroborated with the volumes available for consumption, during the Emergency level, the natural gas TSO

determines the percentage of reduction to be applied to unprotected customers according to the following scheme (see Figure 4.).

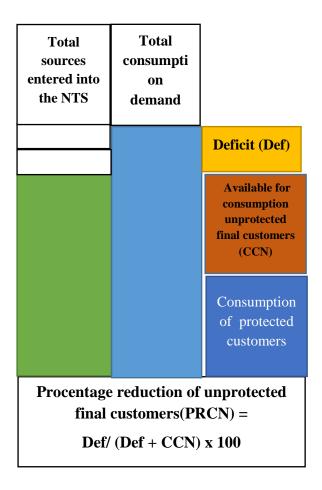


Figure 4. Scheme for determining the percentage reduction in consumption of unprotected final customers

Based on the forecasts made at the level of the natural gas TSO for a period of 72 hours, after excluding the volumes necessary to cover the consumption of the protected customers from the total available sources in the Emergency level, the natural gas TSO determines the initial percentage of reduction of the consumption of unprotected final customers as the ratio between the initial deficit determined by the natural gas TSO at the level of the NTS and the natural gas consumption needs of the unprotected final customers.

The initial percentage of reduction shall be monitored by the natural gas TSO throughout the Emergency level. Natural gas TSO shall update the initial percentage reduction each time there is a change in the deficit between the volumes of natural gas entering the NTS and the total demand for consumption.

The initial percentage of reduction, as well as its updates, shall be immediately communicated by the natural gas TSO to the CA and the natural gas suppliers.

Upon receipt of the communication, natural gas suppliers shall immediately notify unprotected final customers of the obligation to reduce, within 24 hours from the moment of notification, the natural gas consumption in accordance with the notified percentage of reduction. The notifications shall also be sent for information and monitoring to the CA, natural gas TSO and DSOs.

The communications sent by the natural gas TSO shall include at least the following information:

- the forecasted level of entries into the NTS for a period of 72 hours;
- the forecasted level of consumption (exits from the NTS), for a period of 72 hours;
- the percentage of reduction in natural gas consumption;
- the quantity of natural gas to be limited, according to the determined percentage reduction;
- the gas day and the time at which the limitation will become effective;
- the non-binding estimate of the natural gas TSO of the probable date of cessation of application of the natural gas consumption limitation according to the established percentage of reduction.

Notifications transmitted by the natural gas suppliers to unprotected final customers shall include at least the following information:

- the consumption location where the percentage reduction in consumption is applied;
- percentage reduction in natural gas consumption:
- the quantity of natural gas to be limited according to the determined percentage reduction;
- the gas day and the time at which the limitation will become effective;
- information on the non-binding estimate of natural gas TSO regarding the probable date of cessation of application of the natural gas consumption limitation according to the established percentage of reduction.

The natural gas TSO and the DSOs will monitor the consumptions during the Emergency level in accordance with the notifications sent by the natural gas suppliers, mentioned above and will operatively/ duly inform, in their turn, the CA and the natural gas suppliers on the current situation regarding the application of the measures to reduce the consumption by the unprotected final customers.

Within a maximum of 12 hours from the end of the Emergency level, the natural gas TSO will inform the CA and the natural gas suppliers regarding the time of resuming of the activity under normal conditions.

Following the information above, natural gas suppliers will immediately notify unprotected final customers on the cessation of the application of natural gas consumption restrictions, according to the percentage of reduction of consumption.

#### 4.2.3.2. Non-market-based supply-side measures

#### 4.2.3.2.1. Increased import flexibility

The increased flexibility of imports that can be ensured by supplying gas from the spot market to virtual trading points in the European Union is a measure that can be used to meet the demand for natural gas and, in particular, the gas supply to protected customers in case of Emergency level.

#### 4.2.3.2.2. Mandatory increase in the level of natural gas production

In the case of the Emergency level, the possibilities of increasing the internal production of natural gas will be identified, including by temporarily reintroducing into of production the fields/wells with low yield/low level of economic profitability, as far as technically possible. Measures to increase production will be ordered in consultation with domestic producers of natural gas.

Natural gas producers will identify, annually, until July 1<sup>st</sup>, the list of potential fields/ wells with low yield/ low level of economic profitability, which can be put into production in case of Emergency level and transmit to CA the potential gas volumes related to them.

#### 4.2.3.2.3. Reducing the imbalance on the firm capacity of the exit interconnection points

Natural gas TSO can apply an imbalance reduction to the firm capacity of exit interconnection points. This imbalance reduction will diminish the nominated exit quantities from suppliers with the reduction of the exit capacity of the responsible UR. The reduction will be calculated in such a way that the UR is balanced again for the remaining hours of the gas day. The imbalance reduction shall be applied by the natural gas TSO to all natural gas suppliers in a non-discriminatory manner. Natural gas TSO calculates the new quantities and communicates them to suppliers.

#### 4.2.3.2.4. Adaptation of the optimal level of operation of the NTS (line pack)

The balancing operator, respectively the natural gas TSO through the National Natural Gas Dispatcher, at the request of the CA, can adapt the optimal level of operation of the NTS (line pack) in order to reconsider the flexibility offered to the gas market, in order to encourage the URs to act efficiently in balancing their portfolios.

#### 4.2.3.2.5. Increase of technical extraction capacity from the storage warehouses

This measure is only taken into account when all previous measures (market-based and non-market-based) have not had a enough impact to ensure the gas supply to protected customers.

Upon notification of the natural gas TSO, the CA requires underground storage system operators to release volumes from the inactive stocks (gas cushion) existing in the natural gas storage warehouses, as far as it is technically possible.

The request for the release of inactive stocks is made on the basis of the Order of the Minister of Energy, issued for this purpose, within 24 hours from the notification of TSO natural gas, when all the measures adopted have been exhausted, but the volumes of natural gas related to the supply of protected customers are still insufficient.

### 5. ROLE AND RESPONSIBILITIES OF THE INVOLVED ENTITIES PER CRISIS LEVEL

In order to ensure transparency and responsability during a gas supply security crisis, this chapter identifies the relevant stakeholders and their responsibilities per crisis level..

In Law no. 123/2012 were stipulated the obligations and rights of the undertakings operating in the field of natural gas in Romania on the supply of natural gas to the population and, in particular, to protected customers, in order to achieve the basic objectives and to maintain the proper functioning of the internal gas market, especially in situations of supply disruption and crisis (see in Table 3. a summary of the obligations and rights of the undertakings operating in the field of natural gas in Romania).



Tabel 3. Summary of the obligations and rights of natural gas undertakings regarding the safe operation of the national natural gas network

Undertaking	Obligation/ Right	The legal provision of Law no. 123/2012
Natural gas producers	<ul> <li>to hold the authorizations for the establishment of upstream supply pipelines related to the natural gas production activity and their operating license;</li> <li>to ensure the operation of the upstream supply pipes related to the production of natural gas in conditions of safety, efficiency and environmental protection;</li> <li>to ensure the access of third parties to the upstream supply pipes in non-discriminatory conditions, according to the specific regulations;</li> <li>to trade through a public offer, transparent and non-discriminatory on the centralized natural gas markets, in accordance with the provisions of art. 177 and ANRE regulations.</li> </ul>	Article 124 paragraph (1)
Natural gas underground storage system operators	<ul> <li>to operate, maintain, rehabilitate and modernize surface technological installations related to underground storage warehouses, in conditions of safety, efficiency and environmental protection;</li> <li>to ensure the access of third parties to underground storage warehouses, based on objective, transparent and non-discriminatory criteria, according to ANRE regulations;</li> <li>to provide information to the users of the underground storage system, necessary for an efficient access to the system;</li> <li>to ensure adequate means for fulfilling the obligations regarding the public service;</li> <li>to interrupt the operation of the installations for the strictly necessary time, in order to carry out the maintenance and repair works, as well as in other situations provided by the law, with prior notice to the dispatchers of the affected systems and, where appropriate, to customers.</li> </ul>	Article 142 paragraph (1)  Article 142 paragraph (2)



Transmission	-	to operate the transmission system and to ensure its residual physical balance, respectively the	Article	130
system		programming, dispatching and operation of the transmission system in safe conditions;	paragraph (1)	
operator	-	to maintain, rehabilitate, modernize and develop the transmission system in conditions of safety, efficiency		
		and protection of the environment;		
	-	to ensure the access of third parties to the transport system, according to specific regulations, in non-		
		discriminatory conditions, within the limits of the transport capacities and in compliance with the		
		technological regimes;		
	-	to draw up and apply the optimal transmission and delivery regimes for the quantities of natural gas notified		
		by network users, for a given period, in accordance with concluded contracts;		
	-	to draw up and update the technical exploitation agreements in the border area and to submit them to		
		ANRE for approval, prior to their entry into force;		
	-	to draw up and monitor the balance of natural gas entering the system and, respectively, leaving the system,		
		according to ANRE regulations;		
	-	to constitute a minimum stock in the underground storage warehouses or to ensure the purchase of gas,		
		including imports, for the quantities necessary to operate and ensure the physical balance of the		
		transmission system, according to the specific regulations approved by ANRE;		
	-	to exchange information with other interconnected transmission and system operators, with LNG storage		
		and distribution operators and with other collaborators in the energy field, in compliance with ENTSO-G		
		regulations on information exchange protocols, reports, structure and procedures access to databases;		
	-	to ensure the allocation of capacity on interconnection pipelines in accordance with Regulation (EC) No		
		715/2009;		
	-	to ensure the application of congestion management rules, including on the interconnection pipelines, as		
		well as the capacity allocation rules on these pipelines;		
	-	to organize and manage the natural gas balancing market;		
	-	to ensure adequate means for fulfilling the obligations regarding the public service;		
	-	to interrupt or limit the transmission of natural gas in conditions where the safety and integrity of the		



	transmission system are endangered, in accordance with specific regulations;	Article	130
	<ul> <li>to interrupt the operation of the installations for the strictly necessary time, in order to carry out the maintenance and repair works, as well as in other situations provided by the law, with prior notice to the dispatchers of the affected systems and, where appropriate, to customers;</li> <li>to store natural gas in the transmission system, under the conditions of the specific regulations approved by ANRE;</li> <li>to manage the balancing market in order to ensure the physical balance and to maintain in the operational parameters of the system, with the performance of the respective commercial operations;</li> <li>to participate in the trading of natural gas only for the balancing activity of the system, through sale-purchase operations in the balancing market or in other markets, according to the regulations in force and the ENTSO-G norms. Natural gas transactions are carried out on the basis of transparent and non-discriminatory procedures, through competitive mechanisms, in accordance with the regulations of the competent authority.</li> </ul>	paragraph (2	)
Distribution system operators	<ul> <li>to operate, maintain, repair, modernize and develop the distribution system in conditions of safety, economic efficiency and environmental protection, the activities to be carried out on the basis of specific authorizations for the design and execution of gas distribution systems and the operation will be carried out on the basis of the distribution license;</li> <li>to make interconnections with other systems, as appropriate, and to ensure the long-term capacity of the distribution system;</li> <li>to ensure the access of third parties to the distribution systems, in non-discriminatory conditions, within the limits of the distribution capacities, in compliance with the technological regimes, according to the specific regulations elaborated by ANRE;</li> <li>to draw up and monitor the balance between the enter gas and, respectively, the exit gas of its own system, to ensure the permanent balance of the operating system;</li> <li>to ensure the security conditions in the natural gas supply;</li> </ul>	Article paragraph (1	138



	_	to take over the quantities of hydrogen in accordance with the legal regulations / technical standards in force regarding the injection of hydrogen into natural gas distribution networks, respectively in their conversion from natural gas distribution to hydrogen distribution; to interrupt the operation of the objectives of the distribution system and the supply of natural gas to customers for the strictly necessary time, in order to carry out the maintenance and repair works, as well as in other situations provided in this title or in case of force majeure, with prior notice to the dispatchers of the affected systems and, where appropriate, to customers.	Article 138 paragraph (2)
Natural gas suppliers	-	to conclude contracts for the purchase of natural gas, so as to ensure the coverage of consumption for its customers; to purchase the natural gas that it offers to domestic customers, in conditions of minimizing the costs of the allocated resources, based on its own procedures, elaborated in correlation with the provisions of Article 177 paragraphs (3^15), (3^16) and (3^17), to ensure the transparency of the natural gas procurement process and, at the same time, equal and non-discriminatory treatment of persons participating in the natural gas procurement procedure as tenderers; to allow customers, free of charge, the effective change of the natural gas supplier within 21 days from the date of the request and to send them a final liquidation statement, within a maximum of 42 days from the change of supplier; to properly inform final customers about their actual gas consumption and the related real costs, frequently enough so that they have the opportunity to adjust their own gas consumption. This information shall be communicated at appropriate intervals, taking into account the capacity of the final customer's measuring equipment and the cost-benefit ratio of these measures, without any additional costs being charged to the final customer; to limit and / or stop the supply of natural gas to customers, under the conditions specified in the contracts	Article 143 paragraph (1)  Article 143 paragraph (2)

### 5.1. Role and responsibilities for the Early Warning level

Table 4. shows the general role and responsibilities of each entity involved in the gas sector for the Early Warning level.

Table 4. The role and responsibilities of the entities involved for the Early Warning level

Entity involved	Role and responsibilities	
Ministry of Energy, as Competent Authority (CA)	Centralizes information received from natural gas undertakings.	
	Analyzes and assesses, together with natural gas TSO and ANRE, the centralized information.	
	If necessary, make a proposal to convene a meeting of the Interdisciplinary team for crisis management in natural gas supply (EGSC) and then participate in its work.	
	In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Early Warning level in Romania.	
	Issue the Decision to declare the Early Warning level, by Order of the Minister of Energy, if necessary.	
	Make the exchnage of information in accordance with the provisions of the Regulation.	
	Oversees Early Warning crisis situation management.	
	Convenes regular consultations with natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers), as well as with electricity TSO and electricity and heat producers, if applicable.	
	Provides up-to-date information to GCG on the Early Warning level.	
	Issue the Decision to end the Early Warning level, by Order of the Minister of Energy.	
Interdisciplinary team for crisis	Assesses the crisis situation.	
management in natural gas	Issues conclusions regarding the need to declare/ end the	



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supply (EGSC)	Early Warning level.
Natural gas transmission system operator (TSO)	Analyzes and assesses data received from NTS natural gas.  Submits information to CA and ANRE.  Participates in EGSC work (if established).  Convenes regular consultations with underground storage system operators, DSO, electricity TSO on the crisis situation and the possible need for actions.  Contacts TSOs in neighboring Member States and exchanges information using the ReCo Gas System as part of the ReCo East team.
Natural gas underground storage system operators	Submits information to the natural gas TSO, CA and ANRE. Participates in EGSC work (if established).
Distribution system operators	Submits information to the natural gas TSO, AC and ANRE. Participates in EGSC work (if established).
Natural gas producers	Submits information to the natural gas TSO, AC and ANRE. Participates in EGSC work (if established).
Natural gas suppliers	Submits information to the natural gas TSO, CA and ANRE. Participates in EGSC work (if established).
Electricity and heat producers	Submits information to the natural gas and electricty TSOs, CA and ANRE on the fulfillment of legal and contractual obligations, on the natural gas consumption and the levels of electricity and heat production levels  Participates in EGSC work (if established).
Electricity TSO	Participates in consultations convened by the CA with natural gas TSO and electricity producers using natural gas, on the Early Warning crisis situation and possible need for actions, if necessary.
	Participates in EGSC work (if established).  Implements and coordinates measures affecting the electricity
	sector, in particular as regards the preparation of natural gas power plants for restrictions, where appropriate.
	Transmits to CA and natural gas OTS the list of critical gas- fired power plant in the network.

### 5.2. Role and responsibilities for the Alert level

Table 5. shows the general role and responsibilities of each entity involved in the gas sector for the Alert level.

Table 5. The role and responsibilities of the entities involved for the Alert level

Entity involved	Role and responsibilities	
Ministry of Energy, as Competent Authority (CA)	Centralizes information received from natural gas undertakings.	
	Analyzes and assesses, together with natural gas TSO and ANRE, the centralized information.	
	If necessary, make a proposal to convene a meeting of the EGSC and then participate in its work.	
	In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Alert level in Romania.	
	Issue the Decision to declare the Alert level, by Order of the Minister of Energy, if necessary.	
	Make the exchnage of information in accordance with the provisions of the Regulation.	
	Oversees Alert crisis situation management.	
	Convenes regular consultations with natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers), as well as with electricity TSO and electricity and heat producers, if applicable.	
	Provides up-to-date information to GCG on the Alert level.	
	Issue the Decision to end the Alert level, by Order of the Minister of Energy.	
Interdisciplinary team for crisis management in natural gas supply (EGSC)	Assesses the crisis situation.  Issues conclusions regarding the need to declare/ end the Alert level.	



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Natural gas transmission	Analyzes and assesses data received from NTS natural gas.
system operator (TSO)	Submits information to CA and ANRE.
	Participates in EGSC work (if established).
	Convenes regular consultations with underground storage system operators, DSO, electricity TSO on the crisis situation and the possible need for actions.
	Notifies natural gas producers and natural gas underground storage system operators of the need to ensure the maximum available production, respectively to ensure the maximum available storage capacity.
	Contacts TSOs in neighboring Member States and exchanges information using the ReCo Gas System as part of the ReCo East team.
Natural gas underground storage system operators	Submits information to the natural gas TSO, CA and ANRE (regarding the daily situation of natural gas stocks in warehouses).
	Participates in EGSC work (if established).
	Make preparations for the achievement of the maximum extraction capacity, if necessary, and, for this purpose, consults with natural gas TSO.
Distribution system operators	Submits information to the natural gas TSO, AC and ANRE. Participates in EGSC work (if established).
Natural gas producers	Submits information to the natural gas TSO, AC and ANRE. Participates in EGSC work (if established).
Natural gas suppliers	Submits information to the natural gas TSO, AC and ANRE. Participates in EGSC work (if established).
Electricity and heat producers	Submits information to the natural gas and electricty TSOs, CA and ANRE on the fulfillment of legal and contractual obligations, on the natural gas consumption and the levels of electricity and heat production.
	Participates in EGSC work (if established).
Electricity TSO	Participates in consultations convened by the CA with natural gas TSO and electricity producers using natural gas, on the Alert crisis situation and possible need for actions, if necessary.



Participates in EGSC work (if established).
Implements and coordinates measures affecting the electricity sector, in particular as regards the preparation of natural gas power plants for restrictions, where appropriate.
Transmits to CA and natural gas OTS the list of critical gas- fired power plant in the network.

### 5.3. Role and responsibilities for the Emergency level

Table 6. shows the general role and responsibilities of each entity involved in the gas sector for the Emergency level..

Table 6. The role and responsibilities of the entities involved for the Emergency level

Entity involved	Role and responsibilities
Ministry of Energy, as Competent Authority (CA)	Centralizes information received from natural gas undertakings.
	Analyzes and assesses, together with natural gas TSO and ANRE, the centralized information.
	If necessary, make a proposal to convene a meeting of the EGSC and then participate in its work.
	In accordance with the conclusions of the EGSC meeting, the CA may decide whether to declare the Emergency level in Romania.
	Issue the Decision to declare the Emergency level, by Order of the Minister of Energy, if necessary.
	Prepares decisions on non-market-based measures (pursuant to Article 176 paragraph (3) of Law No. 123/2012), prepares proposals on measures to be taken for the Emergency level and consults with natural gas TSO on the restrictions necessary to be applied.
	Make the exchnage of information in accordance with the provisions of the Regulation.
	Oversees Emergency crisis situation management.
	Convenes regular consultations with natural gas



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	undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers), as well as with electricity TSO and electricity and heat producers.
	Provides up-to-date information to GCG on the Emergency level.
	Issue the Decision to end the Emergency level, by Order of the Minister of Energy.
Interdisciplinary team for crisis	Assesses the crisis situation.
management in natural gas supply (EGSC)	Issues conclusions regarding the need to declare/ end the Emergency level.
Natural gas transmission	Analyzes and assesses data received from NTS natural gas.
system operator (TSO)	Submits information to CA and ANRE.
	Participates in EGSC work (if established).
	Convenes regular consultations with underground storage system operators, DSO, electricity TSO on the crisis situation and the possible need for actions.
	Implements and coordinates the measures adopted at Emergency level.
	Informs the CA, on a daily basis, of the planned use of gas sources and makes proposals on the extent of the restrictions that should be introduced in order to efficiently manage the sources and also on the natural gas sources to be contracted.
	Contacts TSOs in neighboring Member States and exchanges information using the ReCo Gas System as part of the ReCo East team.
Natural gas underground	Submits information to natural gas TSO, CA and ANRE.
storage system operators	Participates in EGSC work (if established).
	Implements and coordinates the measures adopted at Emergency level.
Distribution system operators	Submits information to natural gas TSO, CA and ANRE.
	Participates in EGSC work (if established).
	Implements and coordinates the measures adopted at Emergency level.



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Natural gas producers	Submits information to natural gas TSO, CA and ANRE.
	Participates in EGSC work (if established).
	Implements and coordinates the measures adopted at Emergency level.
Natural gas suppliers	Submits information to natural gas TSO, CA and ANRE.
	Participates in EGSC work (if established).
	Implements and coordinates the measures adopted at Emergency level.
Electricity and heat producers	Implements and complies with contracts concluded with electricity TSO and/ or natural gas suppliers, as well as crisis measures adopted at the Emergency level, in line with applicable legislation, without affecting their ability to provide heat for the population.
	Participates in EGSC work (if established).
Electricity TSO	Participates regularly in consultations convened by the CA, with TSO natural gas and electricity producers using natural gas, on the Emergency crisis and possible need for measures and provides information on the impact of reducing the supply of natural gas on the RET.
	Participates in EGSC work (if established).
	Implements and coordinates measures affecting the electricity sector, in particular as regards the preparation of natural gas power plants for restrictions, where appropriate.  Transmits to CA and natural gas OTS the list of critical gasfired power plant in the network.



## 6. SPECIFIC MEASURES FOR THE ELECTRICITY AND DISTRICT HEATING

#### 6.1. Supply of electricity generated from natural gas

In 2020, total electricity production in Romania amounted to 53,74 TWh<sup>1</sup>. The percentage of electricity production in Romania achieved in dispatchable and non-dispatchable production units, in 2020, using natural gas as fuel was 15.92%<sup>2</sup>.

#### 6.2. The likely impact of a disruption of gas supply in the electricity sector

Under certain operating conditions of the National Electric Power System (SEN), for example in the event of a high demand for electricity in the SEN, emergency shutdowns of production sources, reduced production from renewable energy sources, especially from the wind farms, limited import possibilities or problems in the area with the operation of the Electric Transmission Network (RET), the availability of electricity using natural gas can be of significant importance for ensuring the security of electricity supply in the SEN, also taking into account the fact that the gas-fired power stations play an important role in the rapid adjusment needed to balance the SEN, ensuring its proper functioning.

If there are interruptions in the supply of natural gas to consumers in the autumn and winter, they will consume additional electricity to use for heating, which will lead to a crisis situation of electricity supply, at risk, in particular, for the supply of natural gas to the protected customers.

## 6.2.1. Measures to mitigate the potential impact of a disruption of gas supply on the electricity sector

Given the importance of the production of electricity using natural gas as fuel and for the safe operation of the SEN, in the event of a crisis in the supply of natural gas, cooperation should be established between natural gas and electricity TSOs. In this regard, natural gas TSO will inform electricity TSO about the crisis situation and then will remain in regular contact with it.

One of the areas of cooperation between TSO natural gas and TSO electricity is the mitigation of the potential negative impact of the introduction of the restrictions on natural gas consumption necessary to ensure the supply of electricity in Romania.

At this stage, the electricity TSO will identify the gas-fired power plants that are strictly necessary to ensure the stability of voltage and frequency in the SEN, in order to avoid their interruption.

Annual Report on the activity of the National Energy Regulatory Authority 2020, page 134.

https://www.anre.ro/ro/despre-anre/rapoarte-anuale

<sup>2</sup>Source: ANRE

Annual Report on the activity of the National Energy Regulatory Authority 2020, page 126.

<sup>&</sup>lt;sup>1</sup>Source: ANRE

Also, since the beginning of a crisis situation, electricity TSO requires the Power Generation Company in Hydropower Plants Hidroelectrica S.A. to correlate the water level in the accumulation lakes with the necessary production parameters, in the event of decommissioning of natural gas-fired power plants. Hidroelectrica S.A. will transmit the requested information to the electricity TSO as soon as possible, concidering the time frame in which Hidroelectrica has the capacity to compensate for the production gap of gas-fired power plants, so that the water level in the accumulation lakes does not fall below the limit.

In accordance with Article 11 paragraph (7) of the Regulation, during a crisis situation and on reasonable grounds, upon a request of the electricity or natural gas TSO, a Member State may decide to prioritise the gas supply to certain critical gas-fired power plants over the gas supply to certain categories of protected customers, if the lack of gas supply to such critical gas-fired power plants either:

- (a) could result in severe damage in the functioning of the electric power system;
- (b) would hamper the production and/or transmission of natural gas. Member States shall base any such measure on the risk assessment.

#### 6.3. The likely impact of a disruption of gas supply in the district heating sector

Heat producers, which cannot run on fuels other than natural gas and which provide heat to household customers, small and medium-sized enterprises and/or providers of healthcare, essential social assistance, emergency, security, service providers related to education or public administration have the status of protected customers, in accordance with the Order of the Minister of Energy no. 692/2018 on the approval of the definition of the category "protected customer" and will not be affected if the level of Emergency is declared, unless the producers have provided information on possible disruptions in the supply of natural gas that significantly affect their gas supply situation.

The supply of heat to non-household customers have to be treated in the same way as to household customers if the public distribution network for the supply of heat to household customers or essential social services cannot be technically separated (for metering) by the public distribution network of non-household customers.

Regarding district heating from natural gas (district heating instalations), companies that carry out the public central heating service have to take measures to reduce the quality of services (for example, guaranteed lower temperatures provided to users), whether such actions are considered useful in reducing natural gas consumption.



# 6.3.1. Measures to mitigate the potential impact of a disruption of gas supply on district heating

Uninterrupted supply of natural gas is an essential component of ensuring energy security for consumers with regard to residential heating, especially during the heating season when outside temperatures are low.

#### 7. CRISIS MANAGER

In accordance with the provisions of Article 176 paragraph (2) of Law no. 123/2012, in case of a crisis situation, on the three levels provided by the Regulation, the Ministry of Energy, as the competent authority, is designated a *crisis manager*, who implements the measures stipulated in the Preventive Action Plan on measures to guarantee the security of natural gas supply, approved by Government Decision no. 1077/2021 and/ or in the Emergency Plan.

To analyse possible events and incidents identified in the gas market and notified by natural gas undertakings in accordance with their role and responsibilities (see Tables 4., 5. and 6.), in order to be able to decide on the declaration of each level of crisis and to manage the situations arising in the case of each level of crisis in the national gas system in Romania, an Interdisciplinary team for crisis management in natural gas supply (EGSC) is established, which is coordinated by the CA.

The composition of the team is approved by Order of the Minister of Energy.

The EGSC includes, together with the representatives of the Ministry of Energy, a designated representative of the natural gas undertakings (natural gas TSO, DSO, underground storage system operators, natural gas producers, natural gas suppliers, etc.), ANRE, the electricity TSO and the electricity and heat producers. Other representatives/experts with relevant experience may be convened as guests at EGSC meetings, depending on the situations analyzed.

CA will coordinate the measures and actions to be taken in case of emergency situations in order to ensure the security of natural gas supply. Mainly, the role of the CA will be to provide a clear framework for emergency planning so that the necessary actions can be taken by natural gas undertakings to respond as quickly as possible to any possible disruption of natural gas supply.

The CA shall have the following responsibilities:

- a) monitors and analyzes the situation regarding the security of natural gas supply in Romania;
- b) coordinates the activities of all entities involved in the supply of natural gas in crisis situations;
- c) declares/ends the individual crisis levels by Order of the Minister of Energy;
- d) orders the application of the administrative measures, provided for in the Emergency Plan, respectively of the non-market-based measures within the meaning of the Regulation;
- e) communicates with the European Commission and provides information on the application of both market and non-market-based measures in order to verify the correctness of the declaration of each crisis level.

## 8. MEASURES REGARDING UNDUE CONSUMPTION BY CUSTOMERS WHO ARE NOT PROTECTED CUSTOMERS

In order to prevent the undue consumption of natural gas, in relation to the limitation of the natural gas consumption of the unprotected final customers, in case of declaring the Emergency level, the CA contacts the natural gas TSO, the DSO and the natural gas suppliers in order to inform the unprotected final customers to reduce their natural gas consumption in order to ensure the continuity of natural gas supply at national level, especially to protected customers. Unprotected final customers will adopt measures to limit consumption, in accordance with the provisions of this Emergency Plan, to the extent technically possible, without jeopardising the safe and reliable operation of gas networks and the integrity of technological facilities affected by the reduction.Non-market-based measures will be used when all available means necessary to meet the natural gas supply needs of protected customers have been exhausted. For unprotected final customers who do not comply with the restrictions on the supply of natural gas, financial penalties will be applied and/or technically decoupled to the extent technically possible, without endangering the integrity of the technological facilities.

If an unprotected final customer does not comply with the restrictions, the natural gas TSO/DSO may impose technical constraints on it, having the effect of limiting the natural gas consumption. The restrictions do not apply to the gas-fired power plants identified as having a critical role in the RET and the failure to supply gas to the respective power plants could lead to a serious deterioration of the functioning of the SEN.

Unprotected final customers must make every effort to comply with the demand to reduce their consumption. If the unprotected final customer does not comply with the reduction request, their subsequent consumption is considered undue, and the natural gas TSO/ ODS has the right to physically reduce the quantities taken over by them by the necessary quantities, under the conditions of the Emergency level, in accordance with the provisions of Law no. 123/2012 and of the Network Code for the National Gas Transmission System approved by the Order of the President of ANRE no. 16/2013, as amended and supplemented.

In the event of a crisis situation in the national gas system, the consumption of unprotected final customers is monitored by the natural gas TSO and the DSO, and the data is transmitted to the CA.

#### 9. EMERGENCY PREPAREDNESS TESTS

In accordance with the provisions of Article 10 paragraph (3) of the Regulation ,,the measures, actions and procedures contained in the emergency plan shall be tested at least once between its four-year updates [..]. In order to test the emergency plan, the competent authority shall simulate high and medium impact scenarios and responses in real time in accordance with that emergency plan. The results of the tests shall be presented at the GCG by the competent authority".

The Competent Authority shall be responsible for the preparation and organisation of emergency response tests. Emergency tests take place at least once every four years, and the date and entity responsible for organizing them are determined by Order of the Minister of Energy. The first response tests will be carried out no later than one year after the European Commission issued its opinion on the Emergency Plan. The purpose of performing emergency tests is to test the effectiveness of the plan and the operational arrangements included in it.

The scenario of the emergency test will be prepared by a group of experts and will not be made public until it is performed and involves a series of simulated events aimed at assessing incidents that may trigger potential problems in the functioning of the NTS, until the situation where the need arises to declare a crisis level and an objective need is created to start implementing non-market-based measures. The emergency test scenario involves variants of the simulation depending on according to the decisions made by the test participants. At the preparation stage of the scenario, the main entities to be part of the emergency test (stakeholders) are identified.

The emergency test scenario is subject to CA approval

The entities involved are mainly CA, natural gas TSO, electricity TSO, and, depending on the scenario, other natural gas undertakings, energy companies/ electricity producers using natural gas as fuel, other ministries, industrial sector etc. The entities indicated in the test (interested parties) are obliged to participate in it.

For the implementation of the emergency test, the mechanisms and means of communication shall be clearly defined in order to separate the test messages from the actual communication between stakeholders.

The test must be carried out under conditions as close as possible to the actual conditions.

After the emergency test has been performed a summary of the results obtained shall be drawn up and presented. including an action plan, detailing the improvements to the existing emergency arrangements, which will be made available to all interested parties, which will be made available to all interested parties.

#### 10. REGIONAL DIMENSION

#### 10.1. Measures to be adopted per crisis level

The Emergency Plan includes the first implementation of cooperation mechanisms within each Risk Group of which Romania is a part, to strengthen this dimension in order to increase the security of gas supply, as well as to establish appropriate and effective cross-border measures along the emergency supply corridors

In order to ensure that the Member States included in a Risk Group have access to information which will enable them to prevent or respond to potential disturbances in gas supply, it is necessary to establish an effective system of communication between the Competent Authorities of the risk group.

The regional dimension of the Emergency Plan provides the tools needed to cooperate in implementing market-based and non-market-based measures between Member States from the Risk Groups, of which Romania is a part, namely:

- Ukraine: Bulgaria, Czech Republic, Germany, Greece, Croatia, Italy, Hungary, Luxembourg, Austria, Poland, Romania, Slovenia, Slovakia and
- Trans-Balkan: Romania, Bulgaria, Hungary and Greece.

#### 10.1.1. Ukraina Risk Group

All the measures listed below address information requirements that are useful to all Member States belonging to the Risk Group that have to react to unexpected situations in order to prevent the spread of a crisis situation, to help Member States in need with everything possible.

The rapid and efficient exchange of information between the Competent Authorities of the Member States belonging to a Risk Group is a key element in resolving the potential consequences of gas supply disruptions in particular in such a diverse region.

#### 10.1.1.1. Early warning

Where the Competent Authorities has declared the Early Warning level, it has to inform all other Member States belonging to the Risk Group of the declaration as soon as possible, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates every four days, on the Early Warning level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

#### 10.1.1.2. Alert

Where the Competent Authority has declared the Alert level, it has to inform all other Member States belonging to the Risk Group of the declaration as soon as possible, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates every two days, on the Alert level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

#### **10.1.1.3.** Emergency

Where the Competent Authority has declared the Emergency level, it has to inform all other Member States belonging to the Risk Group of the declaration as soon as possible, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates, each day or even several times a day, on the Emergency level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

#### 10.1.2. Trans-Balkan Risk Group

All the measures listed below are aiming at information requirements useful to all Member States belonging to the Risk Group, which have to react in order to prevent the spread of a crisis situation and to assist Member States in resolving the crisis situation.

#### **10.1.2.1.** Early warning

Where the Competent Authority has declared the Early warning level, it has to inform all other Member States belonging to the Risk Group of the declaration, within 24 hours of the issuance of the Decision to declare the Early Warning level, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates every four days, on the Early Warning level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

#### 10.1.2.2. Alert

Where the Competent Authority has declared the Alert level, it has to inform all other Member States belonging to the Risk Group of the declaration, within 24 hours of the issuance of the Decision declaring the Alert level, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates every two days, on the Alert level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

#### **10.1.2.3.** Emergency

Where the Competent Authority has declared the Emergency level, it has to inform all other Member States belonging to the Risk Group of the declaration within 24 hours of the issuance of the Decision declaring the Emergency level, as well as of each measure implemented or intended to be implemented, in order to deal with the effects of the supply disruption.

The Competent Authority will send updates, each day or even several times a day, on the Emergency level to the other Member States belonging to the Risk Group on all measures adopted or concluded, if any.

## 10.1.3. Actions to be taken within each Risk Group, of which Romania is part, in case of declaring a crisis level

The Member State declaring the crisis situation shall provide a description of the event or information that led to the declaration of the crisis level, namely:

- Date, time and duration of the event;
- The nature of the event:
- The location of the event;
- The volumes of natural gas affected.

In view of the provisions of the Regulation, for the Early Warning and Alert levels, information shall only cover the market-based measures that are adopted, including:

- A brief description of the measure and the main actors involved;
- Whether these measures are sufficient to cope with the level of crisis and, failing that, a brief description of the additional measures that can be taken;
- If cross-border effects are expected between the Member States belonging to the Risk Group with which Romania is directly connected (e.g. increased imports from these Member States).

For the Emergency level, the information to be sent will include:

- Actions on the supply and demand side to ensure the natural gas supply, including trade agreements between the parties involved and any compensation mechanisms for natural gas undertakings, where appropriate;
- A brief description of the market-based measures applied at this stage, indicating the expected contribution of the measures to mitigate the Emergency level and the main actors involved;
- A brief description of the non-market-based measures and the main players involved;
- The established order in which the non-market-based measures should be implemented, taking into account the circumstances of the Emergency level;
- The expected contribution of the non-market-based measures to mitigate the situation at the Emergency level as a complement to the market-based measures;

 Assessment of other effects of non-market-based measures, paying particular attention to possible cross-border effects in other Member States of the Risk Group.

#### 10.2. Cooperation mechanisms

The Regulation provides for detailed procedures and measures to be followed for each crisis level through the close collaboration of Member States within the Risk Groups or with other neighbouring states, if necessary. The chapter sets out the requirements for each Risk Group, of which Romania is part, in order to coordinate the actions at each crisis level. The procedures and measures laid down may vary depending on the national arrangements in each Member State.

#### 10.2.1. Ukraina Risk Group

The cooperation mechanism within the Risk Group shall follow coordination procedures established between Member States, transmission system operators, national energy regulatory authorities and other stakeholders.

Natural gas transmission system operators (TSOs) in the Member States of the Risk Group shall work in close cooperation. Where a possible gas supply bottleneck at the level of a Member State is foreseeable, the TSO in that Member State will liaise with the TSOs of the other Member States belonging to the Risk Group. To the extent possible, they will agree on the cross-border coordination of measures, including the exchange of information on any necessary market-based measures with cross-border effects.

In the event of a crisis situation, TSOs shall cooperate and exchange information using the Regional Gas Coordination System (ReCo System for Gas), established by ENTSO-G, pursuant to Article 3, paragraph (6) of the Regulation. Most of the Member States that are part of the Ukraine Risk Group are included in the ReCo Est team, which was launched in November 2017.

The ENTSO-G shall inform the Commission and the competent authorities of the Member States belonging to the Risk Group. TSOs may suggest possible response measures.

In case the ReCo System for Gas is activated for the Ukraine Risk Group, the competent authorities and national energy regulatory authorities of the Member States belonging to the Risk Group shall be immediately invited to attend all meetings and communications.

In case of declaring the Emergency level, the TSOs and the CAs of the Member States belonging to the Risk Group will be in close contact, in particular, to provide the information, at an appropriate level, on the expected scale of necessary restrictions of the cross-border flows of gas supply.

Information supplied by natural gas undertakings pursuant to Article 14 paragraph (2) of the Regulation are shared with the Member States of the Risk Group.

#### 10.2.2. Trans-Balkan Risk Group

The entire cooperation mechanism between Member States and coordination procedures established within the Risk Group Ukraine between transmission system operators, national energy regulatory authorities and other stakeholders shall also apply to this Risk Group.

#### 10.3. Adjacent procedures

In order to have access to full information about the current situation in the gas system, the CAs of all Member State belonging to the Risk Groups Ukraine and Trans-Balkan must prepare appropriate procedures for gathering information from all natural gas undertakings (natural gas TSO, natural gas producers, DSO, underground storage system operators, natural gas suppliers) and also from the market participants where necessary.

#### 10.4. Solidarity among Member States

Where a Member State is unable to cover a major deficit in gas supply, in particular to its solidarity protected customers, and has exhausted all market-based measures and all other non-market-based measures provided for in the emergency plan, in accordance with Article 13 of the Regulation, the Competent Authority of that Member State shall be allowed to request the use of the solidarity mechanism by notifying an explicit request for solidarity to the Commission and to the competent authorities of all Member States with which they are directly connected or through a third country. The Competent Authority should also inform without delay the competent authorities of all Member States belonging to the Risk Group of that notified request for solidarity<sup>3</sup>.

In accordance with Article 13 of the Regulation, Romania must conclude intergovernmental agreements on solidarity measures in order to guarantee the security of gas supply in solidarity with the Republic of Bulgaria and Hungary, countries with which Romania is directly connected.

An assessment of the comments made by Member States on the draft intergovernmental agreement is currently under way. The next step is to present an updated version of the draft intergovernmental agreement for further discussion.

<sup>&</sup>lt;sup>3</sup>The members of the Ukraine Risk Group have started the discussions in order to agree on the technical aspects, legal and financial arrangements necessary for the implementation of the solidarity mechanism described in Article 13 of the Regulation.

As these arrangements are agreed, they will be included in this paragraph.

#### 11. STAKEHOLDER CONSULTATIONS

Given the importance and implications of the Emergency Plan for security of natural gas supply in Romania and, in particular, to protected customers, the Ministry of Energy submitted the draft Emergency Plan to a public consultation for collection, from stakeholders, proposals, suggestions and opinions with a value of recommendation on this document.

The purpose of the consultation was to increase the transparency of the decision-making process and at the same time allowed the accumulation of useful information needed to debate public policy issues with a major impact for the period 2021-2030.

The public consultation took place after the publication by the Ministry of Energy, on the official website of the institution, of the draft Emergency Plan.

In addition, the draft was submitted for views/comments and proposals to natural gas companies, electricity producers and transmission and system operators: electricity and natural gas, as follows: National Regulatory Authority for Energy, Federation of Associations of Energy Utility Companies, The National Natural Gas Transmission Company Transgaz S.A., The National Natural Gas Company ROMGAZ S.A., OMV PETROM S.A., The National Electricity Transmission Company TRANSELECTRICA S.A., Electrocentrale București S.A. ELCEN, Romanian Energy Suppliers Association, Electricity Producers Association – HENRO, The Natural Gas Storage Subsidiary DEPOGAZ Ploiești S.R.L. and DEPOMUREȘ S.A..

The draft Emergency Plan was submitted to the competent authorities of Hungary, Greece and the Republic of Bulgaria for consultation.

The list of interested parties that submitted comments on the draft Emergency Plan in the framework of the public consultation is presented below:

- National Regulatory Authority for Energy;
- Federation of Associations of Energy Utility Companies;
- Electrocentrale București S.A. ELCEN;
- The Natural Gas Storage Subsidiary DEPOGAZ Ploiești S.R.L.;
- DEPOMURES S.A.;
- The National Natural Gas Transmission Company Transgaz S.A.;
- The National Natural Gas Company ROMGAZ S.A.;
- OMV PETROM S.A.:
- Romanian Energy Suppliers Association;
- Electricity Producers Association HENRO;

- The National Electricity Transmission Company TRANSELECTRICA S.A..

Proposals and comments received from interested parties, either of general or detailed nature, were assessed and partially included in the text.

#### 12. CONCLUSIONS

The Emergency Plan was developed in accordance with the provisions of the Regulation.

The Emergency Plan describes description of the role and responsibilities of the undertakings operating in the field of natural gas in Romania, the individual activities of the entities involved in the prevention of crisis situations, in order to achieve the basic objectives and to maintain the proper functioning of the internal gas market, especially in situations of disruption of the security of gas supply for each crisis level.

In order to analyze the possible events and incidents identified at the level of the gas market and communicated by the natural gas undertakings, in order to be able to decide on the declaration of each level of crisis and to manage the situations occurred in the case of each level of crisis in the NTS in Romania, an Interdisciplinary team for crisis management in natural gas supply (EGSC) is established, which is coordinated by the CA.

Within the Early Warning level, market-based measures can be used, mainly: management of the repair/ investment programs.

Within the Alert level, the following market-based measures can be used: voluntary change of nominations, use of the extraction capacities/ the available stocks in underground natural gas storage warehouses and reducing the consumption of customers that can be interrupted on the basis of commercial contracts with interruptibility clauses.

Non-market-based measures, which are used only in the case of the Emergency level, include: introduction of restrictions on natural gas consumption for unprotected customers, in the case of demand-side and, respectively, increased import flexibility, mandatory increase in the level of natural gas production, reducing the imbalance on the firm capacity of the exit interconnection points, adaptation of the optimal level of operation of the NTS (line pack) and increase of technical extraction capacity from the storage warehouses, in the case of those supply-side.

In the case of the Emergency level, the natural gas supply in Romania is aimed at ensuring the supply mainly of the protected customers.



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