



Republic of Bulgaria

MINISTRY OF ENERGY

**EMERGENCY PLAN OF THE REPUBLIC OF BULGARIA
TO SAFEGUARD THE SECURITY OF GAS SUPPLY**

SOFIA 2020



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GENERAL INFORMATION

This Emergency Plan has been drawn up in accordance with Article 72(1)(2) of Energy Sector Act (ZE) and the requirements laid down in Articles 8 and 10 of 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 (the Regulation) on the basis of the model set out in Annex VII. It is aligned with Bulgaria's National Risk Assessment (NRA) and the common risk assessment at the level of risk groups conducted in accordance with Article 7 of Regulation (EU) 2017/1938 (the Regulation). The National Action Plan has been drawn up by the interinstitutional working group established by Order No E-RD-16-457 of 27 August 2018 of the Minister for Energy.

The **plan covers** the responsibilities, obligations and actions of the competent authority, the operators of the natural gas and electricity transmission systems, the operators of natural gas and electricity distribution systems, natural gas suppliers, the main consumers of natural gas, including electricity producers and the crisis management groups envisaged in this plan for each of the three crisis levels to ensure that any disruption of gas supply and/or an exceptionally high demand for natural gas is effectively dealt with in accordance with Article 10(1) of the Regulation.

Purpose: The purpose of the plan is to define the measures to be taken under the control of the Ministry of Energy (ME) and implemented by the transmission system operator Bulgartransgaz EAD in cooperation with natural gas undertakings, large industrial consumers and consumer associations in order to eliminate or mitigate the impact of possible disruptions in gas supply to Bulgaria and the regional risk groups. In accordance with the Regulation the plan will be implemented in crisis situations that affect or could affect the seamless functioning of the market in natural gas in Bulgaria and/or the security of supplies.

Definitions:

- ... 'security' means security as defined in Article 2(32) of Directive 2009/73/EC;
- 'customer' means customer as defined in Article 2(24) of Directive 2009/73/EC;
- 'household customer' means household customer as defined in Article 2(25) of Directive 2009/73/EC;
- 'essential social service' means a service related to healthcare, essential social care, emergency, security, education or public administration;
- 'protected customer' means a customer within the meaning of Article 2(5) of Regulation (EU) 2017/1938, namely ['protected customer' means] a household customer who is connected to a gas distribution network and, in addition, where the Member State concerned so decides, may also mean one or more of the following, provided that enterprises or services as referred to in points (a) and (b) do not, jointly, represent more than 20 % of the total annual final gas consumption in the respective Member State:
 - (a) small or medium-sized enterprise, provided that it is connected to a gas distribution network;

(b) an essential social service, provided that it is connected to a gas distribution or transmission network;

(c) district heating installation to the extent that it delivers heating to household customers, small or medium-sized enterprises, or essential social services, provided that such installation is not able to switch to fuels other than gas;

- 'natural gas undertaking' means an undertaking within the meaning of Article 2(1) of Directive 2009/73/EC, namely any natural or legal person carrying out at least one of the following functions: production, transmission, distribution, supply, purchase or storage of natural gas, including LNG, which is responsible for the commercial, technical and/or maintenance tasks related to those functions, except final customers;

- 'transmission' means transmission as defined in Article 2(3) of Directive 2009/73/EC;

- 'transmission system operator' means transmission system operator as defined in Article 2(4) of Directive 2009/73/EC;

- 'distribution' means distribution as defined in Article 2(5) of Directive 2009/73/EC;

- 'distribution system operator' means distribution system operator as defined in Article 2(6) of Directive 2009/73/EC;

- 'interconnector' means interconnector as defined in Article 2(17) of Directive 2009/73/EC;

- 'emergency supply corridors' means Union gas supply routes that help Member States to better mitigate the effects of potential disruption of supply or infrastructure;

- 'storage capacity' means storage capacity as defined in Article 2(28) of Regulation (EC) No 715/2009;

- 'technical capacity' means technical capacity as defined in Article 2(18) of Regulation (EC) No 715/2009;

- 'firm capacity' means firm capacity as defined in Article 2(16) of Regulation (EC) No 715/2009;

- 'interruptible capacity' means interruptible capacity as defined in Article 2(13) of Regulation (EC) No 715/2009;

- 'LNG facility capacity' means LNG facility capacity as defined in Article 2(24) of Regulation (EC) No 715/2009;

- 'storage system operator' means storage system operator as defined in Article 2(11) of Directive 2009/73/EC;

- 'storage facility' means storage facility as defined in Article 2(9) of Directive 2009/73/EC;

- 'system' means system as defined in Article 2(13) of Directive 2009/73/EC; points (a) and (b) do not constitute more than 20 % of total annual final consumption in the respective Member State:

- the Gas Coordination Group (GCG) facilitates the coordination of measures concerning the security of gas supply. It is composed of representatives of the Member States, in particular representatives of their competent authorities, as well as the Agency for the Cooperation of Energy Regulators (the 'Agency'), ENTSOG and representative bodies of the industry concerned and those of the relevant customers.

The competent authorities ensure that conditions for the supply of natural gas to protected customers are established without prejudice to the proper functioning of the internal energy market and at a price respecting the market value of the supplies. The measures are designed to guarantee a continued supply under very demanding conditions to protected customers and measures to mitigate the impact of an emergency.

Protected customers in Bulgaria are those described in Regulation (EU) 2017/1938, notably household customers who are connected to the gas distribution network; small or medium-sized enterprises; each district heating installation insofar as it delivers heating to household customers, provided that the installation is not able to switch to fuels other than gas (for example electricity cogeneration plants using gas turbines and/or piston engines); all essential social services, including hospitals, homes for the elderly, prisons, schools and other public infrastructures, public and private, providing accredited nursing services and activities, and civil and non-civil sector clients with consumption that does not exceed 0.05 mcm/year. In accordance with Regulation (EU) 2017/1938 solidarity protected customers in Bulgaria include households (household customers) connected to the gas distribution network, essential social services, emergency response services, security services and district heating installations, insofar as they supply heat to household customers, on the condition that there is no possibility for the installations concerned to switch to fuels other than gas (for example, electricity and heat cogeneration plants using gas turbines and/or piston engines). A detailed description of protected customers is set out in **Annex 8**.

In keeping with the approach adopted by Bulgaria, heating utilities using natural gas as the main fuel, but comprising components not able to switch to an alternative fuel, are excluded from the definition of protected customers. Minimum quantities of natural gas sufficient to ensure the safe and reliable operation of the heat generation and transmission installations of such facilities are envisaged in the Preventive Action Plan. The minimum quantities of natural gas envisaged for heating utilities using alternative fuels account for only around 8 % of total domestic consumption of natural gas in normal operating mode. These are necessary for technological reasons, and more specifically because heating utilities in Bulgaria use (heavy) fuel oil as an alternative fuel. The technological process of switching to and operating plants relying on fuel oil requires the use of certain minimum quantities of natural gas necessary to ignite the alternative fuel and stabilise the combustion process to ensure full combustion. The use of certain minimum quantities of natural gas improves the efficiency of this process. It significantly reduces the release of harmful emissions into the air and thus contributes to the protection of the environment and the life and health of citizens. In accordance with environmental legislation (Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damages, respectively the Bulgarian Environmental Protection Act) most large combustion installations with an installed capacity of more than 50 MW, i.e. most heating utilities in Bulgaria, are subject to restrictions in terms of the time they are allowed to operate using fuel oil (this period may not exceed 10 calendar days within any 12-month period).

In addition, there are district (local) heating installations, which generate and supply heat mostly to household customers. The technological map of the plants concerned includes steam generators (boilers), supplying the steam necessary to warm up the fuel oil used as a reserve fuel. For this reason, minimum quantities of natural gas have also been envisaged for these installations. Halting the supply of gas required for these installations to remain in operation will inevitably cause disruptions in production and lead to suspension of the supply of heat to household customers.

Heating installations, including cogeneration plants, have strategic importance for Bulgaria's energy security and a scenario in which their operation is disrupted could trigger a domestic energy crisis. A total suspension of gas supply to these plants will force them to shut down their operations, leaving their clients (primarily households) no option but to switch to an alternative source of heating, which for practical reasons is likely to be electricity. This is confirmed by the fact that most residential buildings constructed using precast concrete panels (such as those built in the largest cities in Bulgaria) were designed

to be heated by district heating utilities and by the absence of chimney openings in some rooms in the apartment units. A sharp rise in electricity consumption will jeopardise the balance of the electricity system and may cause it to collapse.

For this reason, Bulgaria's Emergency Plan envisages that heating utilities switch to an alternative fuel and further states that any curtailment of gas supply must not jeopardise the safe and reliable operation of heat generation and transmission facilities to ensure the continued supply of heat to protected household customers, including childcare facilities, hospitals and educational institutions. The plan further requires that all heating utilities declare the time they need to switch to an alternative fuel and the minimum quantities of natural gas necessary to ensure the safe and reliable operation of their installations.

Supply standard

The standard for natural gas supply to the energy markets of EU Member States is set out in Article 6 of the Regulation. It defines the necessary measures (steps) to be taken to handle crisis situations in order to ensure natural gas supply to protected customers.

The minimum supply standard to be met by natural gas undertakings requires them to ensure supplies to protected customers for at least 30 days in the following cases:

- extreme temperatures during a 7-day peak period occurring with a statistical probability of once in twenty (20) years;
- any period of at least thirty (30) days of exceptionally high natural gas demand occurring with a statistical probability of once in twenty (20) years;
- for a period of at least thirty (30) days in the case of disruption of the single largest gas infrastructure under average winter conditions.

The competent authority requires that natural gas undertakings take measures to ensure the gas supply to protected customers in the Member State in each case.

In order to meet these requirements, the relevant actors are to provide the following information:

- historical data and forecasts of the influence of abnormally low temperatures on the hourly and daily levels of gas demand.

The public supplier, the suppliers of final consumers and gas traders define the necessary quantities of natural gas for their protected customers on an annual, monthly and daily basis. District heating utilities are required to provide information about the time they need to switch to alternative fuel and the minimal natural gas quantities necessary to secure the operational robustness and safety of the heating installations to allow their protected customers to receive heating. The information about the necessary quantities of natural gas and the supply contracts concluded must be updated at least once every two years.

Additional cases, other than those mentioned above, may be collected and examined in the national risk assessment.

Crisis management tools

The bodies responsible for the declaration and management of the three crisis levels in accordance with Article 11 of the Regulation and this Plan are:

- the Commission's Emergency Response Coordination Centre (ERCC), the Gas Coordination Group (GCG) of the European Commission and the Commission's crisis management group;
- the competent authorities of the countries in the risk group;
- the Regional Crisis Management Coordination Centre;

- Bulgaria's competent authority declares any of the crisis levels and immediately notifies the European Commission (the Commission, EC) and the competent bodies of the other Member States;
- the Crisis Management Group (CMG) – Departmental Headquarters of the Ministry of Energy;
- the Headquarters of Bulgartransgaz EAD responsible for the implementation of the emergency plan;
- the headquarters of supply, production and LNG storage undertakings.

Member States in the risk group

According to Annex I to the Regulation Bulgaria participates in three risk groups for gas supply. These are the Ukraine and Trans-Balkan (Eastern) risk groups, Southern Gas Corridor (Southeast) risk group.

The **Ukraine risk group** comprises: Bulgaria, Czech Republic, Germany, Greece, Croatia, Italy, Luxembourg, Hungary, Austria, Poland, Romania, Slovenia and Slovakia;

The **Eastern Trans-Balkan risk group** comprises: Bulgaria, Romania and Greece.

The **Southern Gas Corridor – Caspian Sea** comprises: Bulgaria, Greece, Croatia, Italy, Hungary, Malta, Austria, Romania, Slovenia, Slovakia.

CHAPTER 1 Definition of crisis levels

Bulgaria's **competent authority** responsible for the security of natural gas supply within the meaning of Article 3(2) of 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 is the Minister for Energy of the Republic of Bulgaria.

The **transmission system operator** ensures that when an emergency is declared in a neighbouring Member State, capacity at interconnection points to that Member State, irrespective of whether firm or interruptible, and whether it has been booked before or during the emergency, has priority over competing capacity at exit points into storage facilities. The system user of the prioritised capacity promptly pays fair compensation to the system user of the firm capacity for the financial loss incurred as a result of prioritisation, including a proportionate reimbursement for the cost of the firm capacity being interrupted. The process of determining and paying the compensation does not affect the implementation of the priority rule.

The competent authority ensures that:

(a) no measures are introduced which unduly restrict the flow of gas within the internal market at any time;

(b) no measures are introduced that are likely seriously to endanger the gas supply situation in another Member State; and

(c) cross-border access to infrastructure in accordance with Regulation (EC) No 715/2009 is maintained as far as technically and safely possible, in accordance with the emergency plan.

The **Energy and Water Regulation Commission (KEVR)** is an independent specialist government body responsible for the regulation of activities in the sectors of energy, water supply and sewerage. The Commission was established in 1999. Its responsibilities in the energy sector include energy market monitoring, price control and

licensing of the activities relating to the transmission, supply and distribution of electricity; the storage, transmission, supply and distribution of natural gas, trade in electricity, public supply of electricity and natural gas, and electricity and/or heat generation and transmission. (<http://www.dker.bg>)

The members of the Bulgarian Petrol and Gas Association and the Bulgarian Natural Gas Association and companies and professionals operating at all levels of the gas sector in the following areas: design and surveillance of gas systems and installations, financial modelling in the sector, import of gas equipment and installers, gas distribution undertakings and gas transmission undertakings, traders in natural gas.

In accordance with Article 11 of Regulation (EU) 2017/1938 there are three crisis levels:

(a) early warning level (early warning): when there is concrete, serious and reliable information that an event may occur which is likely to result in significant deterioration of the supply situation and is likely to lead to the alert or the emergency level being triggered; the early warning level may be activated by an early warning mechanism;

(b) alert level (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;

(c) emergency level (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 in accordance with Article 6.

The competent authority declares any of the crisis levels referred to in Article 11 the Regulation and immediately notifies the Commission as well as the competent authorities of the Member States with which Bulgaria is directly connected and provides them with all necessary information, in particular about the actions it intends to take. In the event of emergency which may result in a call for assistance from the Union and its Member States, Bulgaria's competent authority notifies the Commission's Emergency Response Coordination Centre without delay.

The European Commission verifies, as soon as possible but, in any case, within five days of receiving [information] from the competent authority, whether the declaration of an emergency is justified in accordance with paragraph 1(c) and whether the measures taken follow as closely as possible the actions referred to in the emergency plan and do not impose an undue burden on natural gas undertakings and are in accordance with paragraph 6. The Commission may, at the request of another competent authority, natural gas undertakings or on its own initiative, request the competent authority to modify the measures, where they are contrary to the conditions referred to in the Article 11. The Commission may also request the competent authority to declare an end to the emergency, where it concludes that the declaration of an emergency is not or is no longer justified in accordance with paragraph 1(c) of the Regulation.

Within three days of the notification of the Commission request, the competent authority modifies the measures and notifies the Commission thereof, or informs the Commission of the reasons for which it does not agree with the request. In the latter case, the Commission may, within three days of being informed, amend or withdraw its request or, in order to consider the issue, convene the competent authority or, where appropriate, the competent authorities concerned, and, where the Commission considers it to be necessary, the GCG. The Commission sets out its detailed reasons for requesting any modification to the action. The competent authority takes full account of the position of the

Commission. Where the final decision of the competent authority diverges from the Commission's position, the competent authority provides the reasons underlying its decision.

The Commission may declare a regional or Union emergency at the request of a competent authority that has declared an emergency and following the verification in accordance with Article 11(8).

The Commission declares, as appropriate, a regional or Union emergency at the request of at least two competent authorities that have declared an emergency and following the verification in accordance with Article 11(8), and where the reasons for such emergencies are linked.

In all cases, when it declares a regional or Union emergency, the Commission, using the means of communication most appropriate to the situation, gathers the views of, and takes due account of all the relevant information provided by other competent authorities. When the Commission decides, following an assessment, that the underlying basis for the regional or Union emergency no longer justifies the declaration of an emergency, it declares an end to the regional or Union emergency and gives its reasons and informs the Council of its decision.

The Commission convenes the **Gas Coordination Group (GCG)** as soon as it declares a regional or Union emergency.

In a regional or Union **emergency**, the Commission coordinates the action of the competent authorities, taking full account of relevant information from, and the results of, the consultation with the GCG. The Commission may convene a crisis management group composed of the crisis managers referred to in Article 10(1)(g) of the Member States concerned by the emergency. The Commission, in agreement with the crisis managers, may invite other relevant stakeholders to participate. It ensures that the GCG is informed regularly about the work undertaken by the crisis management group.

The **Commission**, after consulting the GCG, establishes a permanent reserve list for a monitoring task force consisting of industry experts and representatives of the Commission. The monitoring task force may be deployed outside the Union when necessary and monitors and reports on the gas flows into the Union, in cooperation with the supplying and transiting third countries.

A **crisis** may be triggered by the occurrence of any of the following risks of different origin:

- expected anomalously low or high outdoor temperatures and anomalously high demand;
- disruption of supplies at any entry point;
- lack of contractual security;
- a breakdown in a section of the national or foreign networks;
- technical problems in infrastructure;
- technical problems in common upstream or downstream gas infrastructure, when several gas infrastructures are connected;
- sabotage, vandalism and theft at facilities of the national gas transmission system;
- reduced or disrupted natural gas supply from third countries (particularly natural gas suppliers, consumers, gas-fired combustion system operators, independent natural gas operators);
- unexpected exceptionally high natural gas demand related to commercial or financial parameters;
- long-term restrictions on natural gas supply;
- civil unrest, war, terrorism, natural disasters, etc.

Where any of the above events occurs, an estimate of the likelihood of a crisis level being triggered is made using the national and regional risk assessments.

The security of natural gas supply is a shared responsibility of natural gas undertakings, the Member States, in particular through their competent authorities, and the Commission, within their respective areas of activity and competence. Natural gas undertakings bear the primary responsibility for the security of supplies as a shared responsibility with the competent authority and the European Commission in accordance with Article 3(1) of the Regulation, and in particular the responsibilities set out in Article 13(2) of the Regulation.

CHAPTER 2 Measures to be adopted per crisis level

One of the three crisis levels is declared in the likelihood of the following events occurring: expected anomalous (exceptionally low) outdoor temperatures; anomalously (exceptionally) high demand for natural gas; disruption of supply at any entry point; lack of contractual security; accident on a section of the national or foreign networks; other emergency situations arising from complications in the international situation, armed conflicts, crises, terrorist attacks, etc.

2.1. The competent authority declares an **early warning** when there is concrete, serious and reliable information that an event may occur which is likely to result in significant deterioration in the gas supply situation and is likely to lead to the alert or the emergency level being triggered.

The early warning level may be activated by an early warning mechanism. The competent authority immediately informs the Commission as well as the competent authorities of the Member States with which Bulgaria is directly connected and provides them with all the necessary information, in particular about the action it intends to take.

When an **early warning** level is declared, using different communication channels, and specifically a 24-hour telephone line and data (internet) link, via the operational dispatcher, the official on duty at the Ministry of Energy, the General Dispatch Unit (GDU) of Bulgartransgaz EAD, the transmission system operators of the neighbouring countries in the risk group, the competent authority transmits and exchanges up-to-date information on the situation created for each client of the natural gas supply system.

A description of the early warning mechanism and the action to be taken is set out below:

2.1.1. The gas transmission system operator activates the announcement scheme envisaged in **Annex 1**.

2.1.2. It notifies the Ministry of Energy, KEVR, natural gas undertakings and the operators in neighbouring countries in the region in accordance with the scheme set out in Annex 1.

2.2.3. The TSO then activates the information flow chart set out in **Annex 2**.

2.1.4. It takes measures to step up the operational control of network parameters and carries out an assessment of the volumes of natural gas volumes all sources at the entry points to the national gas transmission system for a period of at least three days ahead compared to the three-day consumption forecast based on concluded transmission contracts; monitors current consumption levels and the link between outdoor temperature and natural gas consumption; [and] determines the possibility of imbalance between demand and supply and monitors the imbalance of the gas transmission system overall on an hourly basis.

2.1.5. If commercial and technical capability exists, additional quantities of gas are injected into the underground gas storage facility (UGS Chiren) or virtual injection is performed by gas substitution from UGS Chiren with a proportional amount at the network entry point.

2.2.6. If commercial and technical capability exists, the maximum level of network linepack is reached.

2.1.7. Natural gas undertakings notify the Headquarters of Bulgartransgaz of any matter relating to possible changes in the levels of supply and demand for the next three days, and nominate contact persons to work on the schemes set out in **Annexes 2, 3 and 4**.

Natural gas undertakings report:

- the reason for the threat;
- the approximate time remaining until a disruption occurs;
- the expected losses of natural gas as a result of the potential event;
- interruptions in natural gas supply to protected customers in the event of disruption;
- on the assessment of the emergency and request that the fuel security team be convened;
- on the expected effects of market activities.

The transmission system operator sets up permanent headquarters responsible for the implementation of the emergency plan (ShtIAP). The announcement scheme to be triggered upon the occurrence or anticipated occurrence of a crisis level, the natural gas undertakings, consumers, media and the Headquarters are determined by an order issued by the Executive Director of the TSO Bulgartransgaz EAD.

2.1.8 Information measures are taken to reduce natural gas consumption. The competent authority makes a general announcement addressed to natural gas consumers to notify them that gas supplies will be curtailed and appeal for a reduction in natural gas consumption. It notifies the TSO, the Bulgarian Petrol and Gas Association and the Bulgarian Natural Gas Association that such a general announcement will be made. The TSO notifies gas suppliers and large customers. The announcement is made through the established information channels, [by] an official letter and/or by e-mail and/or telephone.

The measures are taken with the aim of reducing natural gas consumption; accumulating additional reserves of alternative fuels; and preventing undue gas consumption, without creating technically unsafe situations. The measure supports the countries and operators from the risk group in conducting a preliminary assessment before the event that has triggered the declaration of crisis level 1 (early warning) and ensuring the normal operation of natural gas supplies to all customers by the operators.

After becoming aware of an anticipated event that may cause the supply situation to deteriorate, the Minister for Energy may convene a meeting of the Departmental Headquarters of the Ministry of Energy (VSht-ME). Having received a recommendation from the headquarters, the Minister decides on the declaration of an early warning in accordance with Article 11(1)(a) of Regulation (EU) 2017/1938. Information about the declaration of an early warning is published on the website of the Ministry of Energy. The decision to cancel the crisis level is taken by the Minister for Energy following consultation with the team.

The Head of the Departmental Headquarters of the Ministry of Energy monitors and assesses the updates received from the market participants and ShtIAP-BTG members and, if the situation continues to deteriorate, prepares to declare crisis level **2 Alert**.

2.2 Alert (crisis level 2) is declared 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 the disruption or demand without the need to resort to non-market-based measures.

Before declaring an alert, the Minister for Energy may convene the Departmental Headquarters of the Ministry and, acting on its recommendation, decide on the declaration of the alert.

An alert is declared when the following conditions are met:

- the likelihood of the event occurring is 100 % or any of the following exceptional events has already occurred;
- the Headquarters of Bulgartransgaz EAD (ShtIAP) has assessed the imbalance in the gas system as such and there is an opportunity to respond to the situation with market-based measures (on the basis of concluded contracts and agreements and their inherent flexibility and reliance on local production and the withdrawal capacity of UGS Chiren.

Following the declaration of an alert the competent authority immediately informs the Commission and the competent authorities of the Member States with which Bulgaria is directly connected and provides them with all necessary information, in particular about the actions it intends to take. Situational updates are transmitted and exchanged via different communication channels, such as a 24-hour telephone line and data (internet) links, the operational dispatcher and/or official on duty at the Ministry of Energy, the General Dispatch Unit (GDU) of Bulgartransgaz EAD and/or the transmission system operators of the neighbouring countries in the risk group(s).

Where the crisis level is declared or cancelled, the Minister for Energy publishes an announcement on the website of the Ministry of Energy and notifies the GCG and the competent authorities of the Member States in the respective risk groups.

In the event of disruption of natural gas supplies to the gas system, the Minister for Energy advises the companies using natural gas to launch the implementation of market-based measures in line with their relevant procedures drawn up in accordance with applicable statutory requirements.

When an **alert** is declared, the actions envisaged in the announcement scheme are taken. [More specifically] the following measures are taken:

2.2.1 The transmission system operator activates the announcement scheme of the Headquarters of Bulgartransgaz.

2.2.2 It notifies the ME, the KEVR, natural gas undertakings and the operators in neighbouring countries in the region in accordance with the scheme set out in Annex 1.

2.2.3 It then activates the information flow scheme set out in Annex 3.

2.2.4 Measures for enhanced operational control of the network parameters are taken and an assessment is made of the natural gas quantities from all sources at the entry points of the national gas transmission network for a period of three days ahead compared to a three-day forecast of consumption based on the transmission contracts, current consumption levels and the link between outdoor temperature and consumption, to determine the probability of imbalance between supply and demand and ensure that overall system imbalance is monitored on an hourly basis.

2.2.5 If commercial and technical capability exists, additional gas quantities are injected in UGS Chiren or virtual injection is performed by gas substitution from UGS Chiren with a proportional amount at the entry points of the network.

2.2.6 If commercial and technical capability exists, the maximum level of network linepack is reached.

2.2.7 The **market measures** in terms of supply are applied in accordance with Annex II to the Regulation:

2.2.7.1 Measures to enhance the flexibility of production, i.e. maximise withdrawal, are applied.

2.2.7.2 Measures to enhance the flexibility of import, i.e. maximise supplies from import, are applied.

2.2.7.3 Measures for commercial gas storage capacity (capacity for withdrawal and for the quantities of natural gas in storage).

2.2.7.4 Action is taken to ensure reverse-flow deliveries via the interconnectors through which the physical flow of gas exits the country.

2.2.7.5 The activities are coordinated with the transmission system operators from the neighbouring countries in the region after triggering the operating agreements or gas transfers between different transmission systems with the consent of the undertakings which have rights over the respective systems.

2.2.8 The [following] market measures in terms of supply are applied in accordance with Annex II to the Regulation:

2.2.8.1 Consumer undertakings shift the volumes of the nominations approved by the public supplier/shippers in accordance with their contracts.

2.2.8.2 Interruption of the consumption of natural gas by consumers with contracts, which expressly envisage the possibility for such interruption.

2.2.8.3 Voluntary suspension of gas use by consumers to lower their load on the system.

2.2.8.4 Voluntary **switch to reserve fuel** on the part of consumers.

The measures set out in point 2.2.7 contribute to maximising natural gas supply (from both a commercial and technical aspect) to consumers within the contracts and agreements in place and those set out in point 2.2.8 contribute to restricting natural gas consumption on a voluntary basis and within existing contracts.

2.2.9 The reporting obligations of natural gas undertakings provided for in the Regulation for the alert crisis level are similar to those for the emergency crisis level and are described below.

When an emergency is declared, natural gas undertakings provide the following information to the competent authority on a daily basis:

- the daily gas demand and gas supply forecasts for the following three days expressed as volume and energy units, i.e. million cubic metres per day (mcm/d) and Megawatt hours (MWh);

- the daily flow of gas at all cross-border entry and exit points and at all points connecting a production facility, storage facility or LNG terminal to the network, expressed in million cubic metres per day (mcm/d) or MW/h;

- the real consumption and the estimated volumes of natural gas for a period of at least three months ahead intended for their protected customers, [expressed as] energy units — million cubic metres per day and Megawatt hours, (mcm/d and MWh).

- the period, expressed in days, for which natural gas supply to the protected customers is expected to be ensured.

After an alert is declared, the headquarters of the commercial undertakings continually analyse the situation and monitor the use of market-based measures on the basis of the information provided by the companies. The decision to cancel the alert is taken by the Minister for Energy following consultation with the Departmental Headquarters of the Ministry for Energy.

Where available market-based measures are exhausted and there is no further opportunity to respond to the crisis, the energy undertakings trading in gaseous fuels notify the transmission system operator and the recipients of natural gas under concluded contracts.

In the event of continued deterioration in the situation, the Head of the Departmental Headquarters of the ME assesses the information received from the companies and the members of the ShtIAP-BTG and, if necessary, proposes to the competent authority that crisis level 3 be declared and notifies the situation to the Head of the Crisis Management Group (CMG) and the countries in the risk group. In the event of exceptionally high demand for natural gas, significant supply disruption or other significant deterioration in the supply situation, and where all relevant market measures have been implemented, but the supply of gas is insufficient to meet the remaining gas demand so

that non-market-based measures have to be additionally introduced with a view to, in particular, safeguarding gas supplies to protected customers, **an emergency is declared.**

2.3 Emergency

Where one of the events referred to in point 2.2 (anomalous outdoor temperatures, exceptionally high gas demand, interruption of supplies at any entry point, lack of contractual security, a breakdown in a section of the national or foreign networks, pressure at the entry points to the transmission system of less than 28 bar_g, the quantity of natural gas in the transmission system reaching a critical level of 18 mln. m³) has already occurred [and] in other emergency situations arising from complications in the international situation, armed conflicts, crises, terrorist attacks, etc. in which the ShtIAP-BTG determines an imbalance in the system that cannot be overcome through market measures (i.e. on the basis of contracts and agreements and their flexibility as well as local production and the capacity for withdrawal from UGS Chiren), an **emergency** is declared and actions are taken as per the announcement scheme, in addition to announcing the situation to the management authorities, management bodies, civil protection forces and assets in the event of natural disasters, accidents and catastrophes. The competent authority immediately informs the Commission and the competent authorities of the Member States with which Bulgaria is directly connected and provides them with all necessary information, in particular about the actions it intends to take. In the event of an emergency (as defined in Article 6(2) of the Regulation) which may result in a call for assistance from the Union and its Member States, Bulgaria's competent authority immediately notifies the **Commission's Emergency Response Coordination Centre (ERCC, Article 7 of Commission Decision 1313/2013).**

Having declared an emergency, the competent authority follows the rules established in advance and set out in the emergency plan. In duly justified exceptional circumstances, the competent authority may take action deviating from the emergency plan.

In the event of an emergency posing a threat to the supplies to protected customers, the Minister for Energy may:

- adopt decisions on the release of mandatory natural gas reserves at the request of the transmission system operator as a non-market-based measure within the meaning of Regulation (EU) 2017/1938;
- curtail the supply of natural gas in the entire territory or in parts of Bulgaria, where a justified proposal is received from the transmission undertaking.

The competent authority establishes the roles and responsibilities of the different actors concerned in such a way as to ensure a three-level approach which involves: firstly, the relevant natural gas undertakings, electricity undertakings, where appropriate, and the industry; secondly, the Member States at national or regional level; and, thirdly, the Union.

The Minister for Energy notifies the declaration or cancellation of an emergency by publishing an announcement on the website of the Ministry of Energy and informs the GCG and the competent authorities of the Member States in the risk group of the commencement of implementation of non-market-based measures.

Within 5 days of receiving information from the competent authority the European Commission verifies whether the declaration of an emergency is justified in accordance with the definition of emergency laid down in the Regulation and whether the measures taken follow as closely as possible the actions listed in the emergency plan and do not impose an undue burden on natural gas undertakings. The Commission may, at the request of another competent authority from the group, natural gas undertakings or on its own initiative, request the competent authority to modify the measures where they are contrary to the conditions referred to in the previous sentence. The Commission may also request the

competent authority to declare an end to the emergency, where it concludes that the declaration of an emergency is not or is no longer justified in accordance with paragraph 1(c) of the Regulation.

The Commission may, at the request of a competent authority, energy undertaking or on its own initiative, request that a competent authority that has declared an emergency modifies the measures where they are contrary to the conditions laid down in Article 11(8) of Regulation (EU) No 2017/1938.

The **Commission may** declare a regional or Union emergency at the request of a competent authority that has declared an emergency and following the verification in accordance with Article 11(8) of Regulation (EU) 2017/1938. The Commission declares, as appropriate, a regional or Union emergency at the request of at least two competent authorities that have declared an emergency following the verification in accordance with Article 11(8) and where the reasons for such emergencies are linked.

In all cases, when it declares a regional or Union emergency, the Commission, using the means of communication most appropriate to the situation, gathers the views of, and takes due account of all the relevant information provided by other competent authorities.

When the Commission decides, following an assessment, that the underlying basis for the regional or Union emergency no longer justifies the declaration of an emergency, it declares an end to the regional or Union emergency and gives its reasons and informs the Council of its decision. The Commission coordinates the action of the competent authorities at regional and Union levels, pursuant to this Regulation, *inter alia*, through the GCG or, in particular, in the event of a regional or Union emergency.

In the event of a **regional or Union emergency**, the transmission system operators cooperate and exchange information using the ReCo System for Gas established by the European Network of Transmission System Operators for Gas (ENTSOG). ENTSOG informs the Commission and the competent authorities of the Member States concerned accordingly.

When an **emergency is declared, natural gas undertakings** provide the following information to the competent authority on a daily basis:

- daily forecasts of natural gas supply and demand for the next three days;
- the volume of daily flow of natural gas and the rate of utilisation of all cross-border entry and exit points and all connection points of the industrial installation, storage facility or LNG terminal to the transmission network expressed in MWh/day;
- the daily level of mandatory natural gas reserves;
- the period, expressed in days, for which natural gas supply to protected customers is expected to be ensured;
- the real consumption and forecast quantities of natural days intended for protected customers for a period of at least three days ahead;
- the time, quantities and source of natural gas delivered within the system through non-market-based measures.
- measures, which the respective operator or commercial undertaking plans to take [or] has already taken to mitigate the impact of the emergency and information about their effectiveness;
- requests for additional measures to other competent authorities;
- measures taken at the request of the competent authorities of other Member States.

The transmission system operator ensures that when an emergency is declared in a neighbouring Member State, capacity at interconnection points to that Member State, irrespective of whether firm or interruptible, and whether it has been booked before or during the emergency, has priority over competing capacity at exit points into storage facilities. The system user of the prioritised capacity promptly pays fair compensation to the

system user of the firm capacity for the financial loss incurred as a result of prioritisation, including a proportionate reimbursement for the cost of the firm capacity being interrupted. The process of determining and paying the compensation does not affect the implementation of the priority rule.

The **decision to cancel the emergency situation** is taken by the Minister for Energy following consultation with the Departmental Headquarters of the Ministry. The Minister immediately notifies the GCG of the cancellation of the emergency. After an end to the emergency is declared, the transmission system operator, on the basis of the information received from cooperating operators and interested market participants, draws up a report on the crisis, placing an emphasis on the conclusions, opportunities to improve emergency procedures and insights on infrastructure development with a view to avoiding a recurrence of such events in the future. The transmission system operator submits its report and conclusions to the Minister for Energy.

Procedure for the release of mandatory reserves of natural gas

The transmission system operator submits an application to the Minister for Energy for the release of mandatory natural gas reserves. The Minister reviews the application and grants permission when all market-based measures have been exhausted but natural gas supplies are still insufficient to cover remaining natural gas demand.

After obtaining permission from the Minister for Energy, the transmission system operator commences supplies from the mandatory natural gas reserves.

In the event of mandatory reserves being released, the above undertakings supply natural gas to the system in the quantities and on a date specified by the transmission system operator.

The transmission system operator submits to the Minister for Energy and the Chairperson of the National Regulatory Authority information about the date and the quantity of gas reserves released, the storage facilities from which withdrawals were made, and the energy undertakings by which natural gas was withdrawn at the end of each gas day in which mandatory reserves are released.

The energy undertakings engaged in economic activities in the area of import of natural gas and gas system users are required to follow the instructions of the transmission system operator.

Annex 5 shows the balance at the main entry points and national consumption per day, as well as the impact of temperatures in the month of January in 2017, 2018 and 2019. During an extended period of temperatures below -16 C° (especially in Sofia, considering Toplofikatsiya Sofia EAD's large share in consumption), daily consumption may reach 16-17 million m³/day while, at temperatures above 0 C°, consumption may be only approximately 10 million m³/day.

The following measures are taken when an **emergency** crisis level is declared:

2.3.1. Activation of the announcement scheme of the Headquarters referred to in point 2.1.1;

2.3.2. Activation of the scheme for notifying the relevant management bodies and the civil protection service in the event of natural disasters, accidents and catastrophes;

2.3.3. Informing customers and mass media of the situation in accordance with the scheme (Annex No 1);

2.3.4. Activation of the information flow chart for notifying natural gas undertakings and the ME, KEVR, the operators of neighbouring countries in the region and the European Commission (Annex No 4);

2.3.5. Measures to enhance the operational control of network parameters and specify the levels of supply and demand for a period of three days ahead;

2.3.6. Temporary suspension or curtailment of natural gas production or supply as soon as possible (within 48 hours) pursuant to an order issued by the Chairperson of the Headquarters for Emergency Plan Implementation (ShtIAP).

2.3.7. Where a need arises to curtail, suspend or limit the gas supply for more than 48 hours, a reasoned proposal to the Minister for Energy is drawn up pursuant to Article 21 of Regulation No 10 of 9 June 2004 on the curtailment, suspension or limitation of the production or supply of electricity, heat and natural gas. The proposal must be submitted not later than 24 hours after an emergency arises.

2.3.8 The market-based measures in terms of supply described in point 2.2.7 are applied in accordance with the Regulation;

2.3.9 The market measures in terms of supply described in point 2.2.8 are applied in accordance with the Regulation;

2.4. The non-market-based measures in terms of supply are applied in accordance with Annex VIII to Regulation (EU) 2017/1938.

2.4.1 Increase in domestic gas production — on an order of the General Dispatching Division of Bulgartransgaz EAD to the operator of production companies.

2.4.2 Increase in withdrawal from UGS Chiren on an order of the General Dispatching Unit of Bulgartransgaz EAD to the operator(s) of storage facilities.

2.4.3 The General Dispatching Division of the TSO orders all network users with concluded transmission contracts to ensure the maximum daily volumes agreed with the external provider, including where this incurs additional costs under the wholesale contracts.

2.4.4 Compulsory switch-off of electricity production by the *undertakings* using natural gas as fuel.

2.4.5 Compulsory use of alternative fuel reserves;

2.4.6 Utilisation of the full capacity of the existing natural gas in storage at UGS Chiren to satisfy the demand of protected customers;

2.4.7 Coordinated action by the transmission system operators from neighbouring countries in the region, triggering operational agreements or transfers between the different transmission systems.

The actions described in point 2.4 are essential for maximising gas supplies in Bulgaria, and more specifically supplies from import, domestic production and storage facilities. They are mandatory for this crisis level on account of demand exceeding supply. The procedure for taking the measures envisaged in points 2.4.1 to 2.4.3 and 2.4.6 to 2.4.7 is in line with the Emergency Plan of Bulgartransgaz EAD and the Instruction on the actions to be taken in the event of restrictions. The actions referred to in points 2.4.4 and 2.4.5 are taken on an order of the Departmental Headquarters of the ME communicated in line with the information flows described in Annex 4.

CHAPTER 3: Specific measures for the electricity and district heating.

3.1. District heating

The possible interruptions in natural gas supply, depending on the season (summer/winter), and the availability of additional sources using fuels other than natural gas for combustion (for example oil gas boilers) may jeopardise the uninterrupted heat supply to final customers. This means that uninterrupted supply of natural gas is an essential component of the energy security of consumers in terms of residential heating, particularly during the heating season when outdoor temperatures are low.

Total annual consumption of natural gas in Bulgaria is approximately 3 bln. m³. The breakdown of this quantity is as follows: 3/4 for industrial use; approximately 32 % for

heating utilities; 10 % for the production of construction materials and the chemical industry each; 8 % for the transport sector; and 7 % for other purposes.

The likely effect of a disruption of gas supply in the sector of **district heating** will affect Bulgaria's largest cities where most customers relying on gas-fired district heating plants live. The potential disruption of supplies to metropolitan heating utilities will inevitably have a major social, economic and political impact on Bulgaria.

3.1.1 Natural gas is the main fuel used by the following installations:

Toplofikatsiya Sofia EAD, including the Sofia Thermal Power Plant (1 432.5 MWt) and Sofia Iztok Thermal Power Plant (2 014.4 MWt), or a total of 239 MWe;

- EVN Bulgaria Toplofikatsiya EAD – 80 MWe (445 MWt) in total installed capacity;
- Veolia Energy Varna EAD – 11.22 MWe (55.43 MWt) in total installed capacity;
- Toplofikatsiya Burgas EAD – 17.82 MWe (74.45 MWt) in total installed capacity;
- Toplofikatsiya Pleven EAD – 68 MWe (466 MWt) in total installed capacity;
- Toplofikatsiya Vratsa EAD – 8.24 MWe (72 MWt) in total installed capacity;
- Toplofikatsiya Razgrad EAD – 3.014 MWe (29 MWt) in total installed capacity;
- Toplofikatsiya Razgrad EAD – 2.81 MWe (173 MWt) in total installed capacity

The entire electricity generation capacity of the above plants relies on the use of natural gas.

- Toplofikatsiya Pernik AD has two coal-fired steam generators and a gas-fired steam generator. When operating on natural gas, the total capacity of the plant may reach 15 MWe;

Biovet AD Peshtera is the only electricity plant with a gas turbine with a total capacity of 18.5 MWe (99 MWt).

In addition to the cogeneration plants with installed capacity of more than 4.0 MWe set out in point 3.1.1, power plants with total electricity generation capacity of 22.78 MWe are in operation.

The cogeneration plants with installed capacity of less than 4.0 MWe, have a total electricity generation capacity of 28.62 MWe.

Gas-fired electricity generation also takes place at the Varna Thermal Power Plant (TPP), a condensation plant with an installed capacity of 630 MWe. Until June 2020, TPP Varna was used as a cold reserve facility.

The total quantities of natural gas in electricity and heat production in Bulgaria in the period 2016–2019, in bcm/y, are set out in the table below:

Production Type	2016	2017	2018	2019
	bcm/y	bcm/y	bcm/y	bcm/y
Natural gas for electricity generation	0.345	0.331	0.345	0.362
Natural gas for heat generation	0.768	0.774	0.772	0.721
Total:	1.113	1.105	1.117	1.083

The generating capacity of gas-fired electricity plants in Bulgaria as compared to total generating capacity in the electricity sector is small but essential for the national energy balance. The consequences of a disruption of natural gas supply in the electricity sector are unlikely to have a significant impact on the domestic electricity market on

account of the low share of gas-fired electricity plants in total generating capacity. However, a disruption in the supply of heat by district heating utilities would cause the population to switch to electricity for heating, which could overload the electricity system.

3.2 Electricity generation from natural gas

The role of natural gas in electricity production (gas-fired generating capacity, total MW) as a percentage of total generating capacity and cogeneration (MW) in the electricity sector is not essential but has an effect of Bulgaria's energy balance, primarily on account of the role of large district heating utilities producing electricity and heat by cogeneration. It should be noted that a disruption in the supply of natural gas to consumers in the autumn and winter may cause a significant increase in demand for electricity due to the switch to electricity for heating as an alternative.

There is one condensation plant relying on natural gas as the main fuel but in recent years it has been used as a facility for cold reserve and ancillary services. The remaining condensation plants use natural gas only as spark-ignition fuel. The disruption in natural gas supply to condensation plants is unlikely have a significant impact on the domestic electricity market. Bulgaria's electricity system has sufficient reserve capacity, which may be used as temporary substitute. In accordance with the Energy Sector Act and other statutory acts the commercial undertakings in the energy sector cooperate to ensure the necessary coordination, including exchange of information, between the key actors in the gas and electricity sectors.

Bulgartransgaz EAD is required to ensure gas transmission through the technological connections between the national gas transmission network and the gas transit network, including where there is no possibility for commercial metering, that is where the volumetric method is applied. The actions described are essential for ensuring the security and reliability of gas transmission networks via transfers of available quantities of natural gas between the two networks.

3.3 Measures to mitigate the impact of disruption of supplies on the district heating and electricity sectors

The uninterrupted supply of natural gas is an essential component of the energy security of consumers in terms of residential heating, particularly during the heating season when outdoor temperatures are low.

3.3.1 The non-market-based measures in terms of supply are applied in accordance with Annex VIII to Regulation (EU) 2017/1938.

If market-based measures are found to be insufficient to address the deficit in required gas supply, and given the importance of solidarity measures as a last resort, the Member State providing solidarity should as a second step, be able to make use of non-market-based measures, including curtailment of certain groups of customers, in order to comply with its solidarity obligations.

3.3.2 Compulsory switching to alternative fuel

The district heating utilities are major consumers of natural gas during the winter. At the same time, they are required to keep alternative fuel reserves in line with Regulation No 11 of 10 June 2014 on fuel reserves. Their curtailment must not jeopardise the safe and reliable operation of heat production and transport facilities, that is the supply of heat to protected household customers, kindergartens, hospitals and schools.

The curtailment/suspension of natural gas supply for a period of up to 48 hours by Bulgartransgaz EAD or for more than 48 hours by the ME must be in line with the conditions and schemes developed by Bulgartransgaz EAD. The TSO develops 7 levels of natural gas supply curtailment in the event of natural gas deficit for all users in a way that enables staged curtailment and/or suspension of specific user groups, notably those who are not protected customers and are capable of switching to alternative fuel, those who are not

protected customers but do not have the capability to switch to alternative fuel, and protected non-household customers, services and households.

3.3.3 Levels of curtailment of natural gas consumption and effect of the introduction of restrictions during a winter month:

Level of curtailment	Actions	Expected daily consumption
No curtailment	None	11.4 mln. m ³ /day
1	Switching to a consumption level in curtailment mode in line with the supply contract	9.5 mln. m ³ /day
2	District heating utility switching from alternative fuel to reserve fuel	6.7 mln. m ³ /day
3	Industrial consumers switching from alternative fuel to reserve fuel	5.8 mln. m ³ /day
4	Curtailment of 50 % of the unprotected customers that may be technologically interrupted and up to 50 % of gas distribution undertakings. Curtailment of interruptible customers with low probability of an accident taking place and short suspension deadline	4.8 mln. m ³ /day
5	Curtailment of consumers with continuous production cycles and consumption of more than 500 000 m ³ /day	2.7 mln. m ³ /day
6*	Curtailment of consumers with a continuous production cycle and consumption of less than 500 000 m ³ /day, curtailment of all unprotected customers (excluding refineries producing alternative fuels other than gas)	2.1 – 2.5 mln. m ³ /day – only protected customers
7*	Supply of gas to households only	1.2 mln. m ³ /day

The transmission system operator Bulgartransgaz EAD has developed estimates for 7 levels of curtailment of natural gas supply which allow it to gradually restrict and/or exclude certain categories of consumers from supply in a situation of a gas deficit in which the demand of all consumers cannot be met.

The most severe levels of curtailment envisage continued supply of natural gas only to restricted customers, respectively plants with non-interruptible production cycles, which require additional technological time to suspend operations in a manner that precludes production or industrial accidents, taking into account the potential withdrawal capacity of UGS Chiren.

The most severe levels of curtailment (5 to 7) envisage continued supply of natural gas only to households, the oil refinery producing alternative fuel for the heating utilities

supplying heat to households, and certain undertakings with non-interruptible production cycles, which require additional technological time to suspend production.

The preliminary schemes and estimates developed by Bulgartransgaz EAD for the gradual curtailment and suspension of natural gas supply to the respective groups of consumers take into account both the seasonality / consumption of natural gas by the consumers concerned, i.e. summer/winter mode of operation, respectively summer/winter consumption in a 24-hour period, and the potential risk of an industrial accident, disruption of gas supply and the technological time these consumers (undertakings/production facilities) need to switch to an alternative fuel, where a possibility exists to do so and sufficient reserves of alternative fuel are available.

The preliminary estimates and schemes for the gradual curtailment and suspension of gas supply to the different categories of consumers developed by the TSO Bulgartransgaz EAD also take into account the historical experience and capacity of the operators and the relevant institutions and undertakings gained during the gas crisis in Bulgaria between 6 and 21 January 2009.

* Levels 6 and 7 must be introduced not earlier than 30 days after an emergency arises, unless their earlier introduction is required for reasons that jeopardise the operation of the gas transmission network.

3.3.4 When applying the measures set out in point 3.3 the competent authority and system operators strive to ensure the supply of natural gas to protected users to the fullest extent.

Annex No 6 sets out the balance of consumption per month (based on historical data from the last few years) and the various scenarios for the curtailment of supplies.

Annex No 7 sets out the characteristics of UGS Chiren on the basis of historical data.

The scenarios for curtailment, expressed as a percentage, at the main entry point, as shown in Annex 6, are based on 8 mln. m³/d in contracted quantities of natural gas during the winter period and 6 mln. m³/d in contracted quantities of natural gas during the summer for an estimated domestic consumption in 2016 and 2017 of 2.9-3.3 billion m³/y.

The analysis of various scenarios of disruption of natural gas transmission via Ukraine examines options with maximum capacity utilisation of alternative entry points. Statistical data indicates that peak consumption of natural gas on exceedingly cold days is approximately **170 GWh/d** (for the coldest period in the last 20 years). At the end of October 2019, the first section of the new pipeline constructed as an extension of gas infrastructure from the Bulgarian-Turkish border to the Bulgarian-Serbian border became operational. The capacity of the new entry point Strandzha 2/Malkoclar is 567 GWh/d. The total contribution of each of the market-based and non-market-based measures detailed in the plan will contribute to coping with the situation at emergency crisis level by increasing the quantities of natural gas available in Bulgaria and within the risk group. The measures and actions to mitigate the potential impact of disruption of gas supplies on the district heating and electricity sectors aim to prevent interruptions in the supply of heat to the core group of protected customers. It is therefore feasible that specific measures be adopted and implemented.

CHAPTER 4 Crisis manager or team

The Minister for Energy, in its capacity as competent body, is responsible for the security of the natural gas supply. The Minister monitors and analyses the situation with regard to security of the gas supply and coordinates the response in the event of a crisis; declares the different crisis levels; authorises the use of non-market-based measures (mandatory reserves) in the event of an emergency within the meaning of

Regulation (EU) 2017/1938; introduces time-limited restrictions on natural gas consumption throughout Bulgaria or in part of the country in the event of an emergency within the meaning of Regulation (EU) 2017/1938. The Minister is also responsible for communications with the European Commission and provides information about the implementation of market-based and non-market-based measures so as to enable the Commission to verify whether the declaration of an emergency is justified. The Minister participates, either in person or through a representative, in the sessions of the Gas Coordination Group (GCG) of the European Commission and ensures the exchange of information between the Commission and the Ministry of Energy.

In order to handle crisis situations, the responsibilities of the crisis management authorities and their members have been defined with a view to ensuring their timely and effective response to emergencies that may disrupt the smooth supply of natural gas to the Bulgarian market, taking into account the provisions of Directive 2009/73/EC of the European Parliament and of the Council, Regulation (EC) 715/2009 of the European Parliament and of the Council, the Energy Sector Act and related implementing regulations.

4.1 The **Departmental Headquarters** is the principal body of the Ministry of Energy responsible for the management of the commercial undertakings under the jurisdiction of the Ministry in the event of a crisis. It is an ad hoc body established by order of the Minister for Energy pursuant to Article 63(2) of the Protection against Disasters Act.

The Departmental Headquarters performs the functions of a crisis management group. It assists the senior officials of the Ministry of Energy in performing activities relating to protection against disasters and the management of crisis and emergency situations of a civilian nature, resulting from fires, road and other accidents, crimes, acts of terrorism and other social, economic and political circumstances which disrupt the normal functioning of the energy system, create political instability and social unrest, pose a threat to the life, health and property of citizens, endanger cultural and material heritage, the environment and national security in general. The Minister for Energy, in its capacity as competent authority, exercises control over the activity of the Departmental Headquarters.

4.2 The composition of the Departmental Headquarters is determined by an order of the Minister for Energy. Its members are senior officials of the ME who have the necessary expert knowledge and experience in crisis management and are thoroughly familiar with the legislation governing protection against different types of disasters and crises.

4.2.1 The Departmental Headquarters is chaired by the Minister for Energy who is responsible for the management and control of the Directorate for Security of Electricity Supply and Crisis Management of the ME.

4.2.2 The deputy chair of the Departmental Headquarters is the Head of the Directorate for Security of Electricity Supply and Crisis Management.

4.2.3 The members of the Departmental Headquarters are:

- the Head of the Energy Projects and International Cooperation Department;
- the Head of the Directorate for Energy Strategies and Policies on Sustainable Energy Development;
- the Head of the Directorate for Corporate Management in the Energy Sector;
- the Head of the Directorate for Financial Management of Property and Information and Communication Services;
- the Head of the Directorate for Legal Affairs, Administrative Services and Human Resources;
- the Head of the Directorate for Crisis Management and Defence and Mobilisation Training.

The Minister for Energy approves Rules of Procedure governing the work of the Departmental Headquarters.

The actions of the Departmental Headquarters of the Ministry of Energy should safeguard the security of gas supply in the Union by ensuring the proper and continuous functioning of the internal market in natural gas ('gas'), by allowing for exceptional measures to be implemented, when the market can no longer deliver the gas supplies required, including solidarity measure of a last resort, and by providing for the clear definition and attribution of responsibilities among natural gas undertakings, the Member States and the Union regarding both preventive action and the reaction to concrete disruptions of gas supply. It implements transparent mechanisms concerning, in a spirit of solidarity, the coordination of planning for, and response to, emergencies at national, regional and Union level.

4.3 The Departmental Headquarters performs the following tasks:

- establishes permanent communication in accordance with the scheme set out in Annex No 3 with the National Headquarters for Protection against Disasters (NShtZB) and the crisis headquarters of the commercial undertakings in the energy sector situated within the area of the disaster or affected by the crisis/emergency situation;
- prepares the documents necessary for the competent authority to declare an alert (crisis level) as provided for in point 5.1.7 of this Plan;
- receives situational updates on the affected areas from the officials on duty at the Ministry of Energy; - works to achieve maximum effectiveness in the implementation of measures for the protection of citizens and infrastructures and prevention of disruptions in the supply of energy resources;
- analyses the information received from the National Headquarters for Protection against Disasters, assesses the level of destruction and the harmful consequences of disasters or crisis/emergencies in the energy sector and defines the measures to be implemented without delay;
- evaluates the situation and the composition and readiness of the crisis/emergency response units at the commercial undertakings in the energy sector;
- adopts decisions on taking specific action to contain the disaster or crisis/emergency situation and proposes them to the Minister for Energy and, when necessary, to the National Headquarters for Protection against Disasters;
- makes arrangements for interaction between the Ministry of Energy and the departments of Bulgaria's response and rescue system (Directorate-General Fire Safety and Civil Protection of the Ministry of Internal Affairs (MVR), the provincial directorates of the MVR, the Bulgarian Red Cross, ministries and institutions, municipal headquarters for protection against disasters, the emergency medical assistance service, hospitals and medical establishments in the area of the disaster, etc.) in conducting civil protection operations and performing tasks and implementing measures for the containment of disasters.
- organises, coordinates and controls the actions taken by the energy sector units operating as part of the Single Rescue System in implementing the tasks and measures for protection against disasters;
- bears responsibility for the performance of the obligations arising from the activation of the National Prevention Plan for Protection in the Event of Disasters and the Action Plan of the Ministry of Energy in constant interaction with the National Headquarters, the Regional Cooperation Centre and the relevant Commission services;
- proposes to the Minister for Energy decisions on the containment of crisis/emergency situations and the elimination of the consequences of disrupted supplies;
- submits proposals to the Minister for Energy on the provision of additional funds, fuel reserves and other resources to enable protection against and containment of the crisis/emergency situation and the elimination of its consequences;

- proposes estimates for the purpose of distribution of energy and other resources in a crisis/emergency situation and the curtailment of electricity, heat or natural gas supply, where curtailment or suspension of supply for a period of more than 48 hours is necessary in the entire territory of Bulgaria;

- proposes measures on the facilitation of natural gas supply to neighbouring countries (EU Member States) or on cooperation with EU Member States in accordance with Annex I to Regulation (EC) No 2009/715.

- draws up summaries and reports on changes in the situation and the progress achieved in recovery/rescue operations and submits them to the Minister for Energy and/or the National Headquarters for Protection against Disasters.

The work of the Departmental Headquarters is assisted by the officials on duty at the Ministry of Energy and experts from the Directorate for Security of Energy Supply and Crisis Management. The Departmental Headquarters performs its tasks depending on the situation and may operate in normal or crisis mode in accordance with dedicated rules approved by the Minister for Energy.

In the absence of a member of the Headquarters, a deputy from the respective administrative unit is designated who participates in the work of the body. Whenever necessary, other employees may be appointed to the Headquarters pursuant to a decision of the Chairperson.

-ShtIAP – The transmission system operator sets up permanent Headquarters (ShtIAP) responsible for the implementation of the emergency plan. The announcement scheme to be deployed by the Headquarters in the event of occurrence or anticipated occurrence of a crisis level is based on an order issued by the Executive Director of the operator.

CHAPTER 5 Roles and responsibilities of the different actors

5.1 **Natural gas undertakings** bear the primary responsibility for the security of supplies as a shared responsibility with the competent authority and the European Commission in accordance with Article 3(1) of the Regulation, and in particular the responsibilities set out in Article 13(2) of the Regulation. Natural gas undertakings, as defined in Article 2 of Directive 2009/73/EC (the Directive), are any natural or judicial persons (excluding end customers) performing at least one of the following functions:

- Production of natural gas;
- Transmission of natural gas;
- Natural gas distribution;
- Supply of natural gas;
- Purchase of natural gas;
- Storage of natural gas.

Natural gas also means compressed (CNG) and liquefied natural gas (LNG).

5.1.1. Among energy undertakings, an essential role in the security of the gas supply in Bulgaria is fulfilled by the operator of the Bulgarian gas transmission system Bulgartransgaz EAD, which specifically:

5.1.1.1. handles the operational and technical management of the transmission system and the components thereof;

5.1.1.2. handles the operational and technical management of the underground gas storage facility (UGS Chiren);

5.1.1.3. monitors the parameters at entry and exit points and the information received from other transmission operators and available to the General Dispatching Division of Bulgartransgaz EAD;

5.1.1.4. estimates every day the gas demand for the next three days, on an hourly and daily basis, taking into account the historical data, weather forecasts and information received from gas undertakings;

5.1.1.5. prepares every day a forecast of the level of gas supply for the next three days, on an hourly and daily basis, taking into account the supply contracts with the companies for domestic gas production and the technical capacity for withdrawing gas quantities from UGS Chiren;

5.1.1.6. determines the necessary quantities of natural gas on the basis of the information received from gas undertakings regarding the estimated monthly consumption by protected consumers in order to be able to meet the supply standard;

5.1.1.7. within 30 days of this plan entering into force, provides natural gas undertakings with the forms to be used to provide the information referred to in point 5.1.1.6;

5.1.1.8. communicates with the competent authority, gas undertakings, industrial users and consumer associations, local and central government authorities and all other institutions and organisations on matters pertaining to the security of gas supplies, including situations of suspension or curtailment of the production or supply of natural gas and the introduction of restrictions;

5.1.1.9. orders the temporary suspension or curtailment of natural gas supplies for up to 48 hours in accordance with Article 24 of Regulation No 10 of 9 June 2004 on the procedure for curtailment, suspension or limitation of the production of electricity, thermal energy and natural gas and/or Regulation No 12 of 9 June 2004 on the activity of operators of gas transmission and distribution networks;

5.1.1.10. submits a request to the Minister for Energy or the local mayor for authorisation and approval of schedules for the curtailment regime proposed in accordance with Regulation No 10 of 9 June 2004;

5.1.1.11. issues orders in connection with points 5.1.1.9 and 5.1.1.10 to network users, including directly to their customers, as well as to the distribution network operators connected to the transmission network of the operator in order to avoid accidents in the gas transmission system. Bulgartransgaz EAD issues orders in line with the conditions and schemes under which curtailment measures are introduced for consumers connected to the transmission network, as developed in accordance with Article 19(2) and (3) of Regulation No 10 of 9 June 2004;

5.1.1.12. proposes to the competent authority the declaration of any of the crisis levels in accordance with this Plan and notifies it of the actions taken in accordance with the Energy Act (ZE) and Regulation No 10 of 9 June 2004 and Regulation No 11 of 10 June 2004 as envisaged in the Plan;

5.1.1.13. coordinates actions with the transmission system operators of neighbouring countries;

5.1.1.14. together with the national competent authority, informs and, where necessary, seeks assistance from the European Commission in order to deal with the emergency situation;

5.1.1.15. where more than one TSO operates in Bulgaria, Bulgartransgaz EAD has a **coordinating** role under the Emergency Plan.

5.1.1.16. Bulgartransgaz EAD maintains approximately 70 million m³ of natural gas in storage at UGS Chiren pursuant to an order issued by the Minister for Energy in accordance with Article 70 of the Energy Act imposing additional public service obligations on the company. The quantities specified in the order constitute a reserve necessary to ensure uninterrupted supplies as required by Annex VIII to Regulation (EU) 2017/1938.

5.1.1.17 In the event of use of the quantities of gas referred to in point 5.1.1.16, the same are restored by the users of the gas transmission network in the following order:

- when technologically possible – quantities of natural gas within three months during the injection period and after the declaration of the end of the emergency;
- by paying the cost of the natural gas within one calendar month after the declaration of the end of the emergency.

5.1.1.18 The costs incurred by Bulgartransgaz EAD on keeping natural gas in storage in accordance with point 5.1.1.16 are refunded through the prices for access and transmission of natural gas via the transmission network in accordance with Article 35 of the Energy Sector Act.

5.2 Responsibility of the undertakings

5.2.1 Natural gas undertakings are required to cooperate fully with the competent authority.

5.2.2 Natural gas undertakings notify the Headquarters of Bulgartransgaz EAD of all matters relating to possible changes in the levels of supply and demand for the next three days and nominate contact persons to work on the schemes set out in Annexes 2, 3 and 4.

5.2.3. Natural gas undertakings are required to fully cooperate with the Headquarters of Bulgartransgaz EAD for the implementation of the measures set out in Chapter 2 of the Plan. Cooperation is to be understood as the execution of the orders issued by the operator in the cases envisaged by the law, including those relating to the provision of information. The natural gas undertakings are listed according to their core activity in accordance with Article 2(1) of the Directive. If a company is involved in more than one activity, then by default this links them to all other activities. Each gas company identifies the activities in which it is involved and the contact persons who are, preferably, different for the different activities, and submits the respective list of the appointed officials to the ME (Minister for Energy).

5.2.4 The natural gas undertakings which supply natural gas to customers with **fluctuating consumption* (including district heating utilities and end suppliers) are required to provide quantities of natural gas to compensate the **fluctuation* in the consumption of their customers.

5.2.5 The undertakings referred to in point 5.2.4 must keep, at the beginning of the winter season or the withdrawal period, quantities of natural gas at UGS Chiren that are sufficient to compensate seasonal fluctuations, which should be within 10 % to 20 % of the annual nominations for supply to their customers with fluctuating* consumption. The undertakings should acquire these amounts during the winter or the withdrawal period at paces sufficient to compensate the **fluctuation* until the end of the season;

5.2.5.1 The natural gas undertakings referred to in point 5.2.5 are required to maintain, at the beginning of the winter season, gas in storage at the UGS Chiren to an indicative volume of 290 mln. m³ or a total of 3 000 000 MWh;

5.2.5.2 Where there are conditions for a gas crisis to emerge, the natural gas undertakings referred to in point 5.2.4 are required to take measures to increase the quantities in storage in line with their capacity for gas supply and with the storage capacity of UGS Chiren;

5.2.5.3 Where conditions that may trigger a gas crisis are no longer present, the gas undertakings can freely dispose of the additional quantities referred to in point 5.2.5.2;

5.2.5.4 Bulgartransgaz EAD is required to provide capacity for injection, storage and withdrawal of the quantities specified in point 5.2.5. In connection with this, the operator determines the injection capacity per month and adopts rules for the nomination and allocation of available capacity per undertaking. The injection capacity for the quantities concerned per month and supplier, is determined by the TSO who publishes the procedure for fulfilment of the obligations under point 5.2.5 on its website;

5.2.5.5 The undertakings referred to in point 5.2.4 are required to notify the competent authority and Bulgartransgaz EAD of the exact quantities of natural gas they are to keep in storage in accordance with point 5.2.5 and/or point 5.2.5.1 before the beginning of the injection period, but not later than 15 February of the current calendar year and to submit to Bulgartransgaz EAD, within the same time period, an application for the booking of capacity products to cover the injection, withdrawal and storage of the respective quantities of natural gas. Where the natural gas undertakings fail to provide the necessary information to the competent authority and Bulgartransgaz EAD within the specified time period, the TSO designates the capacity necessary for injection, withdrawal and storage of the respective quantities of natural gas as available.

5.2.5.6 Bulgartransgaz EAD allocates the respective capacity products booked to cover the injection, withdrawal and storage of the quantities of natural gas referred to in point 5.2.5 in accordance with the applicable Rules for the use of the UGS Chiren and the procedure applicable to the respective product.

5.2.5.7 The costs incurred by the companies on keeping natural gas in storage in accordance with this Chapter 5 are refunded through the prices of licensed services in accordance with Article 35 of the ZE.

5.3. Control to ensure compliance with the obligations under points 5.2.4 and 5.2.5 is performed by the competent authority within the meaning of Regulation (EU) 2017/1938 and by the Departmental Headquarters established by the competent authority. For this purpose, by the beginning of the injection period, but not later than 15 February of the current calendar year, the undertakings referred to in point 5.2.4 are required to provide information on the natural gas supply contracts concluded with customers with **fluctuating consumption*.

The seasonal fluctuation in supply per client is calculated using a fluctuation factor (KN) as follows:

$$KN = V_I / V_z$$

V_s — the quantities used in the previous year in the period between April and September;

V_s — the quantities used in the previous year in the periods between January and March and October and December, respectively.

When KN is less than 0.6, the supply is deemed as fluctuating, and in all other cases – as even.

5.3.1. To verify the information under point 5.2.5, the undertakings referred to in point 5.2.4 submit excerpts from their contracts in redacted form with the commercially sensitive information of Bulgartransgaz EAD deleted. Bulgartransgaz EAD submits a report to the competent authority on the storage and injection capacities booked by the undertakings referred to in point 5.2 according to the information received.

5.3.2. In the event of failure to fulfil the obligations under point 5.3 which may jeopardise the integrity and safe operation of the transmission system, Bulgartransgaz EAD takes the measures envisaged in Section VI of the Rules on the management and technical operation of gas transmission networks adopted by the KEVR on 3 September 2013.

5.4 The prices for access and storage of natural gas at storage facilities to be paid by the undertakings referred to in point 5.2.4 are regulated and subject to approval by the KEVR.

5.4.1 The natural gas undertakings which have natural gas supply contracts with non-household customers and/or end suppliers are required to:

5.4.2. keep a list of the names, means of communication and officials responsible for coordination and interaction with each customer, which should be updated on a monthly

basis, and provide summary information transmitted by electronic means to all exit points and handover points of Bulgartransgaz EAD. Non-household customers should be divided into protected and unprotected within the meaning of point 9.1. The obligation to make this arrangement lies with the undertakings referred to in point 5.4.1;

5.4.3 draw up a precise forecast of consumption based on the orders for annual, monthly and daily consumption by consumers for each handover point at AGRS/GRS/GMS, including expected peak consumption levels. Information on household consumers must be separated from that of industrial consumers. Information on protected non-domestic consumers must be separated from information on unprotected non-domestic customers;

5.4.4 By 15 October each year, natural gas undertakings provide to the transmission system operator up-to-date information about the gas year starting on 1 October and referred to in point 5.4.3.

5.4.5 Natural gas undertakings which conclude or modify contracts for wholesale gas supply with third countries, suppliers and/or operators of facilities for domestic gas production/LNG are required to inform the competent authority of:

- the term of the contract;
- the contracted total annual and monthly average quantities/volumes (per month);
- in the event of declaration of an alert or emergency – the maximum quantities contracted;
- the delivery points under the contract;
- the minimum daily and monthly gas volumes;
- the conditions for suspension of gas deliveries.

5.5 Specific obligations of natural gas undertakings

5.5.1 The public supplier is obliged to require foreign suppliers to include flexible clauses in the supply contracts providing, in the event of emergency, the possibility to increase the quantities supplied above the levels agreed.

5.5.2 Gas traders are obliged to require from the production undertakings with which they have concluded purchase contracts to switch, upon the declaration of an emergency, to an operational mode of maximum technically feasible production.

5.5.3 Gas traders are obliged to require foreign suppliers to include flexible clauses in the supply contracts providing, in the event of emergency, the possibility to increase the quantities supplied above the levels agreed.

5.5.4 Transmission system operators (other than Bulgartransgaz EAD), which have a physical connection to the transmission system, are required to execute the orders of the combined operator Bulgartransgaz EAD.

5.5.5 The operators of distribution networks which have a physical connection to the transmission system are required to execute the orders of the combined operator Bulgartransgaz EAD.

5.5.6 The natural gas customers which have a physical connection to the transmission system are required to execute the orders of the combined operator Bulgartransgaz EAD.

5.5.7 Production undertakings are required to switch, upon the declaration of an emergency, to an operational mode of maximum technically feasible production.

5.6. The reporting obligations of the natural gas undertakings are as follows:

5.6.1 Combined gas operator Bulgartransgaz EAD:

Bulgartransgaz EAD is a combined gas operator engaged in the transmission and storage of natural gas. The company implements a policy of transparency and responsibility with a view to ensuring the security and sustainable development of the Bulgarian and regional markets in natural gas in line with the principles of equal treatment and transparency. In its capacity as combined transmission system operator (TSO) and storage

operator (GSO), it enables the development and reliable functioning of natural gas transmission and storage infrastructure in Bulgaria. The company operates the gas transmission network, which enables the transmission of natural gas to consumers in Bulgaria and the neighbouring countries, and the Chiren underground storage facility under a dedicated licence for natural gas storage. The two gas producers in Bulgaria and the two principal groups of clients, notably gas distribution companies and non-household clients, are connected to the gas transmission network of Bulgartransgaz EAD.

- On the basis of the information received from other undertakings Bulgartransgaz EAD reports to the Departmental Headquarters of the ME on entry point pressures, supplies to Bulgaria, the consumption of the household and non-household customers connected to the gas transmission network, the parameters of the gas transmission network (pressure, natural gas quantity in linepack, operating mode, etc.) and on the need to ensure compliance with imposed restrictions on the part of customers connected to the gas transmission network, including the need to switch to an alternative fuel, etc. [It also reports on] the need to alter the crisis level declared to a lower level;

- reports the daily gas demand and supply forecasts for the following three days, in million cubic metres per day (mcm/d);

- reports the daily flow of gas at all cross-border entry and exit points and all points connecting production facilities, storage facilities or LNG terminals to the network, in million cubic metres per day (mcm/d);

- reports the period, expressed in days, for which it is expected that gas supply to protected customers can be ensured.

5.6.2 Bulgartransgaz EAD is a sole shareholder joint-stock company established in accordance with the Commercial Act under the jurisdiction of the Bulgarian Energy Holding EAD. The company is the only public supplier of natural gas in Bulgaria.

According to the Energy Sector Act the public supply of natural gas in Bulgaria is subject to licensing by the KEVR and only one licence for the activity is issued, which covers the entire territory of the country.

By Decision No R-046 of 29 November 2006 the DKEVR issued Licence No L-214-14 of 29 November 2006 to Bulgargaz EAD for the public supply of natural gas in Bulgaria. The licence is valid for a period of 35 years.

For the entire effective period of the licence Bulgargaz EAD is authorised to perform the following activities:

- conclude contracts with producers of and traders in natural gas for the purchase the necessary quantities of natural gas to cover demand from consumers connected to the gas transmission network as well as the agreed quantities necessary for the operation of public suppliers;

- conclude agreements for the sale of natural gas to customers;

- conclude agreements for the transmission of natural gas with the transmission company and distribution companies;

- conclude agreements for the storage of natural gas with storage facility operators;

- perform other necessary activities relating to the public supply of natural gas;

- the licence holder must ensure the uninterrupted and high-quality supply of natural gas;

- the licence holder may not refuse to conclude contracts for the sale of natural gas with customers who are not directly connected to the gas transmission network or with public suppliers in accordance with the provisions laid down in applicable law.

In the capacity as main supplier of natural gas in Bulgaria, Bulgartransgaz EAD reports on:

- the expected supply quantity for a period of 3 days ahead;
- the hourly and daily consumption of gas by its customers;
- the quantities it can ensure under provisional supply contracts (flexible contracts);
- the compliance on the part of its customers with imposed restrictions (temporary curtailment measures/ regime).
- the period, expressed in days, for which it is expected that gas supply to protected customers can be ensured.

5.6.3 (Domestic) production undertakings report on:

- the expected withdrawal quantities for a period of 3 days ahead;
- the expected pressure at the connection point between the installations of the production undertaking and the gas transmission system;

5.7 Storage undertakings report on:

Bulgartransgaz EAD provides natural gas storage services through a proprietary underground gas storage (UGS) situated in Chiren pursuant to Licence No L-214-10 of 29 November 2006 issued by the DKEVR. The gas in storage at UGS Chiren has local importance and is primarily used to compensate for seasonal variations in domestic consumption and in the event of modifications in agreed natural gas supply orders.

When filled to capacity, UGS Chiren can cover approximately 25 % to 30 % of the daily demand for natural gas during the cold months of winter. UGS Chiren comprises 24 operational drills and a compressor station with a total installed capacity of 10 MW. Its current capacity is sufficient for the storage of 550 mln. m³ of natural gas. The capacity for withdrawal and injection is directly dependent on the pressure exerted by injected layers of gas and the total amount of gas in storage. The minimum and maximum withdrawal capacity is 0.5 mcm/day 3.82 mcm/ day, respectively. Where necessary, this can be increased up to 4.7 mcm/day by means of enforced (emergency) gas withdrawal. However, emergency withdrawal is only possible when the gas storage is full and can be maintained for a period of up to 30 days. The Chiren underground gas storage, together with all specialist underground and ground equipment necessary for gas injection and withdrawal and for preserving the quality of natural gas in storage, and a compressor station with a total installed capacity of 10 MW;

The Chiren underground storage facility reports on:

- the expected withdrawal quantities for 3 a period of days ahead;
- the expected pressure at the connection point between the installations of the storage undertaking and the gas transmission system.

5.8. Natural gas undertakings

The activities relating to the distribution and supply of natural gas to customers connected to the distribution networks are performed by regional and local gas distribution companies. These (mostly private) entities operate under the terms of issued licences and the prices they charge are subject to regulation. The undertakings with the largest market shares are Overgaz Mrezhi AD, Aresgaz AD and Citygaz Bulgaria EAD, etc. Production undertakings and two main groups of consumers (gas distribution companies and non-household customers) are connected to the gas transmission network of Bulgartransgaz EAD. **Distribution undertakings report on the** consumption of household and non-household customers connected to the distribution network, the parameters of the gas transmission network, namely pressure, available natural gas quantity in the gas distribution network (linepack), operating mode, compliance with any restrictions imposed by customers connected to the distribution network, including the switch to an alternative fuel, etc. They also report on the status of supply to households and important public services (security, health care, education, etc.).

In a crisis, all industrial customers have specific tasks to implement with a view to safeguarding the supply of natural gas to protected customers.

Industrial gas consumers are required to cooperate with the operator of the gas transmission or distribution system to which their networks are connected in the development of curtailment plans. For this purpose, by 31 July each year, they provide information about the minimum consumption of natural gas necessary to prevent threats to the safety and health of consumers, or damage to or destruction of technological equipment (that is the quantity of natural gas that corresponds to the maximum allowed consumption at the tenth stage of supply). The indicated quantities of natural gas can be verified by the operators on the basis of historical data on consumption.

Industrial consumers are required to strictly comply with the restrictions imposed on natural gas consumption, when the measures set out in point 2 of the plan are applied. The maximum quantity of natural gas, which consumers may acquire during a period of curtailed consumption, is indicated in the respective contracts for sale, transmission and distribution of natural gas or in comprehensive agreements. In addition, the industrial clients purchasing natural gas for their own use and the entities contracting the transmission or distribution of natural gas must also have procedures in place for taking action in the event of disruption of natural gas supply to the gas system and an unforeseen increase in gas consumption.

In fulfilling their reporting obligations, industrial consumers use available information flows, notably the 24-hour telephone line and data (internet) link, the operational dispatcher and/or official on duty at the Ministry of Energy, and the database comprising up-to-date information about all customers listed in Annex 4, which is updated on an annual basis.

5.9 Competent authority

The crisis levels are declared by the competent authority, which may delegate this task solely to a public authority, a transmission system operator or a distribution system operator. The delegated tasks are performed under its supervision and are specified in the preventive action plan and the emergency plan. In the cases envisaged in the Regulation referred to in Article 9(4), the competent authority notifies the curtailment measures referred to in paragraphs 1 to 3 to the KEVR and the European Commission and makes a public announcement through the media.

The competent authority provides information on any need for assistance to the Commission's ERCC. It conducts an assessment of the overall situation and advises on the assistance that should be provided to the most affected Member States and, where appropriate, to third countries.

In duly justified circumstances irrespective of a declaration of an emergency, the competent authority of the most affected Member State may require natural gas undertakings to provide the information referred to in point 5.1 or additional information necessary to assess the overall situation of the gas supply in the Member State or other Member States, including contractual information, other than price information.

Assesses the information received for security-related purposes within a period of three months and submits the results of the assessment to the Commission. The competent authority establishes the rules on penalties applicable to infringements by natural gas undertakings of the provisions of Article 14(6) or (7) and takes all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

The competent authority prepares requests to the Commission and all Member States for application of the solidarity measure in respect of the solidarity protected customers in its territory and assumes an obligation to provide solidarity to the countries in the risk group in accordance with Article 13 of Regulation (EU) 2017/1938.

When the competent authority declares an end to one of the crisis levels indicated in plan, it notifies the Commission as well as the competent authorities of the Member States with which the Member State of that competent authority is directly connected.

After the end of an emergency, the competent authority referred to in point 5.1.7, as soon as possible and at the latest six weeks after the lifting of the emergency, provide the Commission with a detailed assessment of the emergency and the effectiveness of the measures implemented, including an assessment of the economic impact of the emergency, the impact on the electricity sector and the assistance provided to or received from, the Union and its Member States. Such assessment is to be made available to the GCG and must be reflected in the updates of the preventive action plans and the emergency plans.

5.10 National regulatory authority (KEVR)

The KEVR is responsible for issuing, modifying, supplementing, suspending, terminating and withdrawing licences for electricity and/or heat generation, the transmission of electricity, heat or natural gas, the distribution of electricity or natural gas, the storage of natural gas at storage facilities and/or liquefying natural gas or the import, the unloading and regasification of liquefied natural gas at LNG facilities, trade in electricity, organising an electricity exchange, the public supply of electricity or natural gas, the supply of electricity or natural gas to final consumers, the distribution of traction electricity along railway distribution networks and the supply of electricity by a supplier of last resort.

It establishes the rules for access to electricity and gas transmission networks, electricity and gas distribution networks and natural gas storage facilities, including quality standards for services and supplies, and where necessary reviews them to ensure effective access;

The KEVR certifies electricity transmission and gas transmission system operators as compliant with the requirements for independence, monitors their compliance and submits relevant notifications to the European Commission;

The Commission requires that, where necessary, transmission and distribution system operators propose modifications to the rules and the general terms and conditions of the contracts provided for in the Energy Sector Act to be approved by the Commission acting on their proposal.

It monitors the transition from a regulated market to an organised market based on the principle of freely negotiated prices in accordance with electricity trading rules.

According to the amendments to the Energy Sector Act, which entered into force on 8 October 2019, the energy regulator approves a platform for trading in natural gas on a proposal from the gas transmission network operator. As noted in the report of the working group, in accordance with the requirements laid down in Commission Regulation (EU) No 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks, in order to procure short-term standardised products, the transmission system operator trades on a trading platform.

5.11 Competent authorities of the neighbouring countries

The competent authorities of the neighbouring countries in the risk group(s) cooperate in the implementation of this Plan. The Member States may allow their competent authorities to delegate specific tasks set out in Regulation (EU) 2017/1938 to other bodies. They monitor and control the natural gas supply situation in the respective countries, declare the respective crisis level, apply the measures planned to cope with threats and notify the competent authorities and Commission services via the regional centre. The competent authorities may guide the actions of operators and provide to the Commission information necessary to assess the gas supply situation, once received from the natural gas undertakings. They adopt decisions on the cancellation of emergency situations and notify the Commission.

5.12 European Commission

The Commission convenes the Gas Coordination Group (GCG) as soon as it declares a regional or Union emergency. In a regional or Union emergency, the Commission coordinates the action of the competent authorities, taking full account of relevant information from, and the results of, the consultation of the GCG.

The Commission in particular:

- ensures the exchange of information;
- ensures the consistency and effectiveness of action at Member State and regional levels in relation to the Union level;
- coordinates the actions with regard to third countries and European bodies.

In the event of a regional or Union emergency, the Commission may request that the competent authority provides it without delay with at least:

- the information set out in point 5.9;
- the information on the measures planned to be taken and those already implemented by the competent authority to mitigate the emergency, and information on their effectiveness;
- the requests made for additional measures to be taken by other competent authorities;
- the measures implemented at the request of other competent authorities.

Where the Commission considers that the gas supply in the Union or part of the Union is exposed to a risk or is likely to be exposed to a risk that may lead to the declaration of a crisis level, it may require the competent authorities concerned to collect and submit to the Commission the information necessary to assess the gas supply situation. The Commission shares its assessment with the GCG.

The Commission convenes a **crisis management group** (CMG) composed of the crisis managers of the Member States concerned by the emergency referred to in Article 10(1)(g) of the Regulation. It ensures that the GCG is informed regularly about the work undertaken by the crisis management group (CMG). The Commission, after consulting the GCG, establishes a permanent reserve list for a monitoring task force consisting of industry experts and representatives of the Commission.

The monitoring task force may be deployed outside the Union when necessary and monitors and reports on the gas flows into the Union in cooperation with the supplying and transiting third countries. When the Commission decides that the underlying basis for the regional or Union emergency no longer justifies the declaration of an emergency, it shall declare an end to the regional or Union emergency and shall give its reasons and inform the Council of its decision.

CHAPTER 6: Measures regarding undue consumption by customers who are not protected customers.

In order to prevent undue gas consumption during an emergency, or during application of the measures referred to in Articles 11(3) and 13, the competent authority of the Member State concerned informs customers who are not protected customers that they are required to cease or reduce their gas consumption without creating technically unsafe situations.

The measure introduced to prevent undue consumption of natural gas by customers who are not protected customers (during the emergency) and limit natural gas consumption. This is a non-market-based measure applied when all available means to meet client demand for natural gas have been exhausted. The undertakings that do not comply with the restrictions on natural gas supply are subject to a financial penalty. The amount of the fine is proportionate to the quantity of natural gas consumed during the period in which the production capacity curtailed on account of the restrictions imposed was exceeded and is calculated as follows:

- in the event of exceedance of the hourly capacity, as the product of the maximum capacity registered by the measurement system above the capacity curtailed on account of the restrictions, the number of hours during the month in which restrictions applied and **four times higher** than the fixed fee for the transmission service for the relevant tariff group in which the customer will be classified on the basis of the capacity determined for this customer;

- in the event of exceedance of the hourly and daily capacity, the financial penalty is calculated as the product of the maximum capacity registered by the measurement system above the capacity curtailed on account of the restrictions, the number of hours during the month in which restrictions applied and **eight times** the amount of the fixed fee for the transmission service for the relevant tariff group in which the customer will be classified on the basis of the capacity determined for this customer.

Where Bulgaria has declared an emergency and has indicated that cross-border action is required, any increased gas supply standard or additional obligation under Article 6(2) imposed on natural gas undertakings in other Member States in the same risk group is temporarily reduced to the level indicated in Article 6(1) of the Regulation. The obligations laid down in the first paragraph of this Article cease to apply immediately after the competent authority declares an end to an emergency, or the Commission concludes, in accordance with the first subparagraph of paragraph 8, that the declaration of an emergency is not or is no longer justified.

In the event of an emergency in the national natural gas system, the consumption of customers who are not protected customers is monitored by the respective gas transmission and distribution systems. In the event of undue consumption, the latter activate the procedures for immediate interruption of gas supply in accordance with the Network Code of the Bulgarian Gas Transmission Network and the Code for Gas Distribution Networks. Furthermore, in the event of declaration of an alert [or] emergency, the national operator for natural gas and the operators of distribution systems issues recommendations for reasonable consumption through voluntary actions to be taken by all consumers of natural gas in order to optimise the use of natural gas and enable continued gas supply to protected customers.

CHAPTER 7: Emergency response tests

The Minister for Energy has the initiative in organising emergency response tests (hereinafter emergency tests). The tests are conducted at least once every four years and the relevant dates and organisational arrangements are determined by the Minister for Energy.

The emergency test scenario is developed by an expert group and is kept confidential until the test. It entails a number of simulated events that aim to assess potential problems in the operation of gas systems leading up to the event that triggers the declaration of an emergency, that is creates an objective necessity to commence applying non-market-based measures. Strong impact scenarios that immediately trigger the declaration of an emergency are also acceptable.

The emergency test scenario in the event of a crisis presupposes alternative simulations, depending on the decisions taken by the actors involved. The test scenario is approved by the Minister for Energy and the participation of the entities (stakeholders) identified therein must be confirmed. In order to conduct an emergency test, the mechanisms and means of communication must be clearly defined in order to differentiate them from the routine test messages exchanged between the stakeholders in the course of actual communication between them.

The tests must be conducted in an environment that approximates real conditions to the maximum degree. The use of 'virtual time' for processes unfolding at a slow pace is allowed. In the decision-making phase of the test, virtual time must be the same as real time. Making assessments or conclusions during the tests should be avoided. In a typical test, observer functions are defined. These are performed by actors who do not participate in the emergency test but document the events, decisions, procedures and instructions in order to identify facts that occur during the emergency tests. The first emergency tests will be conducted within one year from the date of adoption of this emergency plan at the latest.

After conducting the emergency test, a summary of the results achieved is compiled and presented. The summary of the conclusions, the calendar of events and the recommendations given after the test are submitted to the body responsible for the emergency test and the final report is submitted to the Minister for Energy.

The transmission system operator, the operators of distribution systems and the operators of storage facilities are required to conduct emergency tests for staff at least once a year in the form of practical tasks or simulations in scenarios of disruption of key elements of the infrastructure managed by the respective operator. Depending on the needs for each scenario, such tests may also be conducted in cooperation with undertakings that can be affected by the consequences of potential interference or may influence the efforts to minimise the consequences of the events.

Reports and conclusions from the conducted tests must be submitted to the Minister for Energy.

Bulgartransgaz EAD develops and conducts emergency tests involving curtailed supply and exceptionally high demand for natural gas. The aim is to obtain information and evidence of the effectiveness of the measures in place and the need to adopt new measures to handle emergency/crisis situations in order to meet natural gas demand or, in the worst-case scenario, ensure that the measures are in line with the supply standard envisaged in Article 6 of the Regulation.

This means that the scenarios should be annually reviewed, taking into account the exceedances in maximum daily consumption of natural gas in the national gas transmission system since records began and any significant changes in the installations and the operation of the national gas system.

The emergency plan **is updated every four years after** 1 March 2019 or more frequently if circumstances so warrant or at the Commission's request. The updated plan reflects the updated risk assessment and the results of the tests out in accordance with paragraph 3 of this Article. Article 8(4) to (11) of the Regulation apply to the updated Plan.

The emergency plan ensures that cross-border access to infrastructure in accordance with Regulation (EC) No 715/2009 is maintained as far as technically and safely possible in the event of an emergency and must not introduce any measure unduly restricting the flow of gas across borders. The plan is subject to review and tests are performed to appraise its effectiveness. The tests which envisage the participation of the Departmental Headquarters of the ME or the ShtIAP of Bulgartransgaz EAD and the headquarters of the natural gas undertakings are conducted at least once in the four-year interval in which the emergency plan is to be updated in accordance with Article 10(2) of the Regulation.

No emergency tests are to be carried out in the event of an incident occurring during the current year, which has led to a crisis and the declaration of a crisis level. At the planning stage of the tests and in order to verify the effectiveness of the plan, the Head of the Departmental Headquarters of the ME may request additional information from the participating actors, when such information must be available in the calendar of the tests. The participating actors provide the requested information in a timely manner, appropriately classifying any confidential information.

The measures, actions and procedures contained in the emergency plan are **tested at least** once between the four-year updates referred to in paragraph 2. In connection with this, the competent authority simulates high and medium impact scenarios and responses in real time in accordance with that emergency plan. The results of the tests are presented at the GCG by the competent authority.

The simulation includes the identification and assessment of emergency natural gas supply corridors and also identifies which Member States can address identified risks, including in relation to LNG. The gas supply and infrastructure disruption scenarios and the methodology for the simulation are defined by ENTSOG in cooperation with the GCG. The ENTSOG for gas ensures an appropriate level of transparency and access to the modelling assumptions used in its scenarios. The Union-wide simulation of gas supply and infrastructure disruption scenarios is repeated every four years unless circumstances warrant more frequent updates. The Commission is empowered to adopt delegated acts in accordance with Article 19 in order to update the composition of the risk groups set out in Annex I by amending that Annex in order to reflect the evolution of the major transnational risks to the security of gas supply in the Union and its impact on Member States, taking into account the result of Union-wide simulation of gas supply and infrastructure disruption scenarios carried out by ENTSOG in accordance with Article 7(1). Before proceeding to the update, the Commission consults the GCG in the setting provided for in Article 4(4) on the draft update.

CHAPTER 8: Regional dimension

8.1.1 Measures to be adopted per crisis level.

The regional dimension of the emergency plan provides a possibility for the three Member States in the Trans-Balkan risk group (Romania, Bulgaria and Greece) to cooperate in the application of market-based and non-market-based measures. Cooperation helps to prevent disruptions in the normal functioning of the gas market in South Eastern Europe and pool efforts and resources to address risks and cope with disruptions in natural gas supply. It envisages the application of cooperation mechanisms in the regional dimension with a view to ensuring that the Member States in the risk group have access to information that allows them to prevent or respond to potential disruptions in gas supply through the implementation of an effective system for communication and exchange of information between the individual competent authorities of the Member States belonging to the risk group.

The plan **enhances regional cooperation between risk group countries through planning so that decisions on the security of gas supply are not taken solely on the basis of national assessments considerations but take into account the regional dimension**. The latter enhances the accuracy of the regional dimension in the assessments and measures to prevent and mitigate crises and ensures greater efficiency in scale of joint actions. Furthermore, it lowers the security costs of supplying natural gas to consumers, including industrial consumers, who are sensitive to the impact of such costs on their ability to compete on the international market. The plan enhances the regional dimension in a number of elements of the framework for the security of gas supplies, including through a common risk assessment and regional chapters setting out jointly agreed measures.

The action plan envisages a **mechanism for cooperation** in the regional dimension for the first time. The mechanism offers a phased approach, starting with defining the mechanism and followed by exchanges within the risk group. The goal is to ensure that the Member States in the risk group have access to information that will allow them to prevent or respond to potential disruptions in natural gas supply and putting in place an effective

system for communication and exchange of information between the individual competent authorities of the Member States in the risk group.

8.1.1 Early warning crisis level

The competent body of the Member State which has declared an early warning immediately notifies all other Member States in the risk group of the crisis level declared and any measure applied or intended to be applied in order to deal with the consequences of the disruption in natural gas supply. 'Early warning' is declared where there exists concrete, serious and reliable information that an event may occur which is likely to result in a significant deterioration of gas supplies and is likely to trigger an alarm on the level of 'alert' or 'emergency'. The competent authority should report any changes in the situation in the gas system, including all adopted or discontinued measures, if any.

8.1.2 Alert crisis level:

The competent body of the Member State which has declared an alert immediately notifies all other Member States in the risk group of the crisis level declared and any measure applied, or market-based measures planned to be applied in order to deal with the consequences of the disruption in natural gas supply.

When an alert is declared, the market is still able to manage that disruption or demand without the need to resort to non-market-based measures; The competent authority reports any changes in the situation in the gas system, including all adopted or discontinued measures, if any.

8.1.3 Emergency crisis level

The competent body of the Member State which has declared an emergency immediately notifies all other Member States in the risk group of the crisis level declared and any measure applied or intended to be applied in order to deal with the consequences of the disruption in natural gas supply.

The competent authority should report any changes in the situation in the gas system, including all adopted or discontinued measures, if any. Non-market-based measures should be additionally introduced in order to more specifically safeguard natural gas supplies to protected customers in accordance with Article 6. In accordance with Article 11(7) of Regulation (EU) 2017/1938 during an emergency, upon a request of the relevant electricity or gas transmission system operator, 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.

8.2 Cooperation mechanism

In order to make the regional cooperation feasible, Member States agree on a cooperation mechanism at risk group level. Such a mechanism should be developed sufficiently in time to allow for discussing and agreeing on appropriate and effective cross-border measures, which will require the agreement of each Member State concerned, to be included in the regional chapters of the preventive action plans and the emergency plans, after consulting the Commission.

This Regulation [introduces], for the first time, a solidarity mechanism between Member States as an instrument to mitigate the effects of a severe emergency within the Union including a burden sharing mechanism. The mechanism ensures that the access to other key gas supply contracts relevant for the security of supply is guaranteed.

Where there is reliable information on a situation outside the Union that threatens the security of gas supply of one or several Member States and that may trigger an early warning mechanism involving the Union and a third country, the Commission should inform

the GCG without delay and the Union should take appropriate action to try to defuse the situation.

The competent authorities of the risk group agree on a cooperation mechanism for the preparation of the preventive action plan and the emergency plan, including the exchange of draft plans.

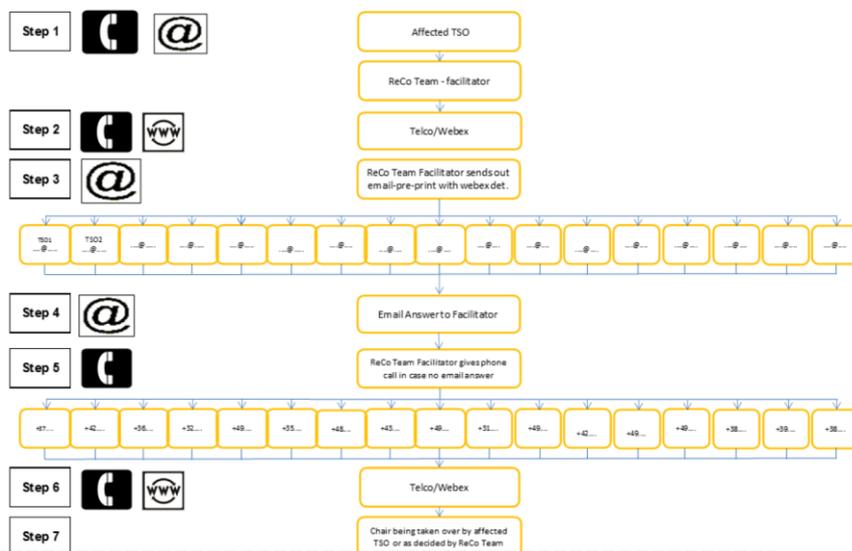
8.2.1 Procedures within the framework of the Regional Coordination system for gas (ReCo system for gas).

In accordance with Article 3(6) of Regulation (EU) 2017/1938 the **Regional Coordination System for Gas** (ReCo System for Gas) established by ENTSOG and comprising standing expert groups plays a significant role in cooperation and the exchange of information between transmission system operators in the case of emergency at regional or EU level.

Transmission system operators (TSO) cooperate and exchange information, including on gas supply flows in a crisis situation, using the Regional Coordination System for Gas (ReCo) established by the ENTSOG. ReCo teams are primarily intended to enable the exchange of information between gas transmission system operators along an existing channel. This has the potential to facilitate the approval of common emergency procedures, the organisation of urgent communication system resilience tests and conduct studies with a view to their improvement.

Although all operational procedures of ReCo teams may be regarded as emergency measures, the existence of ReCo teams is considered a preventive measure. The ReCo system offers a set of instruments which includes measures such as swaps or additional capacity. Each measure may be adopted, depending on the incident classification scale.

The ReCo system includes a diagram depicting the information flow between its constituent parts.



8.2.2 Procedures between operators of neighbouring transmission systems

At the technical level, indicating telephone numbers and e-mail addresses for contact is essential for rapid decision-making in the event of danger and verifying the transmission of communications by the authorised managers. The competent bodies of the countries in the risk group require that their respective system operators exchange information flow charts to enable ReCo teams to benefit from the best available practices.

The mutual assistance agreements are updated within the framework of the interconnection agreements, taking into account the requirements laid down in applicable legislation governing the security of gas supplies and establishing a clear correspondence between crisis levels and the relevant measures.

8.2.3 Regional Trans-Balkan risk group

8.2.4 Measures to be taken in the different crisis situations

The measures set out in this chapter are essentially information requirements that can be useful to all Member States belonging to the risk group in their response to emergency situations, the steps taken to prevent the crisis from expanding and giving assistance to the Member States requiring assistance at all crisis levels.

Early warning:

When the competent body of a Member State participating in the risk group declares an early warning, it must notify the crisis level within one day to all other Member States in the risk group, and provide information about each measure taken. The competent authority of the declaring Member State updates all other Member States belonging to the risk group on the early warning situation every four days, communicating all adopted or discontinued measures, if any.

Alert:

When the competent body of a Member State participating in the risk group declares an alert, notify the crisis level within one day to all other Member States in the risk group, and provide information about each measure taken.

The competent authority of the declaring Member State updates all other Member States belonging to the risk group on the early warning situation every two days, communicating all adopted or discontinued measures, if any.

Emergency:

When the competent body of a Member State participating in the risk group declares an emergency, it must notify the crisis level within one day to all other Member States in the risk group, and provide information about each measure taken. The competent authority of the declaring Member State updates all other Member States belonging to the risk group on the early warning situation on a daily basis or even several times a day, communicating all adopted or discontinued measures, if any.

In accordance with Article 11(7) of Regulation (EU) 2017/1938 during an emergency, upon a request of the relevant electricity or gas transmission system operator, 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.

8.3. Solidarity among Member States.

The Emergency Plan envisages that the solidarity measure is to be taken as a last resort and only if the requesting Member State has:

- not able to cover the deficit in gas supply to its solidarity protected customers despite the application of the measure referred to in Article 11(3) the Regulation;
- has exhausted all market-based measures and all measures provided in its emergency plan;
- has notified an explicit request to the Commission and to the competent authorities of all Member States with which it is connected either directly or in accordance

with Article 13(2) of Regulation (EU) 2017/1938 via a third country, accompanied by a description of the implemented measures referred to in Article 13(3)(b) of Regulation (EU) 2017/1938;

- undertaken to pay fair and prompt compensation to the Member State providing solidarity in accordance with Article 13(8) of Regulation 2017/1938.

When a Member State has requested the application of the solidarity measure pursuant to Article 13 of the Regulation, a Member State which is directly connected to the requesting State or its competent authority or transmission system operator or distribution system operator, as far as possible without creating unsafe situations, takes the necessary measures to ensure that the gas supply to customers other than solidarity protected customers in its territory is reduced or does not continue to the extent necessary and for as long as the gas supply to solidarity protected customers in the requesting Member State is not satisfied. The requesting Member State shall ensure that the relevant volume of gas is effectively delivered to solidarity protected customers in its territory.

Where there is more than one Member State that could provide solidarity to a requesting Member State, the requesting Member State, after consulting all Member States required to provide solidarity, seeks the most advantageous offer on the basis of cost, speed of delivery, reliability and diversification of supplies of gas. The Member States concerned shall make such offers on the basis of voluntary demand-side measures as much as and for as long as possible, before resorting to non-market-based measures.

Where market-, based measures prove insufficient for the Member State providing solidarity to address the deficit in gas supply to solidarity protected customers in the requesting Member State, it may introduce non-market-based measures in order to comply with the obligations laid down in Article 13(1) and (2) of the Regulation.

The Member State, which has requested solidarity promptly pays, or ensures the prompt payment of, fair compensation to the Member State providing solidarity.

Fair compensation includes all reasonable costs that the Member State providing solidarity incurs from an obligation to pay compensation by virtue of fundamental rights guaranteed by Union law and by virtue of the applicable international obligations when implementing Regulation and further reasonable costs incurred from payment of compensation pursuant to national compensation rules.

9. ANNEXES:

Annex 1: Scheme for announcing crisis level to natural gas companies;

Annex 2: Information flows at Early Warning level between Bulgartransgaz EAD CDD and the gas undertakings under Article 2 of Directive 2009/73;

Annex 3: Information flows at Alert level between Bulgartransgaz EAD CDD and the gas undertakings under Article 2 of Directive 2009/73;

Annex 4: Information flows at Emergency Situation level between Bulgartransgaz EAD CDD and the gas undertakings under Article 2 of Directive 2009/73;

Annex 5.1: National consumption and average temperature (Sofia) for January 2017, 2018 and 2019;

Annex 5.2: Relation between temperature and consumption for January 2017, 2018 and 2019;

Annex 6: Scenarios for limiting the gas supply at the main entry point of the system;

Annex 7: Operational characteristics of UGS Chiren;

Annex 8: Protected customers

DRAWN UP BY:

The working group established by Order No RD-16-457 of 27 August 2018 of the Minister for Energy

23 December 2020

Ministry of Energy

Republic of Bulgaria