

# EMERGENCY PLAN FOR SAFEGUARDING OF SECURITY OF NATURAL GAS SUPPLY

## 1. GENERAL PROVISIONS

Article 315(3) of the Energy Law (hereinafter: the Law), stipulates that the Government shall adopt the Emergency Plan in order to ensure the security of natural gas supply which identifies measures, energy entities that will be in charge of ensuring the security of the transmission system operation and the security of supply of certain groups of end customers, the volumes and capacity of natural gas in case of a general shortage of natural gas.

The plan shall be implemented in situations that affect or may affect the normal functioning of the natural gas market in the Republic of Serbia and/ or jeopardize the security of supply, whereby the crisis may be caused by external or internal risks, defined by the regulation establishing the Preventive Action Plan in accordance with Article 315, paragraph 2 of the Law.

The plan implies a continuous flow of natural gas through the gas infrastructure from Hungary and towards Bosnia and Herzegovina as long as the technical and security circumstances permit.

In order to monitor the supply of the Republic of Serbia's energy market with energy and energy products and to propose appropriate measures in cases when the security of supply of customers or operation of the energy system is endangered due to inadequate supply on the market or occurrence of other emergency circumstances, the ministry in charge of energy affairs (hereinafter: the Ministry) shall establish a Special Working Group for monitoring the security of supply with energy and energy products (hereinafter: Special Working Group) consisting of the representatives of the Ministry, the Energy Agency of the Republic of Serbia, the Republic Directorate for Commodity Reserves, Public Enterprise Srbijagas Novi Sad, Public Enterprise Elektroprivreda Srbije, AD Elektromreža Srbije and Naftna industrija Srbije a. d, EPS Distribucija, the Association of Serbian District Heating Utilities and Public Utility Company Beogradske elektrane.

## 2. DEFINITIONS OF TERMS

The terms provided in this Plan shall mean the following:

- 1) Major industrial customers - natural gas customers connected to the natural gas transmission system, with a connection capacity of more than or equal to 50,000 m<sup>3</sup> per day;
- 2) Interruptible customers – major natural gas customers, excluding those who use natural gas for power production, who have concluded contracts on an annual basis under which they are obliged to restrict or interrupt the consumption of natural gas as long as the emergency situation lasts, and up to a maximum of thirty days per year;
- 3) Responsible parties - government authorities, operators of transmission or distribution systems of natural gas, natural gas storage facility operator, electricity transmission system operator, suppliers of natural gas, electricity suppliers, energy entities obliged to provide operating reserves of energy products in accordance with Article 345 of the Law and Major gas customers;

4) Crisis - any event which leads or may lead to a disturbance in supply and endangering the security of natural gas supply;

5) Priority customers - the customers for whom it is necessary to provide a special regime of supply i.e. protection, in cases when the security of gas supply is jeopardized, as follows: households; heat producers; customers with own consumption that is required to carry out the activities of transport, distribution and storage of natural gas (preheating of gas at the main measuring and regulation station, compressor operation, etc.), customers with own consumption that is required to carry out the activities of production and refining of natural gas, oil and petroleum products; hospitals, clinics, clinical hospital centres and clinical centres, institutes, special hospitals (emergency services and other aid stations, dispensaries, blood transfusion, collection and treatment centres and dialysis centres) and facilities and plants of drug and medical supplies manufacturers; other health institutions in accordance with the Plan of the Network of Health Care Facilities, which is adopted in accordance with the law; (4) water and sewerage facilities; facilities for the production of basic food products (central bakeries, dairies and kitchens); units and institutions of the Ministry of Defence and the Army of Serbia; social welfare institutions for accommodation of users (institutes, residential care homes, centres, threshold access centres and shelters); penitential institutions, district prison, correctional centres and special prison hospitals; institutions in the field of pre-school, primary, secondary and higher education, pupil and student accommodation and sports; facilities in which the delivery of gas would cause permanent damage to production units; customers who own facilities for food production, other than central bakeries and kitchens;

### 3. CRISIS LEVELS AND CRITERIA FOR THEIR ACTIVATION

#### 3.1. Crisis levels

The following levels of crisis may arise in the supply of natural gas:

1) Level 1 - Early Warning: when there is concrete, serious and reliable information that an event may occur which is likely to result in significant deterioration of the supply situation and is likely to lead to the Level 2 or Level 3 being triggered.

2) Level 2 - Alert Level: 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.

3) Level 3 - Emergency Level: a situation of exceptionally high gas demand, significant supply disruption or other significant deterioration of supply 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 safeguard supplies of gas to protected customers.

The introduction of the Level 1 crisis is declared by the transmission system operator Transportgas Srbija d.o.o, after consulting with the transmission system operator YugoRosgaz Transport d.o.o, Niš.

The activation of the Level 2 and Level 3 crises is announced by the Government based on the proposal of the Ministry.

### 3.2. Criteria for activation of crisis levels

Crisis Level 1 - early warning is declared in the event that one of the following circumstances has occurred:

- 1) there is a deficit of 3% of nominated volumes of natural gas, over a period of time that is equal to or greater than two consecutive days;
- 2) the delivery pressure is less than the minimum inlet pressure, over a period of time that is equal to or greater than two consecutive days;
- 3) total available volumes of natural gas in the Banatski Dvor storage facility are less than 200 million m<sup>3</sup>, regardless of the season;
- 4) the volumes of natural gas in the Banatski Dvor storage facility held by the Public Enterprise Srbijagas are less than 32 million m<sup>3</sup>;
- 5) the demand for natural gas is 120% of the nominated, over a period of time that is greater or equal to two consecutive days;
- 6) the inability to meet daily demands of system users due to technical issues on the natural gas transmission system;
- 7) the inability to meet daily demands for natural gas for 10,000 to 20,000 system users due to issues on the natural gas transmission system;
- 8) the total unmet demand of priority customers for natural gas are greater than 300,000 m<sup>3</sup>/day;
- 9) the total stocks of heating oil are less than 35,000 t over summer (from April 15 to October 15) or less than 70,000 t at the start of the winter period (from October 15 to April 15). The total stocks include the sum of the reserves of the Republic Directorate for Commodity Reserves, members of the Association of Serbian District Heating Utilities, Public company Elektroprivreda Srbije and stocks held as emergency stocks of oil and petroleum products.

Crisis Level 2 - alert is declared in the event that one of the following circumstances has occurred:

- 1) when there is a shortage of more than 10% of the nominated volumes, over a period of time that is equal or greater than two consecutive days during December, January and February;
- 2) when there is a shortage in the amount of 40% of the nominated volumes over a period of time that is equal or greater than two consecutive days in any other period of the year except January and February;
- 3) total available volumes of natural gas in the Banatski Dvor underground storage facility are less than 150 million m<sup>3</sup>, regardless of the season;
- 4) the volumes of natural gas in the Banatski Dvor underground storage facility held by the Public Enterprise Srbijagas are less than 18 million m<sup>3</sup>;
- 5) the demand for natural gas exceeds 130% of the nominated volume, over a specified period of more than or equal to two consecutive days;
- 6) compressor station failure;
- 7) interrupted supply from the Banatski Dvor underground storage facility;
- 8) the inability to meet daily demands for natural gas for 20,000 to 50,000 system users;
- 9) the total unmet demand of priority customers for natural gas are greater than 500,000 m<sup>3</sup>/day;
- 10) the total stocks of heating oil are less than 20,000 t over summer (from April 15 to October 15) or less than 45,000 t at the start of the winter period (from October 15 to April 15). The total stocks include the sum of the reserves of the Republic Directorate for

Commodity Reserves, members of the Association of Serbian District Heating Utilities, Public company Elektroprivreda Srbije and stocks held as emergency stocks of oil and petroleum products.

Crisis Level 3 - emergency is declared in the event that one of the following circumstances has occurred:

1) when there is a shortage of more than 20% of the nominated volumes of natural gas, over a period of time that is equal or greater than two consecutive days, December, January and February;

2) when there is a shortage in the amount of 50% of the nominated volumes of natural gas, over a period of time that is equal or greater than two consecutive days in any other period of the year except January and February;

3) total available volumes of natural gas in the Banatski Dvor underground storage facility are less than 100 million m<sup>3</sup>, regardless of the season;

4) the volumes of natural gas in the Banatski Dvor underground storage facility held by the Public Enterprise Srbijagas are less than 4 million m<sup>3</sup>;

5) the demand for natural gas exceeds 150% of the nominated volume, over a specified period of more than or equal to two consecutive days;

6) the inability to meet daily demands for natural gas for 50,000 to 100,000 system users;

7) the total unmet demand of priority customers for natural gas are greater than 1,500,000 m<sup>3</sup>/day;

8) the total stocks of heating oil are less than 10,000 t over summer (from April 15 to October 15) or less than 45,000 t at the start of the winter period (from October 15 to April 15). The total stocks include the sum of the reserves of the Republic Directorate for Commodity Reserves, members of the Association of Serbian District Heating Utilities, Public company Elektroprivreda Srbije and stocks held as emergency stocks of oil and petroleum products.

#### 4. PARTIES RESPONSIBLE FOR ACTIONS IN CASE OF CRISIS

To manage the crisis in the supply of natural gas in emergency situations, the following responsible parties have been established:

1) the Government:

- adopts a decision to declare Level 2 and Level 3 of the crisis;
- stipulates the measures for reducing the supply of natural gas or special conditions for import or export of natural gas, the manner and conditions for formation and control of prices, the obligation to supply only specific users or special conditions for performing energy activities with minimal distortions on the energy market in the region, which may last as long as the circumstances for which they are prescribed, or as long as the consequences as a result of these circumstances take place, in accordance with the provisions of Article 319 of the Law.

- decides on appeals for assistance from other countries;

2) the Ministry:

- coordinates emergency situation management;
- considers information and proposals submitted by Transportgas Srbija d.o.o.;
- proposes to the Government to adopt a decision to declare Level 2 and Level 3 of the crisis;

- proposes to the Government to adopt a decision to stipulate the measures for reducing the supply of natural gas or special conditions for import or export of natural gas, the manner and conditions for formation and control of prices, the obligation to supply only specific users or special conditions for performing energy activities with minimal distortions on the energy market in the region, which may last as long as the circumstances for which they are prescribed, or as long as the consequences as a result of these circumstances take place, in accordance with the provisions of Article 319 of the Law.

- proposes to the Government to adopt a decision on the appeals for assistance from other countries;

- establishes and convenes the meetings of the Special Working Group;

- reports on the emergency situation and all undertaken measures to the competent bodies in accordance with the obligations arising from the ratified international treaties;

3) the Special Working Group

- monitors the supply of the Republic of Serbia's energy market with energy and energy products and proposes appropriate measures in cases where security of supply of customers or operation of the energy system is endangered due to inadequate supply on the market or occurrence of other emergency circumstances;

4) Transportgas Srbija d.o.o:

- operationally manages emergency situations;

- collects information from the responsible parties, considers the energy balance of natural gas, undertakes the measures pursuant to the Law and related by-laws;

- adopts a decision on the activation of Level 1 and notifies the Ministry thereof including the reasons for activation, as well as all responsible parties and users of transmission systems;

- considers all relevant information for the security of natural gas supply and, if convinced that it is necessary to activate the Level 2 and Level 3 of crisis, informs the Ministry thereof, and about the reasons for activation of the crisis, measures already taken by the plan on supply restriction;

- adopts the Supply Restriction Plan;

- informs all responsible parties about changing the level of the crisis;

- implements measures under the Supply Restriction Plan;

- after termination of the crisis prepares a crisis report and submits it to the Ministry;

5) Natural gas suppliers:

- analyse and forecast the consumption of natural gas by customers they supply;

- In addition to information submitted in accordance with the Law and related by-laws, submit all relevant data and information to Transportgas Srbija d.o.o. at its request, as well as based on own assessment that changes have occurred that may lead to a threat to the security of supply;

- make regular and emergency procurements depending on the circumstances;

6) Directorate for Commodity Reserves of the Republic of Serbia:

- provides the use of petroleum product stocks that are required for the functioning of energy entities performing the activity of heat production;

- 7) Public Enterprise Elektroprivreda Srbije:
  - submits estimates on the possibilities of substituting natural gas with electricity to the Ministry;
  - produces or acquires the missing quantities of electricity;
- 8) AD Elektromreža Srbije:
  - assesses the possible impact of the crisis in the supply of natural gas to the power system and in case of a threat to the security of the supply of energy and energy products undertakes measures in accordance with the Law and related by-laws.
- 9) Major natural gas customers:
  - act in accordance with adopted consumption restriction measures;
- 10) Natural gas transmission, i.e. distribution system operators:
  - make plans on restrictions of natural gas supply in accordance with the adopted measures of consumption restriction;
  - implement measures based on plans on restrictions of natural gas supply;
  - in addition to the information they submit in accordance with the Law and its by-laws, they also submit all relevant data and information to Transportgas Srbija d.o.o. at its request;
- 11) Natural gas storage facility operator:
  - in addition to the information provided in accordance with the Law and its by-laws, submits all relevant data and information to Transportgas Srbija d.o.o. at its request;
- 12) energy entities engaged in the production of electricity and/or combined production of power and/or heat:
  - in accordance with Article 345 of the Law, ensure possible substitution of natural gas with another energy product in the amount that will secure at least 15 days of their average production of heat in January, February and March for the previous five years.

## 5. MEASURES TO BE TAKEN DURING CRISIS

Measures to be taken in the event of a natural gas supply crisis shall provide:

- 1) harmonization of the current consumption of natural gas with available sources;
- 2) approved maximum daily and maximum hourly consumption.

In case of a crisis, the following measures can be taken:

- 1) restriction of natural gas supply;
- 2) suspension of natural gas supply;
- 3) substituting of natural gas with other energy products;
- 4) additional procurements of natural gas, heating oil and other energy products and energy;
- 5) emergency procurement of heating oil and other energy products by energy entities in charge of providing operating reserves and the Directorate for Commodity Reserves of the Republic of Serbia;

- 6) stipulating of special conditions for import or export of natural gas, the manner and conditions for the formation of prices of energy and energy products;
- 7) mandatory supply of specific users;
- 8) special conditions for the performance of energy activities with the minimal disturbance of the energy market in the environment;
- 9) other measures that the Government may prescribe in order to harmonize natural gas consumption with available resources.

The measures to be taken in the event of a crisis are carried out on the basis of the plans on restriction of natural gas supply adopted by the operator of the system.

The basis for restriction of natural gas supply to which the percentage of restriction will be applied is the contracted volume for the month in which the restriction is made, that is, the average daily and hourly consumption in that month.

The operator of the transmission or distribution system is obliged to inform the customers about the maximum hourly and daily consumption of natural gas during the supply restriction as soon as possible after the date of the adoption of the natural gas consumption restriction plan.

The decision on plan implementation and the supply restriction plan shall be published in the public media no later than 24 hours before the implementation of the measures to which the decision applies.

## 6. ACTIONS TO BE UNDERTAKEN IN CASE OF CRISIS

### 6.1. CRISIS LEVEL 1 - EARLY WARNING

In case of a crisis Level 1 - early warning, the following activities and measures shall be taken:

– Transportgas Srbija d.o.o. immediately after the activation of Level 1 shall notify the Ministry, all responsible parties and all users of the transmission systems thereof and about the reasons for crisis activation;

– Transportgas Srbija d.o.o. shall inform the Ministry on a daily basis about the status of natural gas supply on the market of the Republic of Serbia and the expected changes.

– Transportgas Srbija d.o.o. within 24 hours from the activation of the Level 1 crisis, organizes the first meeting, and following that, as necessary, with the representatives of responsible parties, in order to ensure further regular delivery of information, monitor the development of the crisis and update the crisis level assessments and implement adequate measures;

– a regular exchange of information between Transportgas Srbija d.o.o. and Yugorosgaz Transport d.o.o., Niš shall be established;

– a regular exchange of information between the transmission system operators and the supplier of public suppliers, other suppliers, major customers and other responsible parties shall be established;

– the responsible parties shall regularly inform Transportgas Srbija d.o.o. about the available volumes of natural gas in the underground storage facility, expected consumption and supply of gas;

– suppliers, including public suppliers, shall regularly inform Transportgas Srbija d.o.o. about the expected consumption of priority customers;

- suppliers shall inform Transportgas Serbia d.o.o. on their assessments of the possible restrictions of consumption in the forthcoming period on the basis of interruptible supply contracts with customers and major customers;
- energy entities shall intensify previously planned purchases of natural gas, heating oil and other energy products;
- energy entities shall investigate the market, plan and prepare documentation for additional procurements of gas, heating oil and other energy-products;
- major gas customers shall act in accordance with consumption restriction measures.

Responsible parties and information flow in Level 1 of the crisis is represented in Figure 1.

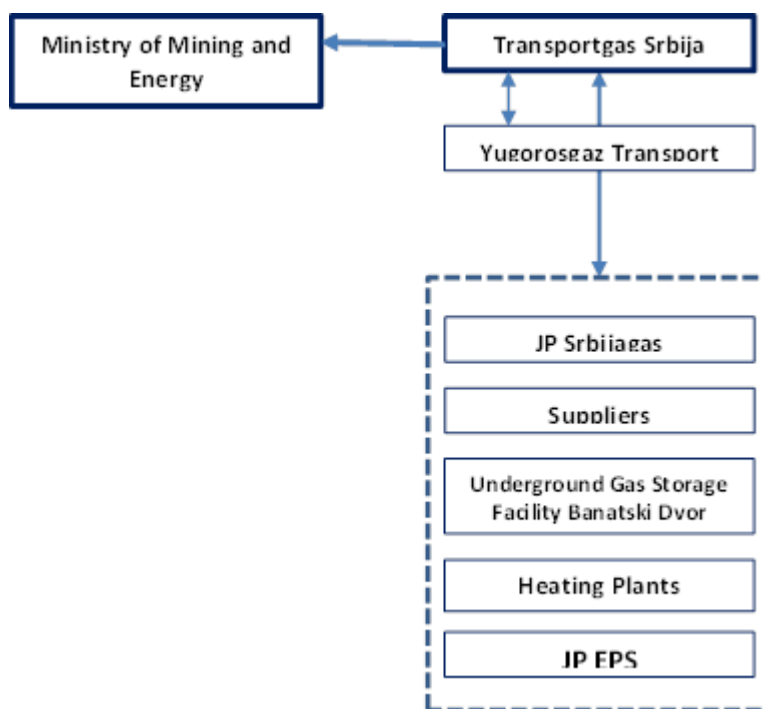


Figure 1: Responsible parties and information flow in Level 1 of the crisis

## 6.2. CRISIS LEVEL 2 -ALERT LEVEL

In the event of a crisis, Level 2 - alert level, in addition to activities and measures taken in the case of Level 1, the following activities shall be implemented:

- Transportgas Srbija d.o.o. shall consider all relevant information for the security of natural gas supply, and if convinced that it is necessary to activate the Level 2, shall inform the Ministry thereof and about the measures already taken and the plan on supply restriction;
- The Ministry shall propose to the Government to issue a decision promulgating the activation of Level 2 and the implementation of market measures;



- the Government's decision shall be delivered to the Ministry, Energy Agency of the Republic of Serbia, Transportgas Srbija d.o.o. and other responsible parties for the purpose of implementation;
- the decision on implementation of measures and the plan on restriction of natural gas supply shall be published in the public media no later than 24 hours before the application of the measures to which the decision applies;
- in order to assess the status of the natural gas market supply and monitor the implementation of the established measures, regular meetings of the Special Working Group for monitoring the security of supply are held;
- based on the expected and the worst possible scenario of development of supply and consumption of natural gas, the Special Working Group shall consider the necessity of implementing non-market measures;
- Transportgas Srbija d.o.o. shall continuously exchange information with the users of the transmission systems, i.e. suppliers of the customers based on interruptible supply contracts and suppliers of the customers who have a possibility to substitute natural gas by other energy products;
- Public Enterprise EPS shall, based on the request of Transportgas Srbija d.o.o. submit an assessment of the possible substitution of natural gas by electricity;
- Transportgas Srbija d.o.o., in cooperation with relevant suppliers, shall examine the possibility of additional natural gas imports.
- interrupted supply or supply restriction under interruptible supply contracts, as necessary;
- the Government and suppliers, if necessary, shall allocate funds for the additional procurement of natural gas, heating oil and electricity on the market;
- the Government, if necessary, shall stipulate special conditions for import or export of natural gas, the manner and conditions for price formation and control, based on market parities;
- emergency procurement of other energy products shall be performed by energy entities in charge of providing operating reserves and the Directorate for Commodity Reserves of the Republic of Serbia;
- emergency procurement of gas for storage in Banatski Dvor shall be implemented;
- producers of heat and electricity using natural gas as energy product shall switch to other energy products, as needed;
- Transportgas Srbija d.o.o. shall thoroughly and continuously monitor the implementation of measures and their efficiency and at least once a day inform the Ministry and responsible parties;
- the Ministry in charge of energy affairs shall report on all undertaken measures to the competent bodies in accordance with the obligations arising from the ratified international treaties.

Responsible parties and information flow in Level 2 of the crisis is represented in Figure 2.

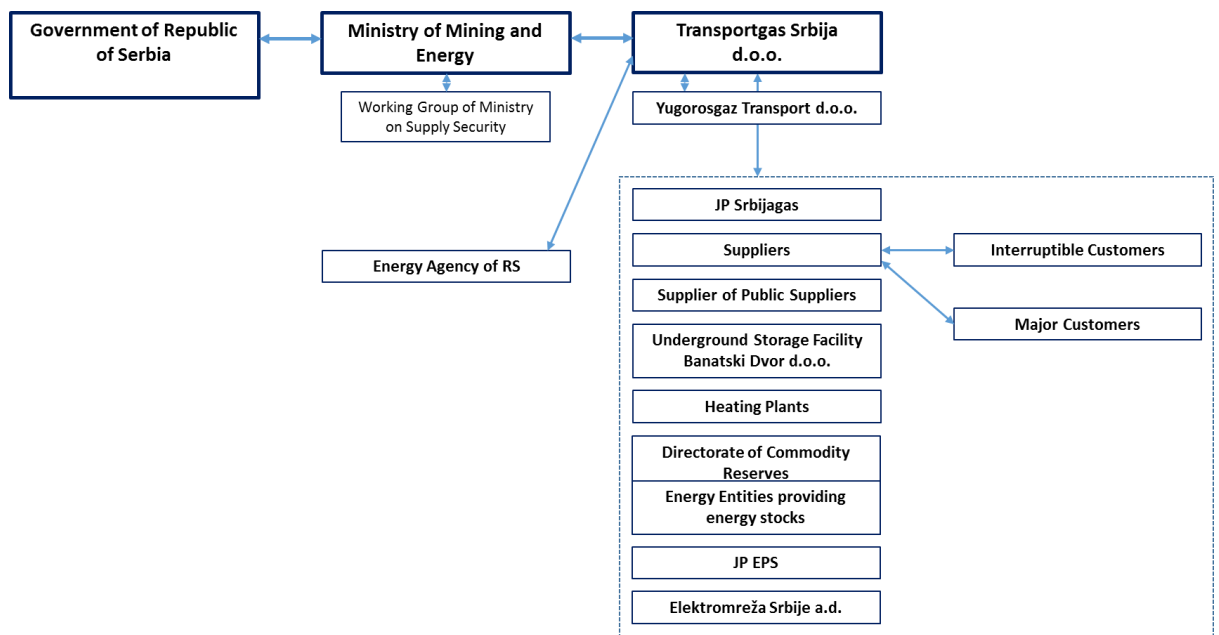


Figure 2: Responsible parties and information flow in Level 2 of the crisis

### 6.3. CRISIS LEVEL 3 - EMERGENCY LEVEL

In the event of a crisis of Level 3 - emergency level, in addition to activities and measures taken in the case of Level 2, the following activities shall be also implemented:

- Transportgas Srbija d.o.o. shall consider all relevant information for the security of natural gas supply, and if convinced that it is necessary to activate the Level 3, shall inform the Ministry thereof and about the measures already taken and the plan on supply restriction;
- the Ministry shall propose to the Government to issue a decision promulgating the activation of Level 3 and the implementation of non-market measures;
- the Government's decision shall be delivered to the Ministry, Energy Agency of the Republic of Serbia, Transportgas Srbija d.o.o. and other responsible parties for the purpose of implementation;
- Transportgas Srbija d.o.o immediately after the activation of Level 3 shall notify all users of the transmission systems about that and the reasons thereof;
- the decision on implementation of measures and the plan on restriction of natural gas supply shall be published in the public media no later than 24 hours before the start of application of the measures to which the decision applies;
- in order to assess the status of the natural gas market supply and monitor the implementation of the established measures, regular meetings of the Special Working Group for monitoring the security of supply are held;
- Transportgas Srbija d.o.o. shall continuously exchange information with the users of the transmission systems, suppliers of the customers based on interruptible supply contracts and suppliers of the customers who have a possibility to substitute natural gas by other energy products;
- Transportgas Srbija d.o.o. shall monitor the implementation of measures and efficiency of their implementation and daily inform the Ministry and responsible parties about the current and expected situations;
- interruption of supply under interruptible supply contracts;

- Interruption or restriction of the supply of customers according to the sequence under the Supply Restriction Plan;
- changes in the production schedule of the units for the production of petroleum products for the purpose of production of additional quantities of heating oil;
- emergency procurement of electricity from imports, if necessary;
- shift to heating oil and other energy products by energy entities engaged in the production of heat and combined production of power and heat;
- reallocation of existing stocks of heating oil and determining the method of replenishment;
- restrictions on use of other energy-products;
- on the proposal of the Ministry, on the basis of the analysis and notification received from Transportgas Srbija d.o.o, the Government shall make a decision on the request for assistance from other countries;
- the Ministry shall report on all undertaken measures to the competent bodies in accordance with the obligations arising from the ratified international treaties.

Responsible parties and information flow in Level 3 of the crisis is represented in Figure 2.

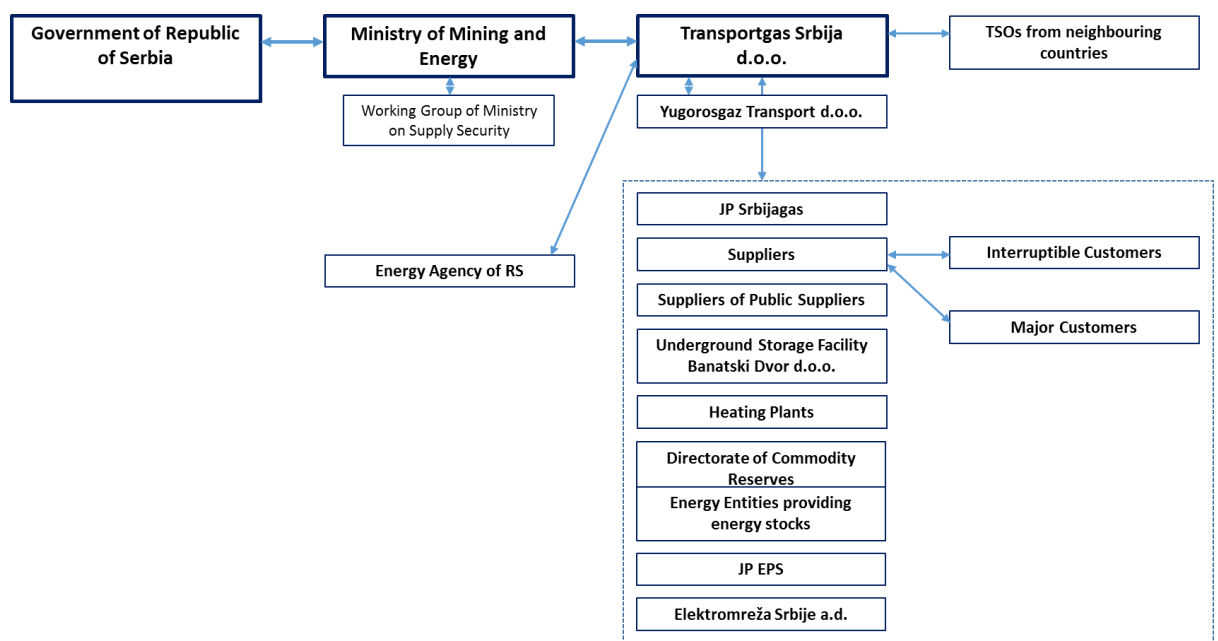


Figure 3: Responsible parties and information flow in Level 3 of the crisis

## 7. COOPERATION WITH OTHER COUNTRIES

In case of a natural gas supply crisis, a joint operation with Hungary and Bosnia and Herzegovina shall be coordinated and the transmission of natural gas to Bosnia and Herzegovina shall be coordinated and unlimited as long as there are technical possibilities for it.

In case of occurrence of crisis of Level 2 and Level 3 the Republic of Serbia may require strict adherence to the principles of European solidarity, in accordance with Regulation 2017/1938 of the European Parliament and the Council on measures to protect the security of natural gas supply, as well as the non-application of the Decree No. 19 of 2009 of the Hungarian Government<sup>1</sup>.

The Ministry shall report on the undertaken measures to the competent bodies in accordance with the obligations arising from the ratified international treaties.

---

<sup>1</sup> Hungarian Government, Governmental Decree No. 19 of 2009 (I.30.) Implementing the provisions of the Act, [http://www.mekh.hu/gcpdocs/52/Gov\\_Decree\\_265\\_2009.pdf](http://www.mekh.hu/gcpdocs/52/Gov_Decree_265_2009.pdf), (accessed on August 20, 2014).