

# **REMIT LNG REPORTING SCHEMA USAGE GUIDELINES**

**ARIS IMPLEMENTATION**

**AGENCY FOR THE COOPERATION OF ENERGY REGULATORS**

REVISION 1.0

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## INTRODUCTION

Under the ARIS project, data will be collected by ACER for the purpose of market monitoring under the guidance of the REMIT Implementing Acts.

To allow ACER to perform the market monitoring tasks, they will be collecting data from market participants (and Reporting entities) within the European Union.

**Comment [A1]:**

As a general comment - if something is capitalised, it means it is a defined term. If it is a defined term, you need to state where it is defined (e.g. in REMIT or the Implementing Acts etc.) in a pre-amble to this document. If it is used and defined in this document, then include it in the Definition of Terms.

**Comment [A2]:** Please define or specify where this is defined.

### 1.1 Purpose

This document details the guidelines for using the LNG reporting data schemas for reporting fundamental data relating to LNG transportation and storage, to ACER.

#### 1.1.1 Topics Covered

This document covers the following topics:

- LNG Facility Reporting
- LNG Planned Usage Reporting
- LNG Unavailability Reporting

#### 1.1.2 Covered Elsewhere

The following information is not covered by this document:

- Gas Storage Reporting
- Nominations and Schedule reporting

### 1.2 Audience

This document is used by:

- Market Participants / Reporting entities for the purpose of understanding the reporting schema templates and providing the correct data.

### 1.3 Definition of Terms

Terms	Definition
ARIS	ACER reporting information system for applying REMIT
REMIT	Regulation on Energy Market Integrity and Transparency

**Comment [A3]:** Definition of terms should be completed (see comment no. 1)

**Comment [A4]:** Could be a little bit more developed?

## REMIT LNG REPORTING SCHEMA

The REMIT LNG Reporting schema is a multi-purpose schema for reporting fundamental data to ACER under the regulations pertaining to fundamental data reporting in the REMIT implementing acts.

### 2.1 Overview

The REMIT LNG Schema provides 3 reports for LNG fundamental data reporting;

- Facility Data Reporting
- Planned Delivery Reporting (includes reloading)
- Unavailability Reporting

Figure 1 - REMIT LNG Report Sequence shows the sequence of the top-level schema for LNG reporting.

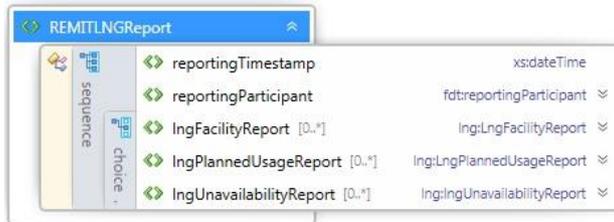


Figure 1 - REMIT LNG Report Sequence

All LNG fundamental data reporting is through the same top-level interface, requiring a reporting participant to submit a single data set for all data, which fall under their reporting framework.

The top-level report allows a participant to report LNG fundamental data of any type within a single report and to submit multiple reports of a variety of different types. For example, a reporting participant is not restricted to report only the LNG facility report, which is the daily activity report of a LNG facility, but can also submit the monthly planned usage report and the unavailability reports using the same schema.

**Comment [A5]:**

Terms should be used consistently – ‘reporting participant’ or ‘reporting entity’?  
How is a reporting participant different to a market participant?

### 2.2 LNG Facility Report

The data element “IngFacilityReport” provides the participant with the ability to report the daily updates with regards to the movement of LNG through the facility, including the information on the overall capacity of the facility, the volume of LNG loaded and unloaded within the facility ~~and the participant specific details with regards to the movement of LNG.~~

Each day the reporting participant should report the details of all of the LNG content moved into or out of the facility and update the position of the facility based on those movements.

**Comment [A6]:**

According to the REMIT implementing acts data to be provided shall be referred to the capacity (technical, contracted, available), send out (amount of gas to the grid for each gas day) and amount of LNG in stock at the end of the gas day. Furthermore the daily data is aggregated for the whole facility and shall not be provided for each market participant (terminal user). Therefore this last requirement exceeds the Implementing acts and shall be removed.

## 2.3 LNG Planned Usage Report

The data element “IngPlannedUsageReport” provides the participant with a reporting element for reporting the expected usage of the facility over the next reporting period. It is expected that the reporting participant provides a monthly update of the planned usage of the facility, which supplies the information of the expected deliveries and planned reloading and unloading dates over the coming month.

## 2.4 LNG Unavailability Report

The data element “IngUnavailabilityReport” is used by the reporting participant to identify any periods where the facility has been unavailable for the reloading and unloading of LNG to participants, whether this is a planned or unplanned activity.

## 2.5 Creating a LNG Data Report

All reports are created as XML files based on the XSD REMITLNGSchema\_V[x].xsd. This XML file contains the reported details from the reporting participant.

① The value populated in V[x] is dependent on the version of the schema used for reporting.

All reports must contain two mandatory fields and can then optionally contain any of the LNG fundamental data report types.

The following two fields must always be populated;

- Reporting Timestamp – this field is used for technical validation of the time taken between generating / submitting the report to the time at which the data is received by the reporting system.
- Reporting Participant – the reporting participant is the identifier of the participant who is submitting the report to the reporting system.

① Note: These fields are not required under the implementing acts, but are required as part of the reporting mechanism for registered reporting participants.

## LNG FACILITY REPORT

### 3.1 Creating a LNG Facility Report

The LNG Facility report contains details of all of the movement of LNG into and out of the facility within a gas day.

The facility report contains a sequence of objects, the first sequence of elements provides the overall status information relating to the facility and the second sequence of elements provides the individual participant details of reloading and unloading for the facility.

The report can contain any number of facility reports and each facility report can contain any number of updates for the facility, with each update specific to a defined participant.

Figure 2 – LNG Facility Report shows the representation of a sequence of the facility report, representing the total facility report with an unbounded number of participant specific reports if any activity within the facility has occurred.

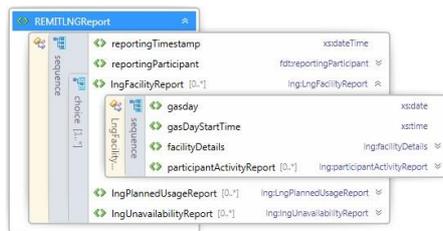


Figure 2 – LNG Facility Report

### 3.2 Facility Reporting

#### 3.2.1 Creating a LNG Facility Report

The LNG facility report type is a complex type which is used to represent the activity at any LNG facility in relation to the data required under the REMIT implementing acts.

The following fields must be provided for all facility reports:

1. Gas Day – this is the date of the gas day the report is referring to. This is the gas day represented using the UTC representation in ISO8601 standard.
2. Gas Day Start Time – this is the official time of the start of the gas day, defined in UTC of the ISO8601 standard. It is accepted that the normalized gas day start time is 06:00; however this is to be included for consistency of reporting.

In addition the facility report is made up of the following key elements:

- Facility Details, see section 3.2.2
- Participant Activity Report, see section 3.2.3

### 3.2.2 Populating Facility Details

When filling in the facility report the details of the facility should be filled in according to the definition below, these are the details relating to the capacity of the facility, the available capacity and the reloading and unloading capacity of the facility.

Figure 3 - Facility Details provides a representation of the fields that need to be populated when reporting the details of the facility, the definition of these fields are below;

1. LNG Facility Identifier – The LNG facility identifier Energy Identification Code as assigned by ENTSO-G which represents the physical facility as registered with ENTSO-G.
2. LNG Facility Operator – The operating participant of the terminal reloading or unloading LNG, where this is different to the registered facility identifier or where a Legal Entity Identifier is available for the facility operator.
3. ~~LNG Storage Capacity – The total capacity for LNG storage at the facility, stored as a volume represented by a number of units and the unit of storage. This is the total or maximum amount of LNG that can be stored at the facility on any gas day. Represented as a volume, see section 6.1~~
4. ~~Available LNG Storage Capacity – The total capacity for LNG storage available at the facility, stored as a volume represented by a number of units and the unit of storage. This is the total or maximum amount of available storage for LNG at the facility at the time of reporting for the gas day. As a volume, see section 6.1~~
5. ~~Reloading Capacity – The total reloading capacity for the facility, stored as a volume represented by a number of units and the unit of storage. This is the total or maximum capacity for reloading that the facility can perform within a gas day. It is assumed that reloading and unloading of LNG is identical for this purpose. As a volume, see section 6.1~~
6. ~~Regasification Capacity (Technical, contracted and available) – The total re-gasification capacity for the facility, stored as a volume represented by a number of units and the unit of storage.~~

This is the volume of LNG that can be converted into gas within a single gas day, to be defined as zero if the facility does not perform regasification. As a volume, see section 6.1

**Comment [A7]:** GLE proposes to discuss this point in ad-hoc meeting.

**Comment [A8]:** LNG business deals with regasification and not storage. Furthermore this data is not foreseen in the implementing acts and therefore should be deleted. Because of this, the GLE proposal doesn't foresee this data as well.

**Comment [A9]:** Same comment as comment no 7.

**Comment [A10]:** This data is not foreseen in the implementing acts and therefore should be deleted.

**Comment [A11]:** This information is not mentioned in the implementing acts. One should read 'LNG facility capacity'.

**Comment [A12]:** This is confusing.

Field Name	Data Type
IngFacilityIdentifier	fdtparticipant
IngFacilityOperator [0..1]	fdtparticipant
IngStorageCapacity	fdtvolume
availableLngStorageCapacity	fdtvolume
loadingCapacity	fdtvolume
unloadingCapacity	fdtvolume
gasStorageCapacity	fdtvolume
availableGasStorageCapacity	fdtvolume
regasificationCapacity	fdtvolume
compressionCapacity	fdtvolume

Figure 3 - Facility Details

### 3.2.3 Populating Participant Activity Report

When filling in the participant activity report details of the facility the following fields should be provided for each market participant who loads or unloads LNG to the facility for a given gas day.

Figure 4 - LNG Facility Participant Activity Report shows a representation of the fields that should be reported as part of the individual participant activity report for the facility. For each participant a repeat of each of the elements should be provided.

1. Usage Time – The date and time of usage, i.e. time of reloading / unloading.
2. ~~Transport Participant LNG Terminal User~~ – The participant ~~transporting~~ reloading or unloading LNG.
3. ~~Transport Ship Size~~ – The size of the transportation in terms of capacity of the transport as a volume. As a volume, see section 6.1
- 3-4. ~~Ship name – the name of the ship transporting reloading or unloading LNG to the LNG terminal~~
- 4-5. ~~Owning Participant – The owner of the transport participant reloading or unloading LNG~~
- 5-6. ~~Reloaded Quantity Volume~~ – The volume reloaded by the participant (if none the element left blank). As a volume, see section 6.1
- 6-7. ~~Unloaded Quantity Volume~~ – The volume unloaded by the participant (if none the element left blank). As a volume, see section 6.1
- 7-8. ~~Regasification Quantity – The volume loaded by the participant (if none the element left blank). As a volume, see section 6.1~~

**Comment [A13]:** When possible try to stick with terms already used in business: other terms could be confusing. We have no idea what a 'Transport Participant' could mean.

**Comment [A14]:** The implementing acts requirements are about "Ship size"

**Comment [A15]:** To be deleted: not foreseen in the implementing acts

**Comment [A16]:** This data is not foreseen in the implementing acts. Therefore it shall be deleted.

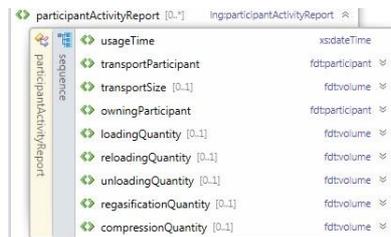


Figure 4 - LNG Facility Participant Activity Report

## LNG PLANNED USAGE REPORT

### 4.1 Creating a Planned Usage Report

The planned usage report contains the monthly forecast for a facility representing expected usage of the facility for the month ahead.

The planned usage report contains a sequence of three objects:

- Facility Identification, see section 4.1.1
- Market Participant Usage, see section 4.1.2

Figure 5 – LNG Planned Usage Report shows the representation of a sequence of usages for facilities by market participants within the report.

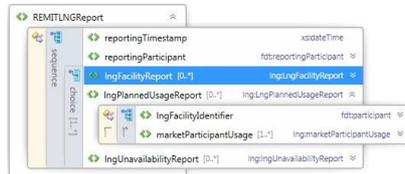


Figure 5 – LNG Planned Usage Report

#### 4.1.1 Populating LNG Facility Identifier

The LNG facility identifier Energy Identification Code as assigned by ENTSO-G which represents the physical facility as registered with ENTSO-G.

#### 4.1.2 Populating Market Participant Usage

The market participant usage is a repeating group of entries for the planned ~~or proposed~~ usage by market participants over the defined period.

Each market participant shall be identified for the dates on which they plan to load or unload LNG to the facility and the proposed volumes for those dates.

Figure 6 – Market Participant Planned Delivery shows the individual report submitted for each market participant. The report identifies the following attributes:

1. Delivery Date – The date on which the market participant is intending to deliver the LNG
2. Delivery ~~Capacity, Volume~~ – The volume of LNG the participant is intending to ~~deliver, Unloading or Reloading~~. Represented as a volume, see section 6.1.
3. ~~Name of the Terminal Customer/Market Participant~~ – the name of the Terminal Customer/Market Participant who is planning to ~~Unloading or Reloading LNG to/from the Terminal~~

**Comment [A17]:** Not correct to refer to this as capacity, it makes no sense.

**Comment [A18]:** Is there a difference between a 'Terminal Customer' and a 'Market Participant'?

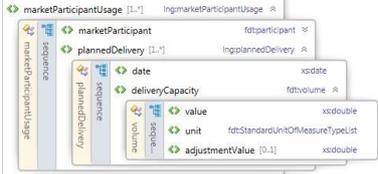


Figure 6 – Market Participant Planned Delivery

## LNG UNAVAILABILITY REPORT

### 5.1 Creating an Unavailability Report

The unavailability report type is a complex type which is used to represent any planned or unplanned unavailability of a facility for a gas day or period within a gas day.

Figure 7 – Unavailability Report represents the sequence of the unavailability report and the elements that need to be reported within it.

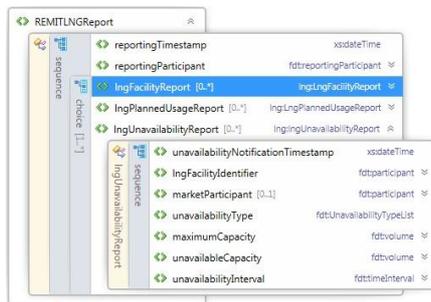


Figure 7 – Unavailability Report

#### 5.1.1 Populating Unavailability Report

The unavailability report is a repeating group of entries for the planned or proposed outage of a facility by market participants, detailing the unavailability type and the period and quantity of unavailability.

Each facility shall identify the dates on which the planned or unplanned outages occur and the capacity which is affected ~~and any market participant relationship to the outage.~~

1. Unavailability Notification Timestamp – this represents the time at which the notification was produced for the unavailability, i.e. the timestamp at which it was published to other participants.
2. Facility Identifier – this represents the identification for the facility the outage is reported on
- ~~3. Market Participant – this identifies any market participant involved or responsible for the reported unavailability.~~
- ~~4-3. Unavailability Type – define whether the outage is planned or unplanned~~
- ~~5. Maximum Capacity – define the volume of maximum capacity for the facility, as a volume, see section 6.1~~
- ~~6-4. Unavailable Capacity – define the volume of capacity that will be unavailable for the facility, as a volume percentage of the technical capacity of the Terminal, see section 6.1~~
- ~~7-5. Unavailable Interval – define the time interval for which the capacity will be unavailable, as a time period start and end date and time when known post the event, see section 6.2~~

**Comment [A19]:** Is this submitted after the event, or during the event? Not clear.

**Comment [A20]:** This does not make sense and is not relevant.

**Comment [A21]:** This information has no relevance at all for the market and should be deleted.

**Comment [A22]:** Not requested by the implementing acts.

**Comment [A23]:** If this is to be reported during an outage, we may not know the time interval. See GLE proposal.

## DATA TYPES

### 6.1 Volume

The volume (as seen in Figure 8 - Volume) is defined as a combination of the following information:

1. Value – which is the numerical value of the delivery volume
2. Unit – the units of the quantity being delivered (loaded or unloaded)
3. Adjustment Value – the coefficient of normalization for the volume to standardize with cubic meters of delivery volume.



Field Name	Field Type
value	xsd:double
unit	fdt:StandardUnitOfMeasureTypeList
adjustmentValue [0..1]	xsd:double

Figure 8 - Volume

### 6.2 Date Time Interval

The date and time interval (as seen in Figure 9 - Date Time Interval) provides a start date and end date of an interval period.

1. Start Date Time – the start date and time of the interval
2. End Date Time – the end date and time of the interval



Field Name	Field Type
startDateTime	xsd:dateTime
endDateTime	xsd:dateTime

Figure 9 - Date Time Interval