EMERGENCY PLAN

to mitigate and avoid the effects of natural gas supply disruption

in the Czech Republic


NOVEMBER 2022
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GENERAL INFORMATION

An Emergency Plan that could affect the security of gas supply in the Czech Republic is updated on the basis of the requirements of Articles 8 and 10 of Regulation (EU) No 2017/1938 of the European Parliament and of the Council of 25 October 2017 on security measures for the supply of natural gas and repealing Directive (EU) No 994/2010 (hereinafter referred to as the Regulation) and new Articles 6a) and 6b) from the amended Regulation of the European Parliament and of the Council (EU) 2022/1032.

The Emergency Plan was prepared by the Ministry of Industry and Trade, which is the Competent Authority pursuant to Article 2, paragraph 7 of the Regulation, and on the basis of Act No. 458/2000 Coll., On Business Conditions and the Execution of State Administration in the Energy Sectors and on the Amendment to Certain Acts Act) as amended.

Emergencies in the gas industry and the basic procedures for their solution are laid down in § 73 of the Energy Act. More specifically, the actions to prevent emergencies and dealing with emergency are included in Decree no. 344/2012 Coll., The Ministry of Industry and Trade of the state of emergency in the gas industry and the method of safeguarding security of supply standard, which divides consumers into eight groups according to the type of gas consumption and further establishes five consumption levels to limit gas supplies and five consumption levels to interrupt deliveries to individual customer groups. The last consumption level is the emergency stage, which means interrupting natural gas supplies to all customers. This decree was amended (MIT Decree no. 215/2015 Coll.)based upon the former Regulation (EU) no. 994/2010 and the wording of the Energy Act no. 458/2000 Coll.

DESCRIPTION OF THE CURRENT SITUATION

The recent escalation of disruptions in gas supply from Russia shows a significant risk that in the near future Russia may suddenly and unilaterally completely stop gas supply to the European Union. The Union must therefore anticipate such a risk and prepare for it in a spirit of solidarity. In order to prepare for further disruptive steps and strengthen the Union’s resilience to future shocks, immediate proactive measures to reduce gas demand are essential. A coordinated action at the level of the Union can prevent the serious harmful effects on the economy and citizens that a possible interruption of gas supply would cause. At an extraordinary meeting of the Council for Transport, Telecommunications and Energy (Energy) on 26 July 2022 under the leadership of the Czech Presidency, the ministers responsible for energy of the EU member states reached a political agreement on a voluntary reduction in demand for natural gas between 1 August 2022 and 31 March 2023 by 15% compared to their average consumption over the past five years, using measures of their own choosing. This voluntary measure would become mandatory if at least five competent authorities of the Member States that have issued national alerts ask the Commission to submit a proposal to the Council to issue an alert at Union level and the Council approves the proposal. The aforementioned agreement was then translated into legislation in the form of Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated measures to reduce gas demand, effective from 9 August 2022.

For the Czech Republic, the five-year average of the reference periods is 6,749.6 million m³. However, the regulation gives the possibility of deductions from this value when the mandatory
filling of storage tanks is exceeded on August 1, 2022, and further when the gas is used for non-energy purposes. After taking into account the readings, the five-year average of the reference periods amounts to 5,996.1 million m3. The required 15% saving, which should amount to 900 million m3 of natural gas, will therefore be based on this calculation. Most likely, the reduction in consumption, if there is no extreme winter, will be taken care of by high gas prices, which force both households and companies to save (in the first half of this year, consumption decreased by approx. 20% year-on-year). However, this cannot be the only impulse to reduce consumption, this main factor must be supplemented by other measures, such as already adopted or prepared legislative regulations, the purpose of which is to reduce gas consumption, either by lowering the heating temperature of buildings or by extending the operation of sources for the production of heat in particular based on solid fuels, which would otherwise be at risk of switching to less emission-intensive fuels, especially natural gas, due to meeting emission limits. Some other tax-legislative, financial non-legislative or regulatory measures or voluntary agreements and subsidy programs can be used to reduce gas consumption. In order for the aforementioned measures to be better understood and accepted by the public, it is necessary to supplement them with the necessary information campaign, which should highlight in particular the fact that if it were possible to maintain gas supplies to the Czech Republic in the amount of approx. 13 million m3/day, it should by using gas in domestic storage tanks and at least 15% of the prescribed consumption savings to survive the coming winter without the need to announce regulatory measures.

CURRENT STATUS (AS OF NOVEMBER 1, 2022)

Due to the invasion of Ukraine by Russia on 24/02/2022, which continues to this day, the conditions of natural gas supply to Europe and thus also to the Czech Republic changed in the process.

The new Nord Stream II gas pipeline, which was supposed to be commissioned this year, was not commissioned at all. Gas transportation through the Nord Stream 1 gas pipeline was gradually reduced until, although a limited amount of gas was flowing, from one third of its maximum capacity, but at the beginning of September, after an unplanned maintenance, the transportation was no longer carried out, and the flow of gas through this gas pipeline was resumed and completely stopped. This caused an interruption, which meant a complete stoppage of gas supply from Russia to Europe and also to the Czech Republic via this gas pipeline.

Since the beginning of September, the domestic gas market is no longer supplied with supplies of Russian gas, but with gas from other sources. Despite this, the gas market in the Czech Republic continues to be balanced, gas supplies to the Czech Republic ensure daily consumption and gas storage continues to be successful.

Gas for the domestic market is provided by private gas traders, mostly from gas wholesalers registered in EU countries or on short-term and spot markets in Western Europe, and therefore safeguarding gas should be a priority interest of these traders. However, the current geopolitical situation and the effort to increase energy security before the coming winter, as well as the need to diversify export dependence, also cause increased government activity to search for new potential gas suppliers, where the goal is to open up space for subsequent negotiations by commercial entities. In addition to possible pipeline deliveries from Norway, it is therefore focusing on LNG, even though the Czech Republic does not have direct access to the sea. Negotiations are ongoing or are being prepared with the USA and with countries from other regions from which liquefied natural gas could be imported to the domestic market, namely Oman, Qatar, Azerbaijan or Algeria (e.g. the Minister of Industry and Trade should, for this purpose, visit Algeria in in the second half November
this year) about the possibility of future supplies of their gas to the local market. With a perspective for the following winter, the idea of joint purchases of gas within the EU is also being refined.

The result of this initiative was, among other things, in cooperation with the ČEZ group, securing a capacity of 3 billion m³ per year for a period of 5 years at the LNG terminal in Eemshaven and the supply of LNG intended for the domestic market. Already a few days after its opening in September the first ship arrived at the terminal with a cargo of liquefied gas intended for the domestic market. A total of eight such tankers should arrive at the terminal this year alone. It is therefore a significant contribution to increasing the Czech Republic’s energy security and independence from Russia, as the contracted capacity of the LNG terminal corresponds to approximately 1/3 of the country’s annual gas consumption. The transport route from the Netherlands to the domestic market was of course also ensured.

Underground gas storages are decisive for the gas security of the Czech Republic. Gas stored in the territory of the Czech Republic (excluding UGS in Dolní Bojanovice, which is so far only connected to the gas system of the Slovak Republic) reached 3.430 billion m³ as of November 14, 2022, which is approximately 99.4% of their maximum storage capacity. Thus, the Czech Republic already fulfilled ahead of time (at the turn of July and August this year) and by the required date greatly exceeded the requirement of Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022, which amends Regulation (EU) 2017/1938 and (EC) No. 715/2009 as regards the storage of natural gas. According to this directly effective regulation of the European Union, member states should ensure that by November 1, 2022, the capacity of storage tanks connected to the transmission system in their territory is filled to 80% of their storage capacity.

1. LEGISLATION

1.1 Legislation of the European Union

History and Presence:


This regulation introduces for the first time a solidarity mechanism between Member States as a tool to mitigate the impact of major emergencies in the Union, together with a burden-sharing mechanism. The solidarity mechanism is designed to deal with extreme situations, if supplies to customers protected under solidarity representing a key need and a necessary priority are threatened in one of the member states. Solidarity has to ensure cooperation with more vulnerable
member states. At the same time, solidarity is a last resort that is used in a state of emergency and only under strict conditions. The Czech Republic is currently in the process of finalizing an agreement on solidarity assistance in the gas industry with the Federal Republic of Germany.

Due to the current situation in Europe and the unstable situation in gas supplies, the European Commission has adopted several legal regulations in the form of regulations:


- COUNCIL REGULATION (EU) 2022/1369 of 5 August 2022 on coordinated measures to reduce gas demand.

1.2 Legislation of the Czech Republic

The national legislation deals with safeguarding security of gas supply in Act No. 458/2000 Coll., On Business Conditions and on the performance of State Administration in Energy Sectors and on the Amendment to Certain Acts (Energy Act), as amended, specifically in § 73 to 73g, where the steps in states of emergency in the gas industry are described. It includes the so-called extraordinary state of emergency (state of crisis level, when the last consumption level is announced for the entire territory of the country according to the legal regulation governing the consumption levels in the gas industry, in which gas is still supplied to a specified group of customers, and the situation that has arisen cannot be resolved by the procedures for resolving the state of emergency according to § 73), the declaration of which is decided by the Ministry after prior discussion with the operator of the transmission system. On the basis of the law, the implementing decree of the Ministry of Industry and Trade No. 344/2012 on states of emergency in the gas industry was issued. This decree was amended this year by decree No. 224/2022 Coll., which takes into account the requirements of the above-mentioned regulation 2022/1032 in the new paragraph on non-use of storage capacity (Use It or Lose It). An amendment to Decree No. 349/2015 on the gas market is currently being finalized, and another amendment to Decree No. 344/2012 Coll. is being prepared.

Other Legal Documents Related to Emergency Situation in the Gas Industry:

Act No. 262/2006 Coll., labor code, as amended
Act No. 59/2006 Coll., on preventing serious emergencies, as amended.
Act No. 239/2000 Coll., on an integrated emergency rescue system, as amended.
Act No. 239/2000 Coll., on an integrated emergency rescue system and changes to some other acts, as amended.
Act No. 240/2000 Coll., on crisis management and changes to some other acts, as amended.
Act No. 241/2000 Coll., on economic measures for states of crisis and changes to some related acts, as amended.
Decree of the Ministry of Industry and Trade No. 345/2012 Coll., on dispatch control for the gas network of the Czech Republic and interchange of a data for dispatch control.
Decree of the Ministry of the Interior No. 103/2006 Coll. on determining the principles for defining an emergency planning zone and the extent and ways of processing an external emergency plan, as amended.
Decree of the Ministry of the Interior No. 328/2001 Coll. as amended by decree No. 429/2003 Coll., on some details for securing the integrated emergency rescue system, as amended.

2. SPECIFIC IMPLEMENTED AND PREPARED MEASURES AGAINST SUPPLY FAILURES FROM THE RUSSIAN FEDERATION

2.1 Measures for filling underground gas storages

Legal measures

➢ Act No. 176/2022 Coll. (Energy Act), amendment of 15/06/2022 – obligation to use storage capacity and procedure in case of non-use of this capacity (use it or lose it principle)
➢ Decree No. 224/2022, which is a supplement to Decree No. 344/2012 on the state of emergency in the gas industry (SoS). The decree establishes the minimum stored quantities of natural gas in the given dates and the conditions for announcing auctions for the gas storage service
➢ Amendments to the legislation regarding the certification of operators of storage facilities are being prepared

Other measures

➢ State material reserves of natural gas in the amount of 2.4 TWh were created, primarily intended for protected customers (purchased by the state)
➢ Furthermore, on the basis of a total of 20 auctions held between May and June, carried out on the basis of the Crisis Measures of the Minister of Industry and Trade of the Czech Republic from April of this year, the state managed, on the basis of certain financial support, to secure the pumping of 4,584 TWh in the guaranteed time period, which is approx. 434.5 million m3 of natural gas. This gas is owned by the traders, but based on the terms of the auctions, they have a limited right to use this gas, as they have to guarantee that a certain proportion of the gas is left in the domestic storages even during the winter months
➢ The possibility of importing liquefied natural gas is secured, as the Czech Republic leases approximately 3 billion m3 of floating terminal capacity in Eemshaven (Netherlands), which represents almost a third of the annual consumption, through the ČEZ group. On September 20, the first tanker from the United States arrived in Eemshaven with a cargo of liquefied gas for ČEZ
➢ The "use it or lose it" (UIoLi) principle was implemented in practice from 1. August – during the first two milestones, a total capacity of 3.15 TWh was taken from 13 entities
Common measures

➢ Decree No. 344/2012 and the safety standard of supplies for protected customers in the amount of approx. 3.2 TWh (at least 30% of this amount is stored in UGS)

➢ Adjustment of supply restrictions or interruptions during a state of emergency
  - five levels of consumption restriction,
  - five levels of consumption interruption and
  - emergency level.

The aim is to ensure the proper operation of the gas system.

2.2 Extraordinary measures for reducing energy consumption especially gas in the area of energy efficiency and savings

➢ Subsidy programs and financial mechanisms: subsidy programs and other financial instruments with the aim of increasing energy efficiency or reducing the energy demand of buildings

➢ Voluntary agreements for businesses: allows businesses to save on a voluntary basis

➢ Voluntary agreements for the banking sector: offering financial products that go beyond the requirements of legislation in the field of energy performance of buildings

Legislative and non-legislative measures

➢ Reducing the heating temperature in buildings and workplaces – the measure is in the approval process

➢ Extending the operation of sources for the production of heat from alternative fuels (especially solid fuels)

These measures should be supported by legislative regulations:

➢ Draft decree establishing special rules for heating and hot water supply – decrease of internal temperature against the designed temperature

➢ Proposals for legislative amendments to the legal framework in the area of public health protection (Ministry of Health)

➢ Draft decree amending Decree No. 415/2012 Coll., on the permissible level of pollution and its detection and on the implementation of some other provisions of the Air Protection Act, as amended. This decree will make it possible to extend the production of heat from solid fuels when a state of crisis is declared in the heating industry (Ministry of the Environment).

Subsidy programs for energy savings

➢ A total of 10 billion CZK (400 million EUR) has been prepared for energy saving projects for small and medium-sized enterprises (SMEs), as well as large enterprises.
➢ Support for alternative energy sources from the National Recovery Plan (e.g. photovoltaic systems) CZK 5 billion (200 mil EUR)

The anticipated National Recovery Plan will be updated in 2023 after determining the final allocation amount from the Resilience and Recovery Facility for individual member states. As part of the update (just as with the already approved National Recovery Plan), part of the funds must be directed to the green transformation, where it is possible to support alternative sources and thus reduce gas consumption.

As part of the above-mentioned supports, the Czech Republic plans to include selected initiatives to support energy, green transformation and reducing gas consumption in the National Recovery Plan. These initiatives focus on 3 basic areas:
- infrastructure for energy,
- support in the field of energy for households and municipalities,
- support in the field of energy for industry.

The Ministry of Industry and Trade and the Ministry of the Environment are working together to implement the initiatives, which provides support for households and municipalities in this area.

Communication campaign towards the public

➢ Need for gas savings, especially the reduction of temperatures in apartments and other non-public rooms - will have to be clearly and timely explained to citizens
➢ There is a manual published by Ministry of Industry and Trade (MIT) that advises how to save money in public buildings

Currently, the MIT has prepared a list of several tips and advices on its website, which measures can help households reduce energy consumption, especially gas. In the next steps, it is necessary to build on the steps already taken in connection with the measures in particular

➢ Communicate real impacts that are based on practice, e.g. the experience of MIT (measures enabled the Ministry to reduce gas consumption by 24%);
➢ Establish cooperation with organizations that deal with energy (gas) savings; use the scheme of voluntary agreements and coordinate with signatories from energy companies (ČEZ, PRE, E.ON, EG.D, innogy, GasNet)
➢ Promote the relevant financial and subsidy programs targeting energy efficiency

Tips for quick savings

➢ Raising awareness through savings advice through the 'ten commandments' - mostly quick and cheap but also mentions long term savings.
➢ The government adopted a handbook for state administration bodies. Advice for households with savings, preparing for winter.
➢ A manual is prepared for the sector of small entrepreneurs and self-employed people.
➢ Energy and consulting centers have been operating for a long time with the support of the Ministry of Industry and Trade
3. GAS SYSTEM

The gas network is a mutually interconnected set of equipment for the production, transport, distribution and storage of gas, including a system of control and signaling technology and information transfer facilities for the activities of computer technology and information systems used to operate these devices.

Fig. No. 1: The Gas System of the Czech Republic

This system consists of:

- transmission systems (interconnected set of high-pressure gas pipelines and compressor stations and related technological objects including the control and signaling system)

- distribution systems (a interconnected set of high-pressure, medium-pressure and low-pressure gas pipelines not directly connected to compressor stations)

- direct gas pipelines (not part of a transmission or distribution system - additionally set up to supply gas to eligible customers)

- gas pipelines (equipment starting with a branch from the pipeline of the transmission or distribution system and terminated before the main gas shut-off)

- gas storage facilities (underground gas facilities for the storage of natural gas directly connected to the Czech or foreign gas system)

- plants (gas generating or extraction equipment)
- technical gas dispatching centers (workplaces ensuring the balance between sources and the need for gas and safe and reliable operation of the gas system of the Czech Republic)

The role of natural gas in the Czech Republic's energy balance is growing. Its share of primary energy consumption in recent years is about 20%. Natural gas sources in the Czech Republic are very small. The annual natural gas extraction in South Moravia is about 150 million m³ representing about 2% of its total annual domestic consumption. The Czech Republic is almost completely dependent on natural gas imports, after the interruption of sources from the Russian Federation, these supplies are replaced by LNG supplies and gas imports from the countries of the European Union and Norway. Before the beginning of the Russian-Ukrainian conflict, about 20 companies were involved in the import of natural gas on the liberalized market.

Domestic gas consumption in the last 5 years ranges from 8.1 to 9.4 billion m³.

Currently, there is a strong political will in the European Union to promote hydrogen as an important energy vector to achieve ambitious decarbonization goals. The operator of the transmission system in the Czech Republic is aware of the changes related to the enforcement of decarbonization goals within the EU and the favorable geographical location of the Czech Republic for the future transit of low-carbon types of gases. The operator of the transmission system and the operators of the distribution systems are already examining and investigating the possibilities of their operated infrastructures with the aim of defining their readiness for the transport of gas mixtures with different concentrations of hydrogen and pure hydrogen. For this purpose, an extensive project has already been launched, which is dedicated to this topic at the national and international level.

4. DEFINITION OF CRISIS SITUATIONS AND CRISIS LEVELS

The Security of Supply Regulation 2017/1938 states that the emergency plan in each Member State should be based on three levels of crisis: "early warning phase", "alert phase" and "emergency". At different levels of crisis, responsible actors will act to mitigate the effects of the emerging situation. These measures are divided into market and non-market measures. A non-market measure is used only if market mechanisms can no longer ensure gas supplies and a state of emergency has been declared.

4.1 Crisis levels

4.1.1 Early warning

If there is specific, serious and reliable information about a potential and probable situation resulting in a substantial deterioration of the gas supplies situation and the declaration of a warning or emergency levels; the early warning level may be triggered by the early warning mechanism.

- occurrence of an extraordinary event with an immediate impact on the gas industry (e.g. a natural disaster)
- occurrence of an extraordinary event in the gas industry (e.g. technical or technological accident, particularly outside the Czech Republic)
- deterioration of the political situation at the international level
- deterioration of the internal political and security situation in states producing or transiting natural gas
- receiving intelligence information about a potential terrorist attack threat
- necessity to control gas consumption and supply - avoiding a state of emergency
4.1.2 Alert

If supplies disrupted or exceptionally high gas demand resulting in a substantial deterioration in natural gas supplies, but the market remains capable of dealing with the disruption of supplies or increased demand without having to adopt other than market measures.

- limited or suspended natural gas supplies in part of the country during long-term extreme temperature conditions in winter
- occurrence of secondary crisis situations
- escalation of the political situation at the international level
- escalation of the internal political and security situation in states producing or transiting natural gas
- receiving intelligence information confirming a real threat of a terrorist attack

4.1.3 State of emergency

If a serious disruption of natural gas supplies or another substantial deterioration of the situation of natural gas supplies occurs and if all suitable market measures are applied, the natural gas supplies are not sufficient to cover the remaining natural gas demand and therefore, other than market measures must be applied in addition particularly to safeguard natural gas supplies to protected customers.

- declaring a state of emergency in the gas industry
- limiting or suspending natural gas supplies to the vast majority or all the state
- the expected term required to restore normal operation exceeds several days up to weeks
- persistent or deteriorating temperature conditions
- occurrence of other secondary crisis situations, threat to the fundamental functions of the state and critical infrastructure
- limited or suspended natural gas supplies due to the international political situation in states producing or transiting natural gas.

Indicators used to evaluate the event

The indicator used to assess the possible deterioration of the supply situation is the pressure drop in the gas system. This is to ensure that sufficient gas is available for protected customers in the event of an interruption under clause 6.2.

4.1.4 Extraordinary state of emergency

An extraordinary state of emergency is a state of crisis level, when the last consumption level is declared for the entire territory of the country in accordance with the legal regulation regulating consumption levels in the gas industry, in which gas is still supplied to a specified group of customers, and the situation cannot be resolved by the procedures for solving the state of emergency according to § 73 of the Energy Act. The ministry decides on the declaration of an extraordinary state of emergency after prior discussion with the operator of the transmission system. The Ministry publishes the declaration of an extraordinary state of emergency on the official board of the Ministry and informs about the declaration of an extraordinary state of emergency in the mass media. The declaration of an extraordinary state of emergency takes effect on the day it is published on the
5. RESPONSIBILITIES AND MEASURES AT CRISIS LEVEL

Since that initial information about changing the gas supply, possibly approaching a situation that causes the prevention of emergencies and other critical levels, is always the first dispatching TSO performs the dispatching all the opening acts.

5.6 Early Warning Level

In order to prevent an emergency in an early warning phase, the dispatching of the transmission system operator proceeds as follows:

a) Informs the chairman of the Central Crisis Staff  
b) Informs the Chairman of the Emergency Commission and the Secretary of the Emergency Commission  
c) Cooperates with all adjacent dispatch centers of foreign TSOs  
d) cooperates with all distribution system operators in the Czech Republic  
e) cooperates with all operators of gas storage facilities in the Czech Republic  
f) Informs the producer of gas in the Czech Republic  
g) Informs direct customers connected to the transmission system  
h) Informs all gas traders confirming the nomination for shipment  
i) Informs the Market Operator  
j) Notifies the Ministry of Industry and Trade, the Energy Regulatory Office and the Ministry of the Interior by means of electronic communication no later than one hour after the start of emergency prevention activities in the early warning phase. The operator of the transport system also communicates the same information to all regional authorities and the City Hall of Prague. It proceeds in a similar way when the prevention of the state of emergency is terminated.

5.7 Alert Level

In order to prevent an emergency in the alert phase, the dispatching of the transmission system operator proceeds as follows:

a) informs the chairman of the Central Crisis Staff  
b) informs the Chairman of the Emergency Commission and the Secretary of the Emergency Commission  
c) cooperates with all adjacent dispatch centers of foreign TSOs  
d) cooperates with all distribution system operators in the Czech Republic  
e) cooperates with all operators of gas storage facilities in the Czech Republic  
f) Informs the producer of gas in the Czech Republic  
g) Informing direct customers connected to the transmission system  
h) Informs all customers (gas traders) confirming the nomination for shipment  
i) Informs the Market Operator OTE, a.s.  
k) Announces the prevention of the state of emergency in the alert phase through the whole area radio program according to the Act on Czech Radio.
l) Informs in a way that allows remote access.

5.8 State of Emergency

In case of declaration of an emergency in the whole territory of the Czech Republic, the dispatching of the transmission system operator shall be carried out in accordance with the emergency decree:

a) Emergency status is declared by the chairman of the Central Crisis Staff
b) Informs the Chairman of the Emergency Commission and the Secretary of the Emergency Commission
c) Cooperates with all adjacent dispatch centers of foreign TSOs
d) cooperates with all distribution system operators in the Czech Republic
e) cooperates with all operators of gas storage facilities in the Czech Republic
f) Informs the producer of gas in the Czech Republic
(g) Informs direct customers connected to the transmission system
h) Informs all gas traders confirming the nomination for shipment
i) Informs the Market Operator
j) Informs the Czech Radio, the General Directorate of the Fire Rescue Service, the Ministry, the State Reserve of Material Reserves, the Energy Regulatory Office.

5.9 Extraordinary state of emergency

Within the duration of the extraordinary state of emergency

a) gas storage operators are obliged to withdraw gas from gas storage tanks directly connected to the transmission system at least in the amount determined by the transmission system operator,
b) a gas market participant who has negotiated a contract for gas storage in a gas storage facility directly connected to the transmission system is obliged to tolerate an increase in gas withdrawal in the amount determined by the gas storage facility operator pursuant to letter a),
c) the operator of the transmission system is obliged to provide a transportation service for withdrawn gas from the gas storage tank regardless of the agreed reservations of transportation capacities and the deviation of the gas market participant,
d) the injection of gas into a gas storage tank directly connected to the transport system is prohibited,
e) gas producers are obliged to produce gas in the highest possible quantity that the gas production plant or production pipeline allows to be delivered to the transmission or distribution system.
5.10 Crisis (emergency) committees and their tasks

Transmission system operator

Act No. 458/2000 Coll., On Business Conditions and Performance of State Administration in the Energy Sectors and on Amendment to Certain Acts, confers on the Transmission System Operator (TSO) the obligation in § 58, q), to manage the gas system of the Czech Republic in a state of emergency. To do this, the Crisis Team of the transmission system operator and the Central Crisis Team, composed of representatives of individual distribution system operators, gas storage operators, gas producers and the Ministry of Industry and Trade.

- The TSO declares a state of emergency according to the Act No. 458/2000 Coll., § 73, paragraph 3
- The TSO has the right according to Act No. 458/2000 Coll., § 58, Para. (h) to use, to the extent necessary, the natural gas installations of customers for whom gas is transported in an emergency.

The Crisis Manager is a representative of the Transmission System Operator. His – hers tasks are determined by the Emergency Plan of the Transmission System.

Distribution system operators

The rights and obligations of the distribution system operators in emergency situations are enshrined in Act No. 458/2000 Coll. in Section 59.

Gas storage operators

The rights and obligations of the gas storage facility operators in emergency situations are enshrined in Act No. 458/2000 Coll. in Section 60.

The basic duties and rights of the Chairman and the members of the Emergency Commission as well as the Head of Disaster Management are similar to those of the transmission or distribution system operator.

The details are stated in Annex.

THE CENTRAL EMERGENCY COMMITTEE OF THE CZECH REPUBLIC’S GAS SYSTEM

In order to solve the situation arising from the declaration of an emergency on the gas system of the Czech Republic, the Central Crisis Team is established. The members of the Central Crisis Staff are:

- Transmission system operator
- Distribution system operators
- Underground gas storage operators
- Gas producers
- Ministry of Industry and Trade
- ČEPS (Czech electro energetic transmission system)
- Market operator OTE, a.s.

Members of the Central Crisis Staff (hereafter CCS) are persons who have decision-making powers vis-à-vis their company. The chairman of CCS is the executive of NET4GAS, s.r.o. - COO

The central crisis team is established based on the consents of the transmission system operator, distribution system operators, underground gas storage operators, gas producers and the Ministry of Industry and Trade. Confirmation of consent to the establishment of the Central Crisis Staff is an
appendix to the Emergency Plan of the Czech Republic's gas system, where individual gas companies nominate their representatives to the Central Crisis Staff of the Czech Republic.

The Central Crisis Staff is responsible for restoring gas supplies in the gas system of the Czech Republic as quickly as possible when a state of emergency is declared, for example for the following reasons:

- Interruption of gas supplies to the Czech Republic
- Natural disasters
- Terrorist attacks
- Crash as a result of illegal action (criminal act. sabotage)
- Accidents of a significant scope

In the event of interruption of gas supplies at all entry points to the Czech Republic and the subsequent declaration of a state of emergency in the entire gas system of the Czech Republic, the central crisis staff is responsible for the safe shutdown of the gas system of the Czech Republic.

In the event of a state of emergency, the CCS is convened automatically according to Appendix P. 5. In the event of a state of emergency, the decision to convene the CCS is made by its chairman. Every member of the CCS has the right to ask the chairman to convene the CCS even outside of an emergency, in such a situation the chairman decides on the convening.

An extraordinary convening of the CCS may occur in cases of local emergencies, accidents of a significant scale, natural disasters, etc. on the transmission system, distribution systems, underground gas storage and gas producers, in the event that the relevant gas companies cannot manage / solve the emergency situation themselves. In this case, the Chairman of the CCS can only convene a part of the CCS with selected representatives of the companies necessary to resolve the situation.

The principles of functioning, convening and tasks of the CCS are listed in the annex.

5.11 Description of measures to prevent an emergency and in an emergency

5.11.1 Market measures in alert level

Given that the Czech Republic is 99% dependent on natural gas imports, it can not use increased flexibility of extraction or some other measures on the supply side. Market measures on the supply side can be used

- Increased flexibility of imports that can be secured by gas supplies from the spot market to virtual trading points in the European Union.

Another of the market measures may be

- Increased withdrawal from gas storage capacity (of about 40% of annual consumption) and withdrawal capacity is close to consumption values in winter period.

- The use of reverse flow is one of the measures in which the Czech Republic has a comparative advantage, as it has the possibility of reverse flow at all cross-border points. It is already possible to use diversified routes and gas supplies in connection with the built-in reverse gas flows in the transport system, especially the gas pipeline Gazelle, which connected the border stations Brandov and Waidhaus / Rozvadov. The Gazela gas pipeline is connected in several places with the existing
transmission system of the Czech Republic and it is therefore possible to partially provide deliveries to end-customers in the Czech Republic.

- In 2021, the second gas pipeline connecting the border transfer stations Brandov and Waidhaus/Rozvadov was opened, which was part of the C4G project, running parallel to the Gaselea gas pipeline.

On the demand side, the Czech Republic does not have so many tools, as very few customers have the possibility of switching to another fuel in the event of a shortage of natural gas. On the demand side can be used

- closed interruptible contracts and
- negotiating a voluntary reduction of some customers, depending on the season and duration of the alert.

Additionally, following the provisions of the Decree of the Ministry of Industry and Trade No. 344/2012 Coll., On the state of emergency in the gas industry and on the way of safeguarding the safety standard, specifically according to § 3, prevention of the emergency - see Annex.

5.11.2 Non-market measures in a state of emergency and their effects

In case of emergency, measures can be applied in the field of safeguarding of gas supply both on the supply side and on the demand side. However, the fact remains that the Czech Republic, which does not have strategic gas reserves, has very limited options on the supply side, virtually the only way remains for gas withdrawal from gas storage.

On the demand side, interruptible deliveries are used as a priority in case of emergency, but the procedure is in accordance with the Decree of the Ministry of Industry and Trade No. 344/2012 Coll., on the state of emergency in the gas industry and on the way of safeguarding the safety standard, namely according to § 4, emergency and § 5, consumption levels.

Withdrawal of gas from storage facilities (underground gas storage facilities)

Mandatory gas withdrawal from UGS is applied after declaring a state of emergency and after the inability to safeguard gas supplies via market measures on the basis of the storage of gas in UGS facilities in the Czech Republic. Decision is made by the Central Crisis Staff PS CR.

Measures that may be appropriate to use in the event of an emergency and to what extent use them to master the crisis is necessary

These measures are described in Decree No. 344 dated October 10, 2012 on the state of emergency in the gas industry and on the way of safeguarding the security of supply standard, where in § 4 State of Emergency are listed the activities in case of emergency and in the order in which they follow. An overview of consumption levels is given in § 5 Consumption levels (see Annex).

Effects of national emergency measures in relation to neighboring countries
There are information transmission schemes where is stated the exchange of information of the transmission system operator Net4Gas Ltd. with dispatchers of foreign partners who take this information into their Crisis (emergency) staff. Crisis staffs can merge and discuss and address the situation in order to mitigate the effects of serious supply disruptions and prevent unnecessary damage to individual Member States.

**State of emergency**

The state of emergency including the extraordinary state of emergency is described in paragraphs 73-73g of Act No. 458/2000 Coll.

**Note:** Descriptions of emergency prevention and emergency measures are provided in the annex.

**Gas supply in state of emergency**

**Regional state of emergency**

A regional state of emergency is declared by the relevant distribution system operator via Czech Radio, ČRo 1 – Radiožurnál station in a way allowing remote access or using other mass media communication and without undue delay, informs the relevant licensed gas trader, operators of connected distribution systems, underground gas storage operators, market operator, the Ministry, Energy Regulatory Office, Ministry of the Interior, the local regional authority or Prague Municipality Office using electronic communication. Similar procedures will be used to end the state of emergency.

**National state of emergency**

A national state of emergency is declared by the transmission system operator via Czech Radio, ČRo 1 Radiožurnál station and in a way allowing remote access or using other mass media communication and without undue delay TSO informs the relevant licensed gas trader, operators of connected distribution systems, underground gas storage operators, market operator, the Ministry, Energy Regulatory Office, Ministry of the Interior, the local regional authority or Prague Municipality Office using electronic communication. Similar procedures will be used to end the state of emergency.

**Activities in a state of emergency**

The activities of different gas market participants in declaring a state of emergency are laid down in the provisions of Act No. 458/2000 Coll. business conditions and public administration in the energy sectors and on amendments to other laws (the "Energy Act") and in addition, they are stated in detail in the decree of the Ministry of Industry and Trade Nr. 344/2012 Coll. on a state of emergency in the gas industry and the provision of the security standard.

**Obligations laid down from the Energy Act**

Obligations of the gas producer, transmission system operator, distribution system operator, gas storage operators and gas traders are described in §57 - §61 of the Energy Act No. 458/2000Coll.
5.12 Communication scheme when an emergency is declared

Graph 1: Information flows when declaring a state of emergency in the Czech Republic gas system

List of abbreviations:
- BTS: Boarder Transfer Station
- CR, CT: Czech Broadcasting, Czech TV
- GD FRS: General Directorate of Fire Rescue Service
- MIT: Ministry of Industry and Trade
- ASMR: Administration of State Material Reserves
- ERO: Energy Regulatory Office
- OTE: Operator of Energy Market
- Gas Traders
- Communication with the media
- Crisis Staffs of Regions
- Customers

1 - Input information
2 - Summoning Central Crisis Staff of the gas system of the Czech Republic
3 - Announcement / revocation of the state of emergency on the gas system of the Czech Republic
4 - Mutual communication - information exchange
5 - Instructions, commands, information
6 - Information on the announcement/revocation of the state of emergency and mutual communication
7 - Announcement / revocation of the state of emergency in the media
6. MEASURES TO MITIGATE THE IMPACT OF SUPPLY DISTURBANCES ON DISTRICT HEATING AND ELECTRICITY

(a) thermal energy

Customers (natural gas customers) who provide more than 20% of the heat produced from their total production to households, healthcare facilities and social services facilities are included in Group C1, which includes the consumption points of customers with predominant heat consumption with estimated annual consumption exceeds 4 200 MWh in the relevant year and does not fall under Group A or D. These sampling points belong to that group (C1) if the sum of the consumption in the last quarter of the previous year and the first quarter of the year is 70% or more of the total consumption for the period from 1 April of the previous year until 31 March of that year.

Customers who provide heat to households, health care facilities and social services facilities are not restricted in preventing emergency, except when their gas supplier has caused a notification of emergency prevention due to a failure to supply gas or a significant deviation.

For reasons of supplying heat to the above-mentioned customer groups, Group C1 customers are not limiting in both gas consumption and consumption levels for limiting gas supply. Their limitations only occur at the 8th and 9th consumption levels, when C1 customers are limiting gas supply by 20% or 40% respectively. Then, there is only an emergency stage, which means the interruption of the gas supply to all the supply points of the customers of all groups.

An important measure for mitigating the impact of gas supply disruptions on district heating has been the inclusion of heat energy suppliers, C1 customers, among protected customers according to the new Decree of the Ministry of Industry and Trade No. 344/2012 Coll., On the state of emergency in the gas industry and on the way of securing the security standard.

(b) electricity

The share of natural gas in the production of electricity is not significant. Dropouts of gas supply will not significantly affect the overall production and supply of electricity. Only about 6% of consumed natural gas is used to generate electricity. For this reason, electricity production from natural gas has not yet been included in the category of protected customers.

7. CRISIS MANAGER OR GROUP

The crisis manager is the Executive Director for the operation of the transmission system operator NET4GAS, Ltd. in cooperation with the crisis crew of the gas system of the Czech Republic. His tasks are set by the Emergency Plan of the Transmission System.

8. ROLE AND RESPONSIBILITIES OF NATURAL GAS UNDERTAKINGS AND INDUSTRIAL CUSTOMERS

The activities of individual gas market participants in declaring a state of emergency are determined by the provisions of Act No. 458/2000 Coll., On Business Conditions and the Performance of State Administration in the Energy Sectors and on Amendments to Certain Acts (Energy Act - EZ), but are further developed in the Decree of the Ministry Industry and Trade No. 344/2012 Coll., about the
state of emergency in the gas industry and about the method of safeguarding the safety standard, as amended.

8.1 Gas transport

Fig. No. 2 – Transmission system

The system, at which the gas transmission is ensured by a transmission licensee to transport gas, is connected to gas systems in neighboring countries; transmission system is instituted and operated in the public interest.

The obligations of the transmission system operator are defined in § 58 of Act No. 458/2000 Coll. on business conditions and public administration in the energy sectors and on amendments to other laws (the "Energy Act"), as amended.

The responsibilities of the transmission system operator include the responsibility for declaring all three crisis levels - early warning, alert and emergency.

The procedures that need to be complied with are described in the Transmission System Operator's Emergency Plan.

In the event of an emergency, and after consideration, either an emergency or a state of emergency is declared.
8.2 Gas distribution

Fig. No. 3 – Distribution system (DS)


8.3 Gas storage

Fig. No. 4 – Underground gas storages
The obligations of the gas storage operator are defined in § 60 of Act No. 458/2000 Coll., On Business Conditions and on the Exercise of State Administration in the Energy Sectors and on the Amendment to Certain Acts (Energy Act) as amended (see Annex).

8.4 Gas trade


8.5 Industrial customers


8.6 Ministry of Industry and Trade

8.7 Intelligence obligations of natural gas undertakings

The reporting obligations of the individual gas market participants are determined by the provisions of Act No. 458/2000 Coll., On Business Conditions and the Execution of State Administration in Energy Industries and on Amendments to Certain Acts (Energy Act), but are further elaborated in the Decree of the Ministry of Industry and Trade no. 344/2012 Coll. on the state of emergency in the gas industry and on how to ensure the safety standard.

9. MEASURES RELATING TO UNDESIRABLE CONSUMPTION BY CUSTOMERS WHO ARE NOT PROTECTED CUSTOMERS

Disconnection of individual customers is described in the emergency plan of the distribution system operator.
10. REGIONAL DIMENSION (TO BE SUPPLEMENTED AFTER UPDATING OF REGIONAL PLANS)

According to Article 8 of EU Regulation 2017/1938, the Emergency Plan contains a regional chapter which sets out appropriate and effective cross-border measures for each level of crisis between Member States of the relevant risk groups. The Czech Republic is a member of 4 regional groups - the Baltic Sea, Ukraine and Belarus.

Risk group Baltic Sea

The risk group Baltic Sea consists of Belgium, the Czech Republic, Denmark, Germany, France, Luxembourg, the Netherlands, Austria, Slovakia and Sweden (EU Regulation 2017/1938 Annex I). Germany is the coordinator of the Baltic Sea Risk Group and led the preparation of the regional chapter for the Baltic Sea Risk Group. The regional chapter will be developed together with all Member States in the risk group before being included in this emergency plan.

Risk group Ukraine

The risk group Ukraine consists of Bulgaria, the Czech Republic, Germany, Greece, Croatia, Italy, Hungary, Austria, Poland, Romania, Slovakia and Slovenia (EU Regulation 2017/1938 Annex I). The coordinator of the risk group is Italy, which also leads the preparation of the regional chapter for this risk group. The regional chapter will be developed together with all Member States in the risk group before being included in this emergency plan.

Risk group Belarus

The risk group Belarus consists of Belgium, the Czech Republic, Germany, Estonia, Latvia, Lithuania, Luxembourg, the Netherlands, Poland and Slovakia (EU Regulation 2017/1938 Annex I). The coordinator of the risk group is Poland, which also leads the preparation of the regional chapter for this risk group. The regional chapter will be developed together with all Member States in the risk group before being included in this emergency plan.

North-Eastern Risk group

The risk group North-Eastern consists of Czechia, Denmark, Germany, Estonia, Latvia, Lithuania, Poland, Slovakia, Finland, Sweden (EU Regulation 2017/1938 Annex I). The coordinator of the risk group is not known yet. The regional chapter will be developed together with all Member States in the risk group before being included in this emergency plan.

10.1 Risk group measures to be adopted per crisis level

As the measures and procedures in the different risk groups are basically identical, only the Baltic Sea risk group has been selected for this emergency plan. A description of the measures of the other risk groups is given in the Annex to this plan.
In principle, all the measures set out below are information requirements useful to all Member States belonging to the risk group to respond to unexpected situations, to prevent the crisis from expanding and to assist Member States to the extent necessary. A number of measures in the energy security model of the transmission system operator include agreements with transmission system operators and customers in other gas transmission systems.

**Risk group Baltic Sea**

will be supplemented after the development of the regional EP

10.2 General measures

If the competent authority of a group Member State declares one of the crisis levels, it will immediately inform the competent authorities of the other group Member States as well as the European Commission. The Member State will provide information on the crisis level identified, the measures it has implemented and/or intends to take, its procedures being followed and the expected contribution of the measures taken.

10.3 Early warning level

The competent authority of the notifying Member State shall update the other Member States belonging to the risk group on the early warning situation every three working days or shall communicate any new developments as often as possible. No further measures are foreseen at this level, as the situation is still within market measures.

10.4 Alert level

The competent authority of the declaring Member State shall update the other Member States belonging to the risk group on the alert situation every two working days or communicate any new developments as often as possible. The competent authority and transmission system operators of a declaring Member State, as well as the competent authorities and transmission system operators of the other group Member States may request shippers and gas consumers to voluntarily increase their gas inflow or reduce their gas consumption. No further measures are foreseen at this level, as the situation is still within market measures.

10.5 Emergency level

The competent authority of the declaring Member State shall inform the other Member States belonging to the risk group of the emergency situation at least once a day or by communicating any new developments as often as possible.
The measures available at emergency level within the risk group are essentially similar to those in the relevant national chapter on non-market measures, but with the addition of being subject to cross-border coordination within the risk group. In addition, the Member State that has declared an emergency may ask the European Commission to declare an emergency situation at regional or Union level in the event an expansion of the crisis is likely to happen, pursuant to Art. 12 of EU Regulation 2017/1938.

10.6 Cooperation mechanisms

The cooperation mechanism within the risk group shall be governed by coordination procedures between Member States, transmission system operators, regulatory authorities and other stakeholders at different levels. The aim is to provide relevant stakeholders with detailed information on the cause and impact of the crisis situation and to coordinate possible mutually agreed solutions in order to prevent or mitigate the negative impacts of the supply crisis.

TSOs

In general, the TSOs shall work in close cooperation with the TSOs in the other group Member States. In case a supply bottleneck is foreseeable, the TSOs will liaise with the TSOs in the other Member States belonging to the risk group. Insofar as possible they will agree on the cross-border coordination of measures, including the exchange of information on any necessary market-based measures with cross-border effects. In case of a supply crisis, the TSOs shall cooperate and exchange information using the ReCo System for Gas established by ENTSOG, pursuant to Art. 3 of EU Regulation 2017/1938. ENTSOG shall inform the Commission and the competent authorities of the Member States belonging to the risk group. The TSOs may suggest possible response measures. For the purpose of a smooth application of this mechanism, it is important to note that the composition of the Baltic Sea risk group differs from the composition of the ReCo teams.

10.7 Competent authorities and regulators

In case the ReCo System for Gas gets activated for the Baltic Sea risk group, the competent authorities and regulators of the Member States belonging to the risk group must immediately be invited to participate in all team meetings and communications.

When the emergency level has been declared, the load distributors of the Member States belonging to the risk group will be in close contact with each other, in particular, in order to provide information on the expected scale of necessary cross-border restrictions on load flow.

Information provided by natural gas undertakings pursuant to Art. 14 (1) of EU Regulation 2017/1938 shall be shared with the Member States of the risk group.

10.8 Chain of Communication
The communications within the risk group in case of a supply crisis should follow the following pattern:
Step 1) Affected TSO: Call to the ReCo facilitator, ask for a meeting in specified time
Step 2) Affected TSO: Confirming email
Step 3) Facilitator: Schedule virtual session
Step 4) Facilitator: Preparation and sending invitation email to TSOs, competent authorities and regulators
Step 5) TSOs, competent authorities and regulators: Reply to the email
Step 6) Facilitator: Call to those who did not reply
Step 7) Facilitator: Start the virtual session
Step 8) TSOs, competent authorities and regulators: Join the session

10.9 Solidarity among the Member States

The adoption of solidarity measures was subject to a change in the Energy Act in the Czech Republic. Currently, the Czech Republic has come close to concluding an agreement with Germany, the issue of compensation for the supplied solidarity gas still remains open.

11. CONSULTATION WITH NEIGHBORING COUNTRIES

In accordance with Article 8 (6) of Regulation (EC) No 2017/1938 of the European Parliament and of the Council, the competent authorities of the neighboring countries should exchange proposals for the Emergency Plan and carry out consultations at regional level in order to avoid inconsistency between the plans and measures proposed by them plans for preventive measures and contingency plans for other Member States and to comply with the provisions of this Regulation and other EU legislation. The competent authorities in each of the risk groups should exchange proposals for a plan containing proposals for cooperation no later than 5 months before the expiry of the deadline for submitting a plan.

The Emergency Plan shall then be updated every four years or more frequently if circumstances so require or if the Commission so requests. The updated plan thus reflects the updated risk assessment and the conclusions of the tests carried out under Article 10 (3) of Regulation No 2017/1938.

Consultations take place on an ad hoc basis (Gas Coordination Group) with the competent authorities of all neighboring EU states, i.e. Germany, Poland, Slovakia and also Austria.

12. CONCLUSION

Tasks and responsibilities of natural gas undertakings for emergencies are defined both in Act No. 458/2000 Coll., On Business Conditions and State Administration in Energy Industries and on Amendments to Certain Acts (the Energy Act), as well as in the Decree on State of Emergency in the Gas Industry and measures how to safeguard the security standard. In addition, the individual activities of natural gas undertakings are dealt with in detail in the emergency plans of individual gas
facility operators in the prevention of emergency and emergency situations and are covered by the "Emergency plan of the gas system of the Czech Republic ".

The obligations of the gas undertakings resulting from the Energy Act and the Decree are continuously controlled by the Ministry of Industry and Trade of the Czech Republic as well as by the Energy Regulatory Office.

For emergency and emergency situations, crisis (emergency) committees of individual gas undertakings are established, defining the processes and rules to which responsibilities and powers are assigned, and further on the Crisis Team of the Transmission System Operator and the Central Crisis Team are established.

**At the alert level**, market-based supply-side measures mainly use increased import flexibility, increased gas withdrawal and possibility of reverse flow in the transmission system, and the use of interruptible contracts on the demand side.

**Non-market measures**, which are usually used only in an emergency, include compulsory gas extraction on the supply side and demand-side switching to another fuel and a gradual reduction in gas consumption depending on the categorization of customers in individual groups according to the Decree no. 344/2012 Coll., The Ministry of Industry and Trade of the state of emergency in the gas industry and the method of safeguarding security of supply standard.

**Cooperation** between Transmission System Operators in emergency situations is in place, it will be appropriate to extend it to other countries of the region that are interconnected, as well as to establish co-operation at the level of state authorities.

**The reporting obligations** of the individual gas service operators are defined by the Energy Act and further developed by the Decree no. 344/2012 Coll., The Ministry of Industry and Trade of the state of emergency in the gas industry and the method of safeguarding security of supply standard.

**Deliveries of gas** in the case of emergency are primarily intended to provide protected customers. The term "Solidarity Protection Customers” is currently not anchored in the legislative of the Czech Republic.

**The transport system** of the Czech Republic is robust, high quality and carefully maintained and ensures no problem of meeting the N-1 standard, this standard is even much higher in the Czech Republic than the requirement of Regulation No. 2017/1938.

**Gas storage**, which accounts for about 40% of the annual gas consumption in the Czech Republic, significantly helps to safeguard gas supplies to end customers in the event of an interruption or limitation of gas supplies.

The Czech Republic is making use of the **diversification of existing routes** and **sources** of gas supply. At present, supplies are provided mainly from LNG terminals and Norwegian sources. The previous dependence on a single source of gas from the Russian Federation was thus removed.

In the transmission system of the Czech Republic, **reverse flows** have been implemented, which will ensure the supply of Czech customers both from the west and from the east in the event of a gas supply failure.

The volume of gas supplies is also ensured for the **production of electricity**, the production of which in gas power plants represents approximately 10% of total electricity production.
It follows from preliminary analyzes at the level of the European Commission that the reduction or failure of supplies from Russia does not currently threaten gas supplies to customers in the Czech Republic.