Approved	



Emergency Plan

prepared on the basis of art. 8.2.b of the Regulation No 2017/1938 of the European

Parliament and of the Council of 25 October 2017 on measures to safeguard the security of gas

supply and repealing Regulation (EU) No 994/2010

Table of Contents

1.	INTRODUCTION	3
1.1	Advisory body to the Minister of Energy	- 3
2.	DEFINITIONS OF CRISIS STATES AND MEASURES ADOPTED IN INDIVIDUAL CRISIS	_
STATES	5	
2.1	Early warning status	6
2.2	Alert state	_ 8
2.3	Emergency state_	10
3.	SPECIFIC MEASURES IN RELATION TO ELECTRICITY AND DISTRICT HEATING	
SYSTEMS		
3.1	Electricity Sector_	16
3.1	Likely impact of the disruption of natural gas supply on the electricity sector	16
-	Measures introduced and actions taken to mitigate the potential negative impact of supp	
disrupti		•
3.1	1.3 Mechanisms to ensure appropriate coordination, including exchange of information	
betwee	n the electricity and gas transmission system operator	16
3.2	District heating sector	17
3.2	2.1 Likely impact of the disruption of natural gas supply on the system heating sector	. 17
3.2	2.2 Measures introduced and actions taken to mitigate the potential negative impact of supply	
disrupti	ions 17	
4.	AN ENTITY OR MANAGEMENT TEAM IN A CRISIS SITUATION	18
5.	THE ROLE AND OBLIGATIONS OF INDIVIDUAL ENTITIES IN ENSURING THE SECURIT	Υ
OF GAS S	SUPPLY	19
5.1	The role of operators in ensuring the security of gas supply	19
5.2	The role of gas enterprises	
5.2	Use of market — based measures	
5.2	Use of non-market based measures - mandatory gas stocks	
5.2	2.3. Use of non-market measures - restrictions of natural gas consumption	23
5.3	Tasks and role of industrial customers and electricity producers in the event of disruptions in	
natural gas	s supplies	23
6.	MEASURES CONCERNING IMPROPER CONSUMPTION BY CUSTOMERS WHO ARE	
NOT PRO	DTECTED CUSTOMERS	25
7.	EMERGENCY RESPONSE TESTS	26
8.		27
8.1	Regional risk group - Belarus	27
8.:	1.1 Measures adopted in subsequent crisis level	. 27
8.:	1.2 Cooperation mechanisms	. 30
8.:	1.3 Solidarity among Member States	. 31
8.2	Regional risk group - Ukraine	
8.:	2.1 Measures taken in individual crisis situations	
8.:	2.2 Cooperation mechanisms	
8.:	2.3 Solidarity between Member States	
8.:	2.4 Suggestions for assessing the next emergency plan	2/

1. Introduction

This document has been prepared on the basis of art. 8 clause 2 letter b of Regulation of the European Parliament and of the EU Council No. 2017/1938 of October 25, 2017 on measures to safeguard the security of gas supply and repealing Regulation (EU) 994/2010 (hereinafter: Regulation 2017/1938).

The purpose of the document is to present measures and procedures, including information flow schemes and actions taken to counteract, reduce or remove the effects of disruptions in the supply of high-methane natural gas, as well as measures and procedures aimed at preventing disruptions in natural gas supplies in individual crisis situations, i.e. in the early warning, alarm and emergency status.

Due to the supply of the low-calorific gas system exclusively from domestic resources (gas mine) and the dispersed nature of production, the continuity of natural gas supply to customers connected to this system is much less risky than in the case of a high-methane natural gas system. In particular, some of the risks relevant to the high-methane natural gas system, due to the above-mentioned the specificity of the low-calorific gas system can not be considered as threatening this part of the market. Minor failures occurring at operating and technical facilities resulting in disruptions in gas supplies from individual facilities are compensated for by gas coming from accumulation in gas pipelines or by increasing supplies from other resources

Moreover, the document specifies:

- 1. the scope of responsibility for the security of gas supply of market participants and the competent authority (within the meaning of Article 3 (2) of Regulation 2017/1938);
- 2. principles for monitoring the Polish natural gas market;
- 3. defining roles, procedures, available resources, communication schemes between entities in the event of individual crises;
- 4. actions taken by public administration, energy enterprises, transmission system operator, distribution system operators and the storage system operator in each of the crisis situations;
- 5. the role of the competent authority and how to deal with a crisis, including the use of market and non-market measures.

The document is updated every 4 years or more often if it is justified by the relevant circumstances. In connection with the ongoing work on the draft of a new ordinance of the Council of Ministers on the manner and procedure for introducing restrictions on natural gas consumption, the purpose of which is to increase the efficiency of the mechanism for introducing restrictions on natural gas consumption, this Emergency Action Plan will be updated after the entry into force of the Regulation.

1.1 ADVISORY BODY TO THE MINISTER OF ENERGY

The competent authority responsible for ensuring security of gas supply is the Minister of Energy. In order to ensure effective circulation of information and effective response in the event of a crisis in the natural gas sector, the Minister of Energy acts with the

help of the Team for ensuring fuel security of the State (hereinafter referred to as: the Team). This team is an advisory body to the Minister of Energy. The composition and rules of the Team's operation are specified in the Ordinance of the Minister of Energy¹. The team consists of representatives of:

- 1. the Minister of Energy,
- 2. the Government Plenipotentiary for Strategic Energy Infrastructure,
- 3. the President of the Office of Regulation and Energy (hereinafter: President of the ERO),
- 4. the Director of the Government Centre for Security,
- 5. the Head of the Internal Security Agency.

Invited persons who are not members of the Team, whose knowledge and experience can be useful for performing the tasks of the Team, e.g. gas system operators, can participate in the Team's work.

The list of contact details of organizational units participating in anti-crisis activities at each level of the crisis situation is attached to this Plan.

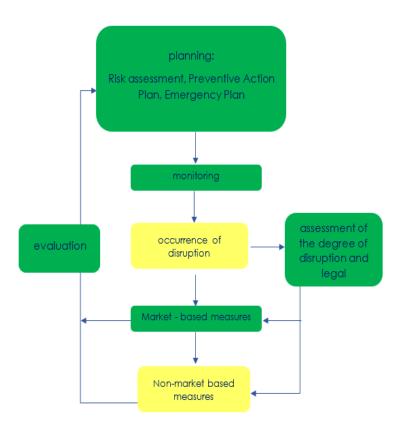
The tasks of the Team include:

- monitoring the current situation in the gas system based on data obtained from the transmission system operator;
- presenting recommendations for the Minister of Energy regarding intervention measures
 at the governmental level in the event of a threat to energy security and disruptions in
 natural gas supplies as well as proposals for optimal intervention measures in a given crisis
 situation, including the justification for introducing one of the crisis states referred to in
 art. 11 paragraph 1 of Regulation No. 2017/1938;
- monitoring the situation on the natural gas market during intervention operations;
- presenting recommendations to the Minister of Energy regarding Poland's application to the European Commission for an announcement of a state of emergency in the natural gas sector on the whole or part of the territory of the European Union;
- after completing the intervention, analysing the gas transmission system operator's report on the crisis, with particular regard to the conclusions contained therein, including proposals to improve procedures and directions of infrastructure development in order to avoid similar events.

¹ https://dziennikurzedowy.me.gov.pl/ year 2019 item 4, 2017 item 2

2. Definitions of crisis states and measures adopted in individual crisis states

Figure 1. Action scheme in the event of an emergency



Market measures on the supply side identify increased flexibility of natural gas imports and commercial storage of natural gas.

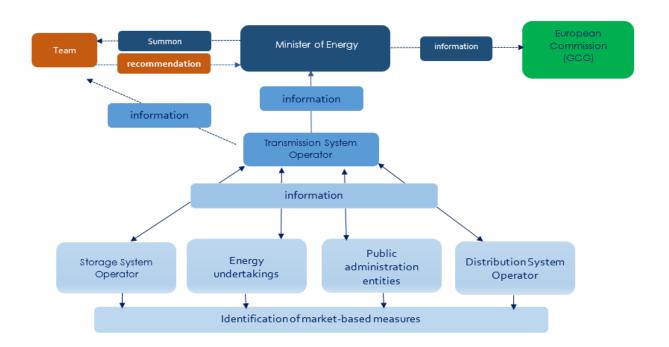
On the demand side, market-based measures include the use of interruptible service contracts, the possibility of switching to other fuels, including the use of alternative fuels in industrial and power plants, and load shedding. The effects and feasibility of a measure depend on the circumstances of the natural gas market, the operation of the system, the duration and timing of the disruption. Nevertheless, the quantitative effects of these market measures on the demand side are relatively small and their role in the context of security of gas supply is local.

The largest contribution to security of natural gas supply lies in non-market based measures, both on the supply side - mandatory stocks and on the demand side - restrictions on the consumption of natural gas on the basis of a gas limitation scheme.

2.1 EARLY WARNING LEVEL

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

Fig 2. Action scheme in the event of an early warning



Action order:

- 1. Energy undertakings engaged in economic activities in the field of natural gas production, as well as natural gas trading undertakings, distribution system operators, the storage system operator or public authorities shall immediately notify via the available communication channels of the transmission system operator of the information about possible interruptions in the supply of natural gas and events that can affect the stability of supply.
- 1.1. The indicated information, in accordance with the entity's property, should contain in particular:
 - a) cause of the threat;
 - b) estimated time until interference occurs;
 - c) expected quantity of natural gas lost as a result of the anticipated event;
 - d) information on any disruptions in the supply of natural gas to protected customers in the event of a disruption;

- e) assessment of the state of emergency along with a request to convene the Team for ensuring fuel security of the State (hereinafter referred to as: the Team);
- f) information on the anticipated effects of market-based activities.
- 2. After receiving the information referred to in point 1, the transmission system operator shall examine the impact of the disruption on the situation in the transmission system and if the situation threatens or can lead to interruptions in the supply of natural gas to the distribution system operator or end user, the transmission system operator, in consultation with competent distribution system operator and trading undertakings, immediately informs the Minister of Energy about the current and future assessment of the situation in the transmission system.
- 3. After becoming aware of an event that can lead to a deterioration of the supply situation, the Minister of Energy can convene a meeting of the Team. After receiving the recommendation from the Team, the Minister of Energy decides whether to enter the state of early warning, in accordance with art. 11 par. 1 letter a of Regulation no. 2017/1938.
- 4. The transmission system operator and distribution system operators in cooperation with energy companies identify all market measures that can be activated and will be effective in a given (anticipated) emergency situation.
- 5. The Minister of Energy informs about the introduction and cancellation of the early warning level the European Commission Gas Coordination Group (hereinafter: GCG), as well as competent authorities of the Member States of the risk groups concerned. If the mandatory stocks of natural gas are maintained outside of Poland, the Minister of Energy shall also inform the competent authorities of a Member State of the European Union or a Member State of the European Free Trade Agreement (EFTA) parties to the agreement on the European Economic Area about the introduction and cancellation of the early warning level and about the natural gas reserves stored in the territory of the abovementioned countries constituting Polish mandatory stocks. The above information is also provided to those from the abovementioned countries that have gas connections with Poland, through which mandatory stock transport can be carried out.
- 6. Information on the introduction of an early warning level is published on the Ministry of Energy's website.
- 7. Decisions on the cancellation of the warning level are taken by the Minister of Energy after consulting the Team.

2.2 ALERT LEVEL

An alert is announced when a supply disruption or exceptionally high natural gas demand occurs that results in significant deterioration of the supply situation, but the market is still able to manage that disruption or demand without the need to use non-market based measures.

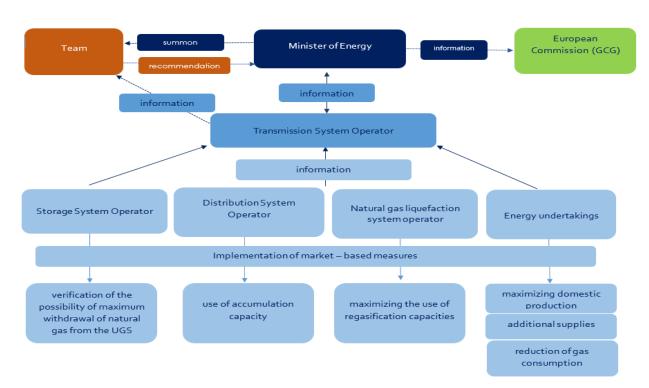


Fig 3. Action scheme in the event of an alert

Action order:

- Energy undertakings engaged in economic activities in the field of natural gas production, as well as natural gas trading undertakings, distribution system operators, the storage system operator or public authorities shall immediately notify via the available communication channels of the transmission system operator of the information about the supply of natural gas and events that affect the stability of supply.
- 2. In the event of events referred to in the definition of an alert status, the Minister of Energy can convene the Team. After receiving a recommendation from the Team, the Minister of Energy decides whether to declare an alert level.
- 3. In the event of an alert being introduced or cancelled, the Minister of Energy publishes this information on the website of the Ministry of Energy and informs GCG as well as the competent authorities of the Member States of the given risk groups. If the mandatory stocks of natural gas are maintained outside of Poland, the Minister of Energy shall also inform the competent authorities of a Member State of the EU or a Member State of the EFTA parties to the agreement on the European Economic Area about the introduction

- and cancellation of the alert status and about the natural gas stocks stored in the territory of the abovementioned countries constituting Polish mandatory stocks. The above information is also provided to those from the abovementioned countries that have gas connections with Poland, through which compulsory stock transport can be carried out.
- 4. In the event of an alert, the Minister of Energy recommends the enterprises should launch market measures in accordance with their procedures. The enterprises are obliged to have procedures in accordance with the Act on Stocks, in the event of a disruption in the supply of natural gas to the gas system, as well as an unforeseen increase in the consumption of the gas by consumers.
- 5. In order to minimize the risks arising from a crisis event:
 - the transmission system operator uses the linepack of the transmission system and the booked capacity and storage capacities,
 - operators of distribution systems use distribution linepack systems and, where
 possible, redirect natural gas between the entry points to the distribution system in
 hydraulically connected areas to relieve the part of the system affected by
 interference,
 - the storage system operator provides information about readiness of underground natural gas storage facilities to use the maximal available withdrawal capacity,
 - the natural gas liquefaction system operator provides information on readiness to maximize the use of regasification capacity,
 - natural gas producers check readiness to maximize natural gas production with mining installations and inform the transmission system operator about results of the checks without delay,
 - natural gas suppliers check the possibility of starting additional supplies of natural gas or reduce the consumption of natural gas by consumers, in accordance with contracts concluded with them (which are not restrictions) and provide information to the transmission system operator,
 - importers of natural gas for own use check capabilities with respect to increasing the
 acquisition of natural gas from other sources and directions, data is transferred,
 without unnecessary delay, to the transmission system operator.
- 6. After introducing the alert level, the Team analyses the situation on an ongoing basis and controls the use of market measures basing on the information provided.
- Decisions on the cancellation of the alert status are taken by the Minister of Energy after consulting the Team.
- 8. In the event of exhaustion of available market measures and no possibility of further crisis response, energy companies dealing in trading in gaseous fuels shall notify of the facts transmission system operator and recipients with whom they concluded natural gas sales contracts.

2.3 EMERGENCY LEVEL

An emergency state is declared in the event of exceptionally high demand of natural gas, significant supply disruption or other significant deterioration of the supply situation and in the event where all relevant market-based measures have been applied but the supply of natural gas is insufficient to meet the remaining gas demand with the result that non-market based measures shall be additionally introduced with a view, in particular, to safeguarding supplies of gas to protected customers

European summon Minister of Energy information Commission Team (GCG) recommendation information Transmission System Operator Energy undertakings Implementation of market-based measures closure of the event insufficient measures TSO assessment TSO request Request of Minister of Energy approval of Minister od Enerav Regulation of the Council of Ministers the introduction of launching mandatory restrictions on gas

Fig 4. Action scheme in the event of an emergency

consumption

stocks of natural gas

Action order:

 In the event of market-based measures do not restore the security of natural gas supply, the Minister of Energy, after receiving a recommendation from the Team, shall decide on the introduction of an emergency level within the meaning of Regulation 2017/1938.

^{*)} If, in the opinion of the transmission system operator, the mandatory stocks do not restore the state of gas security of the state, this operator shall notify the Minister of Energy of the need to introduce restrictions on natural gas consumption.

- 2. The Minister of Energy informs about the introduction and cancellation of the emergency state via the website of the Ministry of Energy and informs GCG as well as the competent authorities of the Member States of the given risk groups. If the mandatory stocks of natural gas are maintained outside of Poland, the Minister of Energy shall also inform the competent authorities of a Member State of the EU or a Member State of the EFTA parties to the agreement on the European Economic Area about the introduction and cancellation of the emergency state and about the natural gas storage in the territory of the abovementioned countries constituting Polish mandatory stocks. The above information is also provided to those from the abovementioned countries that have gas connections with Poland, through which mandatory stocks transport can be carried out.
- 3. After the Minister of Energy introduces an of emergency, energy undertakings conducting economic activity in the field of natural gas production and trading undertakings, the distribution system operator, storage system operator, natural gas liquefaction system operator and gas system users are obliged to follow the instructions of the transmission system operator.
- 4. In the event of an emergency, resulting in a threat to supplies to protected customers, the Minister of Energy can:
 - 1) decide on the release of mandatory stocks of natural gas, at the request of the transmission system operator, constituting a non-market based measure within the meaning of Regulation 2017/1938,
 - 2) if, in the opinion of the transmission system operator, mandatory stocks do not restore the state of gas security in the state, submit a request to the Council of Ministers for the introduction of restrictions on natural gas consumption.
- 5. During an emergency, energy undertakings conducting activities dealing in trading in gaseous fuels and the transmission system operator, according to the scope of their activities, shall inform the Minister of Energy daily by 10:00 on:
 - a) the time, quantities and source of natural gas supplied to the system using nonmarket measures;
 - b) daily forecasts of the demand and supply of natural gas for the next three days;
 - the volume of daily natural gas flow and the percentage of the use of all crossborder entry points and exit points, as well as at all connection points of the production installation, storage installation or LNG terminal to the network in MWh / day;
 - d) the daily level of mandatory stocks of natural gas;
 - e) expressed in days of the period during which, according to estimates, gas supplies to protected customers can be guaranteed;
 - f) measures that the relevant operator or trading enterprise plans to undertake and has already undertaken to mitigate the effects of the emergency, and information on the effectiveness of them;

- g) requests for additional measures to other competent authorities;
- h) measures undertaken at the request of the competent authorities of other Member States.
- 6. The Minister of Energy shall immediately inform about the launch of non-market based measures:
 - EU GCG;
 - competent authorities of EU Member States having gas connections with the Republic of Poland.
- 7. The European Commission verifies, within 5 days of receiving information, whether the introduction of an emergency is justified in accordance with the definition of an emergency, and whether the measures undertaken comply with the actions listed in the emergency plan, and whether they impose an unjustified burden on energy companies.
- 8. The European Commission can, at the request of a competent authority, an energy company or on its own initiative, request a competent authority to modify measures contrary to the conditions set out in art. 11 par. 8 of Regulation 2017/1938. The European Commission can request the competent authority to announce a state of emergency if it considers that its announcement is not or has ceased to be justified.
- 9. Within three days of the notification of the request of the European Commission, the competent authority shall amend the measures taken and inform the European Commission thereof or inform why it does not agree with its request.
- 10. In the absence of consent of the competent authority, the European Commission can, within three days, amend or withdraw its request or convene a meeting of the competent authority or, where applicable, the competent authorities concerned and, if the European Commission deems it appropriate, the EU GCG shall provide detailed the justification for the change request.
- 11. The competent authority shall take into account the position of the European Commission. If the final decision of the competent authority deviates from the position of the European Commission, the competent authority shall provide reasons for its decision.
- 12. The decision to cancel an emergency is taken by the Minister of Energy after the Team's recommendation.
- 13. The Minister of Energy immediately informs EU GCG about the cancellation of an emergency.
- 14. After the cancellation of an emergency, the transmission system operator, basing on information from cooperating system operators and interested market participants, prepares a crisis report with particular emphasis on the conclusions, possibilities for improving crisis procedures and directions of infrastructure development to avoid similar events. The transmission system operator submits the report and conclusions to the Minister of Energy.

The procedure of launching mandatory stocks of natural gas

- 1. The transmission system operator applies to the Minister of Energy for permission to release mandatory stocks.
- 2. The Minister of Energy examines the application for the release of mandatory stocks and gives consent by way of a decision when all market-based measures have been exhausted, but the supply of natural gas is still insufficient to meet the remaining demand for natural gas.
- 3. After obtaining the consent of the Minister of Energy, the transmission system operator starts deliveries from the mandatory stocks of natural gas.
- 4. The transmission system operator informs the storage system operator about the launch of mandatory stocks of natural gas kept on the territory of the Republic of Poland, while the mandatory stocks of natural gas kept outside the territory of the Republic of Poland energy undertakings operating in the field of trade in natural gas abroad and the entity importing natural gas, which maintain the stocks, at the latest on the day of releasing the stocks.
- 5. In the event of launching mandatory stocks, the above-mentioned entities, upon receiving the information referred to in clause 4, shall deliver natural gas to the gas system in quantities and on the date specified by the transmission system operator.
- 6. The transmission system operator provides the Minister of Energy and the President of the Energy Regulatory Office with information on the date and quantity of mandatory stocks released and storage facilities from which they were withdrawn, as well as energy undertakings from which they were offtaken after the end of each gas day in which mandatory stocks were released.
- 7. An energy undertakings which engages in economic activity in the field of natural gas imports and gas system users are obliged to follow the instructions of the transmission system operator.

The procedure for introducing restrictions on natural gas consumption

- 1. Transmission system operators, distribution system operators and adjacent system operators are required to develop restriction plans.
- 2. The implementation of restrictions on the consumption of natural gas is only allowed after exhaustion by energy undertakings engaged in economic activity in the field of natural gas trading abroad, entities importing natural gas and entities commissioning the provision of natural gas transmission or distribution services, all available market-based measures to meet the needs of customers for natural gas.
- 3. If, in the opinion of the transmission system operator, the activities of energy undertakings specified in the procedures and the activation of mandatory stocks of natural gas do not result in the restoration of fuel security in natural gas, on its own

- initiative or on the basis of information obtained from energy undertakings, it shall notify the Minister of Energy of the need to introduce restrictions in natural gas consumption.
- 4. On the basis of a notification from the transmission system operator or on its own initiative, the Minister of Energy draws up an request to the Council of Ministers for the introduction of restrictions on natural gas consumption.
- 5. Restrictions on natural gas consumption are introduced by way of a regulation of the Council of Ministers. The restrictions are introduced for a definite period of time, on the entire territory of the Republic of Poland or part of it, in accordance with previously approved plans for introducing restrictions and the significance of customers for the economy and functioning of the state, in particular the tasks performed by the customers.
- 6. The Minister of Energy shall immediately inform the European Commission, the Member States of the European Union and the Member States of the European Free Trade Agreement (EFTA) parties to the agreement on the European Economic Area about the introduction of restrictions.

Tasks of the transmission system operator during the restrictions

During the restrictions on natural gas consumption, the gas transmission system operator:

- fulfils the obligations related to the introduction of restrictions by setting and publicizing the supply degree, in accordance with the plans for introducing restrictions;
- coordinate the activities of energy undertakings, other gas system operators and storage system operators in order to ensure the security of the gas system and the implementation of the restrictions imposed;
- in coordination with the storage system operator, exercise control over the full capacity and available volume of natural gas storage facilities connected to the gas system.

Actions after introducing restrictions if the threats are not removed

- In case of events as a result of which the market and non-market activities used have not resulted in removing the threat to the fuel security of the state, the safety of persons and the risk of significant material losses, the gas transmission system operator, in consultation with trading companies or on its own initiative, shall immediately notify the Minister of Energy.
- 2. The notification shall contain in particular a description of:
 - a. events and their impact on the country's fuel security in the field of natural gas supply;
 - b. actions taken to eliminate the effects of events;
 - c. proposed measures that can be applied by the European Commission.

- 3. The Minister of Energy may request the Council of Ministers to adopt actions which shall involve:
 - a. the notification of the chairman of the Gas Coordination Group of the European Commission of the occurrence of the events referred to above, or
 - b. the submission of a request to the European Commission to convene a meeting of the Gas Coordination Group.
- 4. In the event of natural disasters or technical failures the consequences of which endanger the life or limb of a substantial number of individuals, property of substantial value or natural environment within a substantial territory, the Council of Ministers may, by way of a regulation, announce a state of natural disaster, either of its own initiative or at the request of the competent province governor pursuant to art. 5 of the Act on the state of natural disaster (Journal of Laws of 2002 No. 62 item 558)
- 5. In the event of a severe threat to the constitutional system of the state, the security of citizens or public order, the Council of Ministers may adopt a resolution requesting the President of the Republic of Poland to announce state of emergency pursuant to art. 2 clause 1 of the Act on Emergency (Journal of Laws of 2002, No. 117, item 985).

3. Specific measures in relation to electricity and district heating systems

3.1 ELECTRICITY SECTOR

Total gross achievable capacity of electricity generation sources using natural gas connected to the National Power System (hereinafter: NPS) is 2,123 MW, which is 4.56% of the gross maximum capacity of all generation sources connected to the NPS.

3.1.1 Likely impact of the disruption of natural gas supply on the electricity sector

Under certain operating conditions of the NPS or parts thereof, e.g. in the event of high demand for power in the NPS, low generation in the NPS (emergency stops of generating sources, low generation of renewable energy sources, in particular wind farms), limited import possibilities or area problems with ensuring power network operation parameters, availability of power from generating sources using natural gas may be of significant importance for ensuring security of electricity supply in the NPS.

In addition, it should be noted that interruptions in the supply of natural gas to consumers in the autumn and winter period can, and in the winter - will cause a significant increase in demand for electricity, in connection with its use for heating purposes as a substitute for gas heating.

3.1.2 Measures introduced and actions taken to mitigate the potential negative impact of supply disruptions

In connection with the growing importance of generating sources that use gaseous fuels to generate electricity, in ensuring the secure operation of the power system, including ensuring the supply of electricity, cooperation has been initiated between the operators of the electricity and gas transmission systems.

One of the areas of cooperation of the above operators is mitigating the potential negative impact of introducing restrictions on the consumption of natural gas to consumers to ensure the supply of electricity in the country.

Pursuant to the current Regulation of the Council of Ministers of 19 September 2007 on the method and procedure for introducing restrictions on natural gas consumption, the restrictions may not cause damage or destruction of technological facilities as well as disruptions in the functioning of entrepreneurs and facilities in the scope of performing tasks related to the production and supplying electricity to household consumers.

3.1.3 Mechanisms to ensure appropriate coordination, including exchange of information between the electricity and gas transmission system operator

Given the importance of exchanging information between the main players in the natural gas and electricity sector, in particular in the event of crises, the operators of the electricity and gas transmission system have formalized their cooperation by concluding an appropriate cooperation agreement in September 2018. The goal of the established cooperation is to coordinate activities and exchange knowledge between these entities in the field of:

- development of electricity and gas systems, in particular development plans;
- development of the electricity market and natural gas market, in particular the mechanisms for technical and commercial balancing of electricity and gas systems;
- operating electricity and gas systems, in particular in the scope of exchange of traffic information during the normal operation of both systems and in periods of threat to the supply of electricity or natural gas.

3.2 DISTRICT HEATING SECTOR

Licensed heating companies have a diversified and fragmented technical infrastructure. In 2017, the total heat capacity installed at licensed heat generators was 54,911.8 MW and the achievable capacity - 53,639.5 MW. In 2017, 38 582 336.4 GJ of heat was generated from natural gas, which accounts for 8.53% of total heat production in licensed enterprises.

3.2.1 Likely impact of the disruption of natural gas supply on the system heating sector

Possible disruptions in the supply of natural gas, depending on the period (summer / winter) and the availability of additional sources fired with other fuels (e.g. peak boilers), may cause disturbances in the continuity of heat supply to end users. The continuity of natural gas supply is therefore an important element in ensuring energy security for consumers with regard to heating buildings, in particular during the heating season at low outside temperatures.

3.2.2 Measures introduced and actions taken to mitigate the potential negative impact of supply disruptions

As in the case of the electricity sector, in accordance with the current Regulation of the Council of Ministers of 19 September 2007 on the method and procedure for introducing restrictions on natural gas consumption, restrictions on natural gas consumption may not cause damage or destruction of technological facilities as well as disruptions in functioning of entrepreneurs and facilities in the scope of performing tasks related to the generation and supply of heat to household consumers.

4. An entity or management team in a crisis situation

The Minister of Energy, acting as the competent authority responsible for ensuring security of gas supply:

- monitors and analyzes the situation regarding the security of gas supply;
- 2. coordinates the activities of all entities in the event of a crisis;
- 3. announces the introduction of individual crisis levels;
- 4. expresses consent to the use of non-market based measures (mandatory stocks) in the event of an emergency, within the meaning of Regulation 2017/1938;
- 5. submits an application to the Council of Ministers for the introduction of restrictions in the natural gas consumption by way of an applicable regulation for specific periods of time within the territory of the Republic of Poland or part thereof in the event of an emergency, within the meaning of Regulation 2017/1938;
- remains responsible for the communication with the European Commission and provides
 it with information on the application of both market-based and non-market-based
 measures for the purposes of correct verification of the announcement of an emergency
 state;
- 7. the representative of the Minister of Energy participates in the sessions of the Gas Coordination Group of the European Commission and ensures the exchange of information between the European Commission and the Ministry of Energy.

5. The role and obligations of individual entities in ensuring the security of gas supply

5.1 THE ROLE OF OPERATORS IN ENSURING THE SECURITY OF NATURAL GAS SUPPLY

The rules of conduct in the event of a threat to the state's fuel security in the field of natural gas and the need to fulfil international obligations are regulated in Chapter 6 of the Act of 16 February 2007 on stocks of crude oil, petroleum products and natural gas, and the principles of conduct in the event of a threat to the state's fuel security and disturbances on the oil market (hereinafter: the Act of Stocks). According to the above by law, the tasks of the transmission system operator include:

- performing consultations on the procedures to be applied in the event of emergency and the collection of such procedures;
- 2. the collection of information on preventive measures adopted by other market participants;
- 3. the performance of actions aimed at restoring the correct functioning of the system;
- 4. verifying the technical capacity to deliver mandatory stocks of natural gas within no more than 40 days from domestic storage facilities and from foreign storage facilities, respectively, taking into account the capacity to transport natural gas outside the borders of the Republic of Poland to the domestic transmission system;
- 5. monitoring the use of booked capacities for the delivery of mandatory stocks maintained outside the territory of the Republic of Poland;
- 6. in the event of a crisis, the obligation to provide the Minister of Energy with reports on the situation in the transmission system on a daily basis;
- 7. informing energy undertakings on the need to release mandatory stocks of natural gas and on the procedure for such release;
- 8. the release of mandatory stocks of natural gas with the consent of the Minister of Energy;
- g. the notification of entities commissioning transmission or distribution services on the release of compulsory stocks in order to ensure the supply of gas to such entities;
- 10. collecting information on the owners and quantities of gas withdrawn from storage facilities;
- 11. the notification of the of Energy and the President of the ERO of the dates of release of mandatory natural gas stocks and the quantities of gas released;
- 12. the notification to the Minister of Energy of the need to impose restrictions on the consumption of natural gas;
- 13. the development, verification and updating of plans of restrictions on the consumption of natural gas;
- 14. implementation of obligations related to the introduction of restrictions;
- 15. the coordination of activities of energy undertakings;

- 16. during the period in which restrictions on the consumption of natural gas remain in force exercising control over the full capacity of storage installations;
- 17. collecting information on the consumption of natural gas by customers covered by restriction plans.

Detailed regulations pertaining to the balancing of the gas system as well as the management of restrictions are contained in the Regulation of the Minister in charge of economy of 2 July 2010 on the detailed conditions of gas system operation. The main duties of the operator shall include:

- transmission system balancing;
- 2. maintaining additional quantities of gaseous fuel in storage facilities for the purposes of compensating for any deficits;
- 3. performing actions aimed at the stabilization of operations of the transmission system;
- 4. conducting network traffic;
- 5. planning technical possibilities to cover the demand of customers;
- 6. preventing and eliminating malfunctions or threats to the safe functioning of the gas network.

In the event of a sudden, unexpected damage to, or destruction of, facilities, installations or networks resulting in an interruption in their use or the loss of characteristics thereof which threatens the security of functioning of the gas system, the gas system operator shall, in cooperation with energy undertakings as well as other gas system operators, take the steps necessary to ensure or restore the proper functioning of the system in question, including, in particular, the activities specified in the Network Operation and Maintenance Manual, which shall include utilization of the storage capacity of the transmission system;

- use of storage capacities reserved by the transmission system operator for balancing purposes;
- the implementation of procedures for the release of additional supplies of natural gas;
- the cooperation with other entities in the event of a threat to energy security.
 In addition, both the transmission system operator and distribution system operators are required to develop plans to introduce restrictions on natural gas consumption:
- abovementioned plans specify the maximum hourly and daily quantities of natural gas consumption by individual customers connected to their network, for individual supply stages;
- 2. the transmission system operator and distribution system operators inform customers about the maximum quantity of natural gas consumption specified in the plan for each supply stage. These amounts become an integral part of sales contracts, contracts for the provision of natural gas transmission or distribution services and comprehensive contracts;
- 3. customers covered by the plans inform the relevant operator to which networks they are connected, by July 31 of each year, of the minimum amount of natural gas consumption

of which does not pose a threat to the safety of persons and damage or destruction of technological facilities, and corresponds to the maximum permitted consumption of natural gas in the 10th degree power. The amount of natural gas specified in the information can be verified by operators based on data on the previous consumption;

- 4. the plans should include data on natural gas consumption by customers, including protected customers, and the method of supplying gas in accordance with the current Risk Assessment and the current Preventive Action Plan;
- 5. If it is not possible to supply some of the protected customers after the scenario identified in the current Risk Assessment occurs, the transmission system operator shall submit recommendations to the competent authority for the cyclical Preventive Action Plan;
- 6. the operators update annually plans to introduce restrictions and submit them, by November 15 of a given year, to the President of the Energy Regulatory Office for approval by decision.

In addition, the transmission system operator prepares the "National plan of the transmission network operator in crisis situations in the natural gas sector" (hereinafter the National Plan). This document integrates developed procedures and plans (including plans for introducing restrictions)) other operators and enterprises and is formed on the basis of information provided by: distribution system operators, storage system operator, natural gas liquefaction system operator, energy company carrying out economic activity in the field of natural gas trading abroad, entity importing natural gas and entities commissioning the provision of transmission services or distribution of natural gas. Energy companies are required to agree procedures and plans (including plans for introducing restrictions) with the transmission system operator. The transmission system operator verifies the procedures reported by natural gas market participants in terms of the technical capabilities of the gas system. The national plan is submitted for approval to the Minister of Energy.

The national plan includes, among others:

- the procedure to be followed in the event of a disruption of natural gas supply, in particular an unforeseen increase in natural gas consumption by customers, with disruptions in natural gas supply, an emergency situation in the customer's or supplier's installation to the Transmission Service Provider (Shipper);
- accurate estimation of the amount of natural gas consumed by protected customers;
- 3. the possibility of switching to alternative fuels by some customers connected to the transmission and distribution networks;
- 4. developing a detailed safety net of identified threats,
- 5. analyzing the work of the network in cases of individual crisis scenarios;
- 6. estimation of the amount of natural gas necessary to supply only protected customers in accordance with the supply standard (Article 6 (1) of Regulation 2017/1938);
- 7. estimation of the amount of natural gas not delivered to final customers, with particular regard to protected customers in the event of a crisis.

² The National Plan is a classified document and is not subject to publication.

³ Integrates market and non-market measures.

5.2 THE ROLE OF GAS ENTERPRISES

5.2.1 Use of market – based measures

All energy companies selling natural gas on the territory of the Republic of Poland are obliged to take measures to ensure the supply of natural gas to all their customers, in particular those belonging to the category of protected customers, in each of the following cases:

- extreme temperatures over a seven-day period of peak demand for natural gas,
 occurring with statistical probability once every 20 years,
- a period of 30 days of extremely high demand for natural gas, occurring with a statistical probability of once every 20 years,
- occurrence of a disruption in the operation of the largest single gas infrastructure in average winter conditions - for a period of 30 days

An energy enterprise carrying out economic activity in the field of natural gas trading abroad, an entity importing natural gas and entities commissioning the provision of natural gas transmission or distribution services, are required to have procedures (in accordance with Article 49 of the Act on Stocks) applicable in the case of:

- occurrence of disruptions in the supply of natural gas to the gas system;
- unforeseen increase in natural gas consumption by consumers.

The operating procedures shall specify in particular the way:

- starting additional supplies of natural gas from other sources or directions;
- reducing the consumption of natural gas by consumers, in accordance with the agreements concluded with them (trade restrictions).

In the event of a threat of disruptions in the supply of natural gas to the gas system or an unforeseen increase in its consumption by customers, the trading company and entities ordering the provision of natural gas transmission or distribution services shall take the market actions specified in the above-mentioned procedures in accordance with the National Plan of the transmission network operator in crisis situations in the natural gas sector.

After taking all measures to meet the needs of its customers for natural gas, the above entities notify:

- gas system operator about the occurrence of disruptions in the supply of natural gas to the gas system or an unforeseen increase in consumption and measures taken to ensure the supply of natural gas to its customers or the inability to ensure this security in a timely manner;
- recipients with whom natural gas sales contracts have been concluded, through the
 available means, on the occurrence of the abovementioned events and their impact on
 the security of gas supply and on actions taken to eliminate the effects of these events.

5.2.2 Use of non-market based measures - mandatory gas stocks

Energy companies carrying out economic activity in the field of natural gas trading abroad and entities importing natural gas are required to maintain mandatory stocks of natural gas in order to minimize the effects of:

- 1. threats to the state's fuel security;
- 2. emergency situation in the gas network;
- 3. unforeseen increase in natural gas consumption.

Mandatory stocks of natural gas are the assets of the abovementioned enterprises, unless they constitute, on the basis of a concluded contract, the assets of the entity accepting the order to maintain mandatory stocks. Mandatory stocks of natural gas are maintained at a level corresponding to at least a 30-day average daily import of this gas, in storage installations whose technical parameters ensure that their total quantity can be delivered to the gas system over a period of not more than 40 days.

5.2.3. Use of non-market measures - restrictions of natural gas consumption

Restrictions on natural gas consumption consist in limiting the maximum hourly and daily natural gas consumption on the territory of the Republic of Poland or part of it, they may be introduced for a specified period. Restrictions are implemented in accordance with restriction plans and do not apply to household gas consumers. Restrictions on natural gas consumption may be introduced in accordance with art. 54 of the Inventory Act in the case of:

- 1. threats to the country's fuel security,
- 2. unforeseen increase in natural gas consumption by consumers,
- 3. occurrence of disturbances in natural gas imports,
- 4. failures in the networks of gas system operators,
- 5. threats to the security of gas networks,
- 6. threats to the safety of persons,
- 7. threat of material losses,
- 8. the need for the Republic of Poland to meet its international obligations.

Restrictions must not cause:

- 1. threats to the safety of persons and damage to or destruction of technological facilities,
- 2. disruptions in the functioning of institutions, entrepreneurs and facilities in the performance of tasks related to:
 - a) national security or defence,
 - b) Healthcare,
 - c) education,
 - d) production and supply of electricity and heat to household consumers,
 - e) environmental Protection.

5.3 TASKS AND ROLE OF INDUSTRIAL CUSTOMERS AND ELECTRICITY PRODUCERS IN THE EVENT OF DISRUPTIONS IN NATURAL GAS SUPPLIES

All industrial customers shall complete specific tasks in order to take measures to ensure the supply of natural gas to customers protected in a crisis.

Industrial gas customers are required to cooperate with the relevant transmission or distribution system operator to which their networks are connected in drawing up plans for

introducing restrictions and provide by 31 July each year information on the minimum amount of natural gas consumption of which does not endanger the safety of persons or damage or destruction of technological facilities (which corresponds to the maximum allowed consumption of natural gas in the 10th power stage). The amount of natural gas specified in the information can be verified by operators based on data on past consumption.

Industrial customers are required to comply with restrictions on natural gas consumption as they apply. The maximum amount of natural gas that consumers can collect at the time of restrictions are imposed on natural gas consumption is an integral part of sales contracts, contracts for the provision of transmission, distribution or comprehensive contracts.

In addition, industrial customers purchasing natural gas for their own use, as well as entities commissioning the provision of natural gas transmission or distribution services should also have procedures in place in the event of a disruption in the supply of natural gas to the gas system and unforeseen increases in gas consumption.

Due to the small share of natural gas in electricity production (approx. 6%), the above study omitted the creation of special procedures for electricity producers.

6. Measures concerning improper consumption by customers who are not protected customers

The measure introduced to prevent the unauthorised off-take of natural gas by customers who are not protected customers (during the emergency period) are restrictions on natural gas consumption. It is a non-market measure, used when all available means to meet the needs of customers for natural gas have been exhausted.

Based on Article. 63 section 1 point 11 of the Act of Stocks, anyone who does not comply with restrictions on natural gas consumption is subject to a financial penalty. The amount of the fine is determined depending on the amount of natural gas consumed in the period of exceeding the power resulting from the introduced restrictions. The power overrun is calculated as follows:

- 1) in the case of exceeding the hourly power as the product of the maximum power registered by the measuring system, over the power resulting from the introduced restrictions, the number of hours in the month in which the restrictions applied, and four times the fixed fee rate for the transmission service for a given tariff group to which the customer would be qualified on the basis of the power determined for that customer in the first power supply stage;
- 2) in the event of exceeding the hourly and daily power as a product of the maximum power registered by the measuring system, over the power resulting from the introduced restrictions, the number of hours in the month in which the restrictions applied, and eight times the fixed fee rate for the transmission service for a given tariff group, to which the customer would be qualified on the basis of the power determined for that customer in the first stage of supply.

At present, work is underway on a draft of a new ordinance of the Council of Ministers on the method and procedure for introducing restrictions on natural gas consumption. The purpose of this work is to increase the efficiency of the mechanism for introducing restrictions on natural gas consumption by:

- limiting the offtake of a larger group of customers, i.e. all who were not qualified as protected recipients;
- introduction of the Polish definition of 'protected customer' notified on 19 February 2018 to the European Commission, which is not subject to restrictions;
- redefining supply levels and the rules for determining them separately for customers whose connection power is greater than or equal to 5.5 MWh / h and for customers with a smaller connection capacity, so that as a result savings in gas consumption can be achieved natural gas, which will guarantee the fuel security of the state;
- clarifying the method of announcing the applicable power levels, in particular by introducing the obligation to make them public 10 hours in advance;
- use for determining degrees of values expressed in energy units.

7. Emergency response tests

The Minister of Energy has an initiative role in organizing emergency response tests (hereinafter: response tests). Response tests take place at least once every 4 years, and their date and entity responsible for their organization is set by the Minister of Energy.

The response test scenario should be prepared in a small expert group and is not disclosed until the test is carried out to its participants. The scenario assumes a series of events grading potential problems in the operation of gas systems up to the event requiring the launch of an emergency, i.e. until the objective need to launch non-market measures. It is also acceptable to assume a catastrophic scenario that will immediately lead to an emergency.

As part of the scenario preparation, identify the main entities that should participate in the test (stakeholders).

The response test scenario assumes variants of the simulation depending on the decisions taken by its participants.

The response test scenario is subject to approval by the Minister of Energy, and the entities indicated in the test (stakeholders) are required to participate in it.

For the implementation of the response test, communication mechanisms and means should be clearly defined to clearly separate test messages from actual communication between stakeholders.

The test should be carried out in conditions as close as possible to real conditions. The use of "virtual time" for slow-changing processes over time is allowed. For the test phase in which decisions are made, "virtual time" should be equal to real time. During tests, avoid formulating assessments or conclusions. It is advisable to define the functions of observers not involved in the tests in order to record events, decisions, procedures and instructions used and to identify facts that occur during response tests.

The first response tests will be carried out no later than one year from the date of adoption of this emergency plan.

After carrying out the response test, a summary phase of the results obtained from it should be provided. Summary of conclusions, schedule of events and recommendations after the test should be presented by the entity responsible for the test in the final report to the Minister of Energy.

The transmission system operator, distribution system operators as well as storage system operators are required to conduct at least once a year response tests in the form of practical tasks or staff simulations for failure scenarios of key elements of managed infrastructure. Depending on the needs of the scenario, such tests may take place in cooperation with entities that may be affected by the effects of potential interference or which may have an impact on minimizing the effects of events.

Reports and conclusions from conducted tests are required to be submitted to the Minister of Energy.

8. Regional dimension

This Emergency Plan contains first implementation of cooperation mechanisms at the regional dimension. In order to ensure that Member States belonging to the risk group have access to information that will enable them to prevent or respond to potential gas supply disruptions when they occur, an efficient system of communication and information exchange between the Competent Authorities of the Member States belonging to the risk group was established.

8.1 REGIONAL RISK GROUP - BELARUS

8.1.1 Measures adopted in subsequent crisis level

Early warning level:

The Competent Authority of a Member State which declared an early warning should immediately inform all other Member States belonging to the risk group about this declaration, as well as every measure implemented, or intended to be implemented, in order to deal with the effects of supply disruption.

This level is triggered when there is concrete, serious and reliable information that an event which is likely to result in significant deterioration of the gas supply situation may occur and is likely to lead to the alert or the emergency level being triggered.

The Competent Authority should report any changes in the situation in gas system with indicating all measures adopted or ceased, if any.

Alarm level:

The Competent Authority of a Member State which declared an alert level should immediately inform all other Member States belonging to the risk group about this declaration as well as every measure implemented or intended to be implemented in order to deal with the effects of supply disruption.

The market is still able to manage that disruption or demand without the need to resort to non-market-based measures.

The Competent Authority should report any changes in the situation in gas system with indicating all measures adopted or ceased, if any.

Emergency level:

The Competent Authority of a Member State which declared an emergency level should immediately inform all other Member States belonging to the risk group about this declaration as well as every measure implemented or intended to be implemented in order to deal with the effects of supply disruption.

The Competent Authority should report any changes in the situation in gas system with indicating all measures adopted or ceased, if any. 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.

According to art. 11 paragraph 7 of Regulation 2017/1938 during an emergency, at the request of an appropriate electricity or natural gas transmission system operator, a Member

State may decide to give priority to the supply of natural gas to certain critical gas-fired power plants relative to the supply of natural gas to certain categories of protected customers. Accordingly, the following table summarizes the list of Polish critical gas-fired power plants and combined heat and power plants together with the annual consumption of natural gas by these power plants.

Table 1. Natural gas consumption by power plants and combined heat and power plants

Name of the power plant	Achievable electrical power [MW]	Annual gas consumption mcm	Fuel Type
Power plant Płock	630	750.5	High-methane natural gas
Power plant Włocławek	485	469.3	High-methane natural gas
Power and heat plant Wrotków	231	237.1	High-methane natural gas
Power and heat plant Gorzów (TG8)	54-5	n/a1	High-methane natural gas and low- calorific natural gas
Power and heat plant Gorzów 2	138	344.6	High-methane natural gas and low- calorific natural gas
Power and heat plant Rzeszów	101	103.4	High-methane natural gas
Power and heat plant Nowa Sarzyna	128.9	165	High-methane natural gas
Power and heat plant Toruń	100.6	121.3	High-methane natural gas
Power and heat plant Zielona Góra	188	356.5	Low-calorific natural gas

¹⁾ The TG8 unit acts as a reserve unit and is not intended for production until 2021.

The quick and efficient exchange of information between Competent Authorities of Member States belonging to a risk group is a key element in dealing with the potential consequences of supply disruptions in such a diverse region.

Non-market based measures in Belarus Risk Group:

Poland:

The act on stocks of crude oil, petroleum products and natural gas, and the rules of conduct in circumstances of a threat to the fuel security of the State and disruptions on the petroleum market (Journal of Laws of 2018, item 1323, as amended) specifies the main obligations of public services related to ensuring the security of supplies.

Mandatory gas stocks

Energy undertakings which engage in economic activities involving import of natural gas into Poland shall be under an obligation to maintain mandatory gas stocks in order to ensure the security of supply of Poland as well as to minimize the consequences of the malfunctions of the gas network or the unexpected increase in the consumption of natural gas. Mandatory gas stocks are to be maintained in a quantity which corresponds to at least 30 days of average daily import. The technical parameters of the storage facilities in which the stocks are stored must ensure that the stocks can be withdrawn within a period not exceeding 40 days.

Gas limitation scheme

Restrictions on the consumption of natural gas may be introduced for specific periods of time within the territory of Poland. Such restrictions involve limiting the maximum hourly and daily consumption of natural gas to the specific group of customers. Pursuant to art. 58.4 of the Act on Stocks restriction plans shall not be applicable to household natural gas consumers.

Belgium:

After the application of the market-based measures of the Early Warning and Alert levels, the TSO may use the following measures, in the stated order when possible:

- 1. Suspension of the trading right of causing grid users
- 2. Interruption of interruptible capacity of exit Interconnection Points
- 3. Interruption of interruptible capacity of blending and quality conversion installations
- 4. Interruption of interruptible capacity to power plants or industrial customers
- 5. Imbalance constraint on firm capacity on exit Interconnection Points
- 6. Constraint on firm capacity of quality conversion installation

incident(s) and the impact of the measures on the system integrity.

- 7. Enforced storage withdrawal
- 8. Constraint on firm capacity to power plants or industrial customers

 Measures 2 to 8 constitute the shut-off plan. This shut-off plan may be applied on the
 whole transmission network or only on parts thereof, taking into account the location of the

Federal Republic of Germany:

In Germany, non-market based measures are responsibilities of public administration and are fixed in German law as named EnSiG (Energy Security Law) and GasSV (decree of Gas security). The non-marked based measure are identical with the measures listed in Annex VIII of the Regulation (EU) 2017/1938.

Netherlands:

At the moment, there are no non-market based measures in The Netherlands. These measures may be introduced in the near future given the situation with regard to the earthquakes in the Groningen field and theirs impact on the inhabitants of the Groningen field and may include the interruption of the gas supply to non-protected customers.

8.1.2 Cooperation mechanisms

8.1.2.1 Regional Coordination System for Gas (ReCo System)

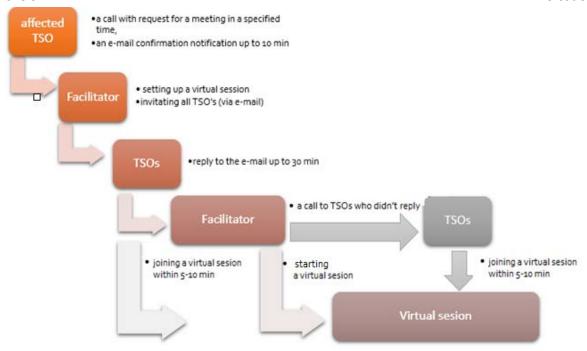
In accordance to Article 3.6 of Regulation (EU) 2017/1938, the role of the Regional Coordination System for Gas (ReCo System for Gas), established by ENTSOG and composed of standing expert groups, for cooperation and information exchange between transmission system operators in the event of a regional or EU emergency, is considerably high.

The transmission system operators (TSO) shall cooperate and exchange information including gas supply flows in a crisis situation using the Regional Coordination System for Gas (ReCo System for Gas) established by ENTSOG.

All ReCo teams operation procedures can be accounted as emergency measures.

The ReCo Team East was launched in November 2017 and Open Grid Europe (a German TSO) was appointed as facilitator until November 2019 The role of the facilitator is to be the first TSO to contact in case of an emergency and to activate the communication flowchart.

The following flowchart presents the way of information exchange in the event of a crisis



8.1.2.2 Adjacent procedures

In order to have access to full information on the current situation in the gas system, the competent authorities of all Member States belonging to the risk group should prepare

appropriate procedures for gathering information from all gas system operators and also from market participants if the need arises.

8.1.3 Solidarity among Member States

If a Member State is unable to cover the deficit in gas supply to its solidarity protected customers despite it has exhausted all market-based measures and all other measures provided in the Emergency plan, in line with the provisions of article 13 of the Regulation (EU) 2017/1938, the Competent Authority of this Member State is permitted to request the use of solidarity mechanism by notifying an explicit request to the Commission and to Competent Authorities of all Member States with which it is connected either directly or via a third country.

The Competent Authority should also, without delay, inform Competent Authorities of all Member States belonging to the risk group about the notified request.

The aim of the arrangement is to allow for a broad review and discussion of the range of barriers in individual Member States that may hinder the implementation of the solidarity mechanism, as well as a discussion on possible ways of removing these barriers and the shape of an intergovernmental agreement that will enable the solidarity mechanism to function. An analysis of the comments made by Member States on the draft intergovernmental agreement is currently underway. The next step is to present an updated version of the draft intergovernmental agreement for further discussion.

8.2 REGIONAL RISK GROUP - UKRAINE

8.2.1 Measures taken in individual crisis situations

All the measures listed below are essentially information requirements useful to all Member States belonging to the risk group to react to unexpected situations in order to prevent the expansion of the crisis and to help the Member States in need to all the possible extent.

Early warning status:

When the Competent Authority of one of the Member State belonging to the risk group declares an early warning it has to communicate this declaration within one day to all the other Member States belonging to the risk group as well as every measure implemented.

The Competent Authority of the declaring Member State shall update all the other Member States belonging to the risk group about the early warning situation every four work days communicating all measures adopted or ceased, if any.

Alarm state:

When the Competent Authority of one of the Member State belonging to the risk group declares an alarm it has to communicate this declaration within one day to all the other Member States belonging to the risk group as well as every measure implemented.

The Competent Authority of the declaring Member State shall update all the other Member States belonging to the risk group about the early warning situation every two work days communicating all measures adopted or ceased, if any.

Emergency:

When the Competent Authority of one of the Member State belonging to the risk group declares an emergency it has to communicate this declaration within one day to all the other Member States belonging to the risk group as well as every measure implemented.

The Competent Authority of the declaring Member State shall update all the other Member States belonging to the risk group about the early warning situation every day or even several time within the day, if the case, communicating all measures adopted or ceased, if any.

According to art. 11 paragraph 7 of Regulation 2017/1938 during an emergency, at the request of an appropriate electricity or natural gas transmission system operator, a Member State may decide to give priority to the supply of natural gas to certain critical gas-fired power plants relative to the supply of natural gas to certain categories of protected customers. Accordingly, the following table summarizes the list of Polish critical gas-fired power plants and combined heat and power plants together with the annual consumption of natural gas by these power plants.

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¹⁾ The TG8 unit acts as a reserve unit and is not intended for production until 2021.

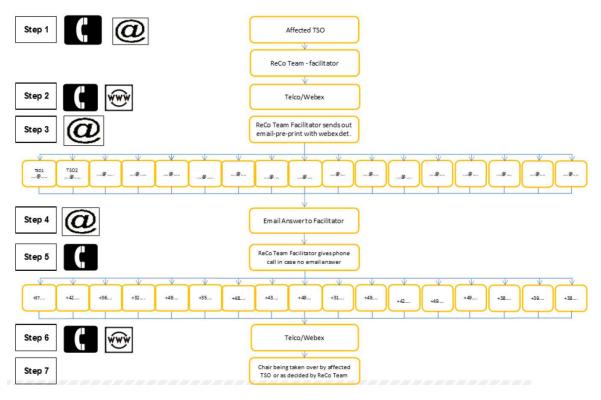
8.2.2 Cooperation mechanisms

8.2.2.1 Procedures within the Regional Coordination System for Gas

The ReCo System for Gas and more concretely the ReCo Team East have been described in the Regional Chapter of the Preventive Action Plan as it is considered a preventive measure.

However, the ReCo System prepared a toolbox including measures such as swaps or extra capacity. Each measure may be adopted depending on the scale where the incident is classified.

ReCo System includes a flowchart describing the information flow.



8.2.2.2 Procedures between neighbouring transmission system operators

At technical level, defining phone numbers and contact email addresses are essential to take decisions rapidly in case of an emergency and to check if the authorised managers submit the communications.

8.2.2.3 Improvement of the cooperation mechanisms

The Competent Authorities of the members of the Ukraine Risk Group will request to their TSOs:

- To exchange flowcharts via ReCo Teams to take advantage of best practices.
- To update "mutual assistance agreements" within the "interconnection agreements" taking into account the current legal framework on security of supply and to establish a clear correspondence between levels of crisis and measures.

8.2.3 Solidarity between Member States

Members of the Ukraine Risk Group have started conversations to agree the technical, legal and financial arrangements needed to implement the solidarity mechanism described in article 13 of Regulation (EU) 2017/1938.

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

8.2.4 Suggestions for assessing the next emergency plan

A proposal for the next plan to strengthen cooperation during crisis is to meet with Member States representatives, all regional TSOs, all regional UGS operators, all regional LNG regasification terminals operators as well as all National Regulatory Authorities at least on yearly basis, maybe before the next gas year.

This could be a kind of Gas Coordination Group restricted to the risk group.

In such a contest, it could be easier to understand national perspectives and operators contingencies for the coming winter season.