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Draft

Manual of Procedures on Fundamental Data Reporting

Defining, in accordance with the draft Implementing Acts, procedures, standards and electronic formats for reporting of Fundamental data

24 June 2014

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1 INTRODUCTION

1.1 Purpose

The Agency has developed this Manual to assist reporting entities such as ENTSOs, TSOs, LNG System Operators, Storage System Operators, or third parties acting on their behalf to report fundamental data under Regulation (EU) No 1227/2011 (REMIT).

Fundamental data in this context refers to the data to be reported in accordance with Article 8(5) of REMIT, i.e. structural data related to the capacity and use of facilities for production, storage, consumption or transmission of electricity or natural gas or related to the capacity and use of LNG facilities. The Commission's Implementing Acts pursuant to Article 8(6) of REMIT will further specify uniform rules on the reporting of information to be provided in accordance with Article 8(5) of REMIT and lay down the timing and form in which that information is to be reported.

The technical and organisational requirements to be fulfilled by reporting entities in order to register with the Agency and, thus, report fundamental data to the Agency will be defined in the ACER Requirements for Registered Reporting Mechanisms (RRM), including the ACER Technical Specifications for RRMs¹.

1.2 Scope

This Manual is intended to provide reporting entities with sufficient guidance to make informed decisions about the reporting of fundamental data. It is not designed to be a comprehensive list of how to report in every situation. It is also not intended to be a replacement of the Commission's Implementing Acts and it will not provide full scale technical specifications for fundamental data reporting through RRMs.

Technical specifications, such as e.g. security requirements, will be defined in the ACER *Technical Specifications for RRMs*² provided by the Agency to reporting entities registered with the Agency. As regards electronic formats, the Agency strives to work with existing Industry standards such as IEC for electricity industry, and Edigas for gas industry³. The Agency however notes that, if required, it may need to define own standards based on industry standards..

For the first release of the Manual, the Agency intends to rely as much as possible on on existing industry standards and data formats currently used by relevant stakeholders. For the purpose of ensuring operational reliability, the Agency however reserves the right not to take over all future

¹ The document will be developed in parallel to the draft Manual.

² The document will be developed in parallel to the draft Manual.

³ Where applicable, the Agency will take note of ongoing adoption of the Interoperability network code for gas (including Data Exchange principles). E.g. AS4 protocol is mentioned in that ongoing work as the future standard.



changes of such existing standards and data formats. Any future changes to existing industry standards and data formats shall therefore be agreed between the Agency and relevant industry organisation, before applying for the purpose of REMIT reporting.

The Manual will be updated periodically to reflect the situation at publication, with sufficient lead time for reporting entities to adopt. Please also note that we include embedded documents in this draft, though in the eventual final version, these documents may be placed separately on the Agency's website and referred to via a weblink.

Finally, please note that the content of this Manual importantly interacts with the ACER Requirements on RRMs and ACER Technical Specifications for RRMs. Therefore the content may change as the requirements and specifications for RRM's evolve. We also note that this document may evolve as a consequence of the public consultation of the Trade Reporting User Manual (TRUM).

1.3 Target Audience

The Agency expects relevant departments (including business and IT-departments) and compliance officers of likely reporting entities, in particular, ENTSOs, TSOs, LSOs and SSOs to ensure that the Manual is fully understood and any necessary amendments to fundamental data reporting processes are initiated.

1.4 ACER contacts

If you have any questions concerning fundamental data reporting, please contact us by email at <u>remit@acer.europa.eu</u>.

1.5 Version history

Version	Effective Date
MANUAL Version 01	
MANUAL Version 02	
MANUAL Version 03	



2 WHY FUNDAMENTAL DATA REPORTS ARE IMPORTANT TO THE AGENCY

2.1 Assistance in Monitoring for insider trading and market manipulation

As stated in Recital 18 of REMIT, efficient market monitoring requires regular and timely access to records of transactions as well as access to structural data on capacity and use of facilities for production, storage, consumption or transmission of electricity or natural gas.

Thus, the primary purpose of fundamental data reports under REMIT is to enable the Agency and NRAs to efficiently and effectively assess and, in combination with transactions, monitor trading activity in wholesale energy products to detect and to prevent suspected market abuse in support of REMIT's goal of increased integrity and transparency of wholesale energy markets. The goal of increased integrity and transparency of wholesale energy markets is to ensure that consumers and market participants can have confidence in the integrity of electricity and gas markets, that prices set on wholesale energy markets reflect a fair and competitive interplay between supply and demand, and that no profits can be drawn from market abuse.

Fundamental data reports are a key means of establishing this, enabling the Agency to spot examples of market abuse that call for enforcement action by NRAs. Similarly, fundamental data reports are very important as evidence when NRAs are bringing market abuse cases to court, as they provide an audit trail of the complete fundamental data next to transactions.

The efficiency of market monitoring can be compromised by inaccurate fundamental data reporting and poor data quality. The Agency is required to identify any questionable fundamental data and establish their nature, timing and the parties involved in order to resolve the issue.

2.2 Sharing of information with NRAs and with other relevant authorities

REMIT requires the Agency to establish mechanisms to share information it receives in accordance with Article 7(1) and Article 8 of REMIT, including fundamental data, with NRAs, competent financial authorities of the Member States, national competition authorities, ESMA and other relevant authorities. This means that other competent authorities may be reviewing the data that is reported to the Agency.



3 WHO NEEDS TO REPORT FUNDAMENTAL DATA AND WHAT IS REPORTABLE?

3.1 Who needs to report?

In accordance with Article 8(5) of REMIT, market participants shall provide the Agency and NRAs with information related to the capacity and use of facilities for production, storage, consumption of electricity or natural gas or related to the capacity and use of LNG facilities, including planned and unplanned unavailability of these facilities. Furthermore, Article 8(5) of REMIT stipulates that reporting obligations on market participants shall be minimised by collecting the required information or parts thereof from existing sources where possible.

According to Article 8(6) of REMIT, the Commission will by means of Implementing Acts specify uniform rules for the reporting of fundamental data, including which entities to report the required information.

The Agency's current understanding is that fundamental data under REMIT will be provided by the following reporting entities⁴:

- <u>On behalf of market participants, ENTSO-E and ENTSOG shall make available to the</u> <u>Agency information through European Transparency Platforms;</u>
- <u>On behalf of market participants, TSOs for electricity and gas or third parties on their</u> behalf shall make available to the Agency information related to nominations;
- <u>On behalf of market participants, LNG System Operators shall make available to the</u> <u>Agency information related to LNG facilities and cargoes; and</u>
- <u>On behalf of market participants, Storage System Operators shall make available to the</u> <u>Agency information related to natural gas storage.</u>

3.2 Reportable fundamental data

Article 8(5) of REMIT identifies the fundamental data that is to be collected by the Agency. The Commission's Implementing Acts will specify the reporting of fundamental data by adopting uniform rules on the reporting of information to be provided in accordance with Article 8(5) of REMIT.

⁴ This is subject to the adoption of the Commission's Implementing Acts.



4 HOW TO SEND FUNDAMENTAL DATA TO THE AGENCY

Reporting entities who comply with the RRM requirements defined by the Agency shall be registered by the Agency.

The fundamental data reporting will be done through the Agency's REMIT Information System (ARIS). ARIS is the Agency's IT system for collecting data, sharing data with NRAs and other authorities, and monitoring trading activities in wholesale energy products with the aim to detect and deter market abuse in forms of insider trading and market manipulation, including attempted market manipulation.

The first tier of ARIS, TIER 1, is the data collection and reporting system. Reporting format, channels and times need to be set by the European Commission with the Implementing Acts envisaged according to Article 8(2) and (5) of REMIT.

It is currently being considered that the three options for provision of XML files (Web GUI, Web Services, SFTP) will be available for ARIS production, without exceptions for any of the actors. No single and/or specific method is obligatory for any of the reporting entities.

More detailed specifications of TIER 1 interfaces and such details as communications and security protocols are to be included in the Technical specifications for RRM.

Please also refer to chapters 4 and 5 of TRUM, available under:

http://www.acer.europa.eu/Official_documents/Public_consultations/PC_2014_R_02/Draft%20T RUM_PC%20version_FINAL.pdf

4.1 Operational reliability

In accordance with Article 12 of REMIT, the Agency shall ensure the confidentiality of the information received. The Agency shall take all necessary measures to prevent any misuse of, and unauthorised access to, the information maintained in its systems and shall identify sources of operational risk and minimise them through the development of appropriate systems, controls and procedures.

In accordance with Article 12 of REMIT, the Agency will develop technical and organisational requirements for the submission of fundamental data in order to ensure efficient, effective and secure exchange and handling of information.

These requirements will define mechanisms:

- (a) to ensure the security, confidentiality and completeness of information,
- (b) to identify and correct errors in data reports,
- (c) to authenticate the source of information,
- (d) to ensure business continuity.



Reporting entities and third parties reporting on their behalf who comply with the requirements will be registered by the Agency.

RRMs will submit fundamental data records to the Agency in accordance with the technical standards, and as further defined in *ACER Technical Specifications for RRM.* They shall be responsible for defining the reporting process that each market participant, if applicable, will follow to report fundamental data to them.

4.2 Data quality

The quality of data reported to the Agency is assured in the following ways:

- a) The required XML schemas constrain the values and data types that can be submitted; and
- b) Submitted data is subject to business validation rules as described in the ACER *Technical Specifications for RRMs* so that erroneous data is rejected.

The following list of general standard formats for the reporting framework under Article 8 of REMIT as specified in chapter 5.2 of TRUM, is available at http://www.acer.europa.eu/Official_documents/Public_consultations/PC_2014_R_02/Draft%20T RUM_PC%20version_FINAL.pdf



5 FUNDAMENTAL DATA FIELD REPORT GUIDELINES, PER DATA TYPE

To enable effective and efficient market monitoring it is vital that reporting entities provide accurate fundamental data. Fundamental data reports should contain all key information applicable to the fundamental data being reported in line with the Commission's Implementing Acts. In this Chapter, the Agency provides additional guidelines on how this information, and related data fields should be populated. Where we refer to specific fields, Reporting entities should complete these in the formats described. Please also refer to Section 1.2 above on scope of this Manual.

A breakdown of the selected data fields for formats to be used for the fields can also be found in Annex I of this draft Manual.

5.1. ENTSO-E platform data

It is currently assumed that the Commission's Implementing Acts will stipulate that ENTSO-E, on behalf of market participants, shall provide the Agency with the following fundamental electricity transmission data related to data as available on the ENTSO-E Transparency platform:

a) Day-ahead Net Transfer Capacity (NTC):

Day-ahead Net Transfer Capacity (NTC) values, as available on ENTSO-E Transparency platform, related to all available bidding zone borders within the European Union for each [reporting] day in Publication Market Document format (IEC62325-451-3) in at least hourly resolution⁵.

b) Physical flows:

Physical flows data related to all bidding zone borders within the European Union for each [reporting] day in Schedule Market Document (IEC62325-451-2) in at least hourly resolution⁶.

c) Outages data bigger than 100 MW of all relevant infrastructure within the European Union as reported to ENTSO-E transparency platform in n Unavailability Market Document format (IEC62325-451-6).

The Agency considers that the outages would be gathered by the end of the reporting day and reported afterwards to the Agency in accordance with technical requirements. The Agency furthermore notes that the outages as reported to the Agency at all times should allow the Agency to identify the location of the outage and the market participants (if applicable) concerned.

⁵ The Agency notes that in some markets across the European Union local market rules determine that data granularity is 30 minutes or 15 minutes (status June 2014).

⁶ The Agency notes that ENTSO-E may advise the Agency to adopt a different XSD for this type of data.



- d) Actual generation per unit bigger than 100 MW within the European Union for each [reporting] day in at least hourly resolution in Generation and Load Market document (IEC62325-451-6-generationload) in hourly resolution.
- e) Static overview generation units bigger than 100 MW within the European Union in Configuration document (IEC62325-451-6).

The Commission's Implementing Acts may foresee that the Agency may request further data and any reference data as may be defined at the Agency's ad-hoc request, to be reported from the platform in dialogue with ENTSO-E on the appropriate needed formats.

The Agency aims to rely on existing data fields and supporting documentation from ENTSO-E transparency platform.

Please see further clarifications in Annex I.

5.2 Electricity nominations

The Agency currently assumes that the Commission's Implementing Acts will foresee that electricity TSOs in the European Union shall provide the Agency fundamental electricity transmission data related to cross border nominations⁷:

Long term (yearly and monthly⁸), day-ahead and intraday cross border nominations values as a result of explicit allocations related to the relevant borders for each [reporting] day, in Schedule Document format (IEC62325-451-2-schedule; see Annex I for Excelsheet with explanation of data fields applicable and not applicable from the used schema) in at least hourly resolution.

The nominations would be provided, per direction between bidding zones, is: E.g. an example for Croatia: $HR \triangleright SI$, $SI \triangleright HR$, $HR \triangleright HU$ and $HU \triangleright HR$.

The nominations would be gathered by the end of the schedule day and reported afterwards to the Agency in [two files one for each of the [relevant] borders] OR [one file per TSO] in accordance with technical requirements.

In addition to clarifications in Annex I, please note the following specification on the following data fields for electricity nominations:

• Data field 20, on 'object aggregation': for reporting the value is always 'per party'.

⁷ The Agency notes that Industry also uses the term 'schedule' to refer to 'nomination'.

⁸ The Agency notes that in some European market rules additional 'long term' nominations exist in accordance with local market rules such as weekly.



5.3. ENTSOG platform data

The Agency currently assumes that on behalf of market participants ENTSOG shall report the following fundamental gas transmission data on capacity and use:

Aggregated per relevant point-related data:

- Available and contracted firm capacity;
- Available and contracted interruptible capacity;
- Aggregated day-ahead and the final re-nominations;
- Physical flows;
- Planned and actual interruption of interruptible capacity;
- Planned and unplanned interruptions to firm capacity.

The information should be provided at daily resolution at least for all *relevant points* as defined in Regulation (EC) No 715/2009 (Gas Transparency regulation)⁹ for the whole of European Union for each [reporting] day.

Relevant points are defined as in Regulation (EC) No 715/2009 (Gas Transparency regulation) at least: all interconnection points, connections to storage, LNG and quality conversion facilities and notional points (hubs).

Relevant points may differ to bookable points and are designated by NRA decisions per Member State. The Agency may request ENTSOG to provide the reference data with all relevant points as available on the ENTSOG platform.

The Commission's Implementing Acts may foresee that the Agency may request further data from ENTSOG available at the transparency platform data and/or reference data as may be defined at the Agency's ad-hoc request, to be reported from the platform in dialogue with ENTSOG on the appropriate needed formats.

The Agency aims to rely on existing data fields and supporting documentation from ENTSOG transparency platform.

Please see further clarifications in Annex I.

5.4. Gas nominations

The Agency currently assumes that the Commission's Implementing Acts will foresee that gas TSOs shall report the following fundamental gas transmission data on nominations:

⁹ The Agency notes that some *Relevant points data*, such as virtual hubs, is currently not available on the ENTSOG platform.



Disaggregated shipper (market participant)-related data (provided by the relevant gas TSO):

• Day-ahead and final (re-)nominations of booked capacities specifying, the identity of market participants involved and, the (provisionally) allocated quantity.

The information should be provided at daily resolution at least for all *Bookable points* for the reporting day and relating to network of relevant gas TSO.

The reporting would take place in relevant Edigas-format.

In addition to clarifications in Annex I, please note the following on the following data fields for gas nominations:

- Reporting time stamp (data field 1). The XML document will allow two timestamps, one for when the report is submitted, and the other for when the data is generated.
- Gas day (data field 12). Under the CAM Network Code gas day is between 4am-4am UTC or 5am-5am UTC depending on whether in daylight saving time. Following rules apply to clarify according to Edigas-documentation, please see figure below from relevant Edigas guide:

1.4 DAYLIGHT SAVING TIME

As indicated above the use of UTC, as strongly recommended by Edig@s, makes the messages independent of any impact due to Daylight Saving Time. However on the change to daylight saving time (summertime) the day in question has only 23 hours. On contrary on the change from daylight saving time (wintertime) the day in question has 25 hours.

	daylight saving
tim	e e.g. CEST
	UTC
1 st hour	05:00Z/06:00Z
2 nd hour	06:00Z/07:00Z
20 th hour	00:00Z/01:00Z
21 st hour	01:00Z/02:00Z
22 nd hour	02:00Z/03:00Z
23 rd hour	03:00Z/04:00Z
0.11.1.6	
	n daylight saving
time e.g. C	
	UTC
with he are a	
1 st hour	04:00Z/05:00Z
1 st hour 2 nd hour	
2 nd hour	04:00Z/05:00Z 05:00Z/06:00Z
2 nd hour 20 th hour	04:00Z/05:00Z
2 nd hour	04:00Z/05:00Z 05:00Z/06:00Z
2 nd hour 20 th hour 21 st hour	04:00Z/05:00Z 05:00Z/06:00Z 23:00Z/00:00Z
2 nd hour 20 th hour 21 st hour 22 nd hour	04:00Z/05:00Z 05:00Z/06:00Z 23:00Z/00:00Z
2 nd hour 20 th hour 21 st hour 22 nd hour 23 rd hour	04:00Z/05:00Z 05:00Z/06:00Z 23:00Z/00:00Z 00:00Z/01:00Z
2 nd hour 20 th hour 21 st hour 22 nd hour	04:00Z/05:00Z 05:00Z/06:00Z 23:00Z/00:00Z 00:00Z/01:00Z 01:00Z/02:00Z

See further Annex I for other data fields overview for gas Nominations.



5.5. LNG-data

On gas storage and LNG, the Agency initiated a dialogue with GLE on further harmonisation of data fields for LNG data fields reporting. We attach a draft guide specifying the data fields for reporting relevant LNG-data in Annex I.

In addition to clarifications in Annex I, please note the following on the following data fields for LNG-data:

• Data fields in XML-schema, chapter 3.2.2 draft guide in Annex 1 (Loading capacity; Compression capacity) are optionally reportable, only if available.

We note that 'Each LSO will provide the Agency with its own data converted in "Mm3(n)/day", being understood that it will indicate to the Agency its definition and conversion method'. The Agency will specify how each LSO will indicate 'conversion and definitions' used for data submission as part of this Manual, based on input by the Industry¹⁰.

The reporting would take place in the relevant XML format. Concerning the development of xmlschemas, the Agency will use AGSI-XML schemas augmented with Edigas experts' feedback.

5.6. Gas storage (platform and individual operators)

On gas storage, please find a draft guide specifying the data fields for reporting on relevant gas storage data in Annex I of this draft Manual.

In addition to clarifications in Annex I, please note the following on the following data fields for gas storage-data as follows:

• Data field in XML-schema (Type) is optionally reportable, only if available.

We further note that some storage operators may report per few storage sites, to reflect the way capacity is offered in the market.

The reporting would take place in the relevant format. Concerning the development of XML-schemas, the Agency will use AGSI-XML schemas augmented with Edigas experts' feedback.

¹⁰ The units are in "Mm3(n)/day","Mm3(n)"or "m3 LNG". Based on public data of ENTSOG, one can see that standard cubic meter (m3(n)) can contain differing energy content. Values between 10 to 12.2 kWh per cubic meter are common in accordance with ENTSOG data, see

http://www.entsog.eu/public/uploads/files/maps/transmissioncapacity/2012/ENTSOG_Cap_MapData_May2012_updat ed.xls . Therefore, in order for the Agency to make values comparable with gas nominations or transactions data in MWh or kWh, a conversion factor per LNG-terminal would need to be specified.



6 DATA INTEGRITY

Reporting entities must meet the specified standards when reporting fundamental data to the Agency in terms of the submission of reports and their content as per the defined specifications in the *ACER Technical Specifications for RRM*. To ensure accuracy and completeness, reporting entities must have appropriate systems and controls in place to enable them to comply with their regulatory obligations.

Reporting entities' obligations under Article 8(5) of REMIT are to make sure that they have successfully provided their fundamental data reports to the Agency. Reporting entities and third parties reporting on their behalf must comply with the RRM requirements defined by the Agency.

Measures to ensure data integrity and operational reliability will be specified in the ACER Requirements for RRMs and the ACER technical specifications for RRMs.



ANNEX I: DATA FIELDS FOR FUNDAMENTAL DATA

Please note that the draft data fields below depend on the final version of the Commission's Implementing Acts.

REPORTING DOCUMENTS

I.1) <u>REMIT ENTSO-E REPORTING SCHEMA USAGE GUIDELINES FOR DATA FIELDS</u>

I.2) <u>REMIT ELECTRICITY NOMINATIONS REPORTING SCHEMA USAGE GUIDELINES FOR</u> <u>DATA FIELDS</u>

I.3) <u>REMIT ENTSOG REPORTING SCHEMA USAGE GUIDELINES FOR DATA FIELDS</u>

I.4) <u>REMIT GAS NOMINATIONS REPORTING SCHEMA USAGE GUIDELINES FOR DATA</u> <u>FIELDS</u>

- I.5) REMIT LNG REPORTING SCHEMA USAGE GUIDELINES FOR DATA FIELDS
- I.6) REMIT STORAGE REPORTING SCHEMA USAGE GUIDELINES FOR DATA FIELDS



ANNEX II: ELECTRONIC FORMATS FOR FUNDAMENTAL DATA

Please note that the draft electronic formats (XML schemas) below depend on the final version of the Commission's Implementing Acts. In order to view the below XML schemas, the readers can use software like Notepad or a web browser.

Please note that the electronic formats are work in progress, based on existing industry formats, and do not fully correspond to the draft data fields specified in the Manual and Annex.

II.1) ELECTRONIC FORMATS FOR REMIT ENTSO-E REPORTING

- <u>Configuration</u>
- Generation Load
- <u>Schedule</u>
- Publication
- Outage

II.2) ELECTRONIC FORMATS FOR REMIT ELECTRICITY NOMINATIONS REPORTING

- II.3) ELECTRONIC FORMATS FOR REMIT ENTSOG REPORTING
- II.4) ELECTRONIC FORMATS FOR REMIT GAS NOMINATIONS REPORTING
- II.5) ELECTRONIC FORMATS FOR REMIT LNG REPORTING
- II.6) ELECTRONIC FORMATS FOR REMIT STORAGE REPORTING



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