

Emergency Plan Belgium

After Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard security of gas supply

June 2020

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Executive summary

FR

L'objectif du plan national d'urgence pour le gaz est de disposer d'un ensemble de procédures et de responsabilités fixes pour toutes les parties prenantes en cas d'interruption de l'approvisionnement en gaz. Ce plan vise à atténuer les conséquences d'une perturbation et à faire face aux situations dans lesquelles l'approvisionnement en gaz ne peut plus être garanti pour tous les clients du marché belge.

Une approche à trois niveaux est utilisée pour faire face à une urgence gazière. La première responsabilité d'atténuer l'impact d'une urgence gazière incombe aux utilisateurs du réseau et au GRT, puis aux États membres au niveau national et régional, puis à l'Union.

Ce document expose les grands principes du plan d'urgence en Belgique.

Le but du plan d'urgence est de mettre en place des procédures et des structures d'urgence qui peuvent être activées dans un laps de temps très court afin d'atténuer les effets d'un incident sur l'approvisionnement en gaz de la manière la plus rapide.

En cas d'urgence majeure d'approvisionnement en gaz, tant l'industrie que le gouvernement auront un rôle important à jouer dans la gestion de l'incident et de ses conséquences.

Le GRT et les sociétés gazières seraient responsables de la gestion pratique et opérationnelle de l'incident afin de s'assurer que la situation est contenue, gérée en toute sécurité et rétablie efficacement. Le GRT a mis en place des plans et des procédures de gestion des incidents afin de garantir l'intégrité du système et d'acheminer les flux de gaz restants selon les priorités définies dans le plan d'urgence. Il est évident que le GRT ne possède ni ne fournit de gaz pour la sécurité d'approvisionnement car cela relève de la responsabilité des fournisseurs.

Le GRT et les sociétés gazières gèrent au jour le jour des situations opérationnelles complexes et disposent de plans et de contingences qui doivent faire face aux événements anormaux. Bien que des urgences d'approvisionnement majeures puissent survenir très soudainement ou à la suite d'une situation évolutive, selon les contrats d'approvisionnement contractuels, les entreprises d'approvisionnement ont pris des mesures pour atténuer ou gérer l'incident avant que le gouvernement ne doive intervenir.

Le rôle du gouvernement est de comprendre et de gérer les conséquences plus larges qui peuvent résulter d'une urgence majeure d'approvisionnement en gaz.

La gestion réussie d'une urgence majeure d'approvisionnement exigera une communication et une coopération efficaces entre l'industrie et le gouvernement. Par exemple, l'industrie disposera des informations les plus récentes sur l'incident, dont le gouvernement aura besoin pour déterminer les mesures à prendre. De même, certaines des conséquences plus larges d'un incident pourraient être atténuées par les choix que l'industrie est en mesure de faire, et certains des aspects pratiques de la gestion d'un incident pourraient être aidés par les activités du gouvernement.

Ce plan d'urgence est établi conformément à l'article 8 du règlement (UE) 2017/1938 du Parlement européen et du Conseil du 25 octobre 2017 concernant des mesures visant à garantir la sécurité de l'approvisionnement en gaz et abrogeant le règlement (UE) n ° 994/2010 (Ci-après, «le Règlement»).

En Belgique, la direction générale de l'énergie du service public fédéral économie, P.M.E., indépendants et énergie a été désignée comme autorité compétente au sens de l'article 2 du règlement. En tant qu'Autorité compétente, elle est chargée de mettre en place ce plan d'urgence de sécurité d'approvisionnement en gaz et de le mettre à jour tous les 4 ans ou plus tôt si les circonstances l'exigent. Cette tâche est effectuée en coordination avec la CREG, et Fluxys Belgium. Le plan d'urgence et ses mises à jour sont rendus publics et notifiés à la Commission européenne.

L'autorité compétente aura également un rôle de coordination lors d'une urgence gazière pour atténuer l'impact sur l'approvisionnement en gaz, avec la responsabilité d'assurer la liaison avec le ministre de l'Énergie, la Commission européenne et d'autres services gouvernementaux pour s'assurer que les détails de l'incident sont communiqués.

Les mesures, actions et procédures contenues dans ce plan d'urgence sont testées au moins une fois entre ses mises à jour quadriennales. Afin de tester ce plan d'urgence, l'autorité compétente simulera en temps réel des scénarios et des réponses à impact élevé et moyen conformément à ce plan d'urgence. Les résultats des tests seront présentés au *Gas Coordination Group* par l'Autorité Compétente, et seront pris en compte pour les mises à jour suivantes.

Le présent plan d'urgence s'applique en cas de crise d'approvisionnement en gaz telle que définie à l'article 11 du Règlement. Ces crises peuvent être caractérisées par 3 niveaux, et ce plan d'urgence s'applique dès que l'un des 3 niveaux de crise a été déclaré. Chacun de ces niveaux implique un certain nombre de mesures et d'actions à entreprendre par différents acteurs afin d'assurer la continuité de l'approvisionnement en gaz des utilisateurs finaux, et notamment des clients protégés. En Belgique, chaque utilisateur final connecté aux réseaux de distribution est considéré comme un client protégé. En cas de crise nécessitant une coordination avec d'autres secteurs au niveau national, le plan fédéral de coordination de crise mis en place dans l'arrêté royal du 31 janvier 2003 prévaut.

En particulier, ce plan d'urgence:

- décrit les niveaux de crise tels que définis dans le règlement ainsi que les procédures à appliquer lors de leur déclaration et après une crise;
- décrit, pour chacun des 3 niveaux, les mesures qui peuvent être prises par les différents acteurs, y compris leurs effets possibles et leur efficacité face à la crise. Les mesures peuvent être séparées en 3 niveaux: les mesures purement fondées sur le marché qui sont appliquées sur une base volontaire par les acteurs du marché; les mesures non fondées sur le marché imposées par les autorités nationales; et les mesures de coordination pour gérer une crise au niveau régional ou de l'Union;
- décrit les mesures spécifiques concernant le chauffage urbain et les centrales au gaz;
- met en place une équipe de gestion de crise au sein de l'autorité compétente;
- décrit les rôles et responsabilités de chaque acteur impliqué dans la gestion d'une crise, y compris les procédures de communication et autres accords existant entre les acteurs;
- décrit les mesures mises en place au cas où certains clients non protégés doivent être limités, y compris un ordre de priorité suivant lequel les utilisateurs finaux doivent être approvisionnés;
- met en place le cadre pour tester et appliquer les mesures et procédures d'urgence; et
- décrit les dimensions régionales et la coopération entre les États membres, y compris les accords bilatéraux conclus afin de mettre en œuvre le principe de solidarité énoncé à l'article 13 du Règlement.

NL

Het doel van het nationaal noodplan voor gas bestaat erin om over een geheel aan vaste procedures en verantwoordelijkheden te beschikken voor alle stakeholders in geval van een onderbreking van de gaslevering. Dit plan streeft ernaar om de gevolgen van een verstoring te verzachten en het hoofd te bieden aan situaties waarin de gaslevering voor alle klanten van de Belgische markt niet meer gegarandeerd kan worden.

Een aanpak op drie niveaus wordt gebruikt om aan een gasnoodgeval het hoofd te bieden. De eerste verantwoordelijkheid om de impact van een gasnoodgeval te verzachten ligt bij de netgebruikers en de TNB, dan bij de Lidstaten op nationaal en regionaal niveau, dan bij de Unie.

Dit document zet de belangrijke principes van het noodplan in België uiteen.

Het doel van het noodplan bestaat erin om noodprocedures en -structuren op te zetten die in een zeer korte tijdsverloop geactiveerd kunnen worden om de effecten van een incident op de gaslevering zo snel mogelijk te verzachten.

Bij een belangrijk gasleveringsnoodgeval zullen zowel de industrie als de regering een belangrijke rol spelen in het beheer van het incident en de gevolgen ervan.

De TNB en de gasbedrijven zouden verantwoordelijk zijn voor het praktische en operationele beheer van het incident om ervoor te zorgen dat de situatie wordt tegengehouden, in alle veiligheid wordt beheerd en effectief wordt hersteld. De TNB heeft plannen en procedures voor het incidentmanagement ingevoerd om de integriteit van het systeem te waarborgen en de resterende gasstromen te leiden volgens de prioriteiten die in het noodplan vastgelegd zijn. Het is duidelijk dat de TNB gas noch bezit noch levert voor de bevoorradingszekerheid, want dit is de verantwoordelijkheid van de leveranciers.

De TNB en de gasbedrijven beheren dagelijks complexe operationele situaties en beschikken over plannen en toevalligheden die het hoofd aan abnormale gebeurtenissen moeten bieden. Hoewel belangrijke leveringsnoodgevallen zich heel plotseling of als gevolg van een evolutieve situatie kunnen voordoen, hebben de leveringsbedrijven maatregelen volgens de contractuele leveringscontracten genomen om het incident te verzachten of te beheren voordat de regering moet ingrijpen.

De rol van de regering bestaat erin om de bredere gevolgen die uit een belangrijk gasleveringsnoodgeval kunnen voortvloeien te begrijpen en beheren.

Het succesvolle beheer van een belangrijk leveringsnoodgeval zal een effectieve communicatie en samenwerking tussen de industrie en de regering vereisen. Bijvoorbeeld zal de industrie beschikken over de meest recente informatie over het incident die de regering nodig zal hebben om de te nemen maatregelen te bepalen. Bovendien zouden sommige van de bredere gevolgen van een incident kunnen worden verzacht door de keuzes die de industrie kan maken, en zouden sommige praktische aspecten van het beheer van een incident kunnen worden ondersteund door de activiteiten van de regering.

Dit noodplan wordt opgesteld in overeenstemming met artikel 8 van de Verordening (EU) 2017/1938 van het Europees Parlement en de Raad van 25 oktober 2017 betreffende maatregelen tot

veiligstelling van de gasleveringszekerheid en houdende intrekking van Verordening (EU) nr. 994/2010 (hierna “de Verordening”).

In België werd de Algemene Directie Energie van de Federale Overheidsdienst Economie, K.M.O., Middenstand en Energie aangewezen als de bevoegde autoriteit in de zin van artikel 2 van de verordening. Als bevoegde autoriteit is zij belast met de implementatie van dit noodplan voor de gasbevoorradingzekerheid en met de update ervan om de 4 jaar of vroeger indien de omstandigheden het vereisen. Die taak wordt in coördinatie met de CREG en Fluxys Belgium uitgevoerd. Het noodplan en de updates ervan worden openbaar gemaakt en aan de Europese Commissie betekend.

De bevoegde autoriteit zal ook een coördinatierol hebben bij een gasnoodgeval om de impact op de gaslevering te verzachten, met de verantwoordelijkheid om het contact met de minister van Energie, de Europese Commissie en andere overheidsdiensten te garanderen om ervoor te zorgen dat de details van het incident gecommuniceerd worden.

De maatregelen, acties en procedures die in dit noodplan bevat zijn worden ten minste één keer getest tussen de vierjaarlijkse updates. Om dit noodplan te testen zal de bevoegde autoriteit scenario's en antwoorden met een hoge en middelhoge impact in real time simuleren overeenkomstig dit noodplan. De resultaten van de tests zullen aan de *Gas Coordination Group* door de bevoegde autoriteit voorgesteld worden en zullen voor latere updates in aanmerking worden genomen.

Dit noodplan is van toepassing in het geval van een gasleveringscrisis zoals bepaald in artikel 11 van de verordening. Deze crisissen kunnen door 3 niveaus worden gekenmerkt, en dit noodplan is van toepassing zodra een van de 3 crisisniveaus afgekondigd is. Elk van deze niveaus impliceert een aantal maatregelen en acties die door verschillende actoren ondernomen moeten worden om de continuïteit van de gaslevering aan de eindgebruikers, met name de beschermde klanten, te garanderen. In België wordt elke eindgebruiker die op de distributienetten aangesloten is beschouwd als een beschermde klant.

Bij een crisis die een coördinatie met andere sectoren op nationaal niveau vereist, heeft het federale crisiscoördinatieplan dat in het koninklijk besluit van 31 januari 2003 werd ingevoerd, de overhand.

In het bijzonder dit noodplan:

- beschrijft de crisisniveaus zoals bepaald in de verordening alsook de procedures die toegepast moeten worden bij de afkondiging ervan en na een crisis;
- beschrijft voor elk van de 3 niveaus de maatregelen die door de verschillende spelers genomen kunnen worden, met inbegrip van hun mogelijke effecten en hun efficiëntie tegenover de crisis. De maatregelen kunnen in drie niveaus worden verdeeld: de zuiver marktgebaseerde maatregelen die op vrijwillige basis door de markspelers worden toegepast; de niet-marktgebaseerde maatregelen die door de nationale autoriteiten worden opgelegd; en de coördinatiemaatregelen om een crisis op regionaal of EU-niveau te beheren;
- beschrijft de specifieke maatregelen met betrekking tot stadsverwarming en gasgestookte centrales;
- stelt een crisismanagementteam binnen de bevoegde autoriteit in;
- beschrijft de rollen en verantwoordelijkheden van elke actor die bij het beheer van een crisis betrokken is, met inbegrip van de communicatieprocedures en andere akkoorden die tussen de actoren bestaan;
- beschrijft de maatregelen die geïmplementeerd worden in het geval dat bepaalde niet-beschermde klanten beperkt moeten worden, met inbegrip van een prioriteitsvolgorde volgens welke de eindgebruikers bevoorrad moeten worden;

- stelt het kader in voor het testen en het toepassen van noodmaatregelen en -procedures; en
- beschrijft de regionale dimensies en de samenwerking tussen de Lidstaten, met inbegrip van de bilaterale akkoorden gesloten om het solidariteitsprincipe van artikel 13 van de verordening te implementeren.

1 Introduction

The goal of the national emergency plan for gas is to have a set of fixed procedures and responsibilities for all the stakeholders in case of a disruption of the gas supplies. This plan intends to mitigate the consequences of a disruption, and to deal with situations in which the gas supplies can no longer be guaranteed to all customers on the Belgian market.

This document gives an overview of the main principles that will be taken up in the national emergency plan Gas. The national emergency plan for gas will be published as a Ministerial Decree. A three level approach is used for tackling a gas emergency. The first responsibility to mitigate the impact from a gas emergency lays with the Network Users and the TSO, then with the Member States at National and regional level, and then the Union.

This document lays out the main principles of the emergency plan in Belgium.

The goal of the Emergency Plan is to put in place emergency procedures and structures that can be activated in a very short timeframe in order to mitigate the effects of an incident in the gas supply in the most rapid way.

In the event of a major gas supply emergency, both industry and government will have significant roles to play in managing the incident and its consequences.

The TSO and the gas companies would be responsible for the practical and operational management of the incident in order to ensure that the situation is contained, managed safely and effectively recovered. The TSO has plans and procedures in place for incident management in order to guarantee system integrity and to dispatch (remaining) gas flows according to prioritisation as defined in the emergency plan. Obviously, the TSO does not own nor source gas for security of supply as this is a responsibility of the supply companies.

The TSO and the gas companies manage complex operational situations on a day to day basis and have plans and contingencies, which should deal with abnormal events. Although major supply emergencies can occur either very suddenly or as a result of a developing situation, according to the contractual supply contracts, supply companies have taken independently action to mitigate or manage the incident before government becomes involved.

The role of government is to understand and manage the wider consequences that may arise from a major gas supply emergency.

The successful management of a major supply emergency will require effective communication and cooperation between industry and government. For example industry will have the most up to date information on the incident, which government will require in order to determine the actions it needs to take. Similarly some of the wider consequences of an incident could be mitigated by the choices

that industry is able to make, and some of the practical aspects of managing an incident could be assisted by the activities of government.

1.1 General information

This Emergency Plan is set up according to article 8 of the regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (Thereafter, “the Regulation”).

In Belgium, the Directorate-General for Energy of the Federal Public Service Economy, P.M.E., self-employed and Energy was appointed as Competent Authority in the sense of Article 2 of the Regulation. As the Competent Authority, it is tasked to set up this security of gas supply Emergency Plan and update every 4 years or sooner if the circumstances require it. This task is carried out in coordination with the NRA (CREG, Commission de Régulation de l’Electricité et du Gaz) and the TSO (Fluxys Belgium). The Emergency Plan and its updates are made public and notified to the European Commission.

The Competent Authority will also have a coordinating role during a gas emergency to mitigate the impact on the gas supply, with responsibility for liaising with the Minister of Energy, the European Commission and other government departments to ensure that details of the incident are communicated.

The measures, actions and procedures contained in this Emergency Plan are tested at least once between its four-year updates. In order to test this Emergency Plan, the Competent Authority will simulate high and medium impact scenarios and responses in real time in accordance with that emergency plan. The results of the tests shall be presented at the GCG by the Competent Authority, and will be taken into account for the following updates.

1.2 Scope and content

This Emergency Plan applies in the case of gas supply crisis as defined in Article 11 of the Regulation. These crises can be characterized by 3 levels, and this Emergency Plan Applies as soon as one of the 3 crisis level has been declared. Each of these levels implies a number of measures and actions to be taken by different actors in order to ensure the continued supply of gas to the end users, and especially the protected customers. In Belgium, every end user connected to the distribution networks is considered as a protected customer.

In the case of a crisis requiring a coordination with other sectors at a national level, the federal crisis coordination plan set up in the royal decree January 31st 2003 takes precedence.

In particular, this Emergency Plan:

- describes the crisis levels as defined in the Regulation as well as the procedures to apply when declaring them and after a crisis;
- describes, for each of the 3 levels, the measures that can be taken by the different actors, including their possible effects and efficiency in dealing with the crisis. The measures can be separated in 3 levels: the purely market-based measures that are applied on voluntary basis

by the market players; the non-market-based measures imposed by the national authorities; and the coordination measures to manage a crisis at regional or Union level;

- describes the specific measures regarding district heating and gas-fired powered plants;
- sets up a crisis management team within the Competent Authority;
- describes the roles and responsibilities of each actor involved in the management of a crisis, including the communication procedures and other agreements existing between the actors;
- describes the measures put in place in case some non-protected customers have to be curtailed, including a priority order following which end users have to be supplied;
- sets up the framework to test and exercise the emergency measures and procedures; and
- describes the regional dimensions and the cooperation between members states, including the bilateral agreements concluded in order to implement the Solidarity principle set out in Article 13 of the Regulation.

2 Crisis levels

2.1 Definition of the crisis levels

Three crisis levels are defined in article 11(1) of the Regulation:

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

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

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

2.2 Triggers for the activation of the emergency plan

There are several different events that might result in a gas supply crisis, but these can be broadly separated into two different categories:

- a. A **developing situation**, which evolves over a period of several days or even weeks and does not have an immediate effect but over a relatively short period of time could seriously impact gas supply. In this case the TSO and the Competent Authority are required to monitor the situation to ensure readiness to respond in the event of an emergency.
- b. A **sudden incident**, which happens instantly or develops within a few hours and immediately impacts supply. In this case the TSO will immediately activate its internal Emergency Plan.

A gas crisis can be triggered by incidents that are inherent to the gas supply chain or by exterior threats and hazards that can have an impact on the gas supply. These incidents constitute the basis on which the decision to declare a crisis is taken, and which level is selected. This applies regardless of whether the decision is taken by the TSO or by the Competent Authority (See following section for detailed procedures).

The table below presents a non-exhaustive list of the incidents that may lead to one of the crisis levels, depending on the timeframe and the impact, the TSO or the Competent Authority (in cooperation if necessary) will decide which crisis level will be declared.

Table 1: Incidents likely to trigger a crisis

Trigger	Occurrence	Source of information
Triggers inherent to the gas supply system	Gas supply deficit (insufficient gas to meet demand)	TSO/shippers/Suppliers
	Gas storage safety monitor breach	TSO
	Gas transportation constraint	TSO/shippers/suppliers
	Technical incidents on pipelines that cause loss of supply to certain customers	TSO
	Failure of major gas market participant	TSO/NRA/Shippers/Suppliers
Triggers caused by other sources	Severe weather disrupting gas supply	All
	Flu pandemic or another medical emergency	Crisis cell home affairs/Competent Authority
	Potential or actual threat of terrorist attack	Crisis cell home affairs/Competent Authority
	Political protest or civil disorder	Competent authority
	Disruption to electricity, water, fuel, telecommunications or other CNI	Crisis cell home affairs/Competent Authority
	Request for support from EU member states or European Commission	Competent Authority

The indicator used by the TSO is described in its internal Emergency Plan for the Security of Supply, and consists of the forecasted linepack position (gas stored inside the pipelines), resulting from a.o. the forecasted consumption of the Belgian market and the forecasted physical flows (entry/exit) in the transmission network.

Thresholds (upper and lower) are defined by the TSO for the linepack, both for the normal balancing conditions, and for incident balancing. Since there are two separate transmission networks for different gas qualities (H-gas and L-gas), a different threshold is defined for each.

The evolution of the forecasted linepack position and the time at which it would cross the normal balancing or incident balancing thresholds are used by the TSO to identify **early warning**, **alert** or **emergency** situations.

Although the H-gas markets of Belgium and Luxembourg are integrated and constitute a single balancing zone, the forecasted linepack position considered for the declaration of a crisis reflects only the situation in the Belgian gas transmission network.

2.3 Procedure for the activation of the Emergency Plan

This Emergency Plan is effectively activated when one of the crisis levels described previously is declared. Some obligations, such as the reporting of incidents likely to cause a gas supply crisis, apply nevertheless, even before the declaration of the crisis.

Because the TSO is usually the first to have the information necessary to determine if one of the crisis levels should be declared, the TSO is authorized to do so on behalf of the Competent Authority. In this case, the TSO shall immediately inform the Competent Authority and the NRA of the declared level and the incident or information leading to that declaration.

If the Competent Authority declares one of the crisis levels, (e.g. based on information obtained from the European Commission, other member states or other sources), it may instruct the TSO to activate the corresponding crisis level in its internal emergency plan. The Competent Authority also informs the NRA.

The decision to declare one of the crisis levels shall be based on all the available information. Every stakeholder (shippers and suppliers, end users, NRA, government bodies, adjacent TSOs ...) is required to inform the TSO when confronted with any event that may affect the security of gas supply, including an incident upstream which may possibly affect the import of natural gas in Belgium. In that case, the stakeholder will provide all the information that is available about the location of the event, the amount of natural gas impacted, impact on the security of supply, etc.

When any of the crisis levels is declared by the TSO or they are informed that a crisis level was declared by the Competent Authority, they shall inform the Network Users and the adjacent TSOs of the declared crisis level and the incident or information leading to that declaration in addition to the information already made available to the Network Users for balancing purposes (market and individual Network User balancing positions). The TSO encourages the Network Users to take the market-based measures at their disposal to help balance the grid and informs them on the actions that need to be taken (See section 3).

When any of the crisis levels is declared by the Competent Authority or the TSO, the Competent Authority shall inform the European Commission as well as the competent authorities of the Member States with which Belgium is directly connected and provide them with all the necessary information, in particular with information on the action they intend to take. This information shall also be notified to the regional authorities and ministers who have energy amongst their competences.

When the TSO declares the emergency level, the notification to the Competent Authority shall also include:

- A description of the incident (nature, timing, possible impact ...);
- The current state of the concerned Belgian gas network (H-gas or L-gas), namely:
 - In case there is an increased risk of a disruption of gas supply:
 - The amount of gas at risk;
 - The location and extent;
 - The expected duration or frequency of imbalances;
 - If there is a disruption of gas supply on Belgian territory:
 - The quantity of natural gas is interrupted or reduced;
 - The location and extent of the disruption;

- Information or an estimate of the expected duration of the shortfall in the supply of natural gas in a specific area.
 - The possibility of an impact on adjacent grids;

When an emergency level has been declared, the Competent Authority will make an assessment of the situation to provide information to the Minister for Energy and to the European Commission as foreseen in the Regulation. In order to establish the assessment, the gas undertakings, the TSO and the NRA provide the necessary information in order to identify the following issues:

- Immediate actions required to protect life and property and to prevent the further escalation of the emergency.
- Longer-term actions required to manage the consequences and assist with recovery.
- Any requirement to implement government emergency powers.
- Key information required for briefing and notification.

Based on the information received from the relevant stakeholders, the Competent Authority will draft up an incident report for the Minister of Energy containing the following information:

- Priorities in the supply of gas and electricity arising from the incident (incl. priorities to avoid or restore a electricity black-out state);
- Consequences of the emergency for the protected customers;
- Recommendations to government on strategic options.

The following information is required by the Competent Authority in order to make a full assessment of the situation:

Table 2: Sources of information available to the competent authority

Information	Providers
Cause of the emergency	Gas Industry/TSO/Competent Authorities
Scale and duration of the emergency	Gas Industry/TSO/Competent Authorities
Timescale for restoration	Gas Industry/TSO/ Competent Authorities /DSOs
Government powers required	TSO/Competent Authority
Actions already taken	TSO/Gas Industry/Competent Authority
Customer issues including priority users	Competent Authority/TSO/DSOs
Market issues	NRA
Gas supply/demand balance	TSO/Balancing Operator
Actions to increase gas supply	Gas Industry
Actions to decrease gas demand	Competent Authority
Socio-economic impact	Competent Authority/crisis cell home affairs
Security issues	Crisis cell home affairs
Media interest	Competent Authority/Gas Industry/TSO
Media lines to take	Cabinet Minister for Energy

In accordance with Article 23 of the Belgian Gas Law, the King may, if the exceptional situation requires it, also take all necessary safeguard measures, including in the specific case of L gas, through a Royal Decree which must cause at least possible disturbances in the functioning of the European internal market and which must not exceed the scope strictly necessary for the sudden difficulties which have

arisen. In this case, the Minister and the competent authority must inform the European Commission and the other Member States of the measures taken.

2.4 End of the crisis and recovery phase

When the interruptions and constraints applied are no longer required, the TSO shall lift the interruptions and constraints at the concerned point pursuing the inverse sequence as applied, taking the system integrity into account. The TSO will inform the impacted Network Users, end-users, DSOs and adjacent TSOs as described in its operating procedures.

The TSO will inform the Competent Authority and NRA when the crisis level is no longer justified. Based on this advice, the Competent Authority may declare an end to the crisis and will in this case inform the TSO, the minister for Energy, the NRA, the European Commission and the competent authorities of the Member States with which Belgium is directly connected.

When the TSO is notified of the decision to lift the declared crisis level, it shall inform the Network Users and other relevant stakeholders.

2.5 Reporting

Every quarter, the TSO sends an overview report of all the incidents that led to the early warning level during this quarter to the Competent Authority, if any.

Every month, the TSO sends an overview report of the incidents that led to the alert level during this month to the Competent Authority, if any.

After every incident leading to the emergency level, the TSO sends a detailed report of the incident to the Competent Authority.

These reports shall contain at least the following information (if applicable):

- The date, time and duration of the incident;
- The nature of the incident or threat;
- The location of the incident;
- The gas volumes affected;
- The origin of the incident;
- The measures put in place.

These reports shall be passed on to the regional authorities and regional ministers who have energy amongst their competences.

After an Emergency level is lifted, the Competent Authority will ensure that all records, information and logs are collected and securely stored. The Competent Authority will also arrange for a review of the incident to be held to determine the following issues:

- The effectiveness of the emergency response and the Emergency Plan;
- The nature of the emergency including cause, course and consequences;
- Quality and effectiveness of internal and external communications;

- Actual outcome against desired/anticipated outcome; and
- Action plan to address identified deficiencies in the Emergency Plan.

The Competent Authority will send an evaluation report of the emergency to the Minister for Energy within one month of the receipt of the complete report from the TSO.

In order to assess that the non-market based measures have only been applied after all the market based measures have been used to the full extend, the Competent Authority shall request the TSO and the Network Users to report on all the market based measures that have been taken during the crisis. A template with the requested information will be sent to the relevant market participants.

3 Measures to be adopted per crisis level

In each phase of the crisis levels, the responsible can activate the proposed measures progressively or simultaneously according to the course of the emergency. The TSO may alter the response arrangements depending on the nature and the impact of the incident as described in its internal emergency plan for security of supply.

A detailed description of the measures to be applied in a gas crisis is provided in annex II.

3.1 Normal market functioning

A large part of the market-based measures available to deal with a crisis can already be applied in normal market conditions, regardless of the declaration of one of the crisis levels.

The Network Users are required to take measures to help balance the grid, such as:

- Increase of imports
- Withdrawal from storage or LNG
- Stop of storage injections
- Increase of purchases on the gas hubs
- Reduction of exports
- Use of interruptible supply contracts (requesting end-user to consume less)

According to the normal rules of the functioning of the market-based balancing, if, despite the measures taken by the Network Users in response to the information provided by the TSO and the Balancing Operator, the market balancing position goes outside the market threshold, the Balancing Operator of the integrated Belux-market will buy or sell gas and settle the quantity with the Network Users causing the imbalance, at a premium (intra-day balancing).

Due to the delay between the taking of the measures by the Network Users (e.g. renominations following the requests from the TSO or Balancing Operator) and the effects of these measures on the physical gas flows, it might be necessary for the TSO to use operational measure in order to keep the linepack position within the normal balancing range.

- Use of operational gas reserves in underground storage or LNG terminal and use of Quality Conversion Point (or QCP) allowing to transfer gas quantities from H-grid to L-grid and vice versa by using the quality conversion installations of Lillo, Loenhout and/or Ville-sur-Haine).

- Use of swaps (physical rerouting), parking or lending (use of the flexibility means of adjacent TSOs), according to the operational balancing agreements (OBA) with Adjacent TSOs.
- Interruption of interruptible capacity on interconnection points, quality conversion installations and/or end consumers connected to the transmission network.

All the measures above may still be applied in the 3 crisis levels, although it is possible that not all of them would be available in more severe crises (e.g. if no more gas is available on gas hubs or in storage and LNG terminal).

3.2 Early warning level

In the early warning level, there will be no immediate intervention by the Competent Authority in some cases. This crisis level is declared when an event has occurred which causes the TSO and the gas undertakings to be more vigilant, but there is no immediate threat to the security of supply. The event can and should be managed by market-based measures alone. All the principles of normal market-based balancing are still applicable, including the contractual and regulatory obligations for suppliers to fulfil their contracts with end consumers in particular. The first responsibility for ensuring the security of gas supply lies with the suppliers, and they shall take the necessary action to source gas for their clients. Penalties provided for during normal market operation, such as but not limited to the fee for balancing operations, are still applicable for the Network Users causing an imbalance of the market.

The TSO is in contact with the gas undertakings and gives the necessary information to the gas undertakings and the adjacent TSOs so that all the necessary actions can be taken. All the gas undertakings provide relevant information about the situation to the TSO as well.

In order to encourage the Network Users to take measures helping to keep the network balanced, the TSO and the Balancing Operator shall keep the Network Users informed of the situation, their individual balancing position, and the market balancing position.

The gas undertakings involved, and in particular the Network Users and TSO, should provide information to the competent authority daily:

- the daily gas demand and gas supply forecasts for the following three days.
- the daily flow of gas at all cross-border entry and exit points as well as at all points connecting a storage facility or an LNG terminal to the network.
- the period for which it is expected that supply of gas to protected customers can be ensured.

At the Early Warning level, the TSO and Balancing Operator may also use the following specific measures, with no pre-defined order:

- Adaptation of the balancing market threshold: the Balancing Operator may adapt the normal balancing threshold to reduce the flexibility offered to the integrated BeLux market in order to encourage the Network Users to be more vigilant and take action earlier to balance the market.
- Level 2 swaps with Adjacent TSOs: the TSO sends a non-binding request to an Adjacent TSO to physically reroute (swap) gas flows to one or several interconnection points. The level 2 swap is done on a reasonable endeavour basis.
- Maintenance works management: the TSO may adapt the timing of planned maintenance

- Ask Adjacent TSOs to temporarily exceed the OBA limits: the TSO sends a non-binding request to an Adjacent TSO to exceed the tolerated deviation between physical flows and nominations on a interconnection point.

Because the principles of normal market balancing by the Belux market area balancing operator remain applicable at the Early Warning level, all obligations with regard to reporting to Network Users and adjacent operators are applied in accordance with the operational rules.

3.3 Alert level

All the measures and procedures that were applicable at the Early Warning level are still applicable at the Alert level. In addition, in case of Alert Level, the TSO may request Network Users to voluntarily alter their nominations as far as possible in order to safeguard the security of natural gas supply to Protected Customers in particular.

At the Alert level, the first responsibility to keep the gas market in balance still lies with the Network Users. The contractual obligations and the measures accordingly at their disposal are therefore sufficient to cope with the crisis by the end of the gas day as long as the market is functioning (=alert level). Penalties provided for during normal market operation, such as but not limited to the fee for balancing operations, are still applicable for the Network Users causing an imbalance of the market.

However, due to the delay between the taking of the measures by the Network Users (e.g. renominations following the requests from the TSO or Balancing Operator) and the effects of these measures on the physical gas flows, it might be necessary for the TSO to use operational measure in order to keep the linepack position in order to safeguard system integrity. This is normal network management practice and the use of operational measures by the TSO is not limited to security of supply crises, although the upscaling of the crisis may lead to an according upscaling of the applied operational measures.

At the Alert level, the TSO may use additional operational measures:

- Level 1 swaps with Adjacent TSOs: the TSO sends a non-binding request to an Adjacent TSO to physically reroute (swap) gas flows to one or several interconnection points. The level 1 swap requires the best endeavour from Adjacent TSOs.
- Constraint on Entry Point: In case of an incident impacting directly an Entry interconnection point, the TSO may place a constraint on this point to reduce the firm capacity offered at this entry point to reflect the physical flows that can pass through this point. This is not automatically the case. The TSO can for example compensate the reduction of physical flows by swaps or other measures, without any visible impact for the Network Users.
- Use of operational gas reserves dedicated to incident management reserved by the TSO in underground storage, LNG terminal and Quality Conversion Point.
- Emergency parking and lending with Adjacent TSOs: The TSO submits a non-binding request to Adjacent TSOs to voluntarily take best endeavour to supply more gas or to take-off less gas from the transmission network.
- Proactive gas purchase on Zeebrugge Trading Point: The TSO initiates a proactive gas purchase on Zeebrugge Trading Point in order to maintain the physical balance in the gas grid as far as possible.

- Use of available capacities at the LNG terminal, storage installation and Quality Conversion Point above the operational gas reserves dedicated to incident management: When capacities at the LNG terminal, storage installation or Quality Conversion Point are not used by the gas undertakings holding the rights for these capacities, the TSO can request the terminal operator and/or the storage operator to use these capacities to inject more natural gas in the gas network.

3.4 Emergency level

The emergency level will be activated by the TSO when the market based measures alone are no longer sufficient to guarantee the full gas supplies to all end consumers according to the supply contract. In this case, the first responsibility to keep their market position in balance still lies with the Network Users. Penalties provided for during normal market operation, such as but not limited to the fee for balancing operations, are still applicable for the Network Users causing an imbalance of the market. However the implementation of non-market based measures is warranted to the extent necessary to supply the gas that cannot be delivered through market-based and operational measures alone.

Insofar as they are applicable and can help mitigate the effects of the crisis, these measures will be applied as far as possible in the following predefined order:

1. Call to reduce natural gas consumption
The Competent Authority can issue a call to end users to voluntarily consume less gas. With these measures, the Competent Authority should be able to mobilise the population and undertakings through communication.
2. Call on neighbouring countries to voluntarily reduce natural gas imports
Neighbouring Member States importing gas through Belgium can be requested to voluntarily and temporarily reduce their imports in order to retain a larger volume of gas available for the Belgian market.
3. Suspension of trading rights
In case of an error or negligence of one or more Network Users, impacting the security of natural gas supply to Protected Customers in particular, the TSO may suspend the right to use the ZTP Notional Trading Services for such Network Users.
4. Imbalance constraint on firm capacity on Exit interconnection points
The TSO can apply an imbalance constraint on firm capacity on Exit Interconnection Points. This imbalance constraint will reduce the nominated exit quantities from shippers by constraining the exit capacity from the 'causing' Network User. The constraint will be calculated in such a way that the Network User will be balanced again for the remaining hours of the gas day.
5. Constraint on firm capacity of quality conversion installation
The TSO can apply a constraint on the firm capacity of the quality conversion installation provided this constraint has a positive impact on the balance of the affected grid (H-gas or L-gas).
6. Ask European Commission to declare a regional emergency
The Federal Minister of Energy, assisted by the Competent Authority, can decide to ask the European Commission to declare a regional emergency. This measure also provides the opportunity to make agreements with other Member States on reducing their import of

natural gas from Belgium that are concrete and specifically tailored to the situation. This measure may be replaced by a joint request with other Member States to the Commission to declare a regional emergency.

7. Constraint on firm capacity or curtailment of non-protected customers (administrative and/or technical disconnection)

The TSO can request the non-protected End Users (Industrial End Users and gas fired Power Plants) to reduce or stop their consumption, taking into account those considered as priority End Users. Non-protected, Priority End Users are, in the following order: 1) Power Plants strictly necessary to prevent a blackout on the electricity grid, 2) Industrial End Users and Power Plants strictly necessary in order to protect the so-called Seveso installations and 3) Power Plants identified by the electricity grid TSO as a black-start power plant in the event of a black-start on the electricity grid as well as the power plants necessary to restore the electricity system back to normal state in case of an electricity black-out.

Measures are described in the electricity system defence plan as well as the restoration plan approved by the ministerial decree of December 19th, 2019..

8. Enforced withdrawal of gas in storage

In order to safeguard the gas supply of protected customers, the TSO has the right to use the storage capacities and gas in storage subscribed by the Storage Users for H-grid and for L-grid by using the Quality Conversion Point.

9. Disconnect customers other than solidarity protected customers (administrative disconnection)

Individual customers other than solidarity protected customers are administratively disconnected. These customers do fall under the definition of 'protected customers' but not under the definition of 'solidarity protected customers'. In practice these are the small and medium-sized enterprises and specific segments of essential social services (educational services for example) connected to the distribution grid. As these customers can in most cases not be technically disconnected individually, they will be disconnected through an administrative prohibition.

10. Invoking mutual solidarity between EU Member States

The Ministry of Energy contacts the European Commission and the competent authorities in the EU Member States to which the Belgian gas transport network is directly connected (currently: the Netherlands, Germany, France and Luxemburg) to request them to supply gas to Belgium for the customers protected under the solidarity provisions. In order to do so, these Member States may be obliged, on the basis of Article 13 EU Regulation 2017/1938, to reduce the supply of gas to their own domestic consumers who are not protected.

11. Administratively disconnect solidarity protected customers

Solidarity protected customers will receive an instruction to consume no gas or less gas (administrative disconnection). A priority order to disconnect solidarity protected customers, or criteria to establish such an order, still needs to be developed. Given the large number of small connections, the technical disconnection of solidarity protected customers is only an option if entire areas can be disconnected technically (see following measure).

12. Technical disconnection of part of the main gas grid including export

In the event of a severe disruption of gas supply, it will be necessary, subsequent to aforementioned measures, to cease the gas supply to certain parts of the main gas grid and to countries abroad, even if this affects all consumers both protected and not protected. The options for disconnecting part of the main gas grid are closing shut-off valves in through

pipelines or closing them at the level of metering and pressure control facilities or gas distribution stations.

4 Specific measures for the electricity and district heating

4.1 District heating

The few existing district heating installations in Belgium are connected to the public distribution networks and are considered as protected customers. As such, they are not impacted by the measures presented in this plan and no additional specific measures are needed in order to ensure their supply of natural gas.

4.2 Supply of electricity generated from gas

The consequences for the electricity sector depend on the nature and severity of a disruption. At the Early Warning and alarm levels, there will be no consequences for the electricity sector. At the Emergency Level, two measures might have an impact on the electricity sector:

7. Constraint on firm capacity or curtailment of non-protected customers

Two scenarios are possible, depending on the state of the electricity system.

- a. The electricity system is still functioning:

All gas-fired power plant with an installed production capacity of more than 25MWe are required to follow the instructions of the TSO for electricity for the implementation of its system defense plan. At this stage, the TSO for electricity identifies the gas-fired power plants that are strictly necessary to avoid a black-out by maintaining the voltage or frequency on the electricity system. These power plants, amongst other non-protected customers, are considered as priority consumers and as such are not impacted by the constraint. The electricity sector might have to take measures to cope with the potential constraints on non-essential gas-fired power plants according to the system defense plan, but no gas fired power plant shall be curtailed without prior consultation of the TSO for electricity.

- b. The electricity system is in black-out or recovery phase:

Considering that most protected customers need electricity to be able to consume gas, the priority is given to the supply of gas to black start power plant and other power plant that are subsequently needed to restore the electricity system to a normal state. In the recovery phase following a black-out, the gas demand from power plants and from protected customers will both gradually increase. This phase happens in coordination between the gas and electricity TSOs, in order to verify that the supply of gas to power plants can be ensured before they are restarted.

12. Technical disconnection of part of the main gas grid including export

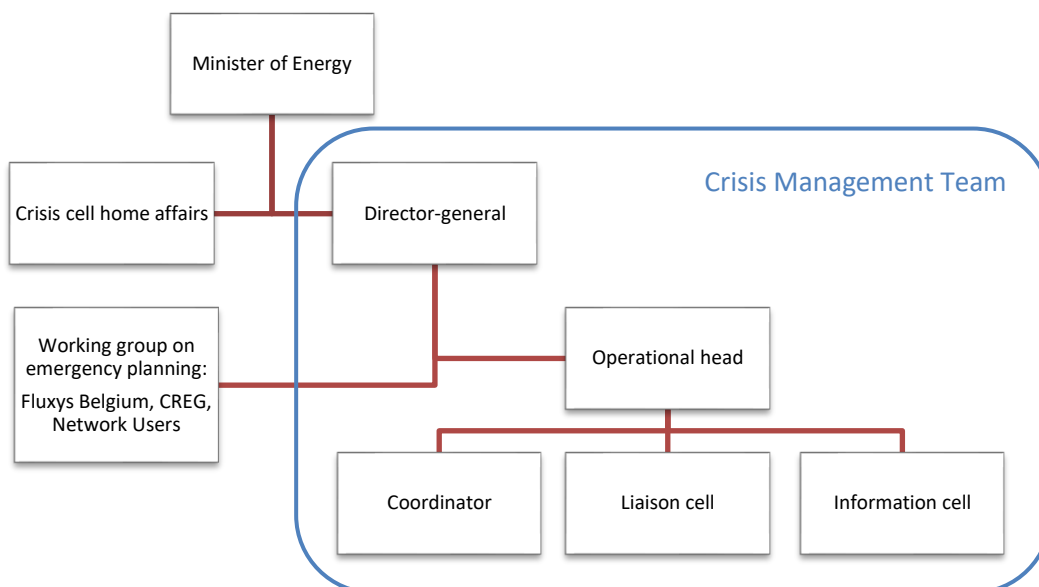
At this point, every other possible action has already been taken, even the curtailment of solidarity protected customers. This last measure is effectively a controlled shutdown of the gas system. The consequence will be that the gas-fired power plants that were considered essential must also be shut down. These power plants can then no longer meet the demand for electricity. A possible consequence is a complete or partial blackout of the electricity system. The TSO for electricity will always try to prevent a black-out using other means to maintain the voltage and frequency on the grid when they are still available, even if the supply of electricity from gas-fired power plants diminishes or disappears. The sequence of measures in an emergency situation is such that a black-out of the electricity system is prevented for as long as possible.

5 Crisis management team

Within the Competent Authority, a Crisis Management Team is set up. The Competent Authority will serve as the crisis management team that will coordinate the communication between the different stakeholders and the actions to be taken in case of a gas emergency. The role of the Competent Authority is to provide a clear framework for emergency planning, so that the necessary actions can be taken by the TSO and the gas undertakings to respond as swiftly as possible to any possible disruption in the gas supplies.

Figure 1 shows the structure of the Crisis Management Team.

Figure 1: Structure of the Crisis Management Team



The Crisis Management Team is managed within the Competent Authority and falls under the responsibility of the Minister of Energy. The Crisis Management Team consists on the Director-general of the DG Energy, an operational head, a coordinator, an information cell and a liaison cell.

The Director-general is responsible for the development and implementation of downstream gas emergency arrangements and all the actions taken by the Competent Authority and will present those

actions to the Minister of Energy. The director-general is always the first person to be contacted by any of the other stakeholders if there is any relevant information about a possible threat for the security of gas supply. If necessary, the Director-general can decide to convene a working group to work on specific items that are dealt with in the Emergency Plan, for example the shut-off plan, and decides on the composition of the working group or to deal with specific items during an emergency. The working group can consist of the TSO, the regulator, the Network Users, other government bodies, and/or any other external experts.

The operational head is responsible for the organisation and activity of the Crisis Management Team.

The coordinator is responsible for the practical operations and the preparation of all the relevant documents for the communication, the practical organisation of the working groups, et elaboration of the agenda and organisation with the communication with the European Commission and other member states. The coordinator keeps a detailed log of all the key information, decisions and actions.

The information cell is responsible for the data collection during a crisis, this is for example the proactive data collection to check on the effect of the measures and the need to apply further measures.

The liaison cell includes liaison officers appointed to national and international bodies.

In case of a crisis limited to gas security of supply and thus not involving a coordination across sectors at the national level by the Crisis Cell of home affairs, the Bureau of Civil Contingency (internal crisis cell of the Federal Public Service Economy, P.M.E., self-Employed and Energy) will serve as a link between the different Directorates General of the FPS.

Within the Competent Authority, a communication strategy is set up in which:

- A single point of contact is selected
- Press releases are being prepared and collected to reply to all questions. The communication with the press will be organized through the Cabinet of the Minister for Energy.
- Set up an information point for civilians to contact if necessary
- Communication procedure with the gas industry

All the relevant information will be logged properly.

6 Roles and responsibilities

This section describes the roles and responsibilities of all actors involved in the management of a gas crisis, including the interactions with the Crisis Management Team described above.

The Crisis Management Team will establish procedures to monitor on a regular basis the gas supplies. Therefore, it establishes a procedure for information gathering from the gas undertakings and may suggest measures to improve the response mechanisms in case of emergency.

All the relevant stakeholders are asked to send in all the necessary information so that the Crisis Management Team is able to make a complete analysis of the situation during an emergency and to inform the Minister of Energy about it. The Crisis Management Team will check if the measures were implemented by the relevant stakeholders.

The Competent Authority keeps an up to date contact list of all the relevant players in the gas market to be contacted in case of emergency.

All the new measures that would be implemented by the Crisis Management Team are to be approved by the Minister of Energy.

The Competent Authority is responsible for establishing an exercise programme for this Emergency Plan.

Table 3: Roles and responsibilities

Organisation	Role and responsibility
Competent Authority (Crisis Management Team)	Lead government body during a gas emergency responsible for drafting the Emergency Plan and procedures to be followed by each of the stakeholders. In certain circumstances, the Competent Authority may decide to deviate from the Emergency Plan and propose additional measures.
Crisis Cell home affairs	Assists the Competent Authority with the coordination of the actions to take on a local level, with the local and regional resilience teams. Takes over the facilitating role in an emergency if the gas emergency has an impact on the civil protection or creates a safety hazards. (Arrêté royal du 18/04/1988 portant création du Centre Gouvernemental de Coordination et de Crise.)
TSO	The transmission system operator has the responsibility to manage the response to a national gas emergency and is the first one to give instructions to the shippers and suppliers to adjust the gas flows as foreseen in the specific emergency plan.
NRA	Regulates the gas market including the gas balancing market and provides information on the operation of the gas markets during an emergency and may be asked to verify certain information during an emergency
Network Users	Shippers and suppliers have the responsibility to keep their portfolios in balance and have to report any incident that may cause a gas disruption and have to communicate with the end consumers in an emergency
DSOs	The Distribution System Operators have the responsibility to guarantee the supplies to the protected customers. In case the gas flows to the distribution network are reduced, they take the necessary measures to follow the priority order of the gas flows to the consumers on the distribution network.
Electricity TSO	Electricity transmission system operator stays in contact with the Competent Authority and the gas TSO and provides information on the impact of the reduction in the gas supply on the electricity grid.

The emergency framework describes the relationship between the organisations responsible for the decision making during an emergency.

The TSO and the gas undertakings are responsible for the operational management of the emergency and for notifying the Crisis Management Team. In case of incidents with Seveso installations, the TSO and the gas undertakings immediately also communicates to the Crisis Cell of home affairs.

The Crisis Management Team is responsible for providing the interface between industry and central government in the event of a gas supply emergency.

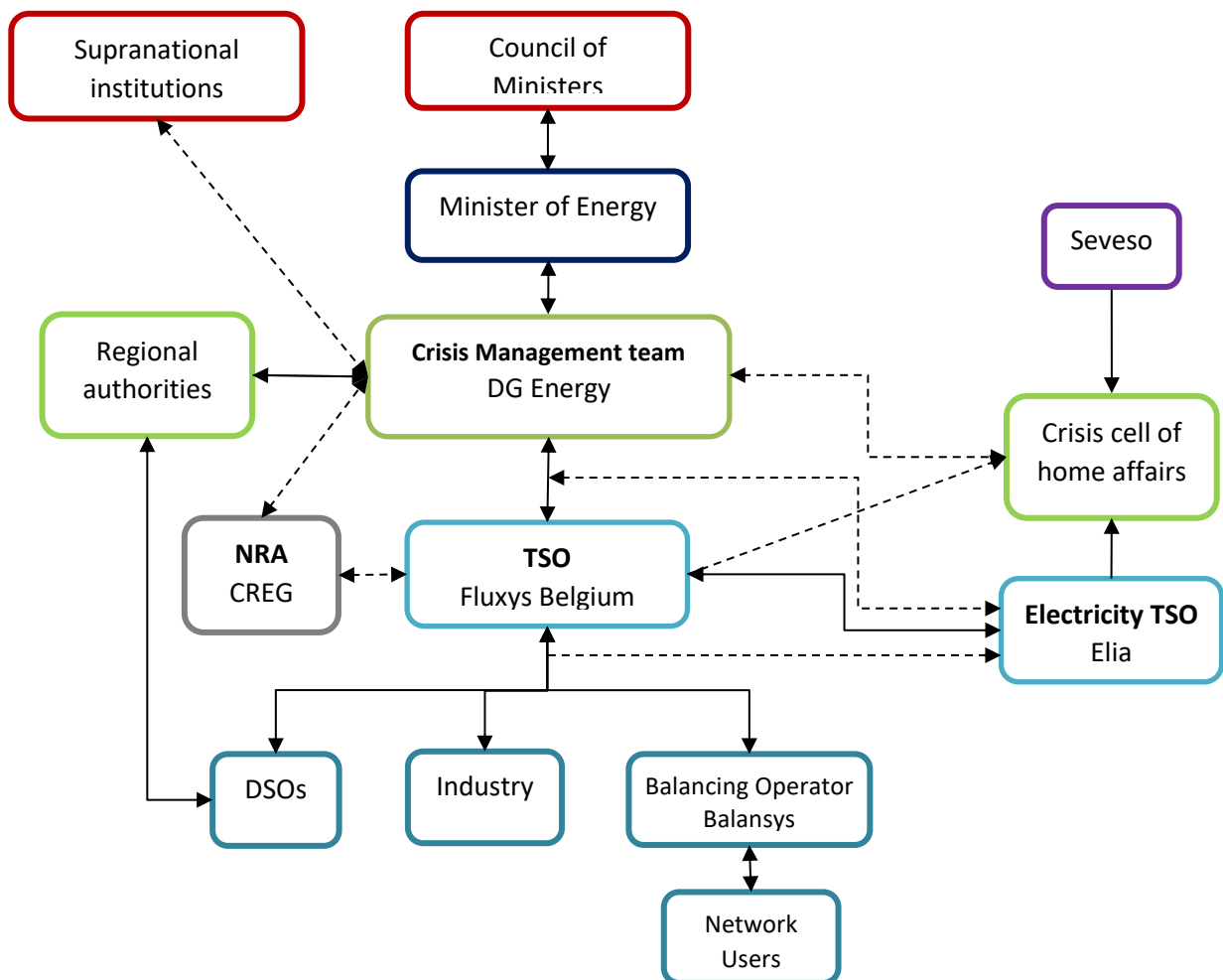
The bureau for Civil Contingencies (BCC) within the FPS Economy, P.M.E., Self-employed and Energy is responsible for managing the cross-government response to an energy emergency in coordination with the crisis cell of home affairs.

Within the DG Energy, a Crisis Management Team for gas is established that coordinates the actions to be taken in an emergency situation and the contacts between the different parties involved. It will provide an interface between the gas undertakings, the TSO, the central government and the supranational institutions.

The Crisis Management Team directs all gas undertakings in the event of a network gas supply emergency. The Crisis Management Team's directions would normally be given via Fluxys Belgium, the TSO. The TSO stays in contact with the Distribution System Operators (DSOs). If emergency actions need to be taken on the distribution network (e.g. demand restraint, priority consumers on the distribution network, ...), the Crisis Management Team contacts the regional competent authorities to inform them on the actions to be taken. The crisis cell of home affairs can facilitate the contact with the local authorities.

The following diagram, Figure 2, describes the relationships for a national gas supply emergency.

Figure 2: Structure of Operational Response during a crisis



7 Measures regarding undue consumption

The shut-off plan described in section 3.4 contains 2 measures aiming at reducing the consumption by non-protected customers, mostly consisting of industrial clients and non-essential gas-fired power plants.

First, the TSO may impose constraints on interruptible capacities booked by these consumers, then, it has the right to ask the end users to immediately limit their consumption, as described in the “Connection Agreements”, taking into account the following priority consumers:

1. Gas-fired power plant that are strictly necessary to avoid a black-out on the electricity network;
2. Industrial clients and power plants that are strictly necessary to protect the *Seveso* installations
3. After a black-out, gas-fired power plants that are identified as “black-start” by the electricity TSO (or necessary in the restoration to a normal state when a black-out occurs).

The end users must make every effort to comply with the demand to reduce their consumption. If the end user does not follow through with the demand, the TSO has the right to physically reduce the withdrawals by the required amounts.

In order to prevent undue gas consumption by end users that are connected to the distribution network but are not solidarity-protected customers, the Competent Authority shall inform customers¹ who are not solidarity-protected customers that they are required to cease or reduce their gas consumption without creating technically unsafe situations.

8 Emergency tests

The Competent Authority is responsible for establishing and conducting an exercise programme for this Emergency Plan to test its effectiveness at least once between its four-year updates. Where appropriate, this exercise will be carried out in conjunction with other exercises by the industry, government and/or the crisis cell home affairs. Table top exercises may also be undertaken to ensure that the plan is subject to a regular test.

The scope of exercises will be agreed with the Competent Authority. A full report of the exercise will be established, including an action plan detailing improvements to existing arrangements and timescales for delivery. This report shall be presented at the Gas Coordination Group by the Competent Authority.

9 Regional dimension

9.1 Specific measures

All the measures described in section 3 are still applicable for regional crises and for the same crisis levels.

9.2 Cooperation mechanisms

Regulation 2017/1938 requires that detailed procedures and measures are to be followed for each Crisis Level, closely collaborating with Member States within the groups and other neighbours where relevant. This chapter sets out the requirements for risk groups to coordinate actions at each crisis level. Specific details within the procedures and measures will vary between Member States depending on national arrangements within Member States.

9.2.1 L-gas risk group

The cooperation mechanism in the L-gas risk group in an emergency situation is based on appropriate and effective coordination between different stakeholders and competent authorities in the Member States. First, this means that the dispatching centres from the TSOs have frequent contacts in an

¹ The « Gas law » of April 12th 1965 provides that, in application of the Regulation, the Competent Authority shall take the necessary measures to organize partial or total gas consumption interruptions.

emergency situation to analyze and control the situation. TSOs are tasked to run their networks as efficiently as possible either through incentives or other mechanisms, and as such solving constraints on cross-border points is part of the day-to-day operational business of TSOs. Neighbouring dispatching centres work closely together, where required, optimizing gas flows and operation of the network in the region.

Secondly, in case of a constraint at an interconnection point (whether this is due to maintenance, weather conditions or interruption of supply) neighbouring TSOs inform each other and relevant shippers immediately through bilateral contacts and through publication on the respective websites. Various actions can be taken to overcome or minimize the constraint. Either through the balancing regimes, or by re-routing gas via other interconnection points in case the preferred route is constrained.

Given the central role of the Netherlands in the L-gas supply, it has been agreed within the L-gas risk group that in case one of crisis levels has been declared for L-gas, the Netherlands will collect the information mentioned in article 14(1) of the Regulation from the competent authorities of the other involved Member States. The Netherlands will subsequently group this information and make it available to all the involved competent authorities and, if so requested, to the European Commission.

The Netherlands will also coordinate the establishment of the assessment mentioned in article 14(3) and will provide this to the European Commission as soon as possible and at the latest six weeks after the lifting of the L-gas emergency. The other involved competent authorities will provide the Netherlands timely with all the information necessary for the assessment.

9.2.2 Baltic Sea Risk Group

The cooperation mechanism within the risk group follows coordinative procedures between Member States, TSOs, regulators and other stakeholders on different levels. The aim is to provide the relevant stakeholders with detailed information about the reason and impact of a crisis situation and to coordinate possible mutually agreed solutions, in order to prevent or mitigate negative effects of a 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.

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.

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

9.2.3 United Kingdom Risk Group

The United Kingdom Risk Group comprises Belgium, Germany, Ireland, Luxembourg, the Netherlands and the United Kingdom. The group operates on a consultative basis with the drafting of this chapter agreed in consultation with its members.

Risk group actions on declaring a crisis level

On the declaration of a crisis level, the relevant group Member State will undertake to immediately contact all other Member States within the United Kingdom Risk Group and other neighbouring Member States if appropriate. It will also contact the Commission. As the crisis is managed it will stay in regular contact with the Member States and update them and the Commission whenever the crisis level changes.

The Member state will identify the crisis level (Early Warning, Alert Level or Emergency Level).

The Member State will provide a description of the incident or information leading to the declaration of the crisis level, covering:

- (i) The date, time and duration of the incident;
- (ii) The nature of the incident or threat;
- (iii) The location of the incident;
- (iv) The gas volumes affected;
- (v) The origin of the incident;

As set out in the Regulation, for the Early Warning and Alert levels, details will set out the market-based measures being adopted including:

- (i) A brief description of the measure and main actors involved;
- (ii) An indication whether these measure are sufficient to deal with the crisis and if not, a brief description of the additional measures that can be taken; and
- (iii) An indication whether cross border effects are to be expected in the other group Member States (For example increased imports from that Member State).

For Emergency level, the details will include:

The actions being taken on the supply and demand side to make gas available, including commercial agreements between the parties involved and any compensation mechanisms for natural gas undertakings where appropriate;

A brief description of the market-based measures still being applied at this stage and the main actors involved, indicating the expected contribution of the measures to mitigate the situation at emergency level and the contribution still needing to be covered by non-market-base measures.,

The non-market-based measures planned or to be implemented for the emergency level, indicating, per measure:

- (ii) A brief description of the measure and main actors involved;
- (iii) The preferred order in which they should be implemented, taking into account the circumstances of the crisis.
- (iv) indicate the expected contribution of the measures to mitigate the situation at emergency level as a complement to market-based measures;
- (v) assess other effects of the measure, with a particular attention to possible cross-border effects in other group Member States.

Cooperation Mechanisms between TSOs

The Regional Coordination (ReCo) System for Gas has been established by ENTSOG (European Network of Transmission System Operators for Gas) as a means for the Member States' Transmission System Operators to share information when one of the three levels is activated. The aim of the ReCo is to provide a wide view and provide information around the situation. Information which group Member States undertake to share during an incident will comprise:

- information about the incident level according to the ICS
- existing or possible consequences of the incident
- short description of the situation

The group Member States participating in the telephone conference will undertake to provide the following information as part of that conference:

- Restrictions
- Pressure in the system
- Capacity utilisation (focused on relevant points or system)
- Underground gas storage information

- LNG utilization
- Level of demand
- Crisis Level
- Trend of prices for balancing gas
- Availability of balancing gas
- Maintenance
- Additional available flows from production

Using the ReCo system the group Member States undertake to participate in regular telephone conferences which enable sharing information around best practice and lessons learned.

The Member State within which the incident has occurred has the responsibility for first activating the ReCo team.

9.2.4 Belarus Risk Group

Regional Coordination System for Gas

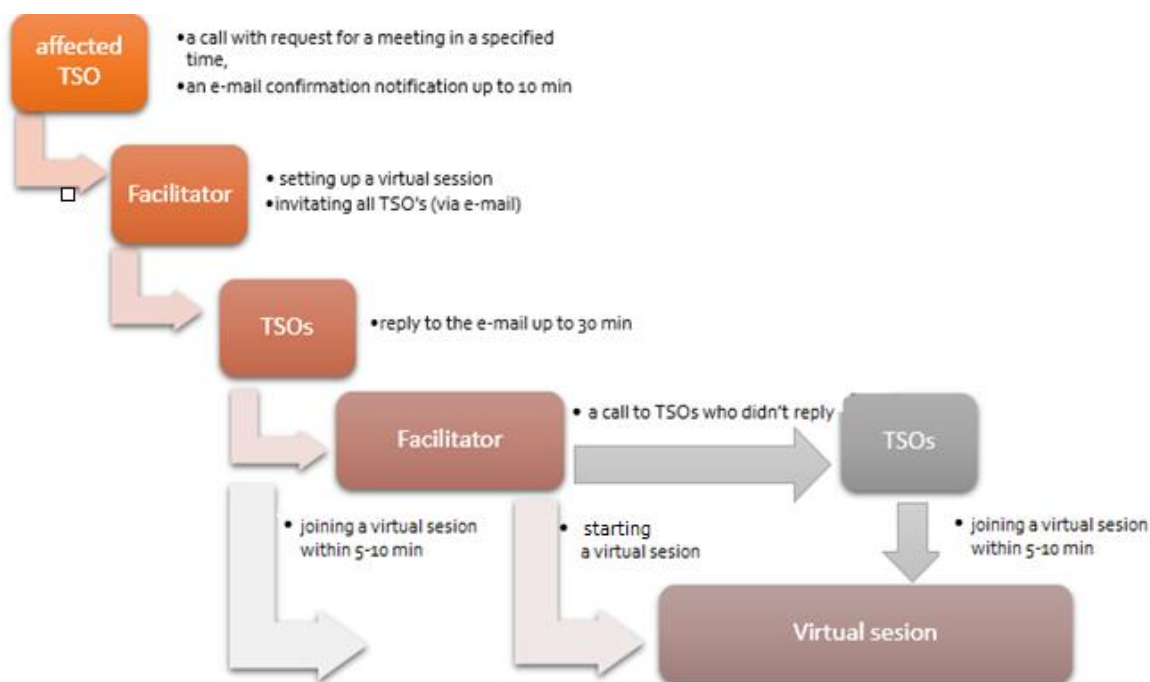
In accordance to Article 3.6 of Regulation (EU) 2017/1938, the role of the Regional Coordination System for Gas (ReCo System for Gas), established by ENTSOG and composed of standing expert groups, for cooperation and information exchange between transmission system operators in the event of a regional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

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

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

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

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



Adjacent procedure

In order to have access to full information about the current situation in the gas system Competent Authorities of all Member State belonging to the risk group should prepare appropriate procedures for gathering information from all gas system operators and also from the market participants if the need arises.

9.3 Solidarity

Placeholder for the description of the bilateral agreements to be concluded with adjacent Member States in order to implement the solidarity mechanism.

9.3.1 France

9.3.2 Germany

9.3.3 Luxembourg

9.3.4 Netherlands

Annexes

Annex I: Glossary

Adjacent TSO	Transmission System Operator of a directly connected country
Balancing Operator	Entity performing the market-based balancing of the gas grid, i.e. (a) aggregating the balancing positions of the shippers active on the respective grids of Creos Luxembourg and Fluxys Belgium and communicating such balancing positions to the shippers and the aggregated balancing position of the overall market, (b) purchasing and selling gas for balancing purposes, and (c) invoicing balancing charges to the shippers; For H-gas market as well as L-gas market In Belgium and Luxemburg (BeLux area) : Balansys
Competent authority	A national governmental authority or a NRA designated by a Member State to ensure the implementation of the measures provided for in Regulation 2017/1938 (In Belgium: Directorate-General Energy of the FPS Economy, SMEs, Self-employed and Energy)
DSO	Distribution System Operator
End user	Customer purchasing natural gas for his own use
GCG	Gas Coordination Group
Network User	Natural gas undertaking with a transport authorization and/or active on the wholesale gas market
Linepack	Temporary buffer of gas by compression in gas transmission systems, but not including facilities reserved for transmission system operators carrying out their functions
LNG	Liquefied Natural Gas
LSO	LNG System Operator. In Belgium: Fluxys LNG, operating the terminal in Zeebrugge.
Minister of energy	The federal minister who has Energy in her/his attributions
Natural gas undertaking	Natural or legal person carrying out at least one of the following functions: production, transmission, distribution, supply, purchase or storage of natural gas, including LNG, which is responsible for the commercial, technical and/or maintenance tasks related to those functions, but shall not include final customers
NRA	National Regulatory Authority. In Belgium: CREG, Commission de Régulation de l'Electricité et du Gaz
Protected customer	Household customer, small or medium-sized enterprise, essential social service, or district heating installation, who is connected to a gas distribution network
Solidarity protected customer	Household customer, essential social service, or district heating installation (provided that it supplies heat to households or essential social services), who is connected to a gas distribution network

SSO	Storage System Operator. In Belgium: Fluxys Belgium, operating the underground gas storage in Loenhout.
TSO	Transmission System Operator. In Belgium: Fluxys Belgium.

Annex II: Detailed description of the measures

Early Warning

Measure I-1	Daily monitoring
Description	<p>The gas undertakings involved should provide information to the competent authority daily:</p> <ul style="list-style-type: none"> • the daily gas demand and gas supply forecasts for the following three days, in million cubic metres per day (mcm/d). • the daily flow of gas at all cross-border entry and exit points as well as at all points connecting a storage facility or an LNG terminal to the network, in million cubic metres per day (mcm/d). • the period, expressed in days, for which it is expected that supply of gas to protected customers can be ensured.
Main actors involved	<ul style="list-style-type: none"> • TSO • Competent Authority • Network Users
Procedures to be followed	In the event of an (imminent) gas incident, the TSO passes the information mentioned above to the competent authority.
Anticipated contribution	This measure means that the Competent Authority is aware of the relevant information as quickly as possible and the exchange of information about the gas incident can be shaped at European level.
Information flows	<ul style="list-style-type: none"> • Information from the gas undertakings involved to the Competent Authority, via the TSO. • Information from the TSO to the Competent Authority.

Measure I-2	Adaptation of the balancing market threshold
Description	The TSO requests the Balancing Operator to modify the threshold delimitating the balancing flexibility offered to the integrated Belux market. When the market balancing threshold is crossed, the Balancing Operator initiates an action to balance the market.
Main actors involved	<ul style="list-style-type: none"> • TSO • Balancing Operator • Network Users
Procedures to be followed	The TSO requests the Balancing Operator to adapt the market thresholds and to communicate to the Network Users the new values of the market thresholds
Anticipated contribution	<p>This measure implies two contributions</p> <ul style="list-style-type: none"> • Network Users are incentivized to better balance their portfolio • Balancing Operator will have a shorter response time and may launch a balancing action (purchase of gas) sooner than in normal conditions as the offered flexibility is reduced and the balancing threshold could be crossed more easily.
Information flows	Request from TSO to Balancing Operator. Balancing Operator informs the Network Users of the modified thresholds.

Measure I-3	Level 2 swaps with Adjacent TSOs
Description	<p>The TSO submits a request to Adjacent TSOs to physically reroute (swap) gas flows to one or several interconnection points. A technical cooperation agreement involving several TSOs in Europe describes three swap levels requiring more or less endeavour from adjacent TSOs:</p> <ul style="list-style-type: none"> • Level 3 is used during normal operations to enhance the efficient steering of the natural gas networks. This swap is done on a voluntary basis. • Level 2 is used in case of planned work or maintenance and punctual technical issue. It is done on a reasonable endeavour basis • Level 1 is used in case of an incident limiting the technical capacity at an interconnection point. It requires the best endeavour from Adjacent TSOs to reroute physical flows
Main actors involved	<ul style="list-style-type: none"> • TSO • Adjacent TSOs
Procedures to be followed	TSO asks Adjacent TSOs a Level 2 swap of physical flows to one or several other interconnection points
Anticipated contribution	Rerouting of flows can ensure that natural gas quantities that Network Users are nominating will be delivered even in the case of an incident on a specific interconnection point
Information flows	Request from the TSO to Adjacent TSOs

Measure I-4 Maintenance work management	
Description	<p>The TSO can adjust the schedule of maintenance work if system integrity is improved by not performing these work.</p> <p>Example: by cancelling planned maintenance work at an interconnection point, the full capacity (fixed + interruptible) can be made available again or possibly increased for a limited duration.</p>
Main actors involved	<ul style="list-style-type: none"> • TSO • Adjacent TSOs • DSO • Network Users • End Users
Procedures to be followed	<p>The TSO can initiate this measure autonomously, possibly after consultation with the actors directly involved in the maintenance work.</p> <p>This measure is only applied if there is a positive effect on system integrity.</p>
Anticipated contribution	<p>The expected effect, if any, is determined based on the nature, location and initial impact of the planned maintenance work.</p>
Information flows	<p>When the TSO decides to adjust the planning of work, the relevant actors are informed according to the existing operational rules or specific agreements made with regard to planned maintenance work.</p>

Measure I-5 Ask Adjacent TSOs to temporarily exceed the OBA limits	
Description	<p>For each interconnection point an Operational Balancing Agreement exists between TSOs that specifies the tolerated deviation between physical flows and nominations (OBA limits). The TSO submits a request to Adjacent TSOs to exceed this tolerated deviation up to an agreed (limited) quantity.</p>
Main actors involved	<ul style="list-style-type: none"> • TSO • Adjacent TSOs
Procedures to be followed	<p>The TSO asks Adjacent TSOs to widen the OBA limits (use of the flexibility means of adjacent TSOs).</p>
Anticipated contribution	<p>The adjacent TSOs could possibly be able to temporarily supply additional gas (loan) or take-off less gas. The TSO uses this measure to try to maintain the physical balance in the gas grid as far as possible.</p>
Information flows	<p>Non-binding request to Adjacent TSOs by the TSO.</p>

Alert

Measure II-1	Level 1 swaps with Adjacent TSOs
Description	<p>The TSO submits a request to Adjacent TSOs to physically reroute (swap) gas flows to one or several interconnection points. A technical cooperation agreement involving several TSOs in Europe describes three swap levels requiring more or less endeavour from adjacent TSOs:</p> <ul style="list-style-type: none"> • Level 3 is used during normal operations to enhance the efficient steering of the natural gas networks. This swap is done on a voluntary basis. • Level 2 is used in case of planned work or maintenance and punctual technical issue. It is done on a reasonable endeavour basis • Level 1 is used in case of an incident limiting the technical capacity at an interconnection point. It requires the best endeavour from Adjacent TSOs to reroute physical flows
Main actors involved	<ul style="list-style-type: none"> • TSO • Adjacent TSOs
Procedures to be followed	TSO asks Adjacent TSOs a Level 1 swap of physical flows to one or several other interconnection points
Anticipated contribution	Rerouting of flows can ensure that natural gas quantities that Market Participants are willing to deliver can be transported even in the case of an incident on an interconnection point
Information flows	Request from TSO to Adjacent TSOs

Measure II-2	Constraint on Entry Point
Description	<p>In case of an incident impacting directly an Entry interconnection point, the TSO may place a constraint on this point to reduce the firm capacity offered at this entry point to reflect the physical flows that can pass through this point. This is not automatically the case. The TSO can for example compensate the reduction of physical flows by swaps or other measures, without any visible impact for the Network Users)</p>
Main actors involved	<ul style="list-style-type: none"> • TSO • Network Users
Procedures to be followed	The TSO informs the Network Users of the reduction of available capacity on the interconnection point
Anticipated contribution	The constraint on the entry interconnection point will encourage involved Network Users to reroute their gas supply to other entry interconnection points, ensuring therefore complementary gas supply to the balancing zone
Information flows	TSO informs the Network Users of the reduction of capacity

Measure II-3 Use of operational gas reserves dedicated to incident management	
Description	The TSO supplies gas from its operational reserves for incident management in underground storage or LNG terminal. If needed, the TSO can also use the quality conversion installations to transfer quantities from H-gas network to the L-gas network.
Main actors involved	<ul style="list-style-type: none"> • TSO • LSO • SSO
Procedures to be followed	The TSO uses its operational reserves for incident management in underground storage, LNG terminal or quality conversion installations.
Anticipated contribution	The TSO's operational reserves for incident management can be used insofar as a natural gas stock is available. The TSO uses these measures to maintain the physical balance in the gas grid as far as possible.
Information flows	Information from TSO to LSO and SSO to activate the operational reserves for incident management. In case of the quality conversion installations, the TSO indicates to its operational teams the requested capacity

Measure II-4 Emergency parking and lending with Adjacent TSOs	
Description	The TSO submits a non-binding request to Adjacent TSOs to voluntarily take best endeavour to supply more gas or to take-off less gas from the transmission network.
Main actors involved	<ul style="list-style-type: none"> • TSO • Adjacent TSOs
Procedures to be followed	The TSO asks Adjacent TSOs to increase as much as possible the use of parking and/or lending (use of the flexibility means of adjacent TSOs).
Anticipated contribution	The adjacent TSOs could possibly be able to temporarily supply additional gas (loan) or take-off less gas. The TSO uses this measure to try to maintain the physical balance in the gas grid as far as possible.
Information flows	Non-binding request to Adjacent TSOs by the TSO.

Measure II-5 Proactive gas purchase on Zeebrugge Trading Point	
Description	The TSO initiates a proactive gas purchase on Zeebrugge Trading Point
Main actors involved	<ul style="list-style-type: none"> • TSO
Procedures to be followed	The TSO initiates a proactive gas purchase on Zeebrugge Trading Point
Anticipated contribution	The gas purchase increases the linepack position. This increase is made in order to maintain the physical balance in the gas grid as far as possible.
Information flows	Purchase order placed on Zeebrugge Trading Point

Measure II-6	Use of available capacities at the LNG terminal and storage installation above the operational gas reserves dedicated to incident management
Description	When capacities at the LNG terminal or storage installation are not used by the Network Users holding the rights for these capacities, the TSO can request the terminal operator and/or the storage operator to use these capacities to inject more natural gas in the gas network. The same principle applies to quality conversion installations.
Main actors involved	<ul style="list-style-type: none"> • TSO • LSO • SSO
Procedures to be followed	The TSO requests the storage operator and terminal operator to inject more gas into the gas network using available, non-used capacities. For L-gas network, the TSO increase the flow on the quality conversion installations using the available, non-used capacities.
Anticipated contribution	Increased injection capacities will potentially further help to maintain the physical balance in the gas grid.
Information flows	Information from TSO to LSO and SSO to increase their injections

Emergency

Measure III-1		Call to reduce natural gas consumption
Description	The Competent Authority can issue a call to voluntarily consume less gas to both households (by turning down heating for example) and undertakings. With these measures, the Competent Authority should be able to mobilise the population and undertakings through communication	
Main actors involved	<ul style="list-style-type: none"> • Competent Authority • Crisis Cell home affairs • TSO • Distribution System Operators (DSOs) • Natural gas suppliers 	
Procedures to be followed	The Crisis Cell home affairs is responsible for implementing this measure, in collaboration with the Competent Authority. Part of this is the coordination of the communications between all parties involved including, in any case, the TSO and DSOs.	
Anticipated contribution	The precise effect of this voluntary measure is uncertain and a major effect cannot be guaranteed.	
Information flows	This measure is implemented based on information about the date and time of the start of the unwanted event, the description, cause, context and effects of the unwanted event, the teams and parties involved, the decisions taken, measures and recommendations, and on the forecasts. These details are supplied to the TSO by DSOs, Adjacent TSOs, and Network Users. This information will be passed to the Competent Authority. In its role as information coordinator, the Crisis Cell home affairs gathers information from the TSO and the Competent Authority and processes it into a departmental overall picture of the situation. On the one hand, this overall picture supports departmental decision-making and on the other hand it serves as input for interdepartmental decision-making in the crisis management.	

Measure III-2		Call on neighbouring countries to voluntarily reduce natural gas imports
Description		Neighbouring Member States importing gas through Belgium can be requested to voluntarily and temporarily reduce their imports in order to retain a larger volume of gas available for the Belgian market.
Main actors involved		<ul style="list-style-type: none"> • Federal Minister of Energy / Competent Authority • Member States of the European Union • Adjacent TSOs • TSO
Procedures to be followed		The Minister of Energy is responsible for implementing this measure, advised by the Competent Authority and the TSO in particular. The request to other Member States to implement measures to reduce export of gas from Belgium will be made on behalf of the Minister of Energy and via the existing contacts with the relevant Ministries in the neighbouring Member States.
Anticipated contribution		As the possibilities for neighbouring Member States to reduce their imports of gas on a voluntary basis without incurring economic losses is likely to be rather low, this measure is unlikely to yield much effect.
Information flows		This measure is implemented based on information about the date and time of the start of the unwanted event, the description, cause, context and effects of the unwanted event, the teams and parties involved, the decisions taken, measures and recommendations, and on the forecasts. These details are supplied to the TSO by DSOs, Adjacent TSOs, and Network Users. This information will be passed to the Competent Authority. In its role as information coordinator, the Crisis Cell home affairs gathers information from the TSO and the Competent Authority and processes it into a departmental overall picture of the situation. On the one hand, this overall picture supports departmental decision-making and on the other hand it serves as input for interdepartmental decision-making in the crisis management.

Measure III-3	Suspension of trading rights
Description	In case of an error or negligence of one or more Network Users impacting the security of natural gas supply to Protected Customers in particular, the TSO may suspend the right to use the ZTP Notional Trading Services for such Network User
Main actors involved	<ul style="list-style-type: none"> • TSO • Network Users
Assessment of necessity	This measure is only considered when the gas crisis results from the behaviour of a Network User whose trading behaviour has an impact on the security of natural gas supply
Procedures to be followed	The TSO removes the access to the Zeebrugge Trading Point of the responsible Network User and no longer accepts the gas exchanges reported by the suspended Network User
Anticipated contribution	The suspended Network User will no longer be able to worsen the imbalance of the market
Other effects	This measure could prevent the responsible Network User to correct their harmful behaviour by themselves. However, it is deemed preferable to suspend the right and therefore directly stop a behaviour that endangers the security of natural gas supply to protected customers
Compliance of the measure with the conditions laid down in Article 11(6)	This measure aims at ensuring that the gas flows correspond to licit nominations, keeping the market in balance and not introducing undue imbalance.
Information flows	Information from TSO to involved Network Users

Measure III-4 Imbalance constraint on firm capacity on Exit interconnection points	
Description	The TSO can apply an imbalance constraint on firm capacity on Exit Interconnection Points. This imbalance constraint will reduce the nominated exit quantities from shippers by constraining the exit capacity from the 'causing' Network User. The constraint will be calculated in such a way that the Network User will be balanced again for the remaining hours of the gas day.
Main actors involved	<ul style="list-style-type: none"> • TSO • Network Users • Adjacent TSOs
Assessment of necessity	This measure can be applied in all cases, taking the impact on protected customers of the adjacent system operator into account
Procedures to be followed	<p>The TSO decides to apply this measure by activating the imbalance constraint in the nomination ICT-system. The imbalance constraint is applied on all the shippers in a non-discriminatory way. The TSO calculates the new confirmed quantities of the shippers and communicates this information to the shippers via Edig@s-messages. Adjacent TSO's are also informed via Edig@s.</p> <p>The physical steering at the exit border will be adapted according to the new confirmed quantities.</p>
Anticipated contribution	The impact of this imbalance constraint is very high because all imbalances are lifted in most cases. The impact is immediate (full hour +1 or full hour +2)
Other effects	Not applicable.
Compliance of the measure with the conditions laid down in Article 11(6)	By constraining the exit borders, there could be an effect on the adjacent transmission systems. Discussions between TSOs should be held in advance to ensure enough time for the affected Adjacent TSO to mitigate the impact.
Information flows	The TSO calculates the new confirmed quantities of the shippers and communicates this information to the shippers via Edig@s-messages. Adjacent TSO's are also informed via Edig@s.

Measure III-5	Constraint on firm capacity of quality conversion installation
Description	The TSO can apply a constraint on the firm capacity of the quality conversion installation provided this constraint has a positive impact on the balance of the affected grid (H-gas or L-gas)
Main actors involved	<ul style="list-style-type: none"> • TSO • Network Users nominating on quality conversion installation
Assessment of necessity	This measure can only be applied if there are nominations on the quality conversion installation and if these nominations have a negative impact on the affected grid (H-gas or L-gas)
Procedures to be followed	<p>The TSO applies the constraint on the quality conversion installation in the nominations ICT system.</p> <p>The imbalance constraint is applied on all the shippers in a non-discriminatory way. The TSO calculates the new confirmed quantities of the shippers and communicates this information to the shippers via Edig@s-messages. The TSO adapts the physical steering on the quality conversion installation according to the new confirmed quantities.</p>
Anticipated contribution	Only in case quality conversion installation is nominated by the shippers and in case this nomination has a negative impact on the balance of the affected grid, this constraint will have a positive impact on the balance of the grid/system.
Other effects	This measure will have a positive impact on the balance of the affected grid, but could have on the other hand a negative impact on the balance of the other grid.
Compliance of the measure with the conditions laid down in Article 11(6)	This measure has no impact on adjacent transmission systems
Information flows	The TSO calculates the new confirmed quantities of the shippers and communicates this information to the shippers via Edig@s-messages.

Measure III-6		Ask European Commission to declare a regional emergency
Description of the measure	<p>The Federal Minister of Energy, assisted by the Competent Authority, can decide to ask the European Commission to declare a regional emergency (Article 12 of EU Regulation 2017/1938).</p> <p>This measure also provides the opportunity to make agreements with other Member States on reducing their import of natural gas from Belgium that are concrete and specifically tailored to the situation.</p> <p>This measure will be preceded by the measure of asking other Member States to limit the import of gas from Belgium on a voluntary basis. In this way, this measure could be the prelude organising a joint request with other Member States to the Commission to declare a regional emergency.</p>	
Main actors involved	<ul style="list-style-type: none"> • Federal Minister of Energy • European Commission • Gas Coordination Group • TSO • Adjacent TSOs 	
Procedure	<p>The Minister of Energy is responsible for implementing this measure, assisted by the Competent Authority.</p>	
Anticipated contribution	<p>Formal declaration of a regional emergency, and the ensuing process in the Gas Coordination Group as coordinated by the European Commission, will incite Member States to implement gas reduction and flexibility measures, and to go beyond what would be achieved on a strictly voluntary basis.</p>	
Information flows	<p>Request from the Federal Minister of Energy to the European Commission</p>	

Measure III-7	Constraint on firm capacity to non-protected customers
<p>Description</p>	<p>The TSO may request the non-protected End Users (Industrial End Users and gas-fired Power Plants) to reduce or stop their off-take, taking into account those considered as priority End Users.</p> <p>Non-protected, Priority End Users are, in the following order:</p> <ul style="list-style-type: none"> • Power Plants identified by the TSO for electricity as strictly necessary to prevent a black-out on the electricity grid • Industrial End Users and Power Plants strictly necessary in order to protect the so-called Seveso installations. • Power Plants identified by the TSO for electricity as black-start power plant or as necessary in the event of restoration of the electricity grid following a black-out.
<p>Main actors involved</p>	<ul style="list-style-type: none"> • TSO • Network Users • End Users • Competent Authority • TSO for electricity
<p>Assessment of necessity</p>	<p>This measure will be implemented to safeguard the gas supply to protected customers.</p>
<p>Procedures to be followed</p>	<p>The Competent Authority shall provide the TSO with the necessary information concerning the Priority End Users, strictly necessary in order to protect the so-called Seveso installations.</p> <p>The TSO constrains the nominated quantities of the concerned Network Users to the concerned End Users.</p>
<p>Anticipated contribution</p>	<p>Scale of the effect:</p> <p>H-gas: the gas demand of non-protected customers can be substantial but is limited in relation to the combined capacity available at the different interconnection points.</p> <p>L-gas: depending on the season, the gas demand of non-protected customers is limited to very limited in comparison to the gas demand of the protected customers. Therefore, on the L-grid, the effect of this measure will be limited.</p> <p>Certainty of the effect:</p> <p>In the event that the End User does not respond to the request to reduce its off-take, the TSO has the right to physically reduce the required amount necessary under these emergency conditions.</p>
<p>Other effects</p>	<p>The enforced reduction or cessation of the natural gas supply towards an industrial End User can lead to the stop of its business processes, resulting in considerable economic losses.</p> <p>Adverse effect on the electricity sector are avoided as long as possible by ensuring the continued supply of gas power plants necessary to prevent a black-out on the electricity grid or restore it to a normal state after a black-out (including black-start power plants)</p>
<p>Compliance of the measure with the conditions laid down in Article 11(6)</p>	<p>This measure has no effect on the supply of gas in another Member State or cross-border access to infrastructure.</p>

Information flows	<p>The TSO for electricity notifies the list of gas-fired power plants identified as necessary, considering the state of the electricity system, to the TSO for gas and the Competent Authority.</p> <p>Network Users and End Users will be informed by the TSO according to the operating procedures described in the Connection Agreement and Access Code.</p>
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Measure III-8 Enforced withdrawal of gas in storage	
Description	In order to safeguard the gas supply of protected customers, the TSO has the right to use the storage capacities and gas in storage subscribed by the Storage Users and if needed transfer these quantities from H-gas network to L-gas network using the quality conversion installations.
Main actors involved	<ul style="list-style-type: none"> • TSO • SSO • Storage Users • Competent Authority
Assessment of necessity	This measure is only considered when all previous measures (market-based and non-market-based) have not had sufficient impact to safeguard the gas supply of protected customers.
Procedures to be followed	<p>The Competent Authority has to confirm the Emergency Level as defined in the Security of Supply (SoS) Regulation.</p> <p>The TSO will give the necessary instructions towards the Storage Operator.</p>
Anticipated contribution	<p>Scale of the effect:</p> <p>The positive effect (in size and duration) of this measure will depend on the available amount of gas in Storage.</p> <p>Certainty of the effect:</p> <p>In case of SoS Emergency, the Storage Users are obliged to follow the instructions given by the Storage Operator.</p>
Other effects	<p>Financial: the Storage Operator shall reimburse to the affected Storage Users an amount corresponding to the capacity costs they have paid for the part of the firm withdrawal capacity used during the period of such SoS Emergency.</p> <p>Gas in Storage: the Storage Operator will, as soon as reasonably possible, retribute the used amount of gas in kind or in cash.</p>
Compliance of the measure with the conditions laid down in Article 11(6)	<p>Implementation of this measure can lead to the Storage Services to be reduced, interrupted or forced to withdrawal during the period of the SoS Emergency.</p> <p>This measure has no effect on the supply of gas in another Member State or cross-border access to infrastructure.</p>
Information flows	The Storage Users will be informed by the Storage Operator according to the operating procedures described in the Access Code for Storage and the Standard Storage Agreement.

Measure III-9		Disconnect customers other than solidarity protected customers (administrative disconnection)
Description of the measure	Individual customers other than solidarity protected customers are disconnected. These customers do fall under the definition of 'protected customers' but not under the definition of 'solidarity protected customers'. In practice these are the small and medium-sized enterprises and specific segments of essential social services (educational services for example) connected to the distribution network. As these customers can in most cases not be technically disconnected individually, they will be disconnected through administrative means.	
Main actors involved	<ul style="list-style-type: none"> • Federal Minister of Energy, assisted by Competent Authority • End Users other than solidarity protected customers • DSOs 	
Procedure	<p>The decision on this measure is made by the Federal Minister of Energy, assisted by the Competent Authority.</p> <p>Communication of the administrative prohibition will be managed by the Competent Authority in cooperation with the DSOs.</p>	
Anticipated contribution	Limited effect to be expected, as the category of protected clients that are not solidarity protected (and their gas consumption) is rather limited.	
Other effects	The enforced reduction or cessation of the natural gas supply towards an industrial End User can lead to the stop of its business processes, resulting in considerable economic losses.	
Compliance of the measure with the conditions laid down in Article 11(6)	This measure has no effect on the supply of gas in another Member State or cross-border access to infrastructure.	
Information flows	End Users other than solidarity protected customers will be informed by the Competent authority through appropriate channels.	

Measure III-10	Invoking mutual solidarity between EU Member States
Description of the measure	The Ministry of Energy contacts the European Commission and the competent authorities in the EU Member States to which the Belgian gas transport network is directly connected (currently: the Netherlands, Germany, France and Luxemburg) to request them to supply gas to Belgium for the customers protected under the solidarity provisions. In order to do so, these Member States may be obliged, on the basis of Article 13 EU Regulation 2017/1938, to reduce the supply of gas to their own nationals who are not protected.
Main actors involved	<ul style="list-style-type: none"> • Federal Minister of Energy, assisted by the Competent Authority • TSO • NRA • Adjacent TSOs • European Commission • Member States of the European Union
Procedures to be followed	The Federal Minister of Energy will contact the European Commission and the relevant competent authorities of neighbouring Member States with a request for solidarity. The Competent Authority, assisted by the TSO and the NRA, will analyse the solidarity offers received. Based on this analysis, the final decision to accept or decline a solidarity offer will be made by the Federal Minister for Energy.
Anticipated contribution	Given the mandatory and enforceable nature of the solidarity provisions in the SoS Regulation, this measure can have a significant effect, provided the gas incident has not yet led to a gas supply crisis at regional level.
Other effects	Not applicable
Compliance of the measure with the conditions laid down in Article 11(6)	This measure follows the solidarity principles set up in the SoS Regulation, which should ensure that the effects on the security of gas supply in other member states are minimized.
Information flows	This measure is implemented based on information about the date and time of the start of the unwanted event, the description, cause, context and effects of the unwanted event, the teams and parties involved, the decisions taken, measures and recommendations, and on the forecasts. These details are supplied to the TSO by DSOs, Adjacent TSOs, and Network Users. This information will be passed to the Competent Authority. In its role as information coordinator, the Crisis Cell home affairs gathers information from the TSO and the Competent Authority and processes it into a departmental overall picture of the situation. On the one hand, this overall picture supports departmental decision-making and on the other hand it serves as input for interdepartmental decision-making in the crisis management.

Measure III-11	Administratively disconnect solidarity protected customers
Description of the measure	<p>Solidarity protected customers will receive an instruction to consume no gas or less gas (administrative disconnection).</p> <p>A priority order to disconnect solidarity protected customers, or criteria to establish such an order, still needs to be developed.</p> <p>Given the large number of small connections, the technical disconnection of solidarity protected customers is only an option if entire areas can be disconnected technically (see Measure III-12).</p>
Main actors involved	<ul style="list-style-type: none"> • Minister of Energy, assisted by Competent Authority • DSOs • Solidarity protected customers
Procedure	<p>The decision on this measure is made by the Federal Minister of Energy, assisted by the Competent Authority.</p> <p>Communication and follow-up of the administrative prohibition will be managed by the Competent Authority in cooperation with the DSO's.</p>
Anticipated contribution	<p>The anticipated effect on the demand is uncertain. The demand for gas can be relatively high which is certainly the case when small-scale users demand gas for heating on a cold winter day.</p> <p>However, as in such circumstances the consequences of disconnecting gas can be major (and possibly life-threatening), it is uncertain to what extent small-scale consumers will respond to an instruction to consume no gas or less gas.</p>
Other effects	<p>Depending on the weather conditions, the curtailment of protected customers may impact the safety of people in Belgium.</p>
Compliance of the measure with the conditions laid down in Article 11(6)	<p>This last resort measure will only be applied when every possibility of solidarity measures in neighbouring member states is exhausted. Therefore, this measure does not introduce new negative impact on the security of supply in other member states.</p>
Information flows	<p>This measure is implemented based on information about the date and time of the start of the unwanted event, the description, cause, context and effects of the unwanted event, the teams and parties involved, the decisions taken, measures and recommendations, and on the forecasts. These details are supplied to the TSO by DSOs, Adjacent TSOs, and Network Users. This information will be passed to the Competent Authority. In its role as information coordinator, the Crisis Cell home affairs gathers information from the TSO and the Competent Authority and processes it into a departmental overall picture of the situation. On the one hand, this overall picture supports departmental decision-making and on the other hand it serves as input for interdepartmental decision-making in the crisis management.</p>

Measure III-12	Technical disconnection of part of the main gas grid including export
Description of the measure and actors	<p>In the event of a severe disruption of gas supply, it will be necessary, subsequent to aforementioned measures, to cease the gas supply to certain parts of the main gas grid and to countries abroad, even if this affects all consumers both protected and not protected.</p> <p>The options for disconnecting part of the main gas grid are closing shut-off valves in through pipelines or closing them at the level of metering and pressure control facilities or gas distribution stations. The choice of which part of the main gas grid is to be disconnected depends on possible effects on national security. The leading criterion is therefore the relative quantity of gas that is consumed by the Category A critical infrastructure. A part of the main gas grid with a relatively large supply of gas to the critical infrastructure is therefore disconnected later than other parts. This choice of region spreads the effect of disconnecting proportionally across Belgium. The shutting-down of export is also a possibility when selecting parts of the main gas grid to be disconnected.</p>
Main actors involved	<ul style="list-style-type: none"> • Minister of Energy, assisted by Competent Authority • DSOs • Solidarity protected customers • TSO • Adjacent TSOs
Assessment of the need	<p>This measure is only considered when all previous measures (market-based and non-market-based) have not had sufficient impact on the gas supply situation. This means that the nature of the crisis is such that this measure should be implemented.</p> <p>Such a measure is prudent, for example, for keeping the pressure in the national gas network up to level – a condition for the timely restart of gas supply – during a major gas shortage.</p>
Implementation procedure	<p>Implementation</p> <p>The TSO is responsible for implementing the measure on behalf of the Minister of Energy. This involves both the technical disconnection from the CCP and the manual technical disconnection of specific customers, transfer points to the distribution networks, Adjacent TSOs, pipeline sections or parts of the transport network.</p> <p>The technical disconnection is carried out by the TSO at the level of metering and pressure control facilities or gas distribution stations.</p> <p>Decision</p> <p>The decision on this measure is made by the Minister of Energy, assisted by the Competent Authority.</p>
Anticipated contribution	<p>Scale of the effect</p> <p>The size of the gas reduction depends on the area that is disconnected.</p> <p>Certainty of the effect</p> <p>As a result of the technical disconnection, the subsequent effects are then guaranteed.</p>

<p>Other effects</p>	<p>This type of gas shortage will have severely disrupting consequences for society. As a result of the gas shortage, undertakings will have to shut down, which results in economic losses and small-scale consumers will be without gas which results in risks to public health and safety.</p> <p>Another possible consequence is the shifting of the gas demand as result of evacuation because people are taken to another location. These effects are currently unquantified.</p>
<p>Relationship to Article 11(6) of EU Regulation 2017/1938</p>	<p>The internal market, the supply of gas to another Member State and cross-border access to infrastructure is not unduly restricted because all other measures have already been considered before this measure is implemented.</p>
<p>Information flows</p>	<p>This measure is implemented based on information about the date and time of the start of the unwanted event, the description, cause, context and effects of the unwanted event, the teams and parties involved, the decisions taken, measures and recommendations, and on the forecasts. These details are supplied to the TSO by DSOs, Adjacent TSOs, and Network Users. This information will be passed to the Competent Authority. In its role as information coordinator, the Crisis Cell home affairs gathers information from the TSO and the Competent Authority and processes it into a departmental overall picture of the situation. On the one hand, this overall picture supports departmental decision-making and on the other hand it serves as input for interdepartmental decision-making in the crisis management.</p>