



MINISTER ENERGII

## **Emergency Plan**

prepared on the basis of art. 4.1.b of the *Regulation No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC*

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## 1. Scope and objective of the document

The present document has been prepared pursuant to art. 4.1.b of the *Regulation of the European Parliament and of the Council no. 994/2010 dated October 20, 2010, concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC* (hereinafter referred to as Regulation 994/2010), on the *Polish Supplies of Natural Gas* (hereinafter referred to as the Risk Assessment), prepared in 2016.

The aim of the document is to present the applicable measures and procedures, including information flowcharts as well as action flowcharts, the latter pertaining to actions taken for the purposes of counteracting, limiting or eliminating the consequences of disruptions to the supplies of methane-rich natural gas as well as the measures and procedures intended to prevent disruptions to the supplies of gas during individual crisis states: the early warning state, the alert state and the emergency state.

**Early warning state** occurs 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 state being triggered. **Alert state** occurs when a supply disruption or exceptionally high gas demand occurs which results in significant deterioration of the supply situation. Only market-based measures may be applied in the event of occurrence of an alert state. **Emergency state** occurs in the event of exceptionally high gas demand, significant supply disruption or other significant deterioration of the supply situation and in the event that all relevant market measures have been implemented but the supply of gas is insufficient to meet the remaining gas demand so that non-market measures have to be additionally introduced with a view, in particular, to safeguarding supplies of gas to protected customers according to Article 8 of Regulation 994/2010. The crisis states referred to above may cover the entire territory of the Republic of Poland or a part thereof.

In addition, the present document defines:

- 1) the scope of responsibility for the security of supplies of natural gas of individual market participants and the competent authority within the meaning of art. 2.2 of Regulation 994/2010);
- 2) the rules for the monitoring of the Polish natural gas market;
- 3) the designation of the roles, procedures, available measures and the structure of communication between individual entities in the event of occurrence of individual crisis states;

- 4) the actions performed by public administration bodies, energy undertakings, the transmission system operator, distribution system operators as well as the storage system operator during each crisis state;
- 5) the role of the competent authority as well as the course of action to be taken in the event of a crisis, including the manner in which market-based measures and non-market-based measures are to be applied.

## **2. Legal basis**

The rules governing the conduct of public administration bodies and energy undertakings in the event of a threat to the security of natural gas supplies are laid down in:

- Regulation No 994/2010 of the European Parliament and of the Council of 20 October 2010 *concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC* (hereinafter referred to as Regulation 994/2010);
- Regulation No 715/2009 of the European Parliament and of the Council of 13 July 2009 *on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005*;
- the Act of April 10, 1997 – *The Energy Law* (consolidated text – the Journal of Laws for 2012, item 1059);
- the Act of February 16, 2006 *on stocks of crude oil, oil products and natural gas, and the rules of conduct in a situation of potential threat to fuel sector on a nationwide scale and disruptions on the oil market* (hereinafter referred to as the Act on Stocks) (the Journal of Law for 2014, item 1695, as amended);
- the Act of April 18, 2002 *on the state of natural disaster* (the Journal of Laws for 2014, item 333, as amended);
- the Act of June 21, 2002 *on the state of emergency* (the Journal of Laws for 2016, item 886);
- the Regulation of the Minister of Economy of 22 July 2010 *on the detailed conditions of gas system operation* (the Journal of Laws for 2014, item 1059, as amended);
- the Regulation of the Council of Ministers of September 19, 2007 *on the method and procedure of introducing restrictions in the consumption of natural gas* (the Journal of Laws no. 178, item 1252);
- the procedures defining the actions to be taken in the event of a crisis as well as the rules of cooperation between energy undertakings and natural gas customers and the

appropriate operator, governed by the Transmission Network Operation and Maintenance Manual (IRiESP) and Distribution Network Operation and Maintenance Manual (IRiESD) as well as the emergency procedures of individual undertakings and Inter-operator Transmission Contracts (MUP).

For the purposes of ensuring an efficient flow of information as well as effective response in the event of a crisis in the natural gas sector, the Minister of Energy shall perform actions with the support of **the Team for providing fuel security of the State**. (hereinafter referred to as “the Team”). The Team is an advisory body to the Minister of Energy. The composition and functioning of the Team shall be specified in an appropriate disposition. The list of contact details of individual organizational units participating in crisis response activities during each crisis state constitutes an appendix to this Plan and shall be provided to the European Commission (Appendix no. 1).<sup>1</sup>

A flowchart of actions to be taken in the event of a crisis is presented below.

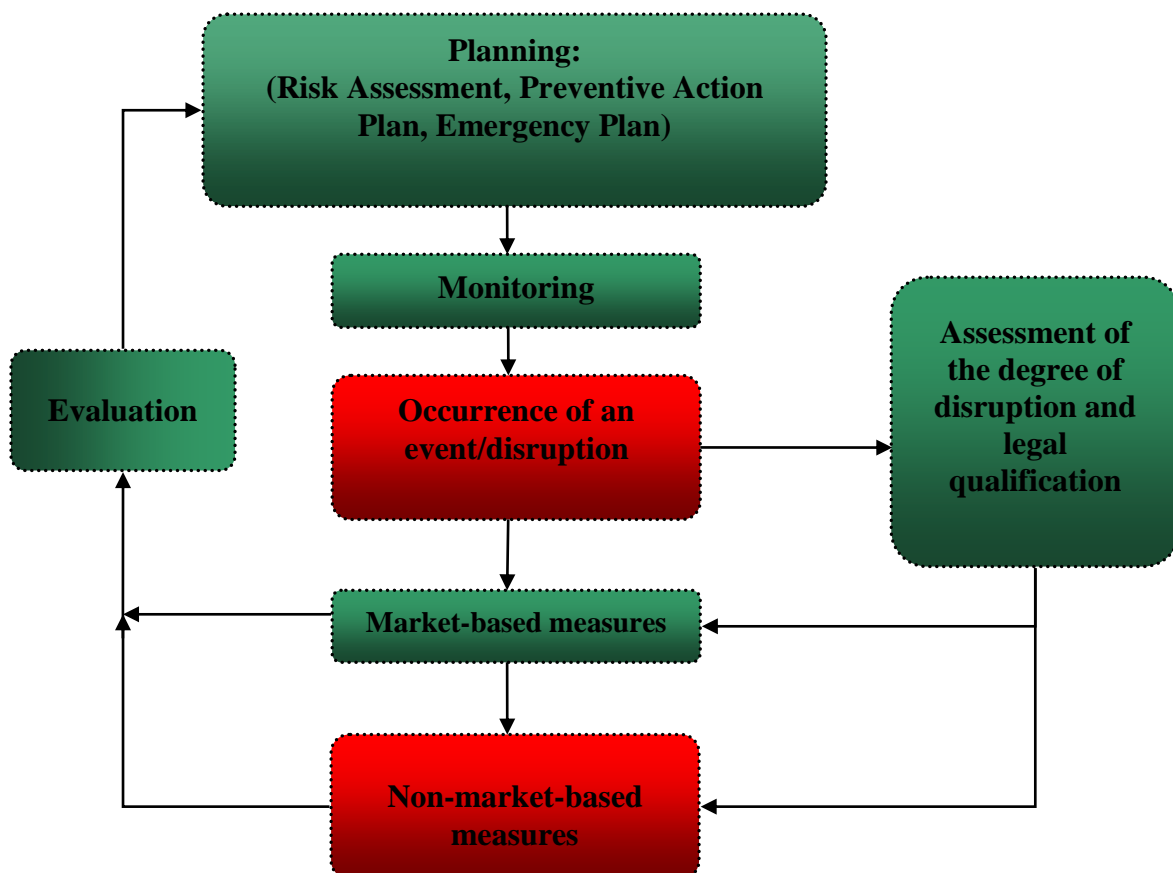


Fig. 1: Flowchart of actions to be taken in the event of a crisis, in accordance with the methodology of Regulation 994/2010.

<sup>1</sup> Appendix no. 1 is not intended for publication.

### **3. The role of gas undertakings (energy undertakings)<sup>2</sup> in ensuring the security of natural gas supplies**

#### **3.1. The application of market-based measures**

**All energy undertakings selling natural gas to protected customers within the territory of the Republic of Poland are under an obligation to apply measures aimed at ensuring gas supplies to all their customers, including, in particular, protected customers in cases specified under art. 8.1 of Regulation 994/2010.**

Energy undertakings which are engaged in economic activities involving the international trade of natural gas and the import of natural gas as well as entities ordering services which involve the transmission or distribution of natural gas are under an obligation to have in place **operational procedures** (in accordance with art. 49 of the Act on Stocks) applicable in the event of:

- disruptions to the supply of natural gas to the gas system;
- unexpected increase in the consumption of natural gas by customers.

The aforementioned operational procedures should, in particular, define the manner of:

- obtaining additional supplies of natural gas from other sources or directions;
- reducing the consumption of natural gas by customers, in accordance with the terms and conditions of the contracts concluded with such customers (trading restrictions).

Operational procedures should also take into account the need to guarantee the supplies of natural gas for the purposes of protected customers obtaining gas from natural gas regasification facilities, including customers not directly connected to the national natural gas transmission and distribution system. The operational procedures referred to above are agreed upon with the entities responsible for the implementation thereof, including, as appropriate, with the operators of other gas systems, and subsequently provided to the transmission system operator.

The transmission system operator prepares the **“Transmission network operator’s nationwide plan for action in the event of crisis situations in the natural gas sector”**.<sup>3</sup> The nationwide plan referred to above integrates the developed procedures and plans

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<sup>2</sup> Pursuant to the Energy Law, the applicable term is “energy undertaking”, whereas according to Regulation 994/2010 the applicable term is “gas undertaking”.

<sup>3</sup> The nationwide plan is a confidential document and it not intended for publication.

(including restriction plans)<sup>4</sup> of the remaining operators and undertakings and is developed on the basis of information provided by distribution system operators, the storage system operator, the liquefaction and regasification system operator, energy undertakings which engage in economic activities involving international trade of natural gas and the import of natural gas. Energy undertakings are under an obligation to consult the procedures and plans (including restriction plans) with the transmission system operator. The transmission system operator verifies the procedures notified by the participants of the natural gas market with regard to the technical capabilities of the gas system. The transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector is provided to the Minister of Energy for acceptance.

The nationwide plan takes into account, inter alia:

- 1) The procedure to be followed in the event of disruptions to the supplies of gaseous fuels, including, in particular, the unexpected increase in the consumption of gaseous fuels by customers, the disruption to the supplies of gaseous fuels, the occurrence of an emergency situation in the facilities of the customer or the supplier of the Transmission Service Contracting Authority (ZUP);
- 2) the precise estimation of the quantity of natural gas used by protected customers;
- 3) the possibility that some of the customers connected to transmission and distribution networks may switch to alternative fuels;
- 4) the development of a detailed safety grid of identified risks,
- 5) the analysis of network operation in the event of occurrence of individual crisis scenarios;
- 6) the estimation of the quantity of natural gas necessary to supply gas exclusively to protected customers according to the supply standard (art. 8.1 of Regulation 994/2010);
- 7) the estimation of the quantity of natural gas which may not be delivered to end customers, with particular emphasis on protected customers, in the event of occurrence of a crisis situation.

In the event of a threat of disruptions to the supplies of natural gas to the gas system or of an unexpected increase in the consumption thereof by customers, the trading undertaking as well as the entities commissioning natural gas transmission or distribution services shall adopt market-based measures specified in the aforementioned procedures,

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<sup>4</sup> Integrates market-based measures and non-market-based measures.

in accordance with the provisions of the transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector.

Having performed all actions which make it possible to satisfy the needs of natural gas customers the above mentioned entities shall notify:

- the gas system operator of the occurrence of disruptions to the supply of natural gas to the gas system or of the unexpected increase in the consumption of gas as well as of the actions taken with a view of ensuring the supplies of natural gas to their customers or of the lack of capacity to ensure such security of supplies in due time;
- the customers with whom natural gas sale contracts have been concluded of the occurrence of the aforementioned events and of the impact thereof on the security of natural gas supplies as well as of the actions taken for the purposes of eliminating the consequences of the events in question.

### **3.2. Application of non-market based measures – compulsory stocks of natural gas**

**Compulsory stocks of natural gas** are maintained by energy undertakings which engage in the international trade of natural gas and import of natural gas for the purposes of mitigating the effects of:

- 1) threats to the fuel supply safety of the state,
- 2) the occurrence of an emergency situation in the gas network;
- 3) unexpected increases in the consumption of natural gas.

The compulsory stocks of natural gas constitute the property of abovementioned undertakings, unless constitute assets of the entity receiving the order to maintain mandatory reserves. Compulsory stocks of natural gas are maintained in a quantity which corresponds to at least 30 days of average daily import of such gas, using storage facilities the technical parameters of which ensure that the stocks in question may be released into the gas system in their entirety within a period not exceeding 40 days.

The compulsory stocks of natural gas remain at the disposal of the Minister in charge of energy. The consent for the release of compulsory stocks is issued by the of Energy by way of a decision. Compulsory stocks of natural gas may be maintained outside the territory of the Republic of Poland – within the territory of another member state of the European Union and the member state of the European Free Trade Agreement (EFTA), which is a party to the agreement on the European Economic Area, in the storage installations connected to the gas system which comply with the requirements laid down in the Act on Stocks. In particular, the technical parameters storage facilities and gas networks, to which installations are



attached, should provide the ability to deliver within 40 days of the total amount of mandatory reserves held outside the territory of the Polish to national transmission or distribution network.

Depending on the assessment of the situation and actions necessary to eliminate the consequences of disruptions to gas supplies, the following steps may be taken:

- 1) the release of compulsory stocks and the subsequent introduction of restrictions on the consumption of natural gas (if it has been initially estimated that the use of compulsory stocks shall be insufficient), or
- 2) the concurrent release of compulsory stocks and introduction of restrictions on the consumption of natural gas (in the event that the use of stocks proves to be insufficient).

In the event of release of compulsory stocks, the Minister of Energy shall immediately notify the European Commission, and if the mandatory reserves are held outside the territory of Poland, the European Union Member States as well as the member states of the European Free Trade Agreement (EFTA) which are parties to the agreement on the European Economic Area of this fact.

### **3.3. Application of non-market based measures – restrictions in the consumption of natural gas**

**Restrictions in the consumption of natural gas** entail the restriction of the maximum hourly and daily consumption of natural gas within the territory of the Republic of Poland or parts thereof and may be introduced for a specific period of time. Energy undertakings shall not be liable for the consequences of the restrictions introduced, in accordance with art. 57 of the Act on Stocks. Restrictions are introduced in accordance with restriction plans and do not apply to household natural gas customers. Restrictions on the consumption of natural gas may be introduced in accordance with art. 54 of the Act on Stocks in cases of:

- 1) threat to the fuel supply security of the state,
- 2) unexpected increase in the consumption of natural gas by customers,
- 3) disruptions in the import of natural gas,
- 4) malfunction of the networks of gas system operators,
- 5) threat to the safety of the functioning of gas networks,
- 6) threat to the personal safety of individuals,
- 7) threat of substantial property damage,

- 8) the need for the Republic of Poland to comply with international obligations.

The restrictions in question may not result in:

- 1) a threat to the personal safety of individuals and the damage or destruction of technical facilities,
- 2) disruptions to the functioning of institutions, undertakings and facilities within the scope of performance of tasks related to:
  - a) security or defence of the state,
  - b) health care,
  - c) education,
  - d) generation and supply of electricity and heat to household consumers,
  - e) environmental protection,

<b>Preparation of plans of restrictions on the consumption of natural gas</b>
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The transmission system operator and distribution system operators (hereinafter referred to as operators) are under an obligation to develop natural gas consumption restriction plans (hereinafter referred to as plans):

- 1) the plans shall determine the maximum hourly and daily quantities of natural gas consumption by individual customers connected to their respective networks for each individual supply level;
- 2) operators shall notify the customers of the applicable maximum natural gas consumption quantity for each individual supply level as specified in the plan. The quantities in question shall be incorporated into the gas supply contracts, transmission service contracts or gas distribution contracts as well as into comprehensive service contracts.
- 3) the customers covered by the aforementioned plans shall notify the appropriate operator to whose network they are connected, by July 31 of each year, of the minimum quantity of natural gas the consumption of which does not cause a threat to the personal safety of individuals and the damage or destruction of technical facilities and corresponds to the maximum permitted consumption of natural gas at the tenth supply level. The quantity of natural gas, specified in the information provided, may be verified by operators on the basis of previous consumption data;
- 4) the plans should take into account the data pertaining to the consumption of natural gas by customers – including protected customers – as well as the method of supply

of gaseous fuels in accordance with the current Risk Assessment and the current Preventive Action Plan;

- 5) on the basis of the plans prepared by operators and of the procedures of individual trading undertakings, the transmission system operator shall prepare the **transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector**, which shall take into account the obligation to supply natural gas to protected customers. In the event that supplying some of the protected customers with gas proves impossible following the occurrence of a scenario identified in the current Risk Assessment, the transmission system operator shall provide the competent authority with recommendations for the cyclically developed Preventive Action Plan;
- 6) operators shall update the restriction plans annually and provide such plans to the President of the Energy Regulatory Office (hereinafter referred to as the President of the ERO) for approval (effected by way of a decision) by November 15 of each year.

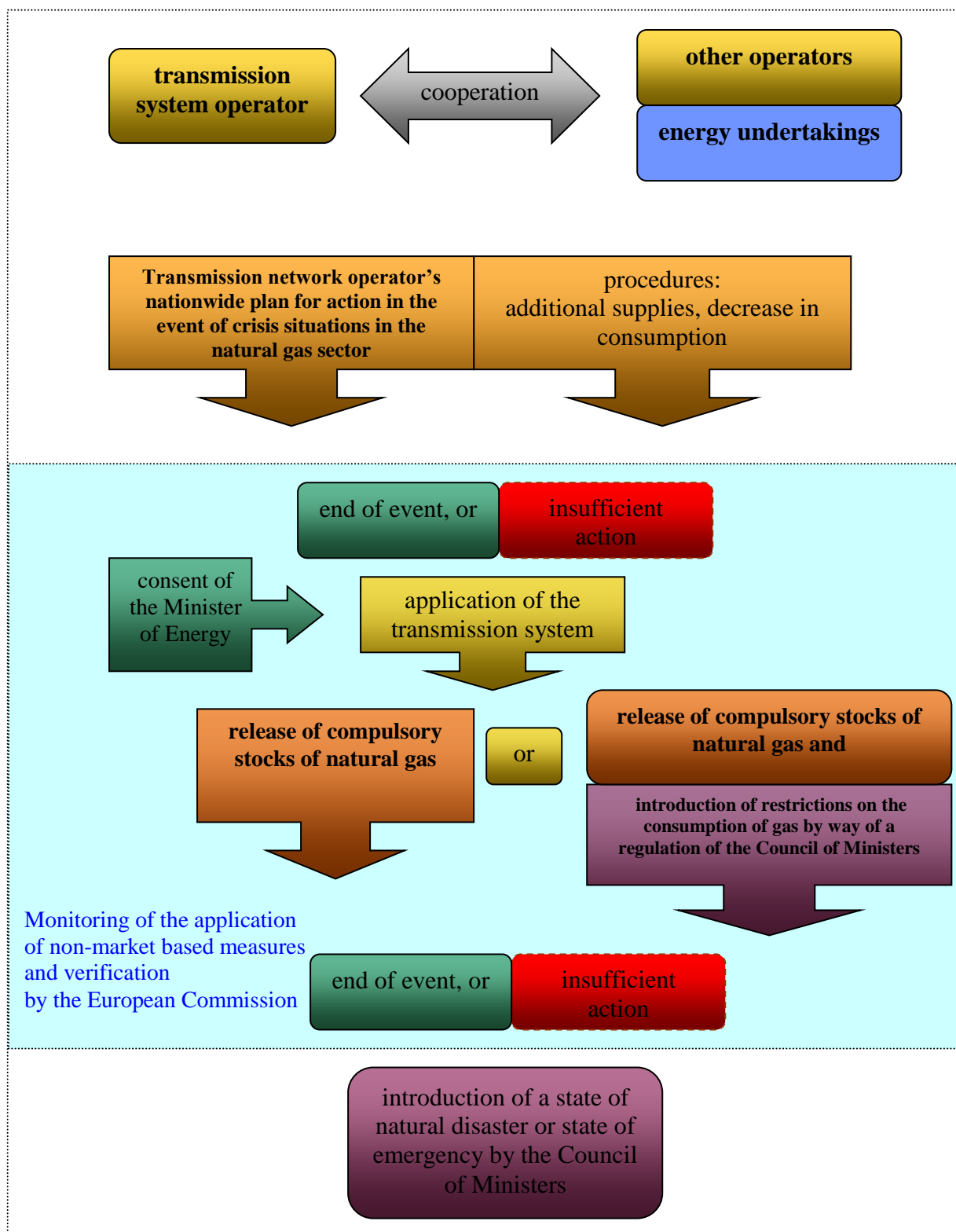


Fig. 2: Flowchart of actions to be taken in the event of occurrence of a crisis within the territory of the Republic of Poland.

#### 4. The role of operators in ensuring the security of natural gas supplies

According to art. 9c.1 of the *Energy Law*, the operators of the transmission system, the distribution system as well as the gaseous fuel storage system, shall – insofar as pertinent to their respective fields of operation – be responsible, *inter alia*, for:

- 1) the security of supply of gaseous fuels by ensuring the security of operation of the gas system and the implementation of the contracts concluded with the users of this system;
- 2) coordinated and effective dispatching, ensuring the required reliability of supply of gaseous fuels and the quality thereof;
- 3) usage, maintenance and repairs of networks, installations and facilities, along with the connections with other gas systems, in a manner which ensures the reliable functioning of the gas system;
- 4) ensuring the long-term capacity of the gas system to satisfy the reasonable needs with respect to the transmission of gaseous fuels in domestic and international trading, the distribution and storage of such fuels or natural gas liquefaction as well as with respect to the extension of the gas system (and, where applicable, the extension of interconnections with other gas systems);
- 5) cooperation with other gas system operators or energy undertakings for the purposes of ensuring the reliable and efficient functioning of gas systems and of coordinating the development thereof;
- 6) the allocation of the capacities of gas storage facilities and liquefied natural gas facilities;
- 7) provision of services essential to ensure the correct functioning of the gas system;
- 8) the balancing of the system, the management of gas system restrictions and performing settlements with the users of the system where such settlements are the consequence of the lack of balance between delivered and consumed quantities of gaseous fuels.

Furthermore, the rules of conduct in the event of a threat to the natural gas supply security of the state as well as in the event of the need to comply with international obligations are governed by Chapter 6 of the Act on Stocks. Pursuant to the Act on Stocks, the tasks of the **transmission system operator** include:

- 1) 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) in the event of a crisis – the duty to provide the Minister of Energy with daily reports on the situation in the transmission system;
- 5) informing energy undertakings on the need to release compulsory stocks of natural gas and on the procedure for such release;
- 6) the release of compulsory stocks of natural gas with the consent of the Minister of Energy;
- 7) 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;
- 8) collecting information on the owners and quantities of gas withdrawn from storage facilities;
- 9) the notification of the of Energy and the President of the ERO of the dates of release of compulsory natural gas stocks and the quantities of gas released;
- 10) the notification to the Minister of Energy of the need to impose restrictions on the consumption of natural gas;
- 11) the development, verification and updating of plans of restrictions on the consumption of natural gas;
- 12) the performance of duties related to the imposition of restrictions;
- 13) the coordination of activities of energy undertakings;
- 14) during the period in which restrictions on the consumption of natural gas remain in force – exercising control over the full capacity of storage installations;
- 15) 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:

- 1) the balancing of the transmission system;

- 2) maintaining additional quantities of gaseous fuels 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) dispatching;
- 5) developing plans pertaining to the technical capabilities of satisfying the needs 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:

- the usage of the accumulation volume of the transmission system;
- the depletion of storage volumes reserved by TSO;
- 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.

The transmission system operator prepares the **“Transmission network operator’s nationwide plan for action in the event of crisis situations in the natural gas sector”**.<sup>5</sup> The nationwide plan referred to above integrates the developed procedures and plans (including restriction plans)<sup>6</sup> of the remaining operators and undertakings and is developed on the basis of information provided by distribution system operators, the storage system operator, the liquefaction and regasification system operator, energy undertakings which engage in economic activities involving the import. Energy undertakings are under an obligation to consult the procedures and plans (including restriction plans) with the transmission system operator. The transmission system operator verifies the procedures notified by the participants of the natural gas market with regard to the technical capabilities of the gas system.

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<sup>5</sup> The nationwide plan is a confidential document and it not intended for publication.

<sup>6</sup> Integrates market-based measures and non-market-based measures.

The transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector is provided to the Minister of Energy for acceptance.

## **5. The tasks and role of industrial customers and electricity producers in the event of disruptions to the supplies of natural gas**

Industrial customers of natural gas notify the appropriate transmission or distribution system operator of the available market-based measures specified in appendix II to Regulation 994/2010 as well as of the level of restrictions in the consumption of natural gas which may possibly be applied in the event of a crisis situation.

Due to the negligible share of natural gas in electricity generation (approximately 4%), the establishment of special procedures for electricity producers has been omitted from the study referred to above.

## **6. The role of the competent authority and international cooperation in the event of disruptions to the supplies of natural gas**

The Minister in charge of energy, acting in the capacity of the competent authority responsible for ensuring the security of natural gas supplies:

- 1) monitors and analyses the situation with respect to the security of gas supplies;
- 2) coordinates the activities of all entities in the event of a crisis;
- 3) announces the introduction of individual crisis states;
- 4) expresses consent for the application of non-market based measures (compulsory stocks) in the event that an emergency state within the meaning of Regulation 994/2010 is announced;
- 5) submits an application to the Council of Ministers for the introduction of restrictions in the consumption of natural gas – by way of an applicable regulation – for specific periods of time within the territory of the Republic of Poland or parts thereof in the event that an emergency state within the meaning of Regulation 994/2010 is announced;
- 6) 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.

Furthermore, for the purposes of implementation of the aforementioned tasks, the Minister of Energy shall act with the support of **the Team for providing fuel security of the State**. The Team is an advisory body to the Minister of Energy. The Team's tasks include planning, initiating and coordinating measures aimed at ensuring fuel security of the State and initiating and coordinating intervention in an emergency situation.

The tasks of the Team include among others:

- analyzing the information about current situation in the gas system during winter season on the basis of the data obtained from the transmission system operator;
- making recommendations to the Minister of Energy in case of the threat energy security and disruption in natural gas supplies and submitting the proposal on optimal intervention in the crisis, including making recommendations to the Minister of Energy to adopt the decision on the announcement of one of the applicable crisis states in accordance with art. 10.3 of Regulation 994/2010;
- monitoring the current situation in the gas market during the application of intervention measures;
- making recommendations to the Minister of Energy to request the European Commission to declare a state of emergency in the natural gas sector, on the whole or part of the territory of the European Union;
- after the intervention analyzing the report prepared by transmission system operator on the crisis situation, including proposals to improve the procedures and directions of development of infrastructure in order to avoid similar events;

Furthermore, actions in the field of international cooperation shall be performed by the following entities:

- 1) energy undertakings which engage in economic activities involving the import of natural gas should, for the purposes of increasing the level of supply security, enter

into framework agreements making it possible for additional supplies of natural gas to be obtained;

- 2) cooperation of the Polish transmission system operator (OGP GAZ-SYSTEM S.A.) with energy undertakings, operators of the neighbouring transmission systems, distribution, storage, liquefaction and regasification system operators, intended to ensure the required throughput and making it possible to obtain supplies of natural gas in the in the event of a crisis. The actions referred to above must enable the full usage of the available market-based measures (including the virtual and physical reverse flow on the Yamal-Europe pipeline);
- 3) the European Commission, which, following the verification of the emergency state announced by the given state, may announce an emergency state within the entire territory of the EU or in a part thereof. Following the announcement of a Europe-wide emergency state, the European Commission shall call a meeting of the Gas Coordination Group and shall coordinate the activities performed by the competent authorities of individual Member States.

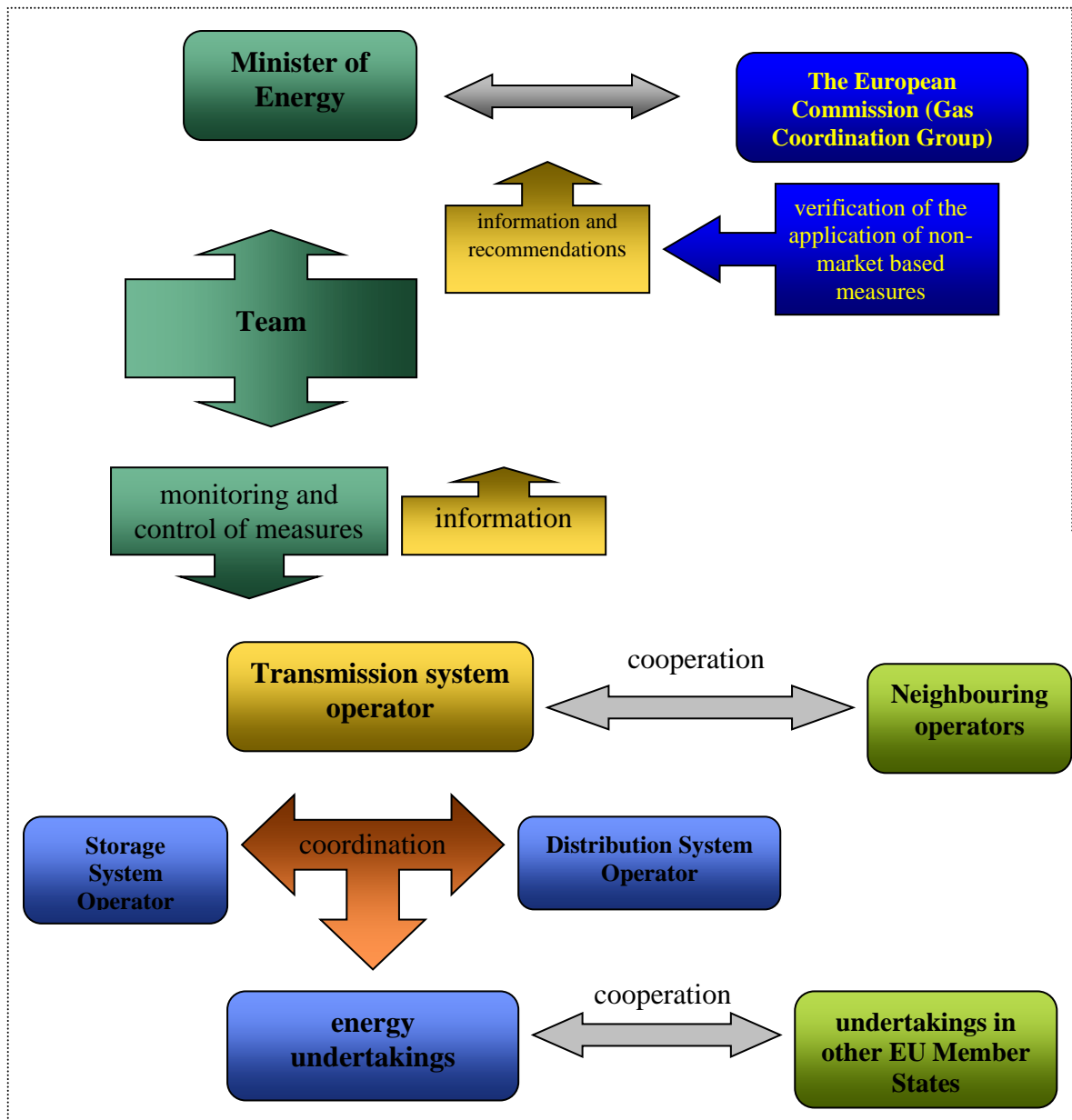


Fig. 3: Flowchart demonstrating the information flow in the event of a crisis .

## 7. Procedures and information flow during crisis situations

### 7.1. Early warning state

**Early warning state occurs 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 state being triggered; the early warning state may be activated by an early warning mechanism;**

#### **Order of actions:**

1. The energy undertakings which engages in economic activities involving the extraction of natural gas as well as trading undertakings, the distribution system operator, the storage system operator or the relevant public administration body (including the Intelligence Agency and the Internal Security Agency) shall, using the available communication channels, immediately notify Minister of Energy and the transmission system operator of becoming aware of the risk of possible disruptions to the supply of natural gas as well as of events which may have an impact on the stability of natural gas supplies.
  - 1.1. The information referred to above – within the scope of jurisdiction of the given entity – should contain, in particular, the following data:
    - a) the cause of the threat;
    - b) the estimated time of supply disruptions;
    - c) the estimated quantity of gas which may be lost as a consequence of the anticipated event;
    - d) information on possible disruptions to the supply of natural gas to protected customers in the event of supply interruption;
    - e) an assessment of the danger, along with a request for convening a meeting of **the Team for providing fuel security of the State** (hereinafter referred to as the Team);
    - f) information on the anticipated consequences of application of market-based measures.
2. Following the receipt of the notification referred to in item 1 above, the transmission system operator shall examine the impact of the disruptions on the transmission system operations and, where the situation in question poses a risk (or presents a possibility) of interruptions in the supply of gas to the distribution system operator or end customers, the transmission system operator shall, in consultation with the relevant distribution

system operator and trading undertakings, immediately notify the Minister of Energy of the current and future assessments of the condition of the transmission system.

3. Having received information pertaining to an event which may lead to the deterioration of the supply situation, the Minister of Energy may convene a meeting of the Team. Having received recommendations from the Team, the Minister of Energy adopts a decision on whether to announce an early warning state, in accordance with art. 10.3.a of the Regulation 994/2010.
4. In the event of announcement of an early warning state, the Minister of Energy issues a recommendation for undertakings concerning the application of market-based measures corresponding to the anticipated threat defined in art. 49 of the Act on Stocks which form part of the transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector, and subsequently continues to monitor the situation.
5. The Minister of Energy shall notify the European Commission of the announcement of the early warning state and its cancellation. In the case of the mandatory reserves of natural gas are held outside the territory of Poland, The Minister of Energy also informs the competent authorities of the Member State of the European Union or Member States of the European Free Trade Association (EFTA) - parties to the Agreement on the European Economic Area about the announcement of the early warning state and its cancellation and about hosted in its territory polish mandatory reserves. and those of above countries that have gas interconnections with Poland. This information is transmitted also to those of the above countries which have gas interconnections with Poland, through can be realized transport mandatory stocks.
6. The notification pertaining to the announcement of an early warning state shall be published on the website of the Minister of Energy.
7. The decision on the cancellation of the early warning state is taken by the Minister of Energy, following consultations with the Team.

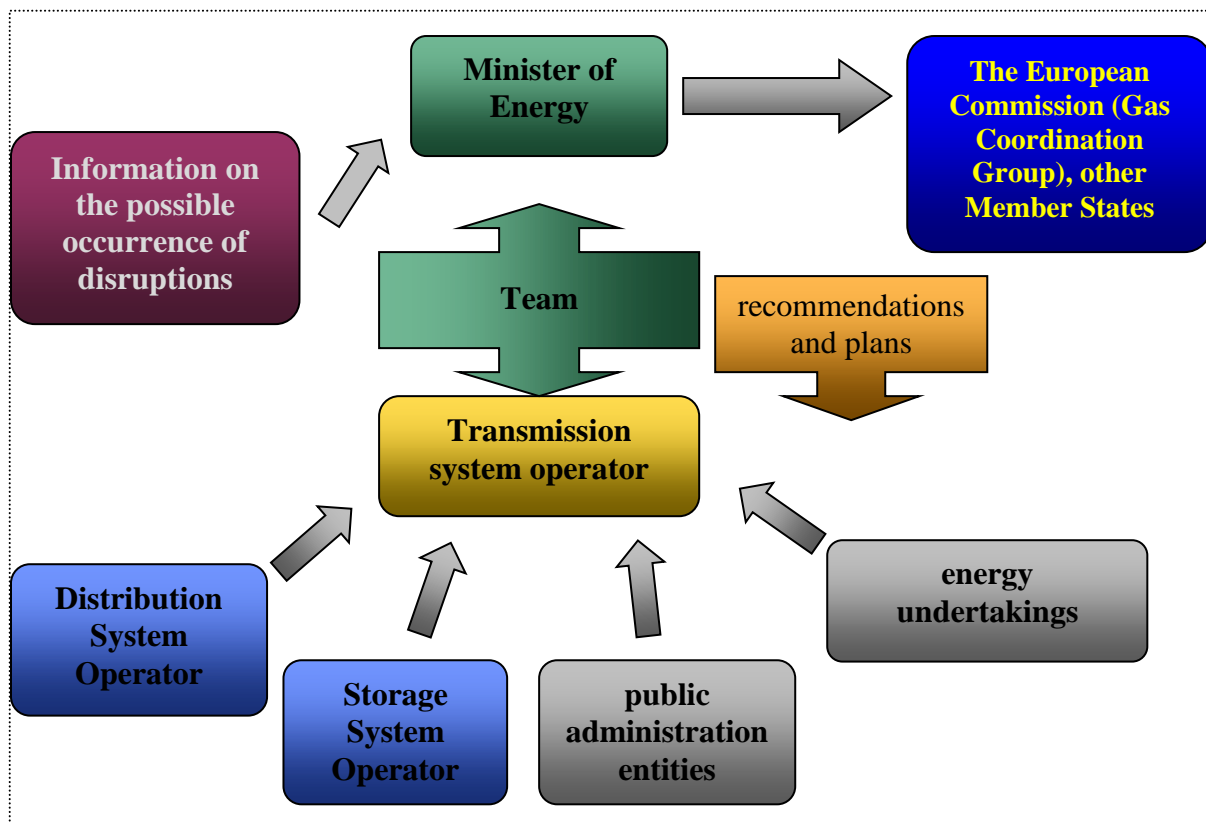


Fig. 4: Flowchart of actions to be taken in the event of occurrence of an early warning state.

## 7.2. Alert state

**Alert state is announced when a supply disruption or exceptionally high gas demand occurs which results in significant deterioration of the supply situation, but the market is still able to manage that disruption or demand without the need to resort to non-market measures.**

### **Order of actions:**

1. In the event of occurrence of events specified in the definition of the alert state, the Minister of Energy may convene a meeting of the Team. Having received recommendations from the Team, the Minister of Energy adopts a decision on whether to announce an alert state.
2. In the event of announcement and cancellation of an alert state, the Minister of Energy shall publish the applicable notification on the website of the Ministry of Energy and notify the Gas Coordination Group of the European Commission of such fact.
3. In the event of announcement of an alert state, the Minister of Energy issues a recommendation for undertakings concerning the application of market-based measures corresponding to the anticipated threat defined in art. 49 of the Act on Stocks which form part of the transmission network operator's nationwide plan for action in the event of crisis situations in the natural gas sector, and subsequently continues to monitor the situation.
4. For the purposes of minimizing the threats stemming from crisis events:
  - the transmission system operator takes advantage of the accumulation capacity of the transmission system, the distribution system operators take advantage of the accumulation capacity of the distribution systems,
  - the storage system operator issues a notification on the readiness of underground gas storage facilities for the use of the maximum available withdrawal capacity, the gas producers verify their readiness to maximize the production of gas obtained from gas extraction facilities and notify the transmission system operator of the results of the review performed without undue delay,
  - entities engaging in the import of gas for their own use examine the possibilities of increasing the amount of gas obtained from other sources and directions, with the data obtained being forwarded without undue delay to the transmission system operator.

5. Following the announcement of an alert state, the Team performs an ongoing analysis of the development of the situation and supervises the application of market-based measures on the basis of the information provided.
6. The decision on the cancellation of the alert state is taken by the Minister of Energy, following consultations with the Team.
7. In the event that the available market-based measures are exhausted and there are no further possibilities in terms of crisis response, energy undertakings engaged in the trade in gaseous fuels shall notify the transmission system operator and the customers with whom they have concluded agreements for the sale of gas of such fact.

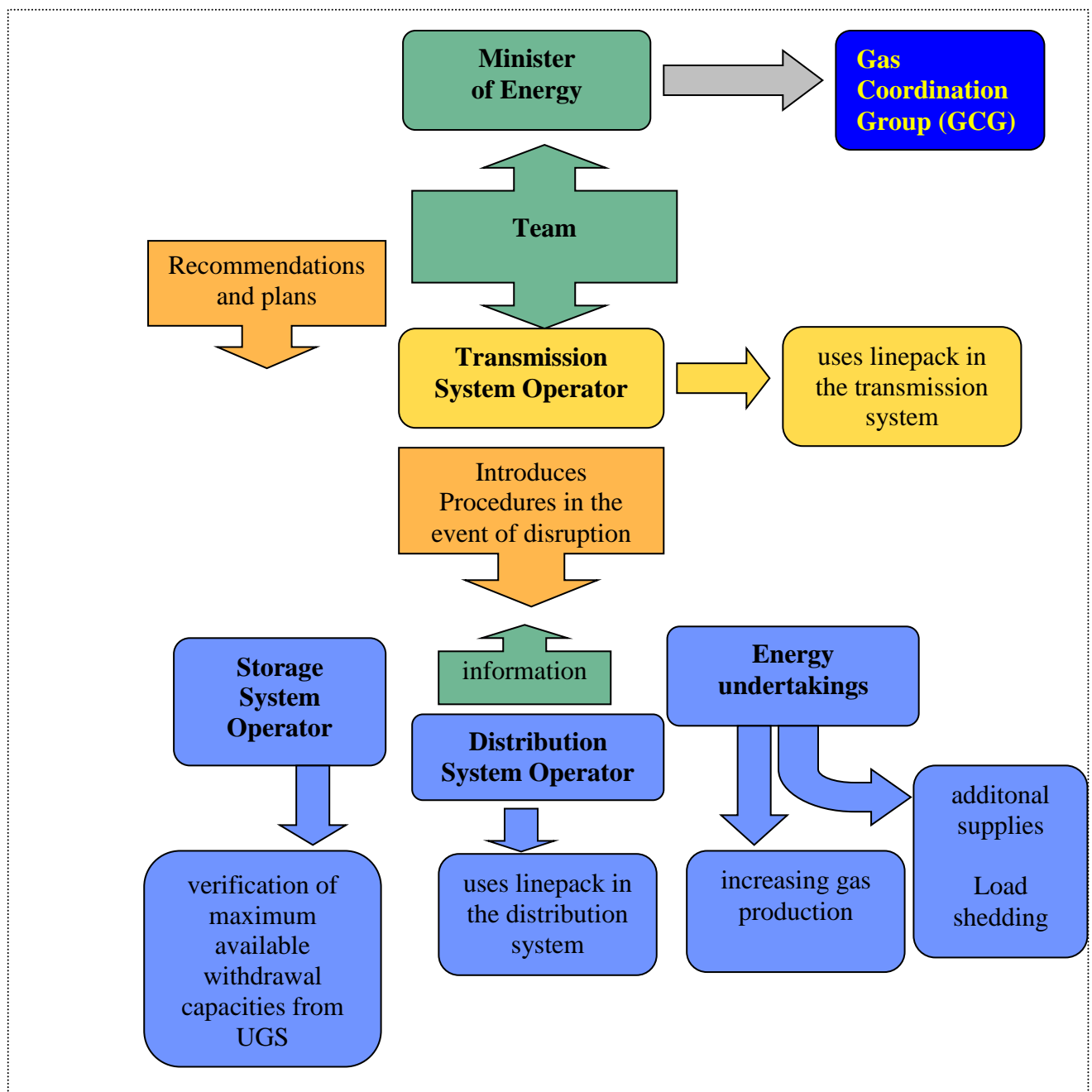


Fig. 5: Flowchart of actions to be taken in the event of occurrence of an alert state.



### 7.3. Emergency state

**Emergency state is announced in the event of exceptionally high gas demand, significant supply disruption or other significant deterioration of the supply situation and in the event that all relevant market measures have been implemented but the supply of gas is insufficient to meet the remaining gas demand so that non-market measures have to be additionally introduced with a view, in particular, to safeguarding supplies of gas to protected customers.**

#### **Order of actions:**

1. In the event that market-based measures fail to ensure the restoration of the security of natural gas supplies, the Minister of Energy, having received an appropriate recommendation from the Team, adopts a decision on the announcement of an emergency state within the meaning of Regulation 994/2010.
2. The Minister of Energy publishes a notification concerning the announcement of an emergency state on the website of the Ministry in charge of energy and notifies the Gas Coordination Group of the European Commission of such fact and of its cancellation. In the case of the mandatory reserves of natural gas are held outside the territory of Poland, The Minister of Energy also informs the competent authorities of the Member State of the European Union or Member States of the European Free Trade Association (EFTA) - parties to the Agreement on the European Economic Area about the announcement of the emergency state and its cancellation and about hosted in its territory polish mandatory reserves. and those of above countries that have gas interconnections with Poland. This information is transmitted also to those of the above countries which have gas interconnections with Poland, through can be realized transport mandatory stocks.
3. Following the announcement by the Minister of Energy of an emergency state, the energy undertakings which engage in economic activities involving the extraction of natural gas as well as trading undertakings, the distribution system operator, the storage system operator, the regasification system operator, the liquefaction system operator as well as the users of the gas system are under an obligation to comply with the instructions of the transmission system operator.
4. In the event of announcement of an emergency state which threatens the supplies of gas to protected customers, the Minister of Energy, at the request of the transmission system operator, may perform the following actions:

**Variant 1:** adopt a decision on the release of compulsory stocks of natural gas<sup>7</sup> which constitute a non-market based measure within the meaning of Regulation 994/2010, or, where such measure proves to be insufficient,

**Variant 2:** adopt a decision on the release of compulsory stocks of natural gas and submit a request the Council of Ministers to introduce restrictions on the consumption of natural gas.

Release of compulsory stocks of natural gas
<ol style="list-style-type: none"><li>1. Energy undertakings shall be ready to release the compulsory stocks of gas in the event of:<ol style="list-style-type: none"><li>a) ineffective application of all available market-based measures (art. 50.2 of the Act on Stocks), and</li><li>b) following the notification of the transmission system operator of the occurrence of disruptions in the supply of gas or an unexpected increase in the consumption of gas by customers;</li><li>c) the occurrence 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 (art. 51.1 of the Act on Stocks).</li></ol></li><li>2. The transmission system operator applies to the Minister of Energy for the consent for the release of compulsory stocks.</li><li>3. Having received the consent of the Minister of Energy (decision issued pursuant to the provision of the Code of Administrative Proceedings), the transmission system operator notifies trading undertakings of the need to release compulsory stocks and the time of such release.</li><li>4. Having obtained the consent of the Minister of Energy, the transmission system operator commences supplies derived from compulsory natural gas stocks and defines</li></ol>

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<sup>7</sup>See page 8.

the rules applicable to the use of such supplies. The transmission system operator shall notify the given storage system operator of the release of compulsory natural gas stocks on the day on which such stocks are to be released at the latest. At the same time, the transmission system operator shall immediately notify energy undertakings of the rules applicable to the use of the supplies of gas derived from compulsory stocks.

5. In the event of release of compulsory natural gas stocks from a storage facility in which stocks which constitute the property of more than one trading undertaking are stored, an assumption shall be made that the compulsory stocks of natural gas released are the property of each of those undertakings in the same proportions.
6. The storage system operator shall provide the transmission system operator, within the period of 7 days from the day of each release of compulsory stocks of natural gas, with the applicable information on the ownership and quantity of natural gas withdrawn from storage facilities.
7. Energy undertakings which engage in economic activities involving the import of natural gas as well as the users of the gas system are under an obligation to comply with the instructions of the transmission system operator.

#### **Introduction of restrictions in the consumption of natural gas**

1. Restrictions in the consumption of natural gas may only be applied where:

- the energy undertakings engaged in economic activities which involve the international trade in natural gas,
- the entities which engage in the import of natural gas, and
- the entities which commission services which involve the transmission or distribution of natural gas,

have exhausted all the available measures aimed at satisfying the needs of natural gas customers and intended to restore the supply security of the state with respect to the supplies of natural gas within the territory of the Republic of Poland or a part thereof (§2 of the regulation on the method and procedure of introducing restrictions in the consumption of natural gas).

2. The transmission system operator, having performed an assessment of whether the measures applied so far (the measures applied by energy undertakings as well as

the release of compulsory stocks of natural gas) are sufficient to eliminate the disruptions to the supplies of gas, shall, of its own initiative or on the basis of information obtained from energy undertakings, notify the Minister of Energy of the need to introduce restrictions on the consumption of natural gas.

3. The Minister of Energy on the basis of the notification of the transmission system operator or of its own initiative – shall, pursuant to art. 56.1 of the Act on Stocks, prepare an application to the Council of Ministers for the introduction of restrictions on the consumption of gas.
4. Restrictions on the consumption of gas are introduced by way of a regulation of the Council of Ministers. Restrictions are introduced for a specific period of time, within the entire territory of the Republic of Poland or a part thereof, in accordance with the previously approved restriction plans and taking into account the significance of gas customers to the economy and the functioning of the state, including, in particular, the tasks carried out by the customers in question.
5. Depending on the assessment of the situation and the actions necessary to eliminate the consequences of disruptions to the supplies of gas, restrictions in the consumption of gas may be introduced both following the release of compulsory stocks (where it has originally been estimated that the use of compulsory stocks shall be sufficient) and and in parallel to the release of compulsory stocks restrictions in the collection (where it is immediately apparent that the release of stocks shall not be sufficient).
6. The Minister of Energy shall immediately notify the European Commission, the European Union Member States as well as the member states of the European Free Trade Agreement (EFTA) which are parties to the agreement on the European Economic Area of the introduction of restrictions.

<b>Tasks of the transmission system operator during the period of restricted consumption of gas</b>
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<p>During the period in which restrictions in the consumption of natural gas remain in force, the transmission system operator shall:</p>
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- |   |
|---|
| <ol style="list-style-type: none"><li>1. perform duties related to the introduction of restrictions by defining and publicly announcing the supply levels, in accordance with the applicable restriction plans;</li><li>2. coordinate the activities of energy undertakings, other gas system operators</li></ol> |
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and storage system operators in order to ensure the security of the gas system and the implementation of the limits imposed;

3. in coordination with the Storage System Operator, exercise control over the full capacity and available volume of natural gas storage installations connected to the gas system.

**Further steps to be taken following the introduction of restrictions in the event that the existing threats are not eliminated**

1. Where events occur as a result of which the market-based and non-market based measures applied have failed to eliminate the threat to the fuel supply security of the state, the personal safety of individuals and threat of substantial property damage, the transmission system operator, of its own initiative or in cooperation with trading undertakings, shall immediately notify the Minister of Energy of such fact.
2. The notification submitted shall include, in particular, the description of:
  - 1) the events and the impact thereof on the fuel supply security of the state with respect to natural gas supplies;
  - 2) the actions taken for the purposes of eliminating the consequences of such events;
  - 3) the proposed measures to be applied by the European Commission.
3. The Minister of Energy may request the Council of Ministers to adopt actions which shall involve:
  - 1) the notification of the chairman of the Gas Coordination Group of the European Commission of the occurrence of the events referred to above, or
  - 2) 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.

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 a **state of emergency**.

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5. The Minister of Energy shall immediately notify the following entities of the application of non-market based measures:
  - The Gas Coordination Group of the European Commission;
  - the competent authorities of the EU Member States the gas systems of which are connected to the gas system of the Republic of Poland.
6. During an emergency state, energy undertakings which engage in the trading in gaseous fuels as well as the transmission system operator – insofar as pertinent to their respective fields of operation – shall, on a daily basis, provide the Minister of Energy, by 10:00 AM at the latest, with the following information:
  - a) the time of supply as well as the quantity and source of natural gas supplied to the system using non-market based measures;
  - b) daily forecasts as to the quantity of demand for gas and as to the supplies of gas for the next three days;
  - c) the quantity of the daily flow of gas and the percentage values pertaining to the usage of all cross-border entry and exit points as well as all network connection points for production facilities, storage facilities or LNG terminals (expressed in MWh/day);
  - d) daily level of compulsory natural gas stocks depletion;
  - e) the period (expressed as a specific number of days) for which, according to estimates, the supplies of gas may be provided to protected customers;
  - f) the measures which the appropriate operator or trading undertaking contemplates to apply (or has already applied) for the purposes of mitigating the consequences of the emergency state, as well as information on the effectiveness thereof;
  - g) the requests for the application of additional measures submitted to other authorities;
  - h) the measures applied at the request of competent authorities of other Member States.

7. The decision on the cancellation of the emergency state shall be adopted by the Minister of Energy, following consultations with the Team.
8. The Minister of Energy shall immediately notify the Gas Coordination Group of the European Commission on the cancellation of the emergency state.
9. Following the cancellation of the emergency state, the transmission system operator, on the basis of information provided by the operators of cooperating systems as well as the interested market participants, shall prepare a report on the crisis situation, with particular emphasis on the conclusions drawn, the possibilities in terms of crisis procedure enhancement as well as the directions for infrastructure development making it possible to avoid similar occurrences in the future.
10. Following the preparation of the report referred to in item 10, the President of the ERO shall conduct a review of the subsidiarity of application of non-market based measures (i.e. of the maximum usage of non-market based measures at each stage of the given crisis state).
11. Within 5 days from the receipt of the relevant information, the European Commission shall verify whether the announcement of an emergency state is justified in accordance with the definition of the emergency state and whether the measures applied are consistent with the actions specified in the emergency plan and whether they do not impose unreasonable burdens on energy undertakings.
12. The European Commission may, at the request of the competent authority or energy undertaking – or at its own initiative – request the competent authority to modify the measures inconsistent with the conditions laid down under art. 10.7 of Regulation 994/2010. The European Commission may request the competent authority to cancel the emergency state where it considers that the announcement thereof has not been (or has ceased to be) justified.
13. Within the period of three days from the receipt of the request of the European Commission, the competent authority shall modify the measures applied, notifying the European Commission of such fact, or shall notify the European Commission of the reasons for its refusal to comply with such request
14. In the event of refusal of the competent authority to comply with the aforementioned request, the European Commission may, within the period of three days, amend or withdraw its request or convene the session of the competent authority or, where appropriate, of the competent authorities involved; where the European Commission

considers such action to be justified, it may also convene a meeting of the Gas Coordination Group. The European Commission shall present a detailed statement of reasons for the request to modify the relevant measure.

15. The competent authority shall take into account the position of the European Commission to the full extent. If the final decision of the competent authority remains inconsistent with the position of the European Commission, the competent authority shall present a statement of reasons for its decision.



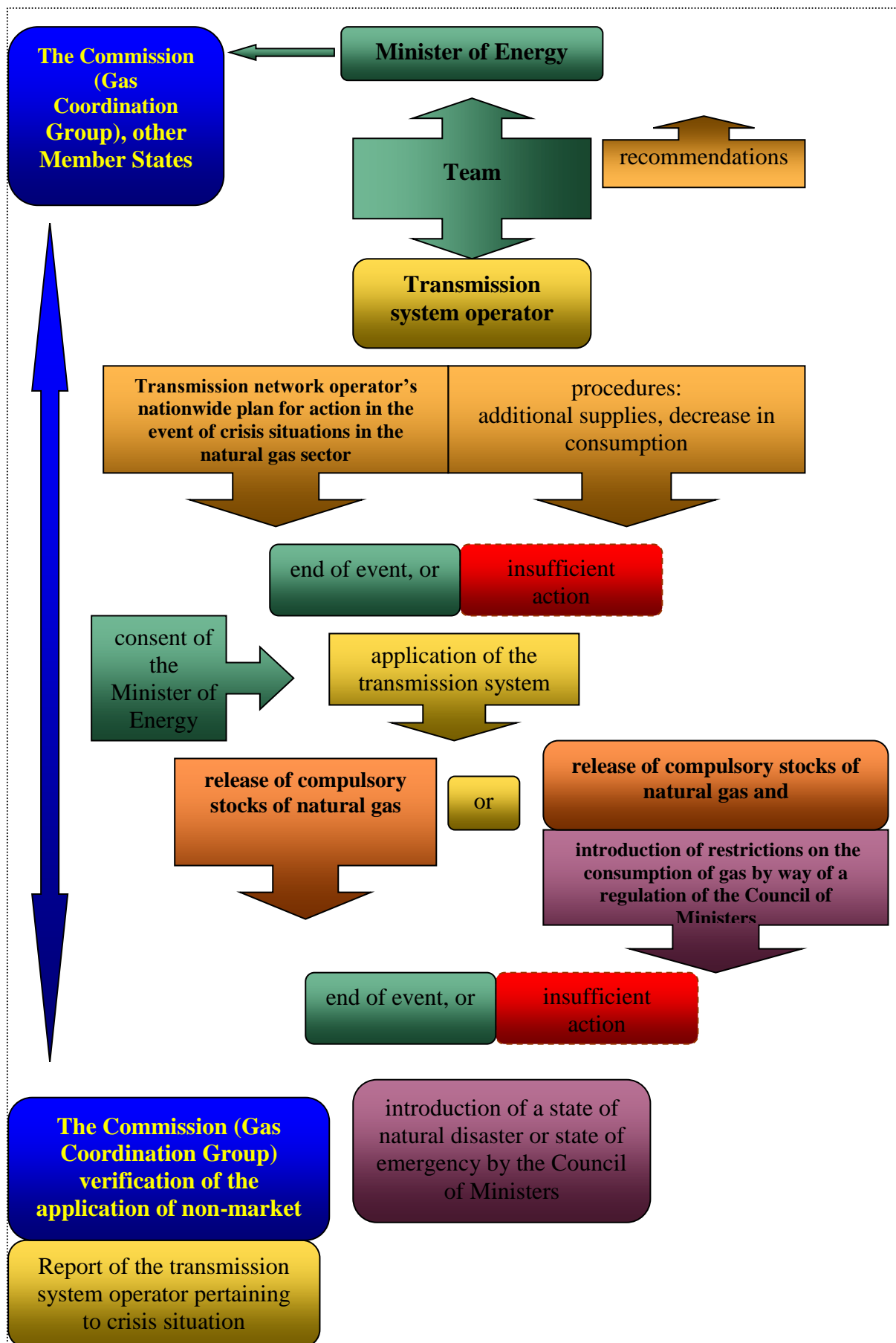


Fig. 6: Flowchart of actions to be taken in the event of occurrence of an emergency state.

## **8. The use of market-based measures in the event of occurrence of a crisis situation**

*The currently available market-based security of gas supply pertaining to the supply side:*

- *increasing the flexibility of gas production* – due to the need to maintain the rational management of gas deposits, there is no possibility of significant increase of the extraction of gas in the event of a crisis situation. The maximum domestic production of gas is at constant level of 6,8 mcm/day (74,6 GWh/day).
- *increasing the flexibility of import* – Gas is supplied to the Polish transmission system through Point of Interconnection on the basis of virtual reverse flow service at Yamal Pipeline up to 23 mcm/day (254,4 GWh/day).
- *commercial storage of gas* – at the present stage, Poland has 7 methane-rich natural gas storage facilities with total active volume of approximately 33 TWh;
- *LNG terminal capacity and maximal send-out capacity* - in June 2016, the first ship arrived at the LNG Terminal in Świnoujście carrying first commercial delivery of liquefied natural gas. During the first stage of the operations of the LNG terminal the off-take of 13,7 mcm/day (158 GWh/day) of natural gas is possible.
- *diversification of gas supplies and gas routes* – interconnector between Poland and the Czech Republic (Cieszyn) allows for gas supplies entry point to the Polish system with capacity of 28,0 GWh/day (October – April), 4,3 GWh/day (May-September). *GCP GAZ-SYSTEM/ONTRAS* - From 1 April 2016 connection of the separate cross border points between GAZ-SYSTEM S.A. (Poland) and ONTRAS (Germany) Gubin, Kamminke and Lasów into one new network point Grid Connection Point GAZ-SYSTEM/ONTRAS (*GCP GAZ-SYSTEM/ONTRAS*) was established. Capacity on firm basis from Germany to Poland amounts to 48,7 GWh/day.
- *reverse flows* - in the event of a crisis, Poland may increase the supplies of natural gas on the basis of the existing contracts as well as using the physical reverse flow on the Yamal-Europe pipeline. The extension of the Mallnow station has enabled the achievement of reverse flow gas capacity from Germany to Poland amounting to 16,8 mcm/day (187,4 GWh/day on the firm basis, from 01.01.2017).

- *the application of short – and long-term contracts* – the contracts concluded on the Polish market include both medium- and long-term contracts as well as framework contracts which enable the purchase of natural gas by way of spot transactions.

*The currently available market-based security of gas supply pertaining to the demand side:*

- increase of energy efficiency (the white certificate system).
- increase of the share of RES in the energy market.

## **9. The use of non-market-based measures in the event of occurrence of a crisis situation**

*The currently available non-market based security of gas supply pertaining to the supply side:*

- the release of strategic stocks of natural gas within the meaning of Regulation 994/2010 – compulsory stocks of natural gas in a quantity which corresponds to at least 30 days of average daily import of such gas into Poland. During the 2016/2017 season, the volume of compulsory stocks of natural gas amounted to 8 505,64 GWh;

*The currently available non-market based security of gas supply pertaining to the demand side:*

- compulsory load shedding within the meaning of Regulation 994/2010 – the system of introduction of natural gas consumption restrictions for customers covered by the approved restriction plans, as described in the present document.

## **10. Cross-border co-ordination of the application of non-market measures**

The varied conditions in the gas system and the specificity of a possible crisis situation (filling of underground gas storage facilities, the availability of natural gas to EU markets, temperature, length crisis) creates considerable difficulties in making a full analysis of all variants of an emergency. Nevertheless, details on the directions of covering demand for natural gas in the event of a specific crisis scenarios are included in the Risk assessment prepared in 2016.

A prerequisite for the consent to be granted by the Minister of Energy, approving the application of non-market measures is the previous utilization of all available market measures, which include, among others: the use of available capacities of cross-border connections, the maximization of commercial stocks of natural gas from storages and output from the LNG Terminal in Świnoujście.

The application of market measures in compliance with the provisions of the regulation 994/2010 results with early warning state and the alert state, which shall be announced by a competent authority. If natural gas demand cannot be satisfied with use of market based measures, the Minister of Energy upon the application of the transmission system operator may:

- take a decision on making available the mandatory stocks of natural gas, which are a non-market measure in compliance with the Ordinance 994/2010, or if such measure is insufficient,
- take a decision on making available the mandatory stocks of natural gas and apply to the Council of Ministers for the introduction of restrictions in the area of natural gas consumption.

In the period between October 1<sup>st</sup>, 2016 and September 30<sup>th</sup>, 2017 the size of obligatory stock was defined on the basis of the decision by the President of the Energy Regulatory Office – 8 505,64 GWh. Commercial stock amounts to 24 000 GWh on November 2016.

Given the fact that before making available mandatory stocks it is necessary to use all applicable market measures (including the maximization of supplies of natural gas from the Federal Republic of Germany and the Czech Republic), it should be noted that such availability of natural gas from obligatory stocks shall not have significant impact on natural gas supplies from the European markets under the application of market measures. It will not have significant impact on the trade within the internal market either. The possible availability of mandatory stocks of natural gas shall increase the supply of gas fuel in Polish gas system, which can decrease the pressure on the supplies from the Western direction. The results of the application of the above mentioned measure at each time depend on the situation on natural gas market. The procedure of the use of mandatory stocks of natural gas has been described in chapter 7.3 hereof.

Current supply standard for 30 days of exceptionally high demand amounts to 9 841,4 GWh. The obligatory stock is currently lower and amounts to 8 505,64 GWh. It is almost sufficient for the monthly period of high gas demand of protected customers - therefore has

no significant influence on trade.

Pursuant to Article 56 (1) of the Stocks Act, Minister in charge of energy shall apply to the Council of Ministers for the introduction of restrictions in the natural gas consumption. The restrictions in consumption of natural gas are introduced with the ordinance issued by the Council of Ministers. The restrictions shall be introduced for the fixed-term on the whole territory of the Republic of Poland or a part thereof in compliance with the previously approved introduction plans of such restrictions as well as taking into account the importance of consumers for the economy and the state operation, and in particular their functions.

In compliance with § 4 of the Ordinance by the Council of Ministers dated September 19th, 2007 *on the manner and procedure of introducing restrictions in the consumption of natural gas*, the restrictions shall apply to consumers that shall jointly fulfill all of the following conditions:

- who consume natural gas in the output point of the gas system, if the total of contractual powers defined in the contracts for this output point is at least 417 cm/h (4,6 MWh/h);
- who have been included in the restriction introduction plans.

In the case of natural gas shortages in the gas system or in the case of extremely low temperatures, the restrictions shall not apply to consumers:

- who consume natural gas in the output point of the gas system, if the total of contractual powers defined in the contracts for this output point is less than 417 cm/h (4,6 MWh/h);
- of natural gas in households.

The natural gas output equals to the difference between the 2<sup>nd</sup> degree of supply level, corresponding to the hourly average and the 24-hour quantity of natural gas consumed by a consumer at a given output point from the gas system in the preceding year, and the 10<sup>th</sup> supply level corresponding to the hourly minimum and the 24-hour quantity of natural gas consumed by a consumer at a given output point from the gas system, which does not present any threat to personal safety or which does not cause any damage or destruction of technological facilities.

Transmission System Operator (TSO)		output	
kWh (E+Lw)			
2nd level	10th level	kWh	% 2nd level
145 662 964	80 669 936	64 993 028	45 %

Distribution System Operator (DSO)		output	
kWh (E+Lw+Ls)			
2nd level	10th level	kWh	% 2nd level
139 143 519	82 486 686	56 656 833	41%

Regardless of the above, it is necessary to initiate measures aimed at tightening cooperation between competent authorities of neighbouring Member States, the co-ordination of activities from the moment of announcing the early warning state, as well as the exchange of information between the entities responsible for network traffic with the view of occurrence of a crisis situation.

Detailed information on the appliance of the market and marker measures as well as description of time when they should be implemented depend on the specific risk scenarios and are very precisely described in the Risk Assessment, which is sensitive information of companies operating on Polish gas market and remains at exclusive disposal of the European Commission. In general, the maximum volumes that may be needed from neighboring countries are as following:

Point name	Interconnector between	Transmission capacity (GWh/d)	comments
		Entry PL	
GCP GAZ-SYSTEM/ONTRAS	PL - DE	48,7	
Mallnow	PL - DE	164,9***	Physical backhaul
Cieszyn	PL-CZ	28,0/4,3*	

\* 28,0 - October - April; 4,3 - May - September;

\*\*\*187,4 (GWh/d) from 01.01.2017;

**Summary:**

- The availability of natural gas on the German market is of a fundamental importance for the possibilities of guaranteeing the supplies of natural gas to Poland at the max level in the analysed scenarios (including the possibility of maintaining a virtual reverse on the Yamal gas pipeline in the maximum amount of 23 mcm/day, 254,4 GWh/day).
- The reverse transmission using the Yamal-Europe gas pipeline (Mallnow – physical reverse flow) is of a key importance from the viewpoint of ensuring supplies safety to Poland. especially the scenarios concerning the disturbances in supplies of natural gas from eastern direction. It is necessary to aim at the maintenance of supplies of natural gas in Mallnow with firm capacity 16,8 mcm/day (187,4 GWh/day).
- LNG Terminal in Świnoujście significantly improved safety of the Polish gas system and contributes to the diversification of the sources of gas supplies at the level of 13,7 mcm/day (158 GWh/day).
- Additional infrastructural projects thanks to which it is possible to increase the availability of natural gas must be implemented in the Central Europe region.
- It is necessary to initiate measures which not only enable the diversification of routes, but which are first and the foremost the sources of supplies of natural gas to V4 markets.
- The development of the natural gas transport axis in the north-south direction between V4 states will make it possible to increase flexibility of the regional natural gas market and the resistance to crisis situations through the integration with alternative natural gas sources.

***Consultation document:***

The document was consulted and agreed with the authorities of the Federal Republic of Germany, the Czech Republic and the Slovak Republic.

**Appendix 1**

Contact details of crisis response team members (not for publication).