# Malta's Emergency Plan

Gas Security of Supply Version: December 2019

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### Executive summary

The Competent Authority responsible for the implementation of the Gas Security of Supply Regulation, including the development of the Preventive Action Plan and Emergency Plan in Malta is the Ministry for Energy and Water Management.

As natural gas in Malta is used solely for electricity production, energy demand equates to the demand for electricity. The "N-1" assessment (Regulation Article 5) highlighted that:

- Malta has one gas facility. "N" therefore = 1, and consequently "N-1" = 0, highlighting the strategic dependency on the facility.
- Malta's only use for natural gas is to generate electricity. Therefore demand-side measures are focused on alternative sources of electricity, and demand reduction.
- Whilst the Regulation considers gas supply and demand at daily granularity, it is necessary to balance electricity supply and demand in real time.
- At a daily level peak demand can be met by relying on all other sources of electricity including on-island PV (solar photovoltaic) generation.
- However, within-day energy supply and demand has also to be assessed. This demonstrated
  that whilst solar PV contributes in aggregate and in daylight hours, peak electricity demand
  in afternoons and evenings cannot be completely met without gas for electricity production.
- It was also noted that Solar PV is intermittent and provides no load or frequency management capability.

The Common Risk Assessments for Algeria and Libya confirmed that Malta is not at significant risk from disruption to gas supply from either country. The only source of natural gas in Malta is imported Liquified Natural Gas (LNG). This enables flexibility in the country of origin, and to date LNG has not been sourced from Algeria or Libya. Within the Risk Group Emergency Plans, coordination between Member States has been established.

Due to the single piece of gas infrastructure and the key role of gas in the electricity generation mix, Malta is particularly vulnerable to disruption to or loss of the supply of natural gas. As such, crisis level parameters and criteria are directly tied to electricity demand and the impact of gas availability on electricity supply. As Malta's only use for natural gas is the production of electricity, the only applicable measures to be adopted per crisis level are the specific measures to be adopted for electricity. The National Risk Assessment of all relevant risks affecting the security of gas supply, (Regulation 2017/1938 concerning measures to safeguard the security of gas supply, the "Regulation"), identified that should the single largest piece of gas infrastructure be lost, and this coincides with an exceptionally high energy demand day, there would be difficulty in meeting all gas demand.

The Regulator for Energy and Water Services (REWS) will work closely with Electricity Generators and the Gas Facility Operator to monitor and forecast demand and potential issues. The Competent Authority will work with key actors to respond as soon as possible to emerging issues in gas supply to prevent the loss of supply and minimise disruption. Whilst appropriate crisis management arrangements are in place, better coordination with the bodies responsible for civil protection and national emergency contingency planning would enable a more effective response in a crisis situation. Malta will respond to crisis situations with appropriate market- and non-market-based measures both to decrease gas demand and to increase gas supply. In order to achieve this, Malta

could require the cooperation of its European neighbours to support the supply of 'top-up' deliveries of gas to the LNG facility.

Malta does not have "protected customers" or "solidarity protected customers" within the Regulation's definition, however due to the island's dependence on gas for electricity production the Competent Authority, the Regulator and the Distribution System Operator will adopt a definition of "Priority Customers" to cover vulnerable groups of electricity customers as part of its gas security of supply arrangements. This will be the basis for prioritisation of customers' electricity supply in the event of a disruption, including one caused by a disruption to the supply of gas.

It is not practical for Malta to conduct full, real-time simulations of crisis events. The lack of a failsafe mechanism and the singular nature of the gas infrastructure means removing the gas facility for an emergency test involves high risk exposure. However, periodic tests shall be undertaken that combine desktop scenarios and on-facility emergency responses.

### Introduction

In line with Article 3 of Regulation (EU) 2017/1938 (Gas Security of Supply Regulation), each Member State is required to designate a Competent Authority responsible for the implementation of the Regulation. The designated Competent Authority in Malta is the **Ministry for Energy and Water Management**. In line with the aforementioned article of the Regulation, the Competent Authority can delegate specific tasks set out in the Regulation to other bodies.

In view of this, the task of developing the Risk Assessment, the Preventive Action Plan and the Emergency Plan was designated to the Energy & Water Agency, the technical and policy arm of the Ministry. To support the task of developing the three documents in line with the requirements of the Regulation, Ainsty Risk Consulting Ltd has been commissioned on behalf of the Competent Authority.

Article 7 (3) of the Regulation requires that each Member State prepares a **National Risk Assessment** of all relevant risks affecting the security of gas supply. Malta's National Risk Assessment was completed and submitted to the European Commission in December 2018. Malta's National Risk Assessment includes an analysis of the infrastructure standard and the calculation of the N-1 formula in line with Article 5(1) of the Regulation. The National Risk Assessment is fully consistent with the assumptions and results of the common risk assessments of the Libyan and Algerian risk groups, to which Malta is a member. The common risk assessments of the relevant risk groups have also been submitted to the European Commission in line with the requirements of the Regulation.

Article 8(2) of the Regulation requires that the Competent Authority of each Member State establishes a **Preventive Action Plan** containing the measures needed to remove and mitigate the risks identified in the risk assessment in accordance with Article 9 and the template in Annex VI and an **Emergency Plan** containing the measures to be taken to remove or mitigate the impact of a disruption of gas supply in accordance with Article 10 and template in Annex VII. It is therefore recommended that this Emergency Plan is read in conjunction with Malta's Preventive Action Plan

# (1) Definition of Crisis Levels

- a) The body responsible for declaring gas supply crisis level for Malta is the crisis manager as appointed by Ministry of Energy and Water Management (MEW), the Competent Authority. The gas security of supply crisis manager for Malta is the Permanent Secretary, Ministry for Energy and Water Management.
- b) Indicators, outlined in the table below, are considered by the crisis manager when assessing whether an event may result in a deterioration of gas supply. Specific parameters are then applied to determine the crisis level that shall be declared.

Crisis Level	Description (Article 11)	Indicators	Decision Parameters
No Crisis	Business as usual. Supply, demand and storage of LNG all operating within acceptable / tolerable range.	No changes outside tolerance to: LNG supply, forecast LNG stock, electricity supply capacity or forecast electricity demand	Potential delay to planned LNG deliveries, LNG stocks falling faster than planned, or plant / interconnector availability
Early Warning	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.	A likelihood of potential disruption to future supplies of LNG or for demand for gas.	Requirement for alternative market- based measures from usual business practices to re-dress the potential disruption of gas supplies necessary to meet forecast demand.
Alert	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.	Likely specific disruption to LNG supplies, LNG stocks, electricity interconnector, gas-oil generation or PV available capacity, or an increase forecast demand for electricity.	Urgent requirement for alternative market-based measures to re-dress the potential disruption of gas supplies necessary to meet forecast demand.

Crisis Level	Description (Article 11)	Indicators	Decision Parameters
Emergency	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 nonmarket-based measures have to be additionally introduced with a view, in particular, to safeguarding gas supplies to protected customers in accordance with Article 6.	Actual disruption to alternative electricity sources, natural gas production or LNG supply.	Requirement for non-market-based measures.  Market based measures no longer sufficient.  Start limiting electricity supplies to those not considered "priority customers".  Requesting co-operation and support from other Member States needs to be considered.

# (2) Measures to be adopted per Crisis Level

Malta only uses natural gas for electricity production. Consequently, all measures to be adopted in response to entering each gas security of supply crisis level are dependent only on measures related to the production and use of electricity.

Please see section (3) "Specific measures for Electricity Production".

# (3) Specific measures for Electricity Production

There is no gas sourced district heating in Malta. This section therefore only considers the measures specific to electricity production in case of disruption or potential disruption to the supply of natural gas to Malta.

All decisions regarding crisis levels are based on the next delivery due at the point of consideration. According to the electricity DSO, it is not possible to make reasonable assumptions about LNG stock levels any further in the future than this.

CRISIS LEVEL	ESCALATION CRITERIA	DE-ESCALATION CRITERIA	ACTION (additional actions per level)
No Crisis	<ul> <li>With current LNG in FSU &amp; forecast rate of use, would forecast stock drop below Op MIN before next planned delivery? if yes, "Early Warning".</li> <li>OR</li> <li>Is there serious potential for withdrawal</li> </ul>	With current LNG in FSU & forecast rate of use, would forecast stock drop below Op MIN before next planned delivery? If no, "No Crisis".  AND	<ul> <li>"Business as Usual":</li> <li>Monitor &amp; forecast gas use rates</li> <li>Monitor FSU stock levels</li> <li>Monitor LNG planned deliveries date &amp; volumes</li> <li>Monitor alternative electricity source availability</li> </ul>
Early Warning	of available interconnector or on-island generation capacity? If yes, "Early warning".  OR  • Will forecast demand for gas generation cause LNG in FSU to fall below Operational Minimum before next delivery due? If yes, "Early Warning".	<ul> <li>Is there serious potential for withdrawal of available interconnector or on-island generation capacity? If no, "No Crisis".</li> <li>AND</li> <li>Will forecast demand for gas generation cause LNG in FSU to fall below Operational Minimum before next delivery due? If no, "No Crisis".</li> </ul>	Seek to monitor likelihood of significant deterioration to Alert or Emergency levels:  • Gas facility op monitor availability of interim/top up delivery  • Validate interconnector availability
	<ul> <li>With current LNG in FSU &amp; forecast rate of use, would forecast stock drop below Op MIN in the next 5-15 days? if yes, "Alert".</li> <li>OR</li> </ul>	With current LNG in FSU & forecast rate of use, would forecast stock drop below Op MIN in the next 5-15 days? If no, "Early Warning".  AND	<ul> <li>Validate spare part available for LNG transfers (N+1 capability on LNG tx equip)</li> <li>Explore possibility of bringing forward next LNG delivery</li> </ul>

Alert	<ul> <li>Is gas facility operational on restricted (&lt;50%) availability? If yes, "Alert".</li> <li>OR</li> <li>Is interconnector or on-island generation availability restricted, (&lt;50%)? If yes, "Alert".</li> </ul>	<ul> <li>Is gas facility operational on restricted (&lt;50%) availability? If no, "Early Warning".</li> <li>AND</li> <li>Is interconnector or on-island generation availability restricted, (&lt;50%). If no, "Early Warning".</li> </ul>	Continue recommended actions for Early Warning. Seek to resolve with market-based measures:  Bring next delivery forward within existing commercial arrangements
	<ul> <li>With current LNG in FSU &amp; forecast rate of use, would forecast stock drop below</li> </ul>	<ul> <li>With current LNG in FSU &amp; forecast rate of use, would forecast stock drop below</li> </ul>	Seek interim/top up delivery
	Op MIN within the next 5 days? if yes, "Emergency". If no, "Alert".	Op MIN within the next 5 days? if yes, "Emergency". If no, "Alert".	Seek to resolve by measures recommended for Alert level and
	OR	AND	exceptional measures. This may
	<ul> <li>Is gas facility operational? If no, "Emergency".</li> </ul>	<ul> <li>Is gas facility operational? If yes, "Alert".</li> <li>AND</li> </ul>	<ul><li>include non-market-based measures<sup>1</sup>:</li><li>direct support / intervention</li></ul>
	OR	• Is interconnector available? If yes, "Alert".	from the Competent Authority
Emergency	<ul> <li>Is on-island generation available? If no, "Emergency".</li> <li>OR</li> </ul>		to arrange an early delivery outside of existing commercial arrangements
	<ul> <li>Prolonged unavailability of the interconnector? If yes, "Emergency".</li> </ul>		<ul> <li>utilise all other electricity sources outside of commercial</li> </ul>
			arrangements to reduce gas demand
			<ul> <li>enforce electricity demand reduction / load shedding.</li> </ul>

<sup>&</sup>lt;sup>1</sup> For non-exhausitve list of non-market-based measures please refer to Annex VIII of the Security of Gas Supply Regulation (EU) 2017/1938

## (4) Crisis Manager or Team

The Ministry for Energy and Water Management (MEW) is the designated Competent Authority responsible for the implementation of the Gas Security of Supply Regulation in Malta. The Permanent Secretary of MEW has the role of the 'Crisis Manager' during a disruption of gas supply, and is responsible for the declaration of the three crisis levels. The Regulation requires that complete and timely information is made available to Crisis Manager during business-as-usual and during a crisis situation. In view of this, gas facility operators and the electricity network operator have the obligation of monitoring and assessing the gas security of supply situation and to ensure the periodic provision of data/information to the Regulator for Energy and Water Services (REWS). The provision of information includes the monitoring and forecasting of gas usage rates, FSU stock levels, planned LNG delivery dates and volumes and the availability of alternative electricity generation sources. The Regulator for the Energy and Water Services (REWS) is responsible for the submission of periodic reports on the gas security of supply situation to the Crisis Manager and the Competent Authority. The availability of sufficient information will enable the Permanent Secretary of MEW and MEW as the Competent Authority to assess the situation and relevant risk factors. This will support them in selecting the appropriate crisis level in line with the escalation (and deescalation) criteria outlined in Section 3 of this plan and take the appropriate preventive and corrective actions. Effective and timely communication between the government bodies involved, the gas and electricity facility operators, as well as first responders needs to be ensured.

The gas facility operators at the Delimara site are responsible for operational crisis management. The Delimara site has emergency plans independent of the National Gas Security of Supply Preventive Action Plan and Emergency Plan. Consequently, the operators at Delimara would be able to act independently to respond immediately to an operational incident (e.g. fire) before the Crisis Manager officially declares a crisis level.

Article 3 of the **Civil Protection Act**<sup>2</sup> establishes that the **Civil Protection Department** (CPD) is responsible for providing first response during emergency situations. This includes providing first response should there be an emergency at the gas facilities within the Delimara site. As per the Act, the CPD is also responsible for the establishment of the infrastructural set-up required to ensure coordination between various departments of Government, local councils and non-governmental organisations which can be called upon to respond in a national or regional disaster or in an emergency.

Article 5 of the **Civil Protection Act** establishes the **Civil Protection Council**, an official body appointed by the Prime Minister. Although the Act allows that a representative member is appointed onto the Council to perform duties related to fuel and energy affairs, currently no such member sits on the Council. The function of the Council includes the formulation, direction and coordination of all national policy issues and practices related to civil protection. If a crisis level is triggered by the crisis manager in the event of a gas disruption, coordination with the appropriate bodies responsible for civil protection would ensure coherence and flow of information in responding to a gas supply crisis.

<sup>&</sup>lt;sup>2</sup> Civil Protection Act (Chapter 411 of Laws of Malta): http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8877&l=1

The **Emergency Powers Act** gives the legal right to the President of Malta, in accordance with the advice of the Prime Minister, to make regulations which are necessary or expedient for securing public safety, and maintaining supplies and services. <sup>11</sup> In an emergency this gives the authority over allocation and utilisation of gas resources to the Prime Minister.

## (5) Roles and Responsibilities of specific actors

As highlighted in the previous section, the Permanent Secretary of MEW acting in the role of the Crisis Manager is responsible for the declaration of the three crisis levels. To the extent possible, the Civil Protection Council is kept informed of the situation and the decisions made by the Crisis Manager and MEW as the Competent Authority. Table 1 provides an overview of the roles and responsibilities, as well as the information flow between the actors involved in the event of a declaration of one of the three crisis levels:

Table 1 – Overview of roles and responsibilities of actors during a crisis

Crisis Level	Overview of roles and responsibilities of actors involved
No Crisis	Business as usual. <b>REWS</b> is responsible for carrying out routine monitoring and reporting of gas supply/demand/stock levels and forecast of use as per information provided by the gas facility operator and electricity system operator. REWS provides the Permanent Secretary of MEW (Crisis Manger) and MEW (Competent Authority) with a periodic report of the gas security of supply situation.
Early Warning	Based on information and reports from gas facility operator and electricity system operator, <b>the Permanent Secretary of MEW</b> is responsible for assessing the situation and declaring an 'early warning' level. MEW keeps bodies responsible for civil protection informed as appropriate. Gas facility operators and electricity system operator are responsible for maximising gas supplies while MEW supports undertakings in the management of the gas supply disruption and the management of consequences of such a disruption in view of returning back to business-as-usual.
Alert	Based on information made available by gas and electricity facility operators to <b>REWS</b> and consequently to <b>MEW</b> , <b>the Permanent Secretary of MEW</b> is responsible for assessing the situation and declaring an 'alert' level. MEW keeps bodies responsible for civil protection informed as appropriate. MEW will continue to support undertakings in the management of the gas supply disruption in view of de-escalating the situation back to business-as-usual.
Emergency	Based on information made available by the gas and electricity facility operators to REWS and subsequently to MEW, the Permanent Secretary of MEW is responsible for triggering the 'emergency' level. The Civil Protection Department, the government body responsible for providing first response in emergency situations will be in close cooperation with gas and electricity facility operators. MEW will continue supporting undertakings in the management of the gas supply disruption via the appropriate market and non-market based measures in view of de-escalating the situation. MEW will notify the Civil Protection Council of escalation into 'emergency' level if deemed appropriate.

#### i) Competent Authority

#### **Ministry for Energy and Water Management**

 MEW, as the Competent Authority and lead government body for the implementation of the Gas Security of Supply Regulation and the Permanent

- Secretary as the designated Crisis Manager have the responsibility for declaring the crisis levels described in Section 1 of the Plan.
- MEW, and in particular the Permanent Secretary as the Crisis Manager, is responsible for assessing the situation and taking decisions on whether to maintain, escalate or de-escalate the situation.
- MEW supports undertakings in the management of the gas supply disruption situation, including in the implementation of market and non-market based measures.
- MEW ensures that bodies responsible for civil protection, such as the Civil Protection Department (CPD) and the Civil Protection Council, are informed of the gas security of supply situation in the event of a crisis as deemed appropriate, including the triggering of crisis levels and of decisions taken to manage the gas disruption.
- MEW assists undertakings in the management of consequences of a disruption of gas supply in view of de-escalating the situation back to business-as-usual.
- As the Competent Authority, MEW informs the European Commission, the Gas Coordination Group (GCG) and the relevant Risk Groups (Libyan, Algerian) and its Member States that one of the three crisis levels has been triggered and provides updates to these parties on the escalation or de-escalation of the gas supply disruption situation.
- ii) Natural gas undertaking (as defined by point 1 of Article 2 of Directive 2009/73/EC)

#### **ElectroGas Malta** (LNG supplier, LNG facility operator and natural gas supplier)

- Responsible for provision of timely information and periodic reports on gas supply, demand and stock levels, including forecasts to the respective government bodies (REWS, MEW).
- Responsible for the regular maintenance of all equipment.
- Responsible for maximising gas supplies during the management of a gas supply disruption.
- Co-ordination and enforcement of gas facility emergency response arrangements.
- Implementation of market-based and non-market-based measures when and if required.
- iii) Relevant organisations representing the interests of households and National Regulatory Authority

#### **REWS (Regulator for Energy and Water Services)**

- Responsible for carrying out routine monitoring and reporting of gas supply/demand/stock levels and forecast of use.
- Provision of timely and aggregated information and reports to MEW.
- Responsible for supporting MEW and the Crisis Manager and provision of advice during the assessment of the gas security of supply situation.
- iv) Relevant organisations representing the interests of industrial gas customers, including electricity producers

#### **Enemalta plc** (electricity distribution system operator)

- Provision of timely information and periodic reports to appropriate government bodies, including the Competent Authority and the Regulator for Energy and Water Management.
- This information would include forecast of demand for electricity and capacity to meet that demand (via interconnector and on-island generation).
- Responsible for the development and implementation of co-ordinated Delimara site emergency response plans and response arrangements.
- Ensuring the enforcement of a formalised process for electricity grid disconnections in order to protect vulnerable groups of consumers, in particular in the event of an emergency.
- Responsible for the regular maintenance of all equipment.
- Dispatching of electricity from local generation plants and the electricity interconnector based on their order of economic remit, technical capacity and existing contractual arrangements.
- Ensuring the availability of alternative back-up gas-oil generation as required (D2), including appropriate fuel levels.
- Implementation of non-market-based measures in the event of an emergency, if required.

#### **D3 Power Generation ltd** (electricity producer)

- Make arrangements and seek permissions necessary to support alternative operational plant running regimes for D3PG in the case of early warning, alert or emergency crisis levels being declared.
- Responsible for the regular maintenance of all equipment.
- Make available alternative back-up gas-oil generation as required.
- Implementation of non-market-based measures in the event of an emergency, if required.

#### v) Other stakeholders

#### **Energy & Water Agency** (technical and policy arm of MEW)

- As delegated by MEW, the Agency is responsible for carrying out specific tasks related to the implementation of the Gas Security of Supply Regulation, such as the development of Malta's Preventive Action and Emergency Plans.
- Upon request by MEW, the Agency provides technical and policy support in the assessment of the gas security of supply situation, both in business-as-usual and crisis situations.

#### **Transport Malta** (Transport Authority)

 Provides support to the CPD in the implementation of measures to provide tug mounted emergency equipment, services and capabilities for dealing with emergencies at LNG facility.

#### **CPD** (Civil Protection Department)

- Responsible for providing appropriate level of response to disasters, as well as natural, industrial and other emergencies.
- Responsible for preparation of contingency plans to respond to a disaster as well as natural, industrial and other emergencies that may occur.
- Organisation and co-ordination of training facilities and courses for personnel that may be required in a national disaster or in an emergency.
- Establishment of the infrastructural set-up required to ensure the co-ordination between various departments of Government, local councils, non-governmental organisations which may be called upon to respond in a disaster or in an emergency.
- Support operators in the recovery process at Delimara site if necessary determining when gas facility is 'safe' to be handed back to operator following an incident requiring CPD's involvement.

#### **CIPD** (Critical Infrastructure Protection Directorate)

- Support gas facilities in the implementation of cyber-security measures for the FSU, regasification facility, D3 and D4.
- Provides support in the manual override capability of the gas facility in the event of an information communication technology failure affecting the operation.

#### **ERA** (Environment and Resources Authority)

• The Authority provides written consent to operate within the Emergency considerations conditions identified in the IPPC permit.

# (6) Measures regarding undue consumption by customers who are not protected customers

Within the definitions laid out in the Regulation, Malta has neither 'Protected Customers' nor 'Solidarity Protected Customers'. This is because all gas is used in electricity generation and no gas reaches end-users. Malta does not have household customers, small/medium sized enterprises or essential services which are connected to gas network or a gas district heating installation.

In Malta, the primary energy source for end-users is electricity. Natural Gas (from LNG) forms the single largest component of the generation mix. In order to mitigate a major social impact on vulnerable groups of customers from a disruption to the gas supply, it is necessary to ensure that electricity supply is not disrupted as a knock-on effect. As demonstrated in the Infrastructure Standard (Article 5) the ability to supply these customers electricity without gas included in the generation mix is insufficient to meet demand at peak periods.

In a business-as-usual situation, electricity is dispatched from local generation plants and the interconnector based on their order of economic remit, technical capacity and existing contractual arrangements. In the case of disruption to LNG supplies and the subsequent impact on on-island electricity production capability, electricity supplies shall be prioritised to the following categories of users:

- Healthcare
- Emergency services
- Essential Social care
- Security services
- Essential Infrastructure
- Households

In the case of a prolonged gas supply shortage, electricity rationing may be necessary, restricting customers' consumption of electricity. Currently, restrictions over the longer term can be achieved by one or more of the following methods:

- Public appeals by the Maltese Government for voluntary restraint;
- Orders or directions under the Civil Protection Act requiring restrictions on consumption by industry, commerce and other undertakings;
- Directions under the Enemalta (Transfer of Assets, Rights, Liabilities and Obligations) Act
- Directions under the Occupational Health and Safety Authority Act

The use of priority customers will allow Malta to further protect essential services and households from disruption in the event that it is necessary to artificially reduce electricity demand. Prioritising these customers allows for targeted planning of measures such as rota disconnections. This will allow available electricity supply to be concentrated to the most essential services first and minimise undue consumption from customers outside of the 'priority customer' criteria.

## (7) Emergency tests

Tests that simulate high and medium-impact scenarios and responses in real time are not practical in Malta as there is only one piece of gas infrastructure. The lack of a failsafe mechanism means removing the gas facility for an emergency test involves high risk exposure. However, periodic tests shall be undertaken that combine desktop scenarios and on-facility emergency responses.

These emergency tests shall be executed every four years or more frequently if circumstances so warrant. Outcomes and recommendations from the test shall be used to update the emergency plan reflecting the updated risk assessment and the results of the tests.

#### 1. Emergency Test Objectives:

- To test the coordination of all relevant parties including efficiency of communication in a crisis situation
- To simulate high and medium impact scenarios and responses in real time in accordance with the emergency plan
- To test the level of emergency preparedness of the gas facility operator, emergency services, the harbour facilities, the electricity system (generation, distribution and critically dependant end users) and other stakeholders.
- To identify weaknesses in systems, processes, resources, training and technical capabilities
- To identify relevant actors not already included in emergency planning

#### 2. Test plan:

Desktop exercise scenarios will be based on 'reasonable worst case' electricity demand. Subsequent events which will focus on the capability and resilience of parties potentially affected and impacted will then be tested. The official authority to initiate and co-ordinate an emergency test lies with the Ministry for Energy and Water Management (MEW). However, the responsibility for operational tasks, such as designing the test plan, carrying out the test and reporting of results may be delegated to third parties, including the Distribution Network & System Operator.

Before the test is carried out, the planned results shall be documented in order to measure actual preparedness against expectation. Constraints and assumptions affecting the outcome will also be documented, including electricity system assumptions.

Potential high impact scenario: A full-scale mock-up of a fire on or affecting the LNG floating storage unit, jetty and regasification facility may need to utilise a desktop component to the exercise. Full scale emergency testing will be restricted due to the singular nature of the gas supply infrastructure and the lack of failsafe reserves.<sup>3</sup>

#### 3. Document conclusions:

The report must compare the expected result against the actual result. This will include explanation of where the differences originated and actions to resolve any oversights. It shall also include resolution proposal / improvements to resolve the errors found, and proposal for updating / revising the emergency plans.

<sup>&</sup>lt;sup>3</sup> The singular nature of the gas supply infrastructure is recognized in section 1.4 of the gas security of supply National Risk Assessment, submitted to the European Commission in December 2018.

The report will be made available to the Competent Authority within one month of the conclusion of the test. Details of issues and recommendations will be documented in order to draw from in the periodic (4 year) revision of the Preventive Action Plan and Emergency Plan. The results of the tests shall be presented at the Gas Coordination Group by the Competent Authority.

## (8) Regional dimension

In line with Annex I of the Gas Security of Supply Regulation (EU) 2017/1938, Malta is part of the following risk groups:

North African gas supply risk groups:

- 1. Algerian Risk Group: Greece, Spain, France, Croatia, Italy, Malta, Austria, Portugal and Slovenia
- 2. Libyan Risk Group: Croatia, Italy, Malta, Austria and Slovenia

South-East gas supply risk groups:

- 3. Southern Gas Corridor Caspian: Bulgaria, Greece, Croatia, Italy, Hungary, Malta, Austria, Romania, Slovenia and Slovakia
- 4. Eastern Mediterranean: Greece, Italy, Cyprus and Malta

Article 20 (2) of the Regulation states that for the time being the obligations related to the work of the South-East gas supply risk groups shall remain on hold and start only from the date of when the major infrastructure/ pipeline enters the test operation.

Given that this Emergency Plan is the first implementation of the obligations of the Gas Security of Supply Regulation (EU) 2017/1938, in the regional dimension, which was co-drafted within the relevant Risk Groups, the main focus is to adopt a first level of shared measures and actions aiming to ensure that Member States belonging to the risk group are informed in a timely manner about the declaration of a crisis level in another Member State and the measures undertaken by that Member State during a crisis. When the Competent Authority of one Member State belonging to the risk group declares a crisis level it shall communicate this declaration within one day to all the other Member States belonging to the risk group as well as every measure implemented.

Malta is currently not interconnected to the Trans-European Gas network via a gas pipeline and does not have "solidarity protected customers" within the Regulation's definition and is therefore not obliged to agree solidarity mechanisms with other Member States. However, due to the independent nature of gas supply in Malta, it may decide to reach outside of the confines of the Regulation and alternatively seek out regional cooperation to ensure the supply of "top-up" deliveries to the LNG facility to avoid any impact on electricity supply.

Emergency measures agreed upon by Member States belonging to a risk group focus predominantly on mutual assistance arrangements between adjacent TSOs establishing how to proceed in case of an exception event situation and other cooperation mechanisms, such as those within regional ReCo systems for gas. In Malta, such emergency measures will be taken into account during the foreseen development of the MTGP gas pipeline project.