REMIT

Technical Advice for setting up a data reporting framework

Final Report

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1. Executive Summary

The Regulation on Energy Market Integrity and Transparency (**REMIT**), adopted by the Council on 10 October 2011, sets up a framework for monitoring energy and financial wholesale energy markets at a European level. The energy and financial wholesale energy markets affected by REMIT encompass both derivative markets (which can be executed physically or financially) and spot markets (where short-term transactions with physical delivery are executed), as well as longer term physical markets as a specific element.

In the context of further concretisation of REMIT, the Commission has appointed a consortium comprising PwC and Ponton to provide technical assistance in setting up the complex reporting framework set out in Article 8.

In particular, advice was sought on setting up a framework for an effective data reporting scheme as required by REMIT, which should set out uniform rules for reporting, including the content, timing, and format of reportable data.

As part of this work, workshops were held with representatives of a number of stakeholder categories (including traders and brokers, intermediaries/ third party solution providers, exchanges, gas TSOs, electricity TSOs, National Regulatory Authorities (NRAs)). Input to our project was also provided by means of stakeholder questionnaires and Steering Group meetings with DG Energy and ACER representatives.

As a result of the analysis undertaken and the feedback received, the following key recommendations in relation to developing a framework for an effective data reporting schemes in the context of REMIT were provided.

Transaction reporting

Records of transactions

- Terminology concerning transaction types:
    - Develop a non-exhaustive list of transaction types and transaction stages as part of the explanatory documents accompanying the further implementation of REMIT to specify the reporting obligation
    - Include LNG and storage transactions and derivative transactions relating to LNG and storage in the list of wholesale energy products
- Terminology concerning transaction lifecycle stages:
    - Specify in further explanatory documents the three transaction stages of order, contract and scheduling/ nomination in such a way that the reporting obligation under REMIT principally includes these three stages for each transaction.

List of contracts and derivatives

- Geographical scope of reporting obligation
    - Specify a list of transmission systems for power and gas in the European Union as a basis for the definition of the reporting obligation.
    - Define the reporting obligation as being applicable for all gas and power transactions (and derivatives relating to such transactions) which may result in delivery, transportation rights, or storage rights in a transmission system under the operation of a power/ gas TSO, SSO, or LSO included in the previous list.
- ACER product taxonomy

    - Define a standard product taxonomy which is binding for the industry in order to categorize transactions by their product types. Contrary to proprietary energy product codes on exchanges, this ACER product taxonomy will not be a list of codes such as "FoBM" or "DBF Nov-12", the proprietary codes for monthly base load on EEX and APXENDEX, respectively. Split the product taxonomy into separate dimensions, each dimension having a finite and well defined number of possible values.

Uniform rules on the reporting of transactions and orders to trade

- Coding scheme for market participants from ongoing ACER registration procedures
    - Use the EIC code as a basis for the ACER code, used to identify market participants in the REMIT reporting format or at least supply as a secondary code
- Delimitation of markets with different tenure
    - Specify in further explanatory documents that balancing markets are within the overall reporting obligation but do not make balancing transactions a part of an initial reporting phase
- Specification of reporting obligation of market participants in the transaction stages
    - By transaction type, the respective stages of a transaction and for both parties involved in a transaction clarify the reporting obligations of market participants.
- Reporting obligations for the order and contract stage:
    - Split the overall reporting obligations for commodity transactions into long form and short form reporting from the start of the reporting regime.
    - Publish a list of intermediaries and request explicitly that at minimum all commodity transactions processed by these intermediaries need to be reported in long form ("white list"). Keep such an intermediary list extendable by giving notice hereof in a versioned ACER guidance document.
    - Apply the REMIT Reporting Document Format for commodity, transport and storage transactions while mentioning that the scope of long form reporting may be adjusted by issuing new versions of the REMIT reporting standard in case further standardization is achieved.
- Reporting obligations for the Scheduling/nominations stage:
    - Apply the REMIT Reporting Document Format for the scheduling/nominations transaction stage of all gas and power transactions from the start of the reporting regime.

Timing and form for the reporting of transactions and orders to trade

- Define reporting obligation for wholesale energy transactions in all three major transaction stages: order, contract, and scheduling/nomination. Reporting in the latter two transaction stages (contract and scheduling/nomination) should be implemented in phase 1, with reporting in the order stage to follow in phase 2.
- Define the cycle for long form reporting of the order and contract transaction stage for all commodity, transport and storage transactions to be T+1, i.e. by close of the following business day.
- Define the cycle for reporting of the scheduling/nomination transaction stage for all commodity, transport and storage transactions to be T+1, i.e. by close of t day.
- Define the cycle for short form reporting to be at maximum monthly, i.e. by close of the first business day in the calendar month for the preceding calendar month.
- Consider wholesale energy transaction lifecycle events such as amendments, cancellations, or novations as out of scope for reporting at least in phase 1.
- Provide a way for reporting parties to communicate gross errors such as order of magnitude errors made in previous reports of wholesale energy transactions to ACER.

Reporting channels

- Define criteria and a procedure on how to register centrally with ACER as "Certified Self-Reporting Party" for market participants and as "Registered Reporting Mechanism" as third-party service provider and accept reporting only from such registered organizations; foresee an adjusted registration process for TSOs.

Fundamental data reporting:

Reporting of fundamental data

- Reporting of fundamental data should be undertaken via central transparency platforms, to fulfil relevant transparency requirements. Collection of disaggregated fundamental data should be undertaken via the same transparency platforms, provided appropriate confidentiality and data ownership provisions are in place. In the interim, collection of limited selected capacity information from market participants should be via ARIS.

Uniform rules on the reporting of fundamental data

- Clarify role of TSOs as data aggregators and the requirement to report disaggregated fundamental data as part of drafting of implementing acts.

Timing and form for the reporting of fundamental data

- Introduce a requirement to report fundamental data upon change, with a maximum frequency of daily reporting**.**

Gas storage and LNG fundamental data

- Reporting of fundamental data should be undertaken via central transparency platforms to fulfil relevant transparency requirements. Collection of disaggregated fundamental data should be undertaken via the same transparency platforms, provided appropriate confidentiality and data ownership provisions are in place. In the interim, collection of limited selected capacity information from market participants should be via ARIS.

Phased approach for reporting

Phased approach for reporting of trade data

- Follow a phased approach for the reporting of wholesale energy product transactions to reflect the current amount of standardization in the market, taking into account the economic impact of the implementation.
- Indicate the duration of phase 1 (and of any further phases as may be required) as being around two years. Sufficient clarity on the framework for subsequent phases should be provided initially.
- As further clarity becomes available following the implementing acts, further non-binding guidance can be provided to market participants

Phased approach for reporting of fundamental data

- Reporting of fundamental data should follow existing and proposed regulations. Develop harmonised transparency platforms to set the timeline for introduction of fundamental data reporting. Consider introduction of central transparency platforms for storage, LNG and EU production data.
- Consistent with the approach outlined in the previous section define a clear timeline for the introduction of Phase 2, which could estimated to be around 2 years. If central collection of fundamental data is not introduced by TSOs (and other relevant market participants) within a

defined timescale, introduce a REMIT reporting obligation and format in order to collect fundamental data directly from participants in ARIS as part of Phase 2.

2. Introduction

2.1. Project context

The Regulation on Energy Market Integrity and Transparency (**REMIT**), adopted by the Council on 10 October 2011, sets up a framework for monitoring energy and financial wholesale energy markets at a European level. The energy and financial wholesale energy markets affected by REMIT encompass both derivative markets (which can be executed physically or financially) and spot markets (where short-term transactions with physical delivery are executed), as well as longer term physical markets as a specific element.

Whilst to date energy market monitoring practices have been Member State and sector specific, efficient market monitoring at an EU level has been identified as a key requirement for detecting and monitoring market abuse.

Key objectives of REMIT are:

- Prohibition of insider trading (direct use of insider information, disclosure of insider information to third parties, recommendation to third parties to trade energy products on the basis of insider information) and the obligation to publish insider information (Art. 3 and Art. 4)
- Prohibition of market manipulation (Art.5)
- Establishment of a framework for monitoring wholesale energy markets at a European level in order to effectively detect and deter market abuse and manipulation (Art.7)

Pursuant to Article 8 of REMIT, ACER shall be provided with a **record of wholesale market transactions,** which include contracts for the **supply** of natural gas or electricity and their derivatives as well as contracts relating to the **transportation** of natural gas or electricity in the Union and their derivatives as defined in Article 2.

In addition, market participants are required to provide ACER and national regulatory authorities with information related to the **capacity and use of facilities** for production, storage, consumption or transmission of electricity or natural gas as well as LNG facilities. This includes planned or unplanned unavailability of these facilities.

The required information may be delivered by either:

- The market participant;
- A third party acting on behalf of the market participant;
- A trade reporting system;
- An organized market, a trade-matching system, or other person professionally arranging transactions;
- Registered or recognized trade repositories;
- A competent authority that has received this information in accordance with MiFID.

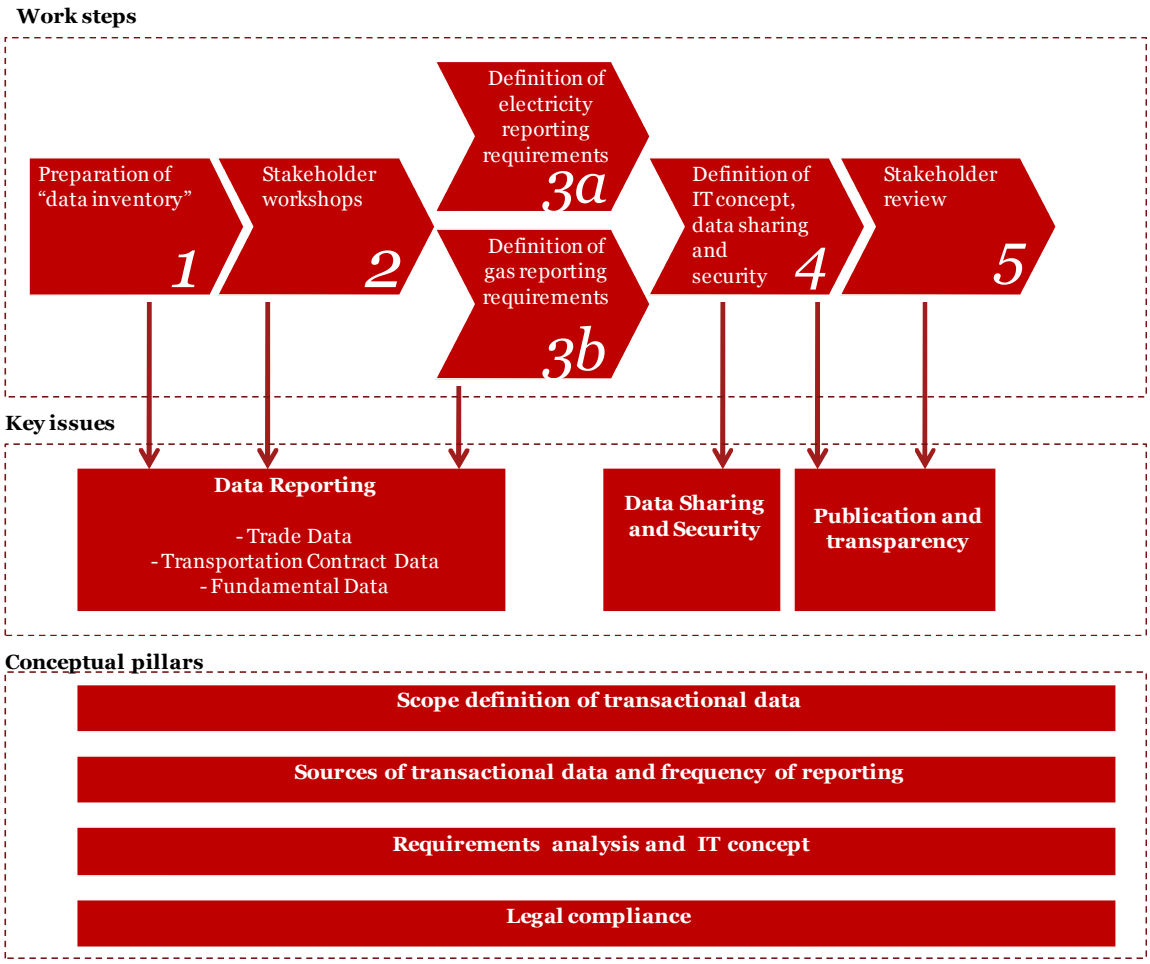
In the context of further concretisation of REMIT, the Commission has appointed a consortium comprising PwC and Ponton to provide technical assistance in setting up the complex reporting framework set out in Article 8. The following sub-section summarises the approach to provide this assistance.

2.2. Project approach and methodology

The figure below outlines the key steps undertaken in order to meet the project objectives, which were identified as:

- Advice on setting up a **framework for the effective data reporting scheme** as required by REMIT, which should set out uniform rules for reporting, including the **content, timing, and format of reportable data**
- Technical recommendations on **how such data sharing should be organised** and how **data security** can be ensured
- Technical recommendations related to ACER making part of the information it receives **publicly available**

Figure 1 Key project work steps



At the initial project kick-off meeting with the European Commission, the following principles were agreed upon for guidance in the execution of this project:

- Interaction with and input from ACER will be important – we have had direct meetings with the ACER team, and ACER has been included as part of the project Steering Group. In

addition, ACER will be providing comments on the Preliminary Advice to be considered in the drafting of Final Advice.

- Where possible existing stakeholder interaction channels should be used and work undertaken to date should be considered – we have organised our stakeholder interaction via existing industry groups (see Step 2) and have asked these groups to assist us in the identification of relevant existing initiatives.

- Synergies with other projects and workstreams will need to be considered – we have identified these jointly with key stakeholder groups and have prioritised approaches which capture synergies with existing workstreams in the respective stakeholder groups.

Step 1: Preparation of data inventory; Step 2: Stakeholder workshops

Key activities undertaken as part of this first phase of work have included:

- Research of selected existing sources

- Interaction with industry representatives, including preparation of stakeholder questionnaires and identification of key issues

- Stakeholder workshops

- Circulation of stakeholder questionnaires

The outcome of this work has been the development of an overview of the current data structures and sources. A draft set of questionnaires was prepared for the relevant stakeholder categories agreed upon with DG Energy (Traders and Brokers, Intermediaries[1], Exchanges, Gas TSOs, Electricity TSOs and National Regulatory Authorities), and discussed as part of workshops with each stakeholder category.

Following the workshops, an updated version of the questionnaire was circulated to stakeholders, who provided responses that in some cases were coordinated by a stakeholder representative organisation, in other cases were submitted directly by stakeholders. The table below summarises the workshops that have been held and the stakeholder responses received.

[1] An additional workshop for Intermediaries (not planned initially) was undertaken on request of DG Energy

Table 1 Overview of stakeholder workshops and questionnaire responses

Workstream	Workshop held on	Individual responses due by	Aggregate response due by	Individual responses received	Aggregate response received?	Notes
Traders and Brokers	29th March	12th April	30th April	RWE, Vattenfall, E.ON	Yes	Aggregate response organised by EFET representing views of EFET, Eurogas and Eurelectric
Intermediar-ies	19th April	3rd May	N/A	Openlink, Triple Point, ICIS Heren, EFETnet , Trayport (confidential response sent directly to DG Energy)	N/A	Additional workshop initially not planned. Outstanding: CME, ICE, Sungard, DTCC, Argus
Exchanges	19-20th March	13th April	20th April	OCE	Yes	Consolidated response received from Europex
Gas TSOs	10th April	25th April	Mid May	23 responses received	Yes	All answers sent directly to PwC. Aggregate response by ENTSOG prepared only on selected questions, received on 9th May
Electricity TSOs	28th March	12th April	26th April	Admie (Greek TSO)	Yes	Consolidated response received on 10th May
NRAs	28th March	13th April	27th April	2 individual responses (Portuguese and Italian NRAs)	Yes	Consolidated response received on 3rd May

Step 3: Definition of reporting requirements; Step 4: IT concept for reporting

Based on the results of previous steps, including but not limited to stakeholder questionnaire responses, we have developed an overview of current data availability and of the emerging requirements for power and gas reporting based on stakeholder feedback. Further to this, we have derived our own recommendations on the concretisation of future reporting requirements under

REMIT. The proposed reporting structure includes recommendations for the data content to be reported by the stakeholders to ACER as well as the required regularity of data reporting.

On the basis of this, a concluding recommendation is given regarding scope and regularity of the future reporting obligations under REMIT including a REMIT Reporting Document Format as a foundation for the design of a future data repository – provisionally named ARIS (Acer REMIT Information System).

Step 5: Stakeholder review

Stakeholder input has been provided as part of this project largely via stakeholder feedback from workshops as well as responses to the questionnaires. Steering group meetings have also been undertaken over the course of the project to share ideas with representatives from DG Energy and ACER. In addition, bilateral stakeholder meetings have been conducted by project team members with selected stakeholder representatives to receive additional stakeholder input.

2.3. Overview on the structure of the report

In accordance with these work steps, the remainder of this document is structured as follows:

- Section 3 provides an overview of the framework for reporting under REMIT, looking at, for example, current data availability and regulatory environments
- Section 4 outlines the feedback from stakeholders on envisaged requirements for power and gas reporting
- Section 5 outlines our recommendations on the envisaged requirements for power and gas reporting

3. Framework for reporting under REMIT

3.1. Introduction

This section looks at the existing availability of data relevant for the reporting obligations placed on market participants, classified into two categories derived from REMIT as outlined below.

"Trade data"

Under Art. 8 (1) of REMIT, market participants (or a person or authority on their behalf as defined by Art. 8 (4)) are required to provide ACER with a "*record of wholesale energy market transactions including orders to trade*". In particular, the following is required: "*precise identification of the wholesale energy products bought and sold, the price and quantity agreed, the dates and times of execution, the parties to the transaction and the beneficiaries of the transaction and any other relevant information*".

Art. 2 (4) of REMIT provides a definition of "Wholesale energy product" as *the following contracts and derivatives, irrespective of where and how they are traded: (a) contracts for the supply of electricity or natural gas where delivery is in the Union; (b) derivatives relating to electricity or natural gas produced, traded or delivered in the Union; (c) contracts relating to the transportation of electricity or natural gas in the Union; (d) derivatives relating to the transportation of electricity or natural gas in the Union"*.

"Fundamental data"

Art. 8 (5) of REMIT indicates that "*Market participants shall provide ACER and national regulatory authorities with information 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, including planned or unplanned unavailability of these facilities, for the purpose of monitoring trading in wholesale energy markets."* To review the availability of such data, the following stakeholder categories have been assessed in particular:

- Traders and brokers (gas and electricity)
- Exchanges (gas and electricity)
- Transmission System Operators (gas and electricity)

In undertaking this analysis, it is important to take into account the role of existing channels of data collection and aggregation and other regulatory obligations (such as current reporting obligations under MiFID, and potential reporting obligations under EMIR and MiFIR). These considerations are particularly relevant in the context of the provision included in REMIT Art.8 (3), which clarifies that market participants who have already reported transactions in accordance with MiFID or applicable EMIR regulations shall not be subject to double reporting obligations relating to those transactions.

For each stakeholder category outlined above, the following types of data have been considered:

- Trade data and fundamental data, as defined by REMIT and currently available to the stakeholder category, outlining separately: a) data currently reported and/or published and b) data readily available from stakeholders.

- Data that is potentially required by REMIT and relevant to the responsibilities of the stakeholder category, but not (currently) available, including an explanation of issues with the availability of such data.

- Data required in the context of different regulatory regimes or requirements (e.g. by financial regulations such as MiFID, or fundamental data published in the context of Electricity Regulation[2] and Gas Regulation[3]), which could overlap with REMIT requirements.

The availability of data from the various stakeholder categories has been derived from the questionnaire responses provided as part of the individual stakeholder workstreams, as well as by research on publicly available data and bilateral interactions with various stakeholder representatives. The key objective is to provide an overview of the current reporting framework, including the relevant data available, in order to support the definition of the gas and power reporting requirements outlined in the following section. For data currently reported, we have also considered the frequency of reporting and granularity of data where relevant.

3.2. Stakeholder groups in energy wholesale markets

3.2.1. The role of market participant in REMIT

Market participants in the sense of REMIT are defined in Art. 2 (7) of REMIT as persons, including TSOs, who enter into transactions, including the placing of orders to trade, in one or more wholesale energy markets. A reporting requirement arises according to Art. 8 (1) of REMIT when a *wholesale energy market transaction* is conducted. Simple involvement with a *wholesale energy market product* as such does not trigger a reporting requirement. A reporting requirement depends on whether or not the transaction took place at a *wholesale energy market*, i.e. a market defined in Art. 2 (6) of REMIT where wholesale energy products specified by Art. 2 (4) of REMIT are traded. According to Recital (5) of REMIT, wholesale energy markets include, inter alia, regulated markets, multilateral trading facilities, and over-the-counter (OTC) transactions, as well as bilateral contracts, either direct or through brokers. This leads to a wide definition of wholesale energy markets.

Key market participants are therefore **traders** who are active on gas and power markets. The focus is on traders because they regularly base their buy and sell decisions for commodity, transport, and storage contracts on their own price expectations. Thus, they may have an interest in moving prices in a direction which suits the overall commercial result of their trading activity.

Producers of gas and operators of power plants are considered here to be market participants, assuming that they either pass on their production to their in-house trading unit or are directly active on markets themselves (and would then be treated under REMIT in the same way as traders would, Art. 2 (7) of REMIT). Having said this, producers may be the best (and sometimes only) source of fundamental data according to Art. 8 (5) and of inside information like block closures leading to the unavailability of production facilities (Art. 4 (1) of REMIT).

[2] Regulation (EC) n. 714/2009
[3] Regulation (EC) n. 715/2009

Transmission System Operators (TSOs) play a crucial role in providing gas and power infrastructure, selling capacity contracts so that traders can deliver energy contracts physically. In addition, TSOs operate balancing markets as a means of securing that gas and power networks can be operated within predefined technical limits while all contractual obligations between traders are fulfilled and the security of supply is guaranteed. Therefore, they are explicitly named as market participants in Art. 2 (7) of REMIT.

Electricity TSOs are legally defined as "a natural or legal person responsible for operating, ensuring the maintenance of and, if necessary developing the transmission system in a given area and, where applicable its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity" (Art. 2 (4) of Electricity Directive[4]).

Gas TSOs are legally defined as "a natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transport of gas" (Art. 2 (4) of Gas Directive[5]).

As regards storage system and LNG terminal operators (SSOs, LSOs), Recital (18) of REMIT states that efficient market monitoring also requires regular and timely access to records of transactions as well as access to structural data on capacity and use of facilities for storage. However, in Art. 2 (4) of REMIT where “wholesale energy products” are defined, the definitions are restricted to contracts for the supply of electricity or natural gas or contracts relating to the transportation of electricity or natural gas and to derivatives regarding the production of these commodities or their transportation. Whilst storage contracts are not explicitly included in the definition of “wholesale energy products”, SSOs and LSOs are important market participants who act as service providers to other market participants (e.g. traders and shippers) in a similar way as TSOs do, apart from not operating balancing markets and not becoming party to commodity transactions.

End users or **“final customers”** as they are called in REMIT are, as a general rule, outside the scope of REMIT. It could be questioned whether a contract concluded by an end user directly with a supplier in the form of a full supply contract would also be subject to transaction reporting. Transaction reporting requirements are triggered in general by *wholesale energy market* transactions, which should not be typical for end users. It is stated that contracts for the supply and distribution of electricity or natural gas for the use of final customers are not *wholesale energy products* (Art. 2 (4) REMIT). However, a contract with an end user can also qualify as wholesale energy product Contracts for supply to final customers exceeding the threshold of 600 GWh per annum are treated as wholesale energy products and make the holder of the contract a market participant under REMIT.

3.2.2. Organisations representing market participants

Whilst an accurate estimate of the number of potential sources of data is difficult to provide, we believe that a reasonable approximation can be achieved by counting the individual members of

[4] EC Directive 2009/72
[5] EC Directive 2009/73

industry associations which have been established to represent particular stakeholder groups. Below is an overview of the organisations that have been involved as part of this project:

- Council of European Energy Regulators (CEER) – not-for-profit association set up by independent energy regulators of Europe to provide a forum for cooperation

- European Network of Transmission System Operators for Electricity (ENTSO-E) – represents all electric TSOs in the EU and others connected to their networks, for all regions, and for all their technical and market issues

- European Network of Transmission System Operators for Gas (ENTSOG) – works to ensure the optimal management, coordinated operation, and sound technical evolution of the European natural gas transmission network and to ensure early progress towards the single market

- Eurogas – a not-for-profit organisation representing companies, national federations and associations involved in the supply, trading, and distribution of natural gas and related activities such as storage and liquefied natural gas

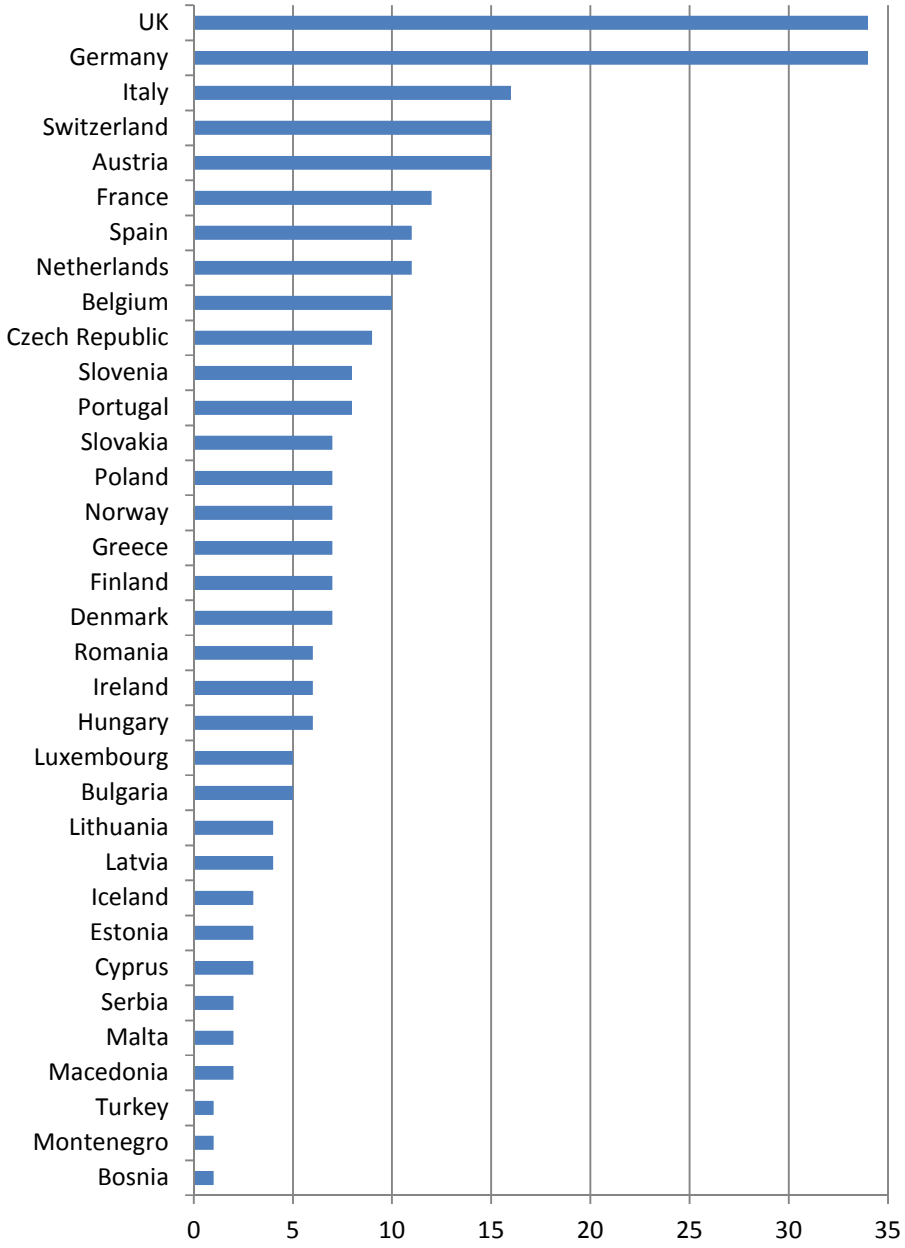
- Eurelectric – the sector association which represents the common interests of the electricity industry at a pan-European level

- European Federation of Energy Traders (EFET) – a group of energy trading companies from 27 European countries dedicated to stimulate and promote energy trading throughout Europe

- The Association of European Energy Exchanges (EUROPEX) – a not-for-profit association that represents the interests of the exchange based wholesale markets for electrical energy, gas, and environmental markets

The memberships of these organisations by country are listed in the figure below. In total, these organisations have 279 members across the 27 EU member states and 7 other accession states and single market participants. These are summarised by country in the chart below. The UK and Germany have the highest number of memberships, with 34 companies represented, primarily due to the high number of companies engaged in energy trading, while the average number is 7.

Figure 2 Membership of organisations by country



3.3. Interdependencies with financial markets reporting

3.3.1. Current reporting requirements

Investment firms are obliged to report transactions with financial instruments admitted to be traded in a regulated market as quickly as possible and at the latest by the close of business of the following working day - regardless of whether the trade took place in a regulated market or not. This obligation imposed by MiFID, which has been in force since 2007, had to be implemented by each national legislator.[6] The data to be reported was specified directly via the *Regulation (EC) No 1287/2006*

6 Art. 25 Subsec. 3 MiFID.

implementing MiFID. The annex to the aforementioned regulation shows 23 fields containing information which must be reported.[7]

Since the reporting requirement is restricted to financial instruments, the spot market as well as individualised forward contracts with envisaged physical delivery are outside MiFID's scope of reporting. According to MiFID, financial instruments in electric power and gas can be the following:

- Options, futures, swaps, forward rate agreements, and any other derivative contract that must be settled in cash or may be settled in cash at the option of one of the parties (other than by reason of a default or other termination event)

- Options, futures, swaps, and any other derivative contract that can be physically settled, provided that they are traded on a regulated market and/or a Multilateral Trading Facility

- Options, futures, swaps, forwards, and any other derivative contract that can be physically settled not otherwise mentioned in the bullet above and not being for commercial purposes, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are cleared and settled through recognised clearing houses or are subject to a regular margin call.[8]

Numerous participants in the energy market who are active in the financial markets, e.g. via energy derivatives, would qualify according to their activities as investment firms. However, they benefit from exemptions regarding the license requirements especially designed for utilities[9] and commodity traders[10]. Thus, they do not qualify as investment firms to which the reporting obligation applies.

Therefore, the applicability of reporting requirements under MiFID for transactions in the energy sector is currently restricted.

3.3.2. Envisaged amendments

Amendments in the reporting requirement regarding financial instruments will follow the implementation of EMIR and the revision of MiFID (MiFID II) introducing MiFIR.

MiFID applies currently to a narrower set of companies than what is expected after the revised financial market regulations MiFID II and MiFIR enter into force. In the interim period, between the reporting obligations under REMIT entering into force and EMIR entering into force in 2013, and taking the extension of MiFID reporting obligations foreseen in 2015 into account, more trade data will have to be reported to ACER as no other reporting to competent authorities that can fulfil REMIT reporting obligations is required.[11]

According to EMIR, counterparties and central clearing counterparties have to ensure that the details of any derivative contract they have concluded and any modification or termination of the contract is reported to a trade repository no later than the following day.[12] The term "derivative contract" covers derivative contracts as mentioned above under 1.2.insofar as they are defined in MiFID as financial

7 Art. 13 EU Regulation 1287/2006 and Tab. 1 of Annex 1.
8 MiFID Annex I, Section C (5)-(7).
9 Art. 2 (1) (i) MiFID.
10 Art. 2 (1) (k) MiFID.
11 Recital (19) REMIT.
12 Art. 9 (1) EMIR.

instruments.[13] Therefore, for example, individualised OTC forward contracts regarding the physical delivery of power and gas are outside the scope of EMIR.

A trade repository has to explicitly grant access to information to ACER to fulfil its tasks.[14] It is expected that EMIR will come into force on 1.1.2013.

As a general consequence of MiFID II, all organised trading shall be conducted on regulated trading venues. Therefore, all transactions in financial instruments will need to be reported to competent authorities.[15] As an exception, there will be no reporting required for financial instruments not admitted to trading or traded on an MTF (Multilateral Trading Facility) or an OTF (Organized Trading Facility), to financial instruments whose value does not depend on that of a financial instrument admitted to trading or traded on an MTF or OTF nor to financial instruments which do not or are not likely to have an effect on a financial instrument admitted to trading or traded on an MTF or OTF.[16] The reports to the competent authority will either be conducted by the investment firm itself, an authorised reporting mechanism (ARM) on its behalf, or by an MTF or OTF whose systems are used for the execution.[17]

The amount of contracts in electric power or gas to be reported will also increase due to an expansion of the definition of financial instruments. Derivative contracts that can be physically settled will also be regarded as financial instruments provided they are traded on a regulated market, an OTF, or an MTF, in contrast to the current definition focussing on trading on regulated markets and MTFs.[18]

Moreover, the exemptions that are important for definition as an investment firm as mentioned above will be restricted. More energy trading entities are expected to qualify as investment firms and hence will be subject to reporting requirements, especially if they are involved in trading on own account.[19]

MiFID II is expected to come into force 2015.

3.3.3. Reporting channels

MiFID

Under MiFID, all reportable transactions are to be reported by the investment firm itself, a third party acting on its behalf, or by trade matching or reporting systems approved by the competent authority, or by the regulated market, or an MTF through whose systems the transaction was completed.[20] In the U.K., the FSA introduced transaction reporting systems collectively referred to as Approved Reporting Mechanisms (ARMs) to manage transaction reporting for third parties under MiFID. There is an application fee of £ 100,000 for firms seeking to become an ARM. The amount is used for approving systems and for linking them with the transaction monitoring system.[21] These ARMs operate beside

13 Art. 2 (2) EMIR.
14 Art. 81 (3) j EMIR.
15 Explanatory Memorandum MiFID II p. 5.
16 Art. 23 (2) MiFIR.
17 Art. 23 (6) MiFIR Proposal.
18 Annex I Section C (6) MiFID II Proposal.
19 Art. 2 (1) MiFID II Proposal.
20 Art. 25 (5) of MiFID. According to article 23 (6) of the MiFIR transactions are to be reported by the investment firm itself, an ARM acting on its behalf or by the regulated market or MTF or OTF through whose systems the transaction was completed. Trade-matching or reporting systems, including trade repositories registered or recognised in accordance with EMIR, may be approved by the competent authority as an ARM.
21 Http://www.fsa.gov.uk/doing/regulated/returns/mtr/arms.

regulated markets and MTFs, which can also provide this service with the difference though that they do not have to apply at the FSA.

Trade matching or reporting systems under MiFID have to comply with specific requirements detailed in Art. 12 of Regulation (EC) No 1287/2006 implementing MiFID. The methods by which the reports of transactions in financial instruments are made shall satisfy the following conditions:

- They ensure the security and confidentiality of the data reported;
- They incorporate mechanisms for identifying and correcting errors in a transaction report;
- They incorporate mechanisms for authenticating the source of the transaction report;
- They include appropriate precautionary measures to enable the timely resumption of reporting in the case of system failure;
- They are capable of reporting the information required under Article 13 in the format required by the competent authority and in accordance with this paragraph, within the time limits set out in Art. 25 (3) of MiFID.[22]

EMIR

Under EMIR, counterparties and CCPs shall ensure that the details of any derivative contract they have concluded and any modification or termination of the contract is reported to a trade repository. Reporting obligations may be delegated by counterparties or CCPs to another entity.[23] An entity or its employees that report the details of a derivative contract to a trade repository on behalf of a counterparty, in accordance with this Regulation, should not be in breach of any restriction on disclosure of information imposed by that contract or by any legislative, regulatory or administrative provision.[24]

According to article 51 (1) of EMIR, a trade repository shall register with ESMA for the purposes of fulfilling reporting obligations. EMIR sets out general and specific requirements to be fulfilled by trade repositories.

According to Article 64 of EMIR, trade repositories shall among others:

- Have robust governance arrangements;
- Establish adequate policies and procedures sufficient to ensure its compliance with all the provisions of EMIR;
- Maintain and operate adequate organisational structure to ensure continuity and orderly functioning of the trade repository in the performance of its services and activities;
- Employ appropriate and proportionate systems, resources, and procedures;
- Have a senior management and board of sufficiently good repute and expertise to ensure the sound and prudent management of the trade repository;
- Publicly disclose the prices and fees associated with services provided under EMIR.

In addition to the more general requirements listed above, trade repositories shall among others adhere to the following more specific requirements as to operational reliability and safeguarding. Trade repositories shall:

22 Art. 12 (1) of Regulation (EC) No 1287/2006.
23 Recital (24) and Art. 6 (1) of EMIR.
24 Recital (24) and Art. 6 (3) of EMIR.

- Identify sources of operational risk and minimise them through the development of appropriate systems, controls and procedures. Such systems shall be reliable and secure and have adequate capacity to handle the information received[25];
- Establish, implement, and maintain an adequate business continuity policy and disaster recovery plan aiming at ensuring the maintenance of its functions, the timely recovery of operations, and the fulfilment of the trade repository's obligations. Such a plan shall at least provide for the establishment of backup facilities[26];
- Ensure the confidentiality, integrity, and protection of the information received for reporting purposes[27];
- Take all reasonable steps to prevent any misuse of the information maintained in its system.

Trade repositories under EMIR are comparable with REMIT reporting channels as both function as an aggregator and should provide the respective supervising authority ESMA or ACER with data. Different from MiFID and REMIT, only EMIR foresees that the supervisory authority is provided with data exclusively from aggregators, insofar as trade repositories are available.[28]

3.4. Current availability of data

3.4.1. Transaction lifecycle

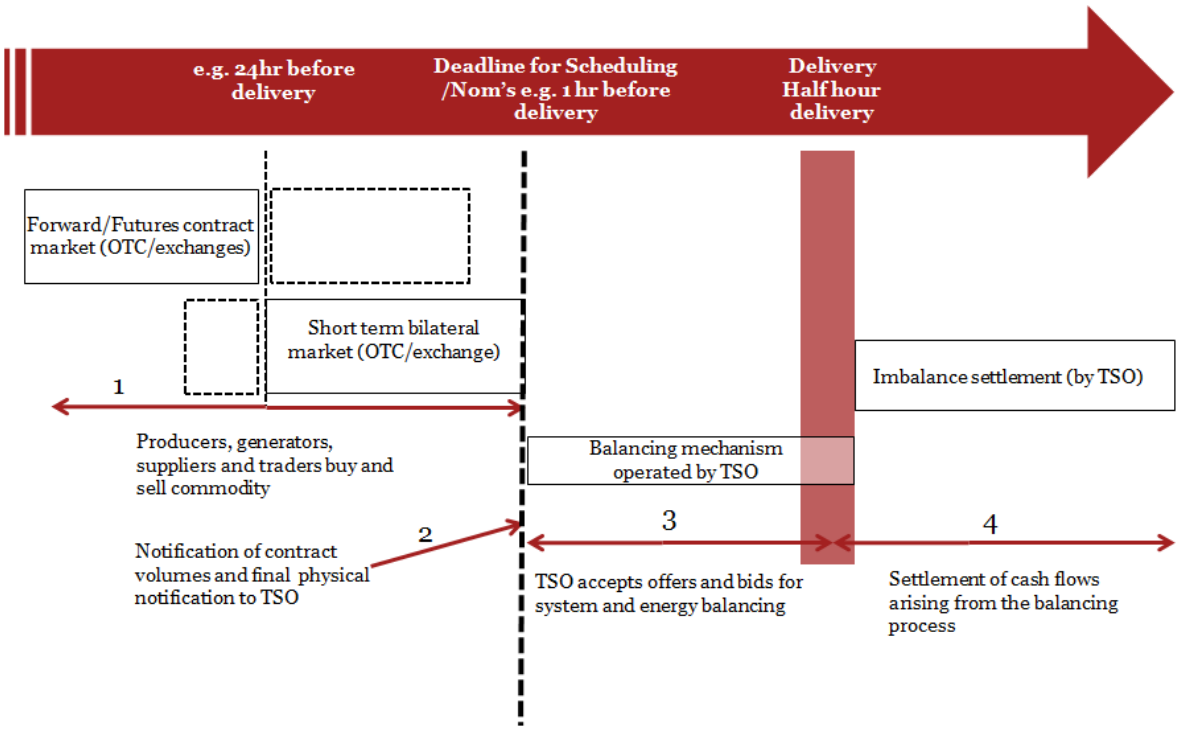
We use the term "trade data" to refer to data relating to individual gas and electricity commodity transactions (both primary energy products and derivatives). In addition, data related to capacity booking and use (i.e. nominations) at an individual shipper/trader level, as well as data on secondary traded capacity is included in the category of trade data (although in some sections of this document we refer to it separately as "transportation contract data"). Trade data also comprises data on commodity transactions undertaken by Transmission System Operators (TSOs) for network balancing.

In order to provide further context for our recommendations on data reporting and sharing, we have outlined below the deal 'lifecycle' as applicable firstly to standard commodity transactions and secondly to contracts with optionality.

For **commodity contracts**, the key variables of price, volume, and timing of deliveries are usually specified within the contract terms – exceptions include contracts with flexibility or optionality; however, these are generally non-standard transactions. For further consideration, it is helpful to refer to the split between trading and balancing markets and explain the different time periods in which the energy markets are usually split. Exact definitions vary from country to country based on the individual provisions of the applicable network code.

25 Article 65 (1) EMIR Proposal.
26 Article 65 (2) EMIR Proposal.
27 Article 66 (1) EMIR Proposal.
28 Article 6 (2) EMIR Proposal.

Figure 3 Transaction lifecycle



Participation in the bilateral markets (i.e. the forward/futures contract market and the short-term bilateral markets) and the balancing markets (i.e. offer/bid submission for balancing energy) can thus be considered separate and are shown in the four main stages of a transaction lifecycle in the illustration attached.

The dotted line in the illustration is the point in time for final notification of physical delivery defined when market participants notify the System Operator of their intended final physical position. This may be set e.g. for one hour ahead of real time for delivery.

The bilateral contracts markets for firm delivery of gas and electricity operate from a year or more ahead of real time (i.e. the actual point in time at which electricity is generated and consumed) typically up to 24 hours ahead of real time. The markets provide the opportunity for a seller and buyer to enter into contracts to deliver/take delivery, on a specified date, of a given quantity of electricity or gas at an agreed price. Transactions may be arranged OTC, via brokers, or via exchanges. In the OTC market, participants have complete freedom to agree contracts of any form, whereas transaction platforms and exchanges follow a standardization approach. They are intended to reflect trading over extended periods and represent the majority of trading volumes. The market operates typically from one up to several years ahead of real time.

Short-term markets for gas and power tend to be concentrated in the last 24 hours ahead of delivery. Markets are in the form of transaction platforms or screen-based exchanges where participants trade a series of standardised blocks of electricity or gas (e.g. the delivery of x MWh over a specified period during the next day). Such platforms enable sellers and buyers to fine-tune their rolling trade contract positions as their own demand and supply forecasts become more accurate as real time is approached. One or more published reference prices are available to reflect trading in such markets.

Balancing markets are operated from the notification point in time through to real time and are typically managed by Transport System Operators. They exist to ensure that supply and demand can

be continuously matched or balanced in real time. Markets are operated with the System Operator acting as the sole counterparty to all transactions. The TSO purchases offers, bids, and other balancing services to match supply and demand and resolve transmission constraints, and thereby balance the system.

Capacity contracts will usually specify price and maximum or average volumes, however the timing of delivery is, in effect, an option retained by the buyer. Delivery is usually confirmed, or nominated, under a defined nominations process which varies according to the contract type – thus adding an additional stage to the deal lifecycle. Gas transportation, as detailed below, is one of the most common forms of standard capacity contract; however, capacity contracts can also relate to the supply of power, and a similar contract form (take or pay) to gas supply.

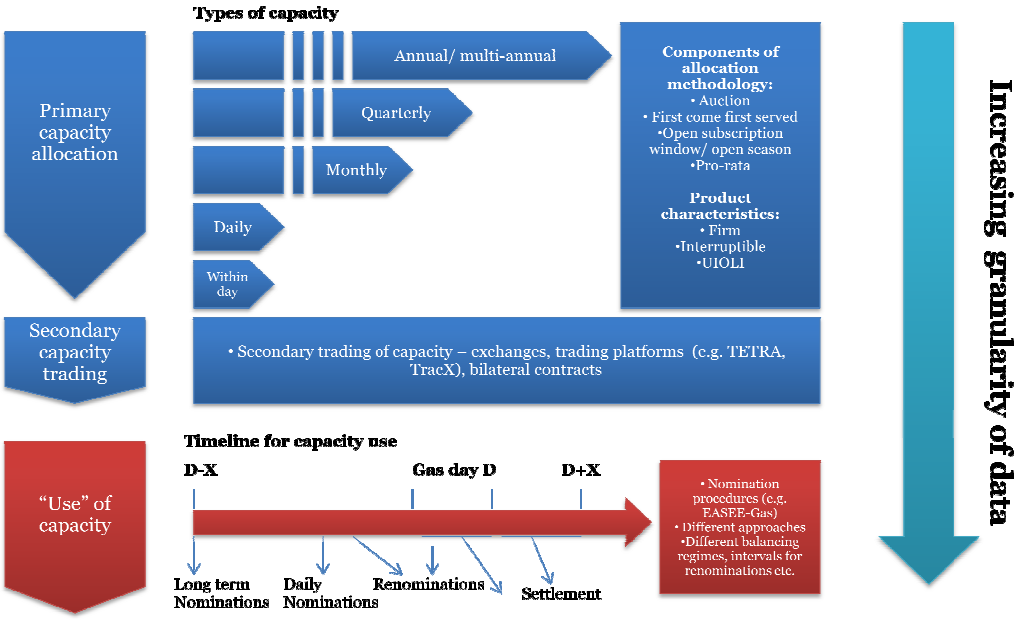
Typically, transportation capacity is allocated via a primary allocation mechanism, when a Transmission System Operator makes a defined volume of capacity that can be booked by market participants available. This allocation can be undertaken by various mechanisms, including auctions, open subscription windows, pro-rata mechanisms, first-come first-served mechanisms, and combinations of the above.

In addition, capacity may be offered as firm or interruptible capacity, and can be offered for different lengths of time, depending on the characteristics of the allocation process (e.g. annual, quarterly, monthly, daily and, in some cases, within-day).

Whilst capacity provides the right to use, the users of such capacity rights are required to schedule or nominate the amount of commodity they intend to flow (booking capacity can be seen as purchasing an option to use the network; this option is then exercised later in the scheduling or nominations stage). Shippers can nominate capacity in advance and during the day of delivery, and different scheduling/nomination rules and formats are used across European countries. Other data that is available as part of the "lifecycle" include data on network balancing (which again varies significantly across countries depending on the respective gas or power balancing market mechanism adopted) and settlement data, which is collected after the end of the delivery day.

The figure below summarises the key elements of the capacity "lifecycle".

Figure 4 Capacity lifecycle



3.4.2. *Traders and brokers*

Contributions to this report were made by the members of three trade organisations, and the staff of the trade organisations themselves: EFET, EURELECTRIC and EUROGAS.

The European Federation of Energy Traders (EFET) is a non-profit organisation designed to improve the conditions of energy trading in Europe and to promote the development of a sustainable and liquid European wholesale market. EFET's vision is "the achievement of sustainable energy markets throughout Europe, in which traders efficiently intermediate in the value chain on the basis of clear wholesale price signals, thereby optimising supply and demand and enhancing security of supply, to the overall long-term benefit of the economy and of society". EFET represents about 120 companies trading in Europe, primarily large companies with a high number of energy wholesale transactions. A fair share of EFET members are asset-backed traders like EDFT and RWE, but banks active in commodity and thus energy wholesale trading like Deutsche Bank or JPMC are well represented in EFET too. The major OTC brokers are all EFET members, also. There is no conflict between traders and brokers as far as a functioning OTC market is concerned, thus their responses could be bundled through EFET.

The Union of the Electricity Industry (EURELECTRIC) is a sector-specific and non-profit umbrella association representing the common interests of the electricity industry at pan-European level. EURELECTRIC has over 30 full members representing the electricity industry in 33 countries. The direct members of EURELECTRIC are the national electricity associations, e.g. Österreichs E-Wirtschaft for Austria, FEBEG for Belgium, and BDEW for Germany. In countries where such an association does not exist, the leading national electricity company is a direct member of EURELECTRIC instead. In contrast to EFET, it may be said that EURELECTRIC represents the interests not only of traders, but also of generators and medium to small traders / distributors like the German Stadtwerke.

EUROGAS is a non-profit organisation promoting the interests of companies, national federations, and associations involved in the supply, trading, and distribution of natural gas and related activities such as storage and liquefied natural gas. EUROGAS wants to promote the smooth functioning of the

European internal gas market and to take a stance on issues of interest to the European natural gas industry, primarily with respect to organisations on the European Union level. EUROGAS represents 50 members from 27 countries in the gas industry. Out of these 50 members, 33 are natural gas companies, 15 are federations of natural gas companies, and two are international organisations.

Energy traders and brokers describe themselves as aware of upcoming reporting requirements in general, with details and clarity in major areas missing for many market participants. Whilst all traders and brokers realize that the reporting requirements are unavoidable and many think that at least parts of the regulation are in general for the good of the market, there is a growing concern that the pendulum is swinging from under-regulation rapidly into over-regulation. Even the largest market participants with major financial resources and IT staff in the thousands are concerned about the ability of their smaller counterparties to follow suit with obligatory regulatory demands. Should market liquidity be substantially reduced by the market exit of these small traders and counterparties, adverse effects to price stability and security of supply could result.

There is strong preference for clear and unambiguous rules, published in a timely fashion. Of course, reporting requirements which can be fulfilled by moderate investments are preferred, but if that goal cannot be reached, at least a clear path for future investments needs to be shown, especially in conjunction with other regulatory regimes. Otherwise, uncertainty about direction and future needs may start to paralyze the ability of large organisations to change according to the demands of the markets, not just the anticipated future input from several regulators. A large share of the IT budget for the fiscal year 2013 will need to be set aside for regulatory concerns. Timely input is of the essence.

Market participants have a high commitment to fulfil their reporting requirements, thus keeping their core business legal. Some traders, especially traders more focussed on one market only, are looking to establish third party reporting via energy exchanges and matching platforms. Their main concern is the ability of those service providers to establish the legal and technical framework for this in time. A clear signal from ACER about the timing and cooperation with such service providers would be most welcome. Otherwise, all market participants will have to develop a plan B in case their data service provider of choice does not meet a deadline or fails certification. Given the timeline of developing major interfaces to their core production systems in trading, having a viable plan B means building an own interface from the start. If this is done, it might as well be used, thus leading to thousands of direct reporting parties vis-à-vis ACER. This can be neither in the interest of ACER nor in that of the reporting parties.

Other traders, especially traders focussed on many market and market venues and thus under a multitude of reporting regimes, are looking to take transaction reporting into their own hands by establishing a group wide Regulatory Compliance function which fulfils that need with relation to all regulatory bodies. Their main concern is not so much their own technical abilities, as they have more control of it than of outside events, but the legal and process framework provided by ACER, such that their envisioned architecture can work.

The OTC market is inherently more difficult to oversee than the exchange market. Apart from exchange fees and lack of liquidity, there are good reasons that many transactions are done OTC: they are complex and do not fit simple forms which would lend themselves to standard reporting as in the financial markets. Data aggregators play a pivotal role in providing data for OTC wholesale energy markets. Building upon existing energy trade data schemes in the OTC world contributes to an efficient reporting framework under REMIT. Therefore, the focus of our recommendation is on the data sets already available at the level of data aggregators, even though it will be reported directly by some market participants.

Topic	Content
Trade data	• All data that is derived from trading at energy exchanges is available (orders and trades with corresponding information like time, volume, price, etc.) • Realistically, orders to trade in OTC would only be available at broker platforms. • If trading does take place without brokers and off automatic confirmation sites, the aggregation of data would only be possible directly from all participants
Transparency platforms	• Traders see themselves rather as consumers of fundamental data published on transparency platforms
Interdependencies	• Overlap with MiFID/ MAD • Impact of MiFID II/ MiFIR • Different requirements in the financial markets according to MiFID and the spot markets (Art. 15 of REMIT)

3.4.3. Exchanges

The Association of European Energy Exchanges (EUROPEX) is a not-for-profit association representing the interests of the exchange-based wholesale markets for electrical energy and gas with regard to developments of the European regulatory framework for wholesale energy trading. EUROPEX currently has 17 European energy exchanges as members. Energy exchanges differ by their status as profit or non-profit organisations, their mandatory or non-mandatory legal framework, the national legal regime in place, as well as by the given economic conditions.

Energy exchanges describe themselves as both well suited and highly committed to helping market participants to fulfil their reporting requirements. EUROPEX highlights the necessity of establishing a clear legal framework for third party reporting; energy exchanges will also have to develop a comprehensive business model that enables refunding the initial investment and the running costs.

Energy exchanges play a pivotal role in providing data for wholesale energy markets. Building upon existing energy trade data reporting schemes contributes to an efficient reporting framework under REMIT.

Topic	Content
Trade data	• All data that is derived from trading at energy exchanges is available (orders and trades with corresponding information like time, volume, price, etc.) • Collection of orders to trade is a serious challenge to the overall process (estimated 20-50 times more than trades)
Market surveillance	• Specific market surveillance reporting is done by exchanges to their supervisory bodies • Various overlapping reporting obligations with REMIT in EU member

	states • Need for central data repository to analyze cross-border market behaviour is confirmed • Mechanisms established on a voluntary or mandatory basis – depending on legal and regulatory framework • Explicit market surveillance office do not necessarily exist
NRA reporting	• In general, suspicious behaviour currently has to be reported to NRAs or other exchange supervisory authorities already • Not all energy exchanges fall under MIFID/EMIR reporting obligations. Certain exchanges are only active in spot markets (and not derivatives markets) and are operating under different regulatory regimes
Transparency platforms	• Some but not all energy exchanges are involved in collection of fundamental data
Interdependencies	• Interim period where MiFID/ MAD apply to a narrower set of companies than what is expected after the entry into force of MiFID II/ MiFIR and CSMAD/ MAR; that narrower set, however, seems to fall under REMIT • Different requirements in the financial markets according to MiFID and the spot markets (Art. 15 of REMIT) • MiFID does not govern orders to trade

Availability of trade data is derived from trading at energy exchanges (including orders and trades with corresponding information such as time, volume, price, etc.). According to EUROPEX, the collection of orders to trade is a serious challenge to overall process since the number of such data records is estimated at 20-50 times more than data for executed transactions.

For market surveillance, specific reporting is done by exchanges to supervisory bodies in their respective countries. Such mechanisms are established on a voluntary or mandatory basis, and therefore there may not be an explicit 'market surveillance' team in existence within each of the exchanges' organisations. This depends on the country-specific legal and regulatory framework. In this context, EUROPEX confirms a need for a central data repository to analyse cross-border trading activity in line with the rationale identified for the introduction of REMIT.

For regulatory reporting, EUROPEX identified an existing rule that suspicious trading behaviour must be reported to NRAs or other exchange supervisory authorities. With this in mind, it was mentioned that at present not all energy exchanges fall under MIFID/EMIR reporting obligations, since certain exchanges are only active in spot markets (and not derivatives markets).

Through participation in transparency platforms, some but not all energy exchanges are involved in collection of fundamental data.

EUROPEX identified the main interdependencies with other ongoing regulatory workstreams as occurring within an interim period where MiFID/ MAD apply to a narrower set of companies than that which is expected after the entry into force of the revised forms of these regulations (i.e. MiFIR and MAR). Under MIFIR and MAR certain exemptions may be removed which will mean that more companies must comply. Some of these companies may already be within the scope of REMIT; however they will only face double-reporting issues after the introduction of MiFIR/ MAR. EUROPEX

specifically pointed out that there are different requirements in the financial markets according to MiFID and the spot markets (Art. 15 of REMIT) and that MiFID does not govern orders to trade.

3.4.4. NRAs

3.4.4.1. Introduction - involvement of NRAs via CEER

The National Regulatory Authorities are involved in this project via the Council of European Energy Regulators (CEER). CEER is a Belgian not-for-profit organisation, set up by the National Regulatory Authorities that serves as their voice on an EU and international level. This project has been presented and discussed in the Market Integrity and Transparency Working Group of CEER, led by Mr. J. Braz as chairperson. The project's approach and scope was been presented on the 27th of February 2012 at the CEER premises in Brussels in connection with a working group meeting. As listed in chapter 2.2 ("Project approach and methodology") the workshop took place on the 28th of March 2012.

3.4.4.2. Fragmentation of supervision in the wholesale energy market

The collection of data with the purpose of monitoring transactions in the wholesale energy market is currently fragmented. Energy market monitoring practices are member state and sector specific.[29] Outside the applicability of MiFID, rules may exist at the member state level, however limited in scope, often relating only to a single trading platform and covering a single member state.[30]

Different monitoring schemes by NRAs are already in action regarding the wholesale energy market.

In Germany for example, the Federal Grid Agency (Bundesnetzagentur – BNetzA) exercises its regulatory tasks by monitoring the structure of the wholesale energy markets in particular (including requests for data from broker platforms), whereas the European Energy Exchange in Leipzig is supervised by the Saxon State Ministry of Economic Affairs, Labour and Transport (SMWA) as the exchange supervisory authority under the German Exchange Act.[31] As far as the supervision of trading in financial instruments such as exchanged traded commodity derivatives is concerned, the Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin) is the competent body who is supported by the market supervisory offices at the stock exchanges.

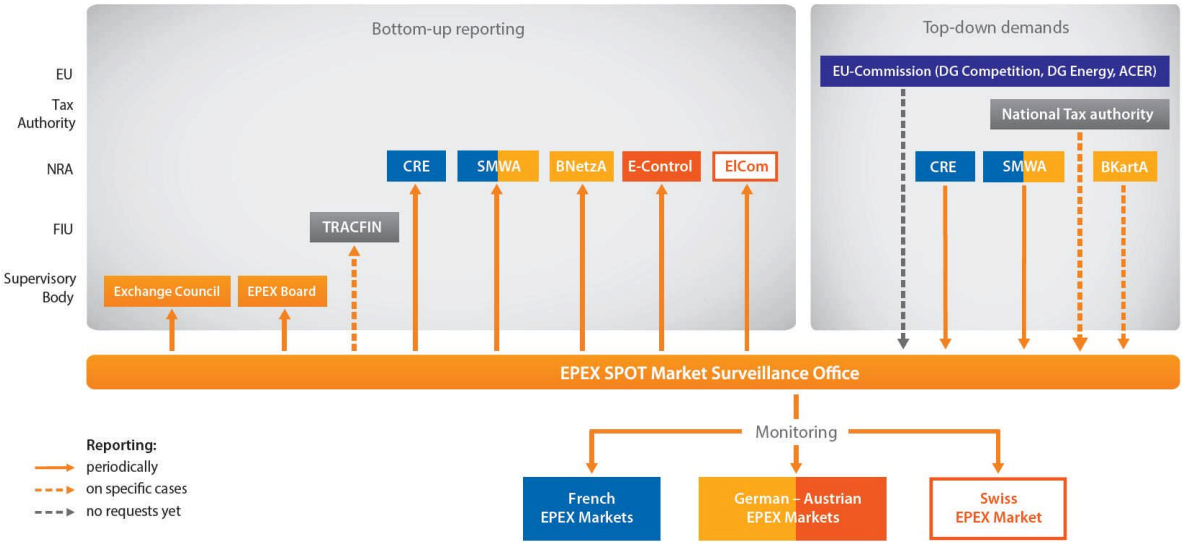
In Austria, E-Control conducts monitoring in the area of electricity and gas by regularly monitoring and evaluating the daily and weekly price developments at wholesale energy markets. For this, energy market data providers are used. The energy trading venues Energy Exchange Austria (EXAA) and Central European Gas Hub (CEGH) are supervised by the Austrian Financial Market Authority (financial market) and by the Austrian Federal Ministry for Economic Affairs (spot market) under the Austrian Exchange Act.[32]

In France the Commission de Régulation de l'Énergie has been entrusted with the task of monitoring the French wholesale electricity and natural gas markets since 7th December 2006. CRE monitors electricity and natural gas transactions between suppliers, traders, and producers; transactions carried out on organised markets; and cross-border trades.[33] At the European Power Exchange (EPEX

29 Recital 6 REMIT.
30 Commission of the European Communities, Impact Assessment regarding REMIT of 8.12.2010, p. 13.
31 Council of European Energy Regulators, Pilot Project for an Energy Trade Data Reporting Scheme, Final Report p. 12
32 Council of European Energy Regulators, Pilot Project for an Energy Trade Data Reporting Scheme, Final Report p. 13
33 Council of European Energy Regulators, Pilot Project for an Energy Trade Data Reporting Scheme, Final Report p. 13

SPOT), its market surveillance department has built up relations with EEX market surveillance on power markets and with the supervisory authorities and energy regulators in charge of monitoring EPEX SPOT markets as shown in the diagram below:[34]

Figure 5 EPEX Spot Market Surveillance Office – overview



However, even if differentiated trading supervisory mechanisms in place in single European jurisdictions, there is no obligation for transaction reporting at the European level.[35]

3.4.4.3. Non-binding statements from the workshop with the NRAs

The formal views of the NRAs regarding the responses to the questionnaire are outlined in the following chapter. However, in the following we have listed a number of general and comprehensive thoughts on the framework for reporting under REMIT, which have been expressed in the NRAs' workshop.

- Withholding of capacity with the intention of manipulating the market belongs to the activities which should be prevented and detected.
- When setting up a reporting scheme the cost/benefit ratio should always be taken into account ("No data collection for the sake of data collection").
- Especially in the gas market, it is necessary to encompass contracts already concluded in addition to newly concluded contracts, since the existing long term contracts have a high relevance in the market.
- The focus of the reporting obligation should, in practice, lie on market exchanges and brokers rather than on individual market participants.
- While real time reporting permits an intervention before it gets really problematic, reporting on a daily basis might be more cost efficient.

34 www.epexspot.com/en/market_surveillance.

35 Council of European Energy Regulators, Pilot Project for an Energy Trade Data Reporting Scheme, Final Report p. 15.

- While trade data should be available on a daily basis, fundamental data could be, under specified circumstances, reported less frequently.
- The immediate access to fundamental data on unplanned outages should have a high priority.
- General awareness regarding the tension between the need for standardization versus the need for providing detailed information.
- Regarding access to the ACER database for the public and for scientific purposes, a pragmatic approach should be followed. The sensitivity of the market participants for older data might be much lower.

3.5. Electricity TSOs

3.5.1. Introduction

Electricity transport system operators (TSOs) constitute the cardinal focus points for the data provision in the wholesale energy market. The necessity of a sophisticated allocation of capacities for electricity units deemed to be transported in the internal market, including between the grids of various TSOs, puts electricity TSOs in the position of having to collect and exchange data on times and volumes. In addition, TSOs are faced with a series of reporting requirements laid out in legal provisions and guidelines.

The foremost legal provision for data reporting on a pan-European level is found in Chapter 5 of the Guidelines on the Management and Allocation of Available Transfer Capacity of Interconnections between National Systems, Annex I to Regulation (EC) No 714/2009 (Regulation of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003). The addressees to the reporting requirements under these guidelines include both TSOs and, in some instances, market participants. Under chapter 5 of the guidelines, TSOs are obliged to publish certain pieces of information and data sets, whereas national regulatory authorities (as defined in Article 35 (1) of Directive 2009/72/EC) are given the power to review the manner in which such information is published in some cases.

Other significant sources of information on data transparency are the European Regulators' Group for Electricity and Gas (ERGEG) Advice on Comitology Guidelines on Fundamental Electricity Data Transparency (Ref: E10-ENM-27-03, published on 7 December 2010) and the ENTSO-E Transparency Platform run by the European Network of Transmission System Operators for Electricity (ENTSO-E).

Additionally, ENTSO-E has contributed a summary of the responses submitted by electricity TSOs to the questionnaire sent out by PwC and Ponton in order to understand the stakeholders view on reporting requirements.

Eventually, national regulatory frameworks on reporting obligations can indicate which type of data and manner of reporting could easily be integrated in the REMIT data reporting framework. However, no thorough analysis of all European jurisdictions has been undertaken for the purposes of this report. Rather, information on national regulation as contributed by means of the ENTSO-E summary of the responses to the questionnaire and the German national regulatory framework have been taken into account.

3.5.2. Data currently reported and/or published by electricity TSOs on an individual basis (fundamental data/transparency provisions)

According to Articles 15 and 16 of Regulation (EC) No 714/2009 and as set forth in Chapter 5 of the Guidelines on the Management and Allocation of Available Transfer Capacity of Interconnections between National Systems, electricity TSOs are obliged to publish information on

a) network availability, access and use, including comprehensive multi-faceted congestion reports and capacity allocation procedures (1. to 3. below);

b) operational and planning security standards (4. below);

c) cross-border trade based on the best possible forecast (5. (a) to 5. (i) below).

The data sets described in a) to c) above shall be considered fundamental data according to the definition laid out in section 1.1 of the ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency.

Currently, electricity TSOs are required to publish the information on an individual basis and are fulfilling their transparency requirements by publishing fundamental data on their respective websites.

When TSOs and market participants, as the case may be, publish the aforementioned pieces of information, certain timeframes need to be considered (7. below). As far as forecasts shall be published, ex-post realized values shall also be published at the latest on the following day ("D+1").

In order to comply with the programmatic background of Chapter 5 ("transparency"), all information must be published in a manner that it remains freely available in an easily accessible form (8. and 9. below). In order to nurture the harmonisation within the internal market, TSOs shall exchange sufficiently accurate network and load flow data (10. below).

In detail, the guidelines put these requirements forward as follows:

1. *TSOs shall publish all relevant data related to network availability, network access, and network use, including a report on where and why congestion exists, the methods applied for managing the congestion, and the plans for its future management.*

2. *TSOs shall publish a general description of the congestion-management method applied under different circumstances for maximising the capacity available to the market, and a general scheme for the calculation of the interconnection capacity for the different timeframes, based upon the electrical and physical realities of the network. Such a scheme shall be subject to review by the regulatory authorities of the member states concerned.*

3. *The congestion management and capacity allocation procedures in use, together with the times and procedures for applying for capacity, a description of the products offered, and the obligations and rights of both the TSOs and the party obtaining the capacity, including the liabilities that accrue upon failure to honour obligations, shall be described in detail and made available in a transparent manner to all potential network users by TSOs.*

4. *The operational and planning security standards shall form an integral part of the information that TSOs publish in an open and public document. That document shall also be subject to the review of the national regulatory authorities.*

5. *TSOs shall publish all relevant data concerning cross-border trade on the basis of the best possible forecast. In order to fulfil that obligation, the market participants concerned shall*

provide the TSOs with the relevant data. The manner in which such information is published shall be subject to review by the regulatory authorities. TSOs shall publish at least:

(a) annually: information on the long-term evolution of the transmission infrastructure and its impact on cross-border transmission capacity;

(b) monthly: month- and year-ahead forecasts of the transmission capacity available to the market, taking into account all relevant information available to the TSO at the time of the forecast calculation (for example, impact of summer and winter seasons on the capacity of lines, maintenance of the network, availability of production units, etc.);

(c) weekly: week-ahead forecasts of the transmission capacity available to the market, taking into account all relevant information available to the TSOs at the time of calculation of the forecast, such as the weather forecast, planned network maintenance work, availability of production units, etc.;

(d) daily: day-ahead and intra-day transmission capacity available to the market for each market time unit, taking into account all netted day-ahead nominations, day-ahead production schedules, demand forecasts, and planned network maintenance work;

(e) total capacity already allocated, by market time unit, and all relevant conditions under which that capacity may be used (for example, auction clearing price, obligations on how to use the capacity, etc.), so as to identify any remaining capacity;

(f) allocated capacity as soon as possible after each allocation, as well as an indication of prices paid;

(g) total capacity used, by market time unit, immediately after nomination;

(h) as closely as possible to real time: aggregated realised commercial and physical flows, by market time unit, including a description of the effects of any corrective actions taken by the TSOs (such as curtailment) for solving network or system problems;

(i) ex-ante information on planned outages and ex-post information for the previous day on planned and unplanned outages of generation units larger than 100 MW.

6. *All relevant information shall be available for the market in due time for the negotiation of all transactions (such as the time of negotiation of annual supply contracts for industrial customers or the time when bids have to be sent into organised markets).*

7. *The TSO shall publish the relevant information on forecast demand and on generation according to the timeframes referred to in points 5 and 6. The TSO shall also publish the relevant information necessary for the cross-border balancing market.*

8. *When forecasts are published, the ex post realised values for the forecast information shall also be published in the time period following that to which the forecast applies or at the latest on the following day (D + 1).*

9. *All information published by the TSOs shall be made freely available in an easily accessible form. All data shall also be accessible through adequate and standardised means of information exchange, to be defined in close cooperation with market participants. The data shall include information on past time periods with a minimum of two years, so that new market entrants may also have access to such data.*

10. *TSOs shall exchange regularly a set of sufficiently accurate network and load flow data in order to enable load flow calculations for each TSO in their relevant area. The same set of data shall be made available to the regulatory authorities and to the Commission upon*

request. The regulatory authorities and the Commission shall ensure the confidential treatment of that set of data, by themselves and by any consultant carrying out analytical work for them on the basis of those data.

The table below summarises the data that is required **to be published under Regulation (EC) 714/2009** as quoted above:

Table 2 Data to be published under Regulation (EC) 714/2009

Data item	Timeframe	Due date
Network availability, access, use		In due time for the negotiation of all transactions
Congestion report (existence of and reason for congestions, management methods, and future management plan)		In due time for the negotiation of all transactions
Congestion management method and interconnection capacity	For the different timeframes	In due time for the negotiation of all transactions
Congestion management and capacity-allocation procedures in use, together with the times and procedures for applying for capacity		In due time for the negotiation of all transactions
Description of the products offered, including rights, obligations, and liabilities		In due time for the negotiation of all transactions
Operational and security planning		As an integral part of the information otherwise submitted
Information on the long-term evolution of the transmission infrastructure and its impact on cross-border transmission capacity	Long-term	Annually
Forecasts of the transmission capacity available to the market (e.g. considering impact of summer and winter seasons, maintenance, availability of production units, etc.)	Month- and year-ahead	Monthly
Forecasts of the transmission capacity available to the market, (e.g. considering the weather forecast, planned network maintenance work, availability of production units, etc.)	Week-ahead	Weekly
Transmission capacity available to the market taking into account all	Day-ahead Intra-day for each market	Daily

netted day-ahead nominations, day-ahead production schedules, demand forecasts, and planned network maintenance work	time unit	
Total capacity already allocated and all relevant conditions under which that capacity may be used (for example, auction clearing price, obligations on how to use the capacity, etc.), so as to identify any remaining capacity	By market time unit	In due time for the negotiation of all transactions
Allocated capacity as well as an indication of prices paid		As soon as possible after each allocation
Total capacity used	By market time unit	Immediately after nomination
Aggregated realised commercial and physical flows including a description of the effects of any corrective actions taken by the TSOs (such as curtailment) for solving network or system problems	By market time unit	As close as possible to real time
Ex-ante information on planned outages and ex-post information for the previous day on planned and unplanned outages of generation units larger than 100 MW.	a) Future b) Previous day	a) In due time for the negotiation of all transactions b) D+1

TSOs also report fundamental data on a national level. These national reporting requirements are to be seen as cumulative to the reporting requirements on a European level and add hourly data reporting to the daily, weekly, or long-term data reports according to Regulation (EC) 714/2009. According to the ENTSO-E summary of TSO responses to the questionnaire, fundamental data reported on a national level may include the following data sets (shown by the example of **Norway** as published at http://www.npspot.no):

Hourly data per bidding area

a) Day ahead auction capacities (for cross-border trade);

b) Intraday market capacities (for cross-border trade);

c) Balancing market capacities (for the common Nordic market);

d) Production per bidding area;

e) Consumption per bidding area;

f) Net exchange per bidding area;

g) Reservoir filling.

Under **German** national law, fundamental data which has to be published by electricity TSOs without undue delay and held accessible for a minimum duration of two years (e.g. on a website) comprise the following data sets as laid out by section 17, paragraph 1 of the Electricity Grid Access Ordinance *(Stromnetzzugangsverordnung* or *StromNZV)*. These requirements were put in place on a national level before Regulation (EC) 714/2009 was put into force. However, requirements under section 17 StromNZV are not in conflict with the Regulation, but rather complement these by hourly or quarter-hourly data.

a) Aggregated load submitted to Distribution System Operators (DSO) or consumers (vertical load) per hour and per MWh;

b) Annual maximum load and the load curve measured on a quarter-hourly basis;

c) Net losses;

d) Quarter-hourly control area balance per MWh per quarter hour as well as the activated reserve per minute;

e) Cross-border flows aggregated per coupling point, including a forecast on the capacity allocation;

f) Market-relevant outages and planned revisions;

g) Volumes and prices of lost energy (grid losses);

h) Data on scheduled feed-in of wind energy on the basis of forecasts as used by TSOs and on the basis of actual feed-in on the basis of the data TSOs use among each other (per MWh per hour).

Thus, under the national regimes depicted above, hourly or even quarter-hourly fundamental data is available complementing the data to be published and/or reported in accordance with Regulation No. 714/2009 (see table above).

3.5.3. Data readily available (transactional data)

According to the ENTSO-E summary of TSO responses to the questionnaire, data sets as laid out in the following paragraphs are available.

Commercial data items which can be extracted from **long-term capacity contracts**:

a) Transmission capacity or generation capacity, offered capacity, allocation results;

b) Interconnection, business interval, monthly and yearly market data, pricing method (uniform price);

c) Time horizon, PTR (physical transmission right) volumes, commercial profile areas, BRPs (balance responsible parties), prices.

However, there are no long-term capacity contracts in the Nordic market area, UK, Ireland, or Greece, disregarding possible bilateral contracts to non-EU parties (e.g. Russia).

Data available from **capacity auctions** comprise:

a) Offered capacity;

b) Requested capacity;

c) Allocated capacity;

d) Price capacity;

e) Bid curve;

f) Bilateral transfers and resales;

g) Interconnector data.

These data are made available in harmonised XML documents as documented on the ENTSO-E EDI library (https://www.entsoe.eu/resources/edi-library/).

Data available from the **balancing energy market** comprise:

a) Bilateral and power exchange transactions (day ahead and intraday);

b) Prices (bids and offers);

c) Volumes of primary, secondary, and tertiary reserves;

d) Volumes of settled balancing energy;

e) Balancing energy offers (available generating capacity and offered prices);

f) Bidding area;

g) Location.

It has to be considered that in some states such as Ireland or Greece, no balancing energy markets exist, since there is a pool system under which a plant is centrally dispatched to balance supply and demand. Therefore, data available from these regions (Ireland, Greece) merely refer to imbalance settlements which are dealt with by collecting data on unit availabilities and imbalance prices per MW, respectively.

Trade data collected on a national level may comprise (shown by the example of Norway as published at http://www.npspot.no and http://www.statnett.no using the ENTSO-E XML format schemes):

Hourly data per bidding area:

a) Day ahead auction prices, volumes, and cross-border flows;

b) Intraday market prices, volumes, and cross-border flows;

c) Balancing market prices (tertiary reserve, prices also used for imbalances) and volumes;

d) Special regulation volumes (tertiary reserve out of merit order);

e) Automatic reserves (primary) activated volumes;

f) Automatic reserves (primary) reserved capacities;

g) Automatic reserves (primary) capacity prices.

In Germany, the NRA has instituted the "Market Rules for the Performance of Balancing Group Accounting in Electricity" ("MaBiS"). These rules address the TSOs in their role as balancing group supervisors. The balancing group supervisor is responsible for making sure that the power balance of the balancing group is in equilibrium in each 15-minute measuring period. Under these rules, electricity TSOs are obliged to communicate detailed trade data among the market participants on a monthly basis, whereas the data sets have to refer to the respective energy trade volume in kWh and are based on quarter-hourly feed-ins.

The procedure and formats are not yet standardised, therefore each of the four German electricity TSOs has implemented its own procedures which apply until the NRA (or another responsible

authority) issues a standard process and format. For example, TenneT TSO GmbH uses the MSCONS data format.

Per balance region, the TSO determines the balance totals per balance area for the following types of time series:

- Load curve total (LCT) per balance area (incl. associated (proprietary) sales);
- Feed-in curve total (FCT) = total time series feed-in curve time series of feed-in points per balance area. Power from renewable energy is fed-in, thus the feed-in curve total must also be transmitted for renewable energy systems read (separated by energy source);
- Standard feed-in profile total (SET) = Total time series synthetic feed-in profiles per balance area. Power from renewable energy is fed-in, thus the feed-in curve total must also be transmitted for renewable energy systems not read (separated by energy source);
- Standard load profiles (SLP) synthetic or analytical;
- Daily parameter-dependent load profile total (DLT) per balance area;
- Daily parameter-dependent feed-in profile total (DET) per balance area;
- Aligned grid time series (GTS) - the difference between the totals of all grid time series - must be transmitted for subordinate or neighbouring grids.

The invoices according to the balancing group contract, according to the monthly totals, usually comprise the following information:

- Work: MWh including 6 decimal places;
- Separation of ‘000s for quantities and monetary amounts;
- Identification of excess quantities of the balancing group by adding the term “excess”;
- Identification of shortfalls of the balancing group by adding the term “shortfall”;
- Monetary amounts in the legal currency: EUR (€);
- Disclosure of the shortfall quantities (MWh) and of the monetary amount (net) for shortfalls;
- Disclosure of the excess quantities (MWh) and of the monetary amount (net) for excess;
- Disclosure of the balance of the shortfall quantities minus excess quantities (MWh);
- Disclosure of the monetary amounts (net) for shortfall and excess quantities as well as of the sum of these two monetary amounts (net), broken down according to tax rates, if required, insofar and for as long as this is possible according to the legal provisions, in particular, those of VAT laws and their interpretation by the state financial authority competent for each TSO (in their role as balancing group coordinator, or "BIKO"); if such a disclosure is not permitted according to such laws, the presentation is made according to the legal requirements and, in particular, according to the requirements of the VAT laws as well as the interpretation by the state financial authorities mentioned above;
- Disclosure of the VAT rate and disclosure of the VAT amount applicable to the tariff (net monetary amount);
- Disclosure of the gross total;
- Date of maturity / value date of invoice.

The time at which data on the **final allocated volume** is confirmed varies depending on the TSO at stake and the type of volume addressed (transmission capacity or volume). ENTSO-E summarises from the answers to the questionnaire that balancing power allocation volumes might be confirmed at two hours after the final allocation (H+2), whereas cross-border trade allocations might be confirmed at H-1 in some cases (e.g. the British market, with a half-hourly reporting scheme) and H+1 in others (e.g. SvK, Statnet, REN). However, with EirGrid (Ireland), timeframes generally are D+4 for generation and interconnectors and M+13 for suppliers and non-price-affecting generation.

When obliged to report data whose primary owner are generators, TSOs depend on the **thresholds** generators consider when reporting their data. According to the responses to the questionnaire, generators mostly report data exceeding 100 MW (e.g. publication of planned and unplanned outage), however there are exceptions to that threshold. Installed generation capacity might be reported with a 1 MW threshold or, for solar and wind energy, even with 0.1 MW. Also, there are regional differences (e.g. the standard reporting threshold for England and Wales is 100 MW, for South Scotland 30 MW, and for Northern Scotland 10 MW).

With the opening of the European internal energy market, definitions of standardised information interchange interfaces (**data formats**) were necessary. Since 2000, ETSO and now ENTSO-E have been providing the electricity market with recommendations and implementation guides for various business processes such as Scheduling System (ESS), Settlement and Reconciliation (ESP), Transmission Capacity Allocation and Nomination (ECAN), Reserve Resource Process (ERRP), etc. ENTSO-E reports that this harmonisation work is being accomplished by the International Electrotechnical Commission (IEC) and in particular through the Technical Committee (TC) 57 WG 16 on “Deregulated Energy Market Communications”, to which ENTSO-E contributes expertise and recommendations. Core components have been defined by ENTSO-E (including their mapping with CIM classes) and are currently used in exchanges for the electricity market as well as for the publication of information on the entsoe.net platform. All the documentation related to these harmonised XML documents is found on the ENTSO-E EDI library at https://www.entsoe.eu/resources/edi-library/. The ENTSO-E WG EDI has furthermore developed the "Market Data Exchange Standard", i.e. MADES, in order to ensure a single face to the market and to provide encryption, secrecy, and authentication and at the same time guarantee information transmission. The MADES standard is found at

https://www.entsoe.eu/fileadmin/user_upload/edi/library/mades/mades-v1r0.pdf

As regards capacity bookings, electricity TSOs and the regional capacity auction offices (e.g. CAO Central Allocation Office GmbH) currently do not use a standardised format. However, communication and confirmation report messages are communicated by most TSOs/ regional capacity auction offices in the XML schema on which the ESS version 3.3 or ECAN 4.0 format is based. In several cases, the usage of the ESS or ECAN version is written down in balancing group contracts (Bilanzkreisvertrag), e.g. the Balancing Group Contract of TenneT TSO GmbH (28th of July 2011).

3.5.4. Harmonised fundamental data (ENTSO-E transparency platform)

ENTSO-E has established a transparency platform which is operational since 2007 at www.entsoe.net. It publishes many data items of great interest to electricity traders on a daily basis. It contains key operational and congestion management information for Europe's high voltage electricity transmission interconnectors.

The data submitted to the ENTSO-E transparency platform by electricity TSOs on a voluntary basis comprise:

a) Vertical load;

b) Physical flows;

c) Auction data;

d) Commercial schedules;

e) Net transfer capacities;

f) Outage;

g) Balancing.

Data submission to the ENTSO-E transparency platform is completed by a large number of, but not all, electricity TSOs and also by power exchanges, auction offices, and further third parties. The data submitted to the platform is used by traders, consultants, the European Commission, ACER, by the media, universities, and by individuals.

At the transparency platform, each TSO has a single point of contact (TPC = Transparency Platform Coordinator). Data is submitted via ftp, e-mail, or entered directly. Data submission standards are being developed by the EDI WG (see above).

3.5.5. Summary on REMIT data currently available

The following table outlines the REMIT data currently available, structured by fundamental data (mandatory requirements and voluntary platform) and transactional data (trade and transport contract data).

Table 3 REMIT data currently available

Fundamental data (transparency requirements)	• Currently published by TSOs (as required by Chapter 5 of Annex I to Regulation No. 714/2009 • Data include network availability, network access, network use, congestion management, capacity allocation, liabilities, operational and planning security standards, planned and unplanned outages, forecasts, and ex-post realised values • Requirements to be fulfilled on an individual TSO basis
Fundamental data – ENTSO-E Transparency Platform	• Platform collecting transparency data for TSOs and further market participants • Currently operating on a voluntary basis • Data includes vertical load, physical flows, auction data, commercial schedules, net transfer capacities, outage, balancing • Data submission via ftp, e-mail, or direct entry • Data format standard development under way by ENTSO-E WG EDI

Trade/ transportation contract data (capacity allocations/scheduling; balancing)	• TSOs hold data on capacity allocations and scheduling • Various data formats used for capacity allocation • ESS used for scheduling Europe-wide by many TSOs • Balancing market systems differ by region/country • Limited reporting to NRAs

3.5.6. ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency: Data items to be published according to the ERGEG draft

According to the **ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency**, the respective market participants shall collect and contribute data to the future central information platform on:

a) Load (data provider: TSOs; third party contributions to data provider: generation and consumption units and the DSOs within the respective TSO's control area);

b) Transmission and interconnectors (data providers: TSOs, transmission capacity allocators);

c) Generation (data provider: generators);

d) Balancing (data providers: TSOs or operators of balancing markets, as the case may be).

Such data shall be made available and disclosed in the following manner:

a) Without undue delay and according to the timing requirements defined;

b) On a common European website provided by ENTSO-E;

c) The website is to be easily accessible to the public, free of charge for the information specified in these guidelines; however, a neutral point of contact has to be provided;

d) Update on a regular/rolling basis; the update frequency shall be according to the changes that take place;

e) Information shall be stored for at least 5 years in the central information platform;

f) In a user-friendly manner, in downloadable format that allows for quantitative analyses;

g) In consistent units as required by these guidelines; and

h) In English.

The minimum contents of the data sets which TSOs are responsible to provide as set forth in the ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency are summarised in the tables below.

Table 4 TSO Data requirements - Load

Data item	a) Timeframe b) Unit	Due date	Primary data owners
Load			
Actual total load	a) Hourly b) -	At the latest one hour after the operational hour (H+1)	TSOs Owners of generation units
Estimate of the total load	a) Day-ahead b) Market time unit per bidding area	On the day before the operational day at the latest one hour before the gate closure time of the day-ahead market in the bidding area. To be updated, if necessary.	TSOs DSOs
If weekly energy and capacity products are offered: Estimate of the total load per bidding area per day, for every day of the coming week	a) Week-ahead b) Per bidding area per day for every day of the coming week: W maximum, minimum and average load values (21 individual data)	Each Friday at the latest one hour before the gate closure time of the day-ahead market in the bidding area. To be updated, if necessary.	TSOs DSOs
If monthly energy and capacity products are offered, an estimate of the total load	a) Month-ahead b) Per bidding area; for each week maximum, minimum and average load values	One week before the monthly capacity auction, or at the latest one week before the delivery month	TSOs DSOs
If yearly energy and capacity products are offered, an estimate of the total load	a) Year-ahead; for the following year b) Per bidding area; for each month maximum, minimum and average load values	One week before the yearly capacity auction, or at the latest one week before the delivery year	TSOs DSOs
A forecast margin, which is defined as the difference between yearly forecast of available generation capacity and yearly	a) Year-ahead b) Per bidding area, (MW) evaluated at local market time unit of annual maximum load	One week before the yearly capacity auction or at the latest one week before the delivery year	Total load forecast: TSOs, DSOs Available generation capacity: Owners of

Data item	a) Timeframe b) Unit	Due date	Primary data owners
forecast of total load. Information on generation capacity shall include forecast of total generation capacity, forecast of availability of generation and forecast of reserves contracted for system services.			generation units
Ex-ante information on the planned unavailability of consumption units. Any change in the availability of a consumption unit is required to be reported and published if the change in available capacity of the consumption unit equals to or exceeds 100 MW and lasts at least one market time unit.	a) - b) Name of the consumption unit, location, bidding area, available capacity during the event, installed capacity, reason for the unavailability and start and estimated stop date (day, hour) of the unavailability.	As soon as possible and at the latest H+1 after the decision is made. To be updated with changes as soon as possible and at the latest H+1 after the decision.	Owner of the consumption unit that is subject to planned unavailability
Ex-post information on the unplanned unavailability of consumption units. Any change in availability of a consumption unit is required to be reported and made public if the unplanned change in availability of the consumption unit equals or exceeds 100 MW and lasts for at least one market time unit.	a) - b) Name of the consumption unit, location, bidding area, available capacity during the event, installed capacity, reason for the unavailability and the start and estimated stop time (day, hour) of the unavailability.	As soon as possible and at the latest H+1 after the outage or when an update is available.	Owner of the consumption unit that is subject to unavailability.

1. **Transmission and interconnectors**

Data item	a) Timeframe b) Unit	Due date	Primary data owners

Data item	a) Timeframe b) Unit	Due date	Primary data owners
Transmission and interconnectors			
Information on expansion and dismantling projects in their national transmission grids with the estimated impact (MW) also on the interconnection capacity (NTC) for minimum the following three years. This information must be given for projects with a relevant effect on transfer capability (NTC) between bidding areas. A relevant effect is considered to be an effect that equals or exceeds 100 MW at least during one market time unit.	a) Annually, for the minimum the following three years b) Per bidding area; for every network component and interconnector project, the TSOs shall make public the name of the assets concerned. Also, the location, type of asset, the impact on interconnection capacity between the bidding areas, and the estimated date of completion shall be provided.	The information shall be published one week before the yearly transmission capacity auction or at the latest one week before the delivery year. Information is to be updated with relevant changes before end of March, end of June and end of September of year Y.	TSO
Transmission and interconnection capacity			
For explicit auctions, the capacity offered by TSOs, the capacity requested by the market, and the capacity allocated to the market	a) Every market time unit b) MW; price of the capacity; congestion revenue per border between bidding areas.	At the latest H+2 after each auction	TSOs
For explicit auctions, the total capacity nominated	a) Every market time unit b) Between bidding areas	At the latest H+2 after each nomination	TSOs
For cross-border implicit auctions, the allocation results	a) - b) Per market time unit; MW; equal to net positions of each bidding area; price of each bidding area (Euro per MWh); congestion income per border between	-	TSOs

Data item	a) Timeframe b) Unit	Due date	Primary data owners
	bidding areas.		
Report on where and why structural cross-border congestion exists. This report shall indicate where the limiting constraint in the transmission network is located, to what extent this constraint affects the level of transmission capacity (how many hours/days/weeks/months in the year) and all possible corrective measures that could be implemented to increase the transmission capacity, together with their estimated cost. The methodology and projects for achieving the long-term solution shall be described	a) Yearly; b) At least on a regional level	Updated during the year where necessary	TSOs
Aggregated final commercial scheduled exchanges and physical flows	a) - b) By market time unit; between bidding areas	As closely as possible to real time and at the latest H+2	TSOs or power exchanges
Reasons and effects on net transfer capacity (NTC) of actions taken by TSOs and having a significant impact on NTC. Information shall include a description of the effects of any corrective actions taken by the TSOs (such as curtailment, reduction of grid feed-ins or withdrawal and grid-related measures) for solving network or system problems.	a) - b) equal to or above 100 MW during at least one market time unit	Information on NTC modification shall be published at H+2 and a complete report on D+1	TSOs
Cross-border transfer capacity	a) - b) MW reserved as	The information shall be published at the	TSOs

Data item	a) Timeframe b) Unit	Due date	Primary data owners
	priority rights between the EU and non-EU member states per product period	entry into force of these guidelines and updated as soon as there is a modification in the information.	
If any type of Available Transmission Capacity (ATC) method is applied for capacity calculation:			
Planned outages on interconnections between bidding areas and in the transmission grid that reduce interconnection capacity between bidding areas, if the estimated impact on capacity (NTC) equals or exceeds 100 MW during at least one market time unit. Information shall contain the name of the asset concerned, the place (including affected bidding area), the type of asset, the start and estimated stop dates of the outage (day, hour), the estimated impact (MW) on transmission capacity(NTC) between the bidding areas and the reasons.	a) start and estimated stop dates of the outage (day, hour); b) MW	This information is to be published at the latest one week before the yearly transmission capacity auction, or if no transmission capacity auctions are conducted, at the latest one week before the delivery year. The information shall be updated with changes at the latest H+1 after information is known	TSOs
Ex-post information on actual outages (planned and unplanned) in the transmission grid and on interconnections between bidding areas if the impact on transmission capacity (NTC) equals or exceeds 100 MW during at least one market time unit.	a) Start and estimated stop dates (D, H) of the actual outage b) Asset concerned; location; affected bidding area; type of asset; impact on transmission capacity between bidding areas in MW	As soon as possible and at the latest H+1 after the occurrence The reasons for the outage should be published at the latest on the next day	TSOs
In the case of explicit transmission capacity auctions, the offered	a) - b) MW	Sufficiently in advance of the auction;	TSOs

Data item	a) Timeframe b) Unit	Due date	Primary data owners
capacity (MW) in the explicit capacity auction		In view of year-ahead, month-ahead, and week-ahead auctions, publication should be done sufficiently in advance and no later than one week before the auction	
In the case of implicit auctions, the offered day-ahead capacity (MW)	a) - b) MW	At the same time that TSOs provide capacity value to the entity responsible for the implicit auction	TSOs
Estimated net transfer capacity (MW) for the next day	a) For the next day b) MW; for each border between bidding areas and per direction; per market time unit	Information shall be published daily, at the same time that the offered day-ahead capacity (MW) is published	TSOs
If applicable (if weekly energy and capacity products are offered), estimated net transfer capacity (MW)	a) For the next week b) MW; for each border between two bidding areas and per direction; one value per day	Information is to be published Friday the week before the delivery week, at the latest 1 hour before the gate closure time of the day-ahead market in the bidding area	TSOs or Transmission Capacity Allocator
If applicable (if monthly energy and capacity products are offered), estimated net transfer capacity (MW)	a) For the next month b) MW; for each border between bidding areas and per direction; one value per week with one maximum and one minimum value per market time unit	Information is to be published at the latest one week before monthly transmission capacity auction and at 18h00 at the latest	TSOs
If applicable (if yearly energy and capacity products are offered), estimated net transfer capacity (MW)	a) For the next year b) MW; for each border between bidding areas and per direction; one average value per month	This information is to be published at the latest one week before yearly transmission capacity auction and at the latest one week before the delivery year at 18h00 at the latest	TSOs

Data item	a) Timeframe b) Unit	Due date	Primary data owners
For the intraday market estimated hourly available transmission capacity (MW)	a) For the next day b) MW; between bidding areas and per direction; per market time unit	At D-1, as soon as day-ahead capacity is known and at the latest at 18h00. Data should be updated per market time unit after each change	TSOs
If applicable, for DC links, information on any restrictions placed on the use of available cross-border capacity through the application of ramping restrictions or intraday transfer limits.	-	-	TSOs
In the case of flow-based allocation for the capacity			
Non-redundant flow-based parameters containing power transfer distribution. Factor (PTDF) matrix with physical margins (MW) available for the market/allocation associated to the anonymous critical branches	a) Per day (D) b) MW; per market time unit	At D-1 before the (implicit or explicit) auction day for D	Transmission Capacity Allocator
Flow-based allocated capacity (MW) per non-redundant critical branches, in D-1	a) D b) MW; per market time unit	H+2 after auction (implicit or explicit) results have been released	Transmission Capacity Allocator
For intraday market, non-redundant flow-based parameters containing PTDF matrix with estimated physical margins (MW) available for the intraday allocation associated to the anonymous critical branches	a) - b) MW; per market time unit	At D-1 after day-ahead nominations/schedules are known. Data should be updated per market time unit after each change	Transmission Capacity Allocator

Table 5 TSO Data requirements - Balancing

Data item	a) Timeframe b) Unit	Due date	Primary data owners
Balancing			
Balancing and balancing market			
If applicable, reserved balancing reserves either according to legal requirements or by procurement processes, ex ante	a) - b) Time unit for which the reservation is made (e.g. hour, day, week, month, year, etc.)	To be published as soon as possible, no later than two hours before the next procurement process takes place	TSOs
If applicable, prices of ex ante capacity reservations paid to generators or load for each kind of reserve, and the relevant pricing methodology	a) - b) Time unit for which the payment is made (e.g. hour, day, week, month, year, etc.)	To be published as soon as possible, no later than two hours before the next procurement process takes place	TSOs
Ex-post aggregated offers for activation to the TSO separated for each type of reserve	a) - b) Market time unit	As soon as possible, no later than two hours after the operating hour	TSOs
Ex-post information on the activated balancing reserves	a) - b) Balancing time unit	As soon as possible, at the latest two hours after the operating hour	TSOs
Ex-post information on actual prices (average and marginal prices) paid by TSOs for balancing energy		To be published sufficiently before the following procurement procedure	TSOs
Imbalance prices	a) - b) Per balancing time unit	As soon as possible, at least two hours after the operating hour. If there is an ex ante procurement procedure, the information shall be given at least two hours before the following procurement procedure	TSOs
Volumes of the aggregated imbalances and actually used volumes of balancing reserves inside control	a) - b) Per balancing time unit	One hour after the operating hour, the information shall be published one hour after the operating hour	TSOs

Data item	a) Timeframe b) Unit	Due date	Primary data owners
areas			
Financial balance of the control area	a) Monthly b) -	At the latest on the last calendar day, three months after the operational month. If settlement is preliminary, the figures shall be updated after the final settlement	TSOs
Market information on the type of balancing bids/offers used	a) - b) -	-	TSOs
TSO-TSO cross border balancing exchanges			
Volumes of exchanged bids and offers	a) - b) Per balancing time unit	After the operating hour	TSOs
Maximum and minimum prices of exchanged bids and offers	a) - b) Per balancing time unit	After the operating hour	TSOs
Volume of balancing energy activated in various control areas within joint cross-border balancing	a) - b) Per balancing time unit	After the operating hour	TSOs

3.6. Gas TSOs

3.6.1. Introduction

This section outlines the key existing channels for Gas Transmission System Operators (TSOs). In particular, we provide an overview of:

- Existing fundamental data currently published by Gas TSOs as required by Chapter 3 of Annex I to Regulation (EC) no.715/2009;
- Existing fundamental data currently published via the ENTSOG Transparency Platform;
- Existing disaggregated trade data/fundamental data currently collected, but typically not published by TSOs (including primary and secondary allocations, nomination and balancing data).

3.6.2. Fundamental data published by gas TSOs on an individual basis (transparency data)

For the purposes of this section, and without prejudice to further guidance provided by the Commission and/or ACER, we expect "fundamental data" to include (but not be limited to) data collected under the transparency requirements outlined in Chapter 3 of Annex I to Regulation no. 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks.

The transparency requirements for publication of fundamental data by individual gas TSOs were defined in November 2010 and are outlined in Chapter 3 of Annex I to Regulation No.715/2009. Gas TSOs are currently required to publish transparency data on an individual basis, and are fulfilling their transparency requirements by publishing fundamental data on their individual websites. Under the above mentioned Regulation, TSOs are required to provide information on a website accessible to the public, free of charge, and with no registration requirements. Data needs to be published on a regular/rolling basis, in a user friendly manner, and in a clear, quantifiable, easily accessible way and on a non-discriminatory basis. In addition, the regulation also specifies that data should be provided "in a downloadable format that allows for quantitative analyses" and in consistent units, in particular KWh for energy content and m^3 for volume.

The table below summarises the data that is required to be published under the Regulation.

Table 6 Data requirements outlined in Chapter 3 of Annex I to Regulation No. 715/2009

Data item	Aggregation	Period
Technical capacity for flows in both directions	For all relevant points	Forward: At least 18 months ahead Historical: 5 years on a rolling basis
Total contracted firm and interruptible capacity in both directions	For all relevant points	At least 18 months ahead Historical: 5 years on a rolling basis
Nominations and re-nominations in both directions	For all relevant points	Historical: 5 years on a rolling basis
Available firm and interruptible capacity in both directions	For all relevant points	At least 18 months ahead
Actual physical flows	For all relevant points	Historical: 5 years on a rolling basis
Planned and actual interruption of	For all relevant points	Historical: 5 years on a rolling basis

interruptible capacity		
Planned and unplanned interruption to firm services	For all relevant points	Historical: 5 years on a rolling basis
Gross calorific value or Wobbe index	For all relevant points	

In addition to the requirements above, the Regulation requires TSOs to publish information on:

- The aggregate amounts of capacity offered and contracted on the secondary market (i.e. sold from one network user to another network user);
- Harmonised conditions under which capacity transactions will be accepted;
- Maximum amount, booked levels, and availability of flexibility for the market for the next gas day (when flexibility services, other than tolerances, are provided);
- The amount of gas in the transmission system at the start of each gas day and the forecast of the amount of gas in the transmission system at the end of the gas day.

Furthermore, TSOs are required to provide to each network user, for each balancing period, its specific preliminary imbalance volume and network user, at the latest one month after the end of the balancing period.

The requirements outlined above are currently fulfilled on an individual basis by gas TSOs. In addition, ENTSOG developed a Transparency Platform a few years ago in order to provide centralised information to all market participants. This is described in more detail below.

As part of the TSOs questionnaire responses, the following key indications were provided:

- ENTSOG has indicated that the majority of the TSOs meet the requirements of Regulation 715/2009, Chapter 3, Annex 1, which requires individual TSOs to publish a large amount of fundamental data via their website. Accordingly, ENTSOG believes that TSOs are already publishing fundamental data as required under REMIT.
- Only a limited number of gas TSOs have indicated in their responses that they provide separate reporting of fundamental data to National Regulatory Authorities.
- The current data formats used on individual websites vary among TSOs. Typically, fundamental data is available in xls, csv, and/or xml formats, but no common format has been adopted.
- Only a limited number of TSOs have indicated the availability of fundamental data in relation to production facilities for natural gas, storage, LNG terminals, or consumption of large end users of gas at exit points.

- Most gas TSOs responding to the questionnaire have indicated that they publish data in relation to planned maintenance and interruptions. In particular, a number of participants referred to the harmonised format developed within ENTSOG (see below).

Under the harmonised ENTSOG format, information is available both with yearly and monthly granularity. For both firm and interruptible capacity, the following data is provided:

- Technical capacity;
- Planned interruption;
- Remaining capacity (in absolute units (kWh or $m^3(n)$) and percentage term);
- Period of maintenance;
- Nature of the planned activity.

TSOs have agreed to implement the common format voluntarily on their websites. In addition, ENTSOG's transparency platform provides links to the relevant information on individual TSOs' websites.

A number of TSOs have indicated that in some cases their existing or envisaged reporting obligations for fundamental data overlap in parts with envisaged reporting obligations under REMIT. The German TSOs have also highlighted that a law on the creation of a market transparency agency is in development and a database for the automated delivery of data to the German NRA (Bundesnetzagentur) is planned by 1st October 2012.

3.6.3. Harmonised fundamental data

ENTSOG has developed a transparency platform on which participating TSOs upload a key set of fundamental data on a voluntary basis. In particular, ENTSOG has informed us that currently 17 TSOs are uploading requested data on a regular basis.

The transparency platform was originally developed by ECG Erdgas Consult for Gas Infrastructure Europe (GIE), namely its transmission column (GTE) representing the European transmission system operators for gas. After the establishment of ENTSOG, The European Network of Transmission System Operators for Gas, in December 2009, the ownership and management of the Transparency Platform was transferred to the new TSOs' organisation.

TSOs are currently responsible for the upload of data on a regular basis and in due time, and to ensure data consistency. The upload of information is currently undertaken via a TSO interface in an xml format. The download of information per interconnection point from the platform can be undertaken manually, in xls format.

The transparency platform provides search tools for routes across the European gas transmission networks, as well as information on individual points.

On selected routes, as well as on individual entry/exit points, the following information is provided:

- Monthly available firm capacity (kWh/d);

- Monthly technical firm capacity (kWh/d);
- Monthly available interruptible capacity (kWh/d);
- Monthly technical interruptible capacity (kWh/d);
- Daily nominations (kWh);
- Daily renominations (kWh);
- Daily flows (kWh);
- Other information, including:
    - General information about an operator with links to relevant sections of the TSO's website,
    - Description of the type of contract (e.g. annual, monthly, etc.);
    - Conversion factors adopted;
    - Information on balancing rules;
    - Information on tariffs.

As highlighted above, this data is uploaded on a voluntary basis by individual TSOs, and is not currently required in order to fulfil transparency requirements. We understand from ENTSOG that this may change going forward and the EU transparency requirement may be fulfilled at an EU level by a centralized platform managed by ENTSOG; however, at this stage this approach has not been confirmed.

In relation to information on the maintenance of physical infrastructure as outlined above, ENTSOG has indicated in its questionnaire response that it has introduced a harmonized format for the publication of maintenance activities. Under this format, information is made available by interconnection point in both monthly and yearly granularity. For both technical and interruptible capacity, the following data is provided:

- Technical capacity (in units kWh or $m^3(n)$);
- Planned interruption (in units kWh or $m^3(n)$);
- Remaining capacity (in units kWh or $m^3(n)$ and percentage terms);
- Nature of the planned activity (installation works, pipeline works, online inspection).

ENTSOG has indicated that TSOs have agreed to implement the common format voluntarily on their websites, and the ENTSOG transparency platform provides links to the detailed information on the individual TSO website. In addition, the removal of any interruptible capacity, whether due to planned or unplanned maintenance / interruption, is reported on the transparency platform after the gas day, per point, together with the number of interruptions over the calendar year.

3.6.4. Disaggregated fundamental /trade data currently held by TSOs

As outlined in Section 2, TSOs hold data on capacity allocations and nominations at entry and exit points on their systems. The capacity allocation mechanisms adopted include first-come first served, open subscription windows and auction mechanisms. Typically, different types of allocation mechanisms are applied depending on the type of capacity allocated (e.g. firm/interruptible; long-term / short-term).

Data items collected in relation to capacity bookings vary amongst TSOs, but would typically include:

- Shipper name;
- Shipper ID;
- Type and ID of the point;
- Type of capacity (firm/interruptible);
- Type of allocation process;
- Start date;
- End date;
- Granularity (e.g. within day, daily, monthly, etc.);
- Reference to contract (if the booking refers to an existing contract);
- Duration of contract.

However, currently there is no standard process or platform for the allocation of capacity across Europe. Work on the harmonisation of capacity allocation mechanisms is currently underway, and it is described in more detail in Section 4.

In their responses to the questionnaire, gas TSOs have indicated that various formats are also used in the capacity allocation processes, including xls, xml, and specific capacity booking platforms.

In the case of auctioned capacity, price information may also be included; however, most TSOs did not provide this as part of their response.

Similarly, data items collected in relation to nominations vary. Only some of the TSOs responding have indicated standard nomination formats and standards that are currently being used, such as Gasdat, Kiss-a (xls format), Delfor (Delivery schedule message based on EDIFACT).

Nomination data is typically processed on an hourly or daily basis, depending on the type of balancing system adopted.

Data items collected in relation to nominations may include, among other values:

- Date of generation;

- Shipper code;
- Gas day;
- ID point;
- Direction point;
- ID counterparty;
- Quantity.

The majority of TSOs responding to the questionnaire stated that there is no difference in terms of data collected at interconnection points between EU and non-EU countries.

Currently, the operation of balancing markets is not harmonized at a European level, ranging from market based mechanisms to regulated tariffs/imbalance charges. Therefore, the data items collected vary on a country by country basis depending on the type of mechanism adopted. As part of their responses to the questionnaire, a number of TSOs have indicated the type of data published and the format used; however, as mentioned above, the type of data collected and data flows vary widely depending on the type of balancing mechanism in place.

4. Definition of requirements for power and gas reporting

4.1. Introduction

This section outlines the views from stakeholder categories in relation to the reporting structure for power and gas. The draft reporting structure builds on the assessments of existing data flows and on REMIT requirements examined in the previous sections, and takes into account the views collected as part of discussions with relevant stakeholders as well as from stakeholder questionnaires.

For all stakeholder categories for which workshop have been conducted (traders and brokers, intermediaries, exchanges, gas TSOs, and electricity TSOs), this section provides an overview of the key areas of feedback from questionnaires in relation to the principal areas outlined in Article 8 of REMIT, in relation to both trade/transportation contract data and fundamental data:

- Trade/ transportation contract data:
    - Records of transactions;
    - Lists of contract and derivatives;
    - Uniform rules on the reporting of transactions and orders to trade;
    - Timing and form for the reporting of transactions and orders to trade;
    - Reporting channels.
- Fundamental data:
    - Reporting of fundamental data;
    - Uniform rules on the reporting of fundamental data;
    - Timing and form for the reporting of fundamental data.

4.2. Traders and brokers

The traders and brokers provided a range of answers to the circulated questionnaire, yet there was enough consensus to present a general opinion on behalf of the participants. This consensus is summarised in this section.

4.2.1. Records of transactions

Participants were concerned about the burdensome consequences of double reporting. In order to limit the onus of reporting, participants urged consideration of joint procedures and formats between REMIT (ACER) and EMIR (ESMA). The EMIR draft is not yet finished, so it is our expectation that the commodities field definitions (Section 2h – Commodities) can be completed in coordination with

and with regard towards REMIT. Foremost, coordination should occur with regard to the required data fields, the reporting format, and reporting deadlines.

Participants also strongly urged the re-use of existing formats used in ETRM systems to reduce effort. Currently, 50-80% of transactions are captured through EFET cpML, a superset that includes the eCM and eXRP standards. Following this advice, one common reporting format for both standard OTC and exchange transactions will be delivered based on a comparison between the ESMA Draft Technical Recommendation (Annex 2) and EFET cpML, also taking into account the CRE reporting scheme and our understanding of broker platforms' API XML.

The use of existing coding schemes, such as EIC codes for legal entity and delivery location identification in energy commodities, was cited by respondents to further reduce implementation overhead and provide a coherent data set across all participants. Traders and brokers expressed scepticism about product standardization due to the wide range and number of products.

There is no consensus on the reporting of lifecycle events, nor is there a general trend in the percentage of lifecycle events. Some report an amendment rate of <.1% of transactions, others report an amendment rate of up to 30%. There is agreement that amendments to the economic details of a transaction (price, volume, start or end date, etc.) could be useful for monitoring, but the high reporting burden must be balanced with the added value of the information. If there is sufficient time lag between deal execution and data capture, transaction lifecycle events may not be that relevant overall; however, amendments allow for the correction of grossly wrong entries.

Non-standard transactions do not account for a large proportion of overall transactions and are harder to use to manipulate the market, but they often involve a higher volume than standard transactions and therefore should be reported. The definition of “non-standard transaction” was open to interpretation, and thus led to widely differing answers for portfolio share (0% to 15%). Different representations in non-standard transactions lead to suggestions of off-line, text reporting with a limited set of fields. However, the focus should remain on standard transactions as they are easier to capture, more frequent, and more volatile.

4.2.2. List of contracts and derivatives

The stakeholders did not explicitly state which contracts and derivatives should be included with respect to Article 8.2(a). However, the implied consensus of opinion of the stakeholders is that in order to accurately and completely fulfil the intent and stated language of the regulations, ACER requires full spectrum of contracts including futures contracts, spot contracts, intraday contracts, and balancing contracts. As TSOs have all of the information needed for reporting centralised balancing contracts, it was suggested that this reporting obligation fall to the TSOs and not on the market participants. Further to this point, transactions in OTC balancing/within-day markets and futures markets conducted through a platform should be reported by the platform and not by market participants.

The stakeholders have requested confirmation that intra-group deals should not fall under REMIT as they do not affect the market. Orders to trade for OTC deals should not be reported as it is too expensive, very complex, and of very limited value.

For nearly all respondents, OTC deals are more prevalent than exchange deals. The range of OTC deals per month and per participant is between 1,000 and 40,000 whilst the range of exchange deals is 0 to 25,000. This percentage trends per market and per commodity.

No de minimis thresholds should apply to OTC transactions. Large numbers of small transactions could affect the market, so regulators need a complete picture. These small transactions could also potentially be exploited to manipulate the market if the threshold is used as a loophole to reporting obligations. Additionally, most markets have a very limited number of block sizes.

Small traders are concerned about the cost of implementation in terms of market liquidity.

4.2.3. Uniform rules on the reporting of transactions and orders to trade

The stakeholders have indicated that existing reporting requirements and systems for NRAs and others are already burdensome and non-standardised between agencies. They stress the importance of coordination between REMIT, EMIR, MiFID, MAD, and to some extent Dodd-Frank, with a particular emphasis on the alignment between REMIT and EMIR. Non-financial companies are expected to encounter further complexities as they are not already subject to this type of reporting. In particular, the cooperation between ACER and ESMA is viewed as the highest priority.

The respondents do not see a need to distinguish between exchange and standard OTC deals for reporting purposes, but there should be a distinction between auction and continuous-trading markets. For exchanges that already undertake market monitoring, their dedicated data collection platforms should be taken into account as a possible data source for REMIT reporting.

4.2.4. Timing and form for the reporting of transactions and orders to trade

The stakeholders were clear and of a single mind regarding the timing of reporting for standard transactions. Real-time reporting is too burdensome and would require more reporting of amendments. The earliest practical reporting timeframe is D+1 (best endeavours) / D+2 (maximum allowed), with D being trading days. For example, if a deal is executed on a Friday before the close of markets, it should be reported by the end of business day on Monday (D+1), but at the latest by the end of Tuesday (D+2), regardless of confirmation status. Running and transmitting reports overnight also balances the load on IT systems, thus reducing overhead.

Codes should be re-used as far as possible. Above all else, EIC codes with no further attributes should be used for counterparty identification. EIC codes can also be used for e.g. the identification of delivery point areas. If ESMA enforces product codes for financial products, these should be usable without mapping in the REMIT space as well.

Existing standards should also be re-used for regulatory reporting: Commodity products Markup Language (cpML) has built-in coverage of EMIR and Dodd-Frank and could be extended under the EFET umbrella for REMIT. Between 50% and 80% of transactions to be reported could be covered using cpML as of April 2012.

4.2.5. Reporting channels

The overall responsibility for transaction reporting should remain with reporting parties at all times. The stakeholders expressed concern about incurring operational and legal risk should the delegated reporting party fail to report or report incorrectly.

Reporting parties trading in different markets and with multi-national entities want to centrally retain the reporting in-house, citing lower costs due to fixed implementation costs that would not scale with the volume of data and lower risk exposure. Reporting parties trading in only one or two markets are more likely to delegate reporting in order to limit obligations and reduce duplication and inconsistencies.

As previously stated, stakeholders are very apprehensive about the additional burdens of REMIT. The primary concern is the number of interfaces and reporting mechanisms, rather than double reporting for individual trades. Each interface requires time and resources for development, integration, testing, and implementation. Each reporting mechanism adds a layer of complexity and legal risk.

All reporting parties and service providers should be required to pass a defined certification scheme. The intent of such certification is to verify that the parties are qualified and capable of reporting. In contrast, the validation of all information submitted to verify compliance to the reporting definitions is an additional and ongoing process. The suggestion of certification for reporting parties and service providers is in line with our recommendation that reporting parties themselves can become Registered Reporting Mechanisms (RRM).

It was also recommended that NRAs should access any data they require from ACER to further reduce reporting burdens.

4.2.6. Reporting of regulated information (fundamental data)

Traders do not view the reporting of fundamental data as their prime responsibility due to the fact that relevant events originate from generators and TSOs. The traders envision themselves in a "consumer of information" role but do not anticipate being required to report fundamental data to ACER themselves.

Regardless of which party is required to report fundamental data, a distinction should be made between data reported for market monitoring purposes and data reported to inhibit insider trading. The main difference would be the reporting deadlines: market monitoring data should be available on a weekly or monthly basis, whereas data regarding the avoidance of insider trading should be available in real time.

4.2.7. Uniform rules on the reporting of regulated information

Many of generators and TSOs must already report on a national or regional basis, so duplicate reporting to ACER is not seen as necessary. However, should reporting be required, the generators, transparency platforms, and TSOs should be the first line of data for REMIT.

Consideration must be taken as to which reported data may be published and which must remain confidential, at least until it is no longer business relevant.

4.2.8. Timing and form for the reporting of regulated information

As discussed above, traders view fundamental data in two categories: that required for market monitoring purposes and that required to avoid insider trading. The data for market monitoring

should be reported weekly or monthly, while the inside data should be reported as close to real time as possible.

There is currently no single common data format that REMIT regulations could adopt, but EEX and NordPool were overwhelmingly suggested as bases for the formulation of a standard format and to avoid double reporting. More precise definition of the fundamental data to be reported is necessary in order to create a standard format. Some traders were sceptical as to whether standardisation of fundamental data is possible.

4.2.9. Further Suggestions

The following table is a summary of comments collected outside of the scope of specific questionnaire questions.

Table 7 Traders and brokers – further suggestions

Topic	Content
General	• Reporting standards (content, format, frequency) should not be duplicated at a national level – regulators should access transaction data directly from the trade repository and not impose additional requirements on firms • Technical standards should maximally re-use existing technology and standards where these have been demonstrated to work in an efficient and robust way
Practical Steps	• Establish a stakeholder working group for REMIT implementation issues – particularly on reporting obligations • Break down work more effectively into IT, operative, and legal/regulatory/compliance issues with separate communication and guidance
Regulatory suggestions	• Given the purpose of REMIT to prevent market abuse, it is not appropriate to subject intra-group transactions and internal orders to reporting requirements. • Intra-group transactions are not wholesale energy products executed in a 'market place' (consistent with EMIR) and therefore should not be reportable under REMIT • Intra-group transactions are frequently dealt with quite differently in internal systems, reporting them would impose considerable additional implementation cost

Other data uses	• Firms should have access to data reported to ACER in order to facilitate in-house analysis
	  ◦ on an anonymous basis for transaction data
	  ◦ as long as no commercially confidential information is published
	• This may require some high-level aggregation of data where appropriate

4.3. Third party data providers

4.3.1. Summary of responses from third party data providers

Table 8 Summary of responses – Third party data providers

Topic	Content

Records of transactions	• All or nearly all of the transaction data required by REMIT is currently captured by the third party data providers' systems.
	• Surveillance list addition suggestions:
	  • Exercise of any option or swing volumes. Frequency – could occur many times over the life of the contract
	  • Recalculation of contract prices due to indexation formulae, especially complex cross-commodity transactions (e.g. gas linked to the price of oil). Frequency – monthly
	  • Contract novation to 3rd parties. Infrequent – once/twice in the life of the contract

Lists of contracts and derivatives and appropriate de minimis thresholds	• Opinion split as to whether and how non-standard transactions should be reported. One indicates that the possibility for market manipulation is low, another contends that contracts with cross-commodity components have complex knock-on systemic risks as financial institutions often take the opposite side of the indexation component.

Uniform rules on the reporting of transactions and orders to trade	• Suggest distinguishing between exchange and OTC transactions because they:
	  • could lead to exchange and OTC price differences
	  • have a different demographic
	  • could influence price formation
	  • determine commercial hedging versus trading

Timing and form for the reporting of transactions and orders to trade	• EFET and CpML are appropriate open formats for trade data and cover a significant number of transactions. • Opinion on transactional data reporting frequency is split between real time and D+1.

Avoidance of double reporting and Reporting channels	• Some third party data providers would agree to act as a central reporting body. Others do not expect to be notifying agents, but do expect to be the primary source of transaction data. In this case, two data management choices were presented:
	  • Pull - customers extract data to format and submit on their own
	  • Push - direct interface from the third-party system to the authorised system, where the third-party system would produce a report in an agreed format, transmit it, and capture response

	messages, thus acting as a conduit only and incurring no legal responsibility as an agent.
Reporting of fundamental data	• Fundamental data collection is difficult due to the varied nature of the data. A standard format is recommended for consistency and completeness, preferrably based on the formats used by exchanges and market operators for their public bulleting boards. • Ad-hoc data could be formatted according to what is used by ENTSO TSOs on their message boards.
Uniform rules on the reporting of fundamental data	• Fundamental data reporting agents: the data providers do not object to pushing the fundamental data of which they are aware, but do not see themselves as the primary source of this data.
Timing and form for the reporting of regulated information	• Opinion on fundamental data reporting frequency is generally as soon as possible, meaning real time or long enough before gate closure to allow affected participants to act.
Further comments	• Consider aligning the initiatives of REMIT and EMIR to consolidate reporting in this area even further. • Buyers of Long-Term Gas Contracts (LTC) have to be considered as having a substantial position in oil. • There are significant volumes and values tied up in 'non-standard' contracts such that they can't be marginalised, and electronic confirmation of them is probably more straightforward than currently believed. Propose a special workshop dedicated to the reporting and confirmation treatment of non-standard contracts under REMIT (and EMIR). • Vast majority of energy companies do not use electronic confirmation matching for OTC transactions - not seen as cost-effective for low transaction volumes. Result: 2-3 day lag for the manual trade confirmation process. Request clarification of what has to be notified and when. • The definition of 'transaction' under REMIT is broader than the one under EMIR, thus EMIR transaction data could be seen as a subset of the REMIT data set. ACER should work very closely with ESMA to ensure that EMIR Trade Repositories are flexible enough to capture the required transaction data items unique to REMIT, otherwise there is a real risk of gaps, non-compliance, and double reporting. • Request clarification of the process (including responsibilities) of how combined EMIR-REMIT transaction data submitted to an EMIR Trade Repository is made available to ACER for REMIT purposes. • Question of REMIT responsibility in the case of annual consumption capacity under the control of a single economic entity over 600GWh. Applying the spirit of REMIT, a substantial demand side response capacity contract should be a notifiable transaction because DSR contains an element of volume 'swing' or 'optionality'.

4.4. Exchanges

This section summarises the views outlined by exchanges in the questionnaire response prepared by EUROPEX.

4.4.1. Records of transactions

EUROPEX suggests primary consideration of the current developments taking place under the Dodd-Frank Act and EMIR in relation to the definition of transaction reporting. EUROPEX asks DG Energy, ACER, DG Market, and ESMA to cooperate closely and to jointly introduce the respective reporting obligations.

Therefore EUROPEX's recommendation as to the content of transaction reporting is closely aligned to the EMIR Discussion Paper Draft. EUROPEX suggests a thorough consultation on the topic of REMIT, as has been done by ESMA in relation to EMIR. Moreover, EUROPEX highlights that non-alignment with other reporting requirements is likely to cause an extra burden on market participants, and could eventually fragment trading.

Transaction reports should include a precise identification of the wholesale energy products bought and sold, the price and quantity agreed, the dates and times of execution, the parties to the transaction and the beneficiaries of the transaction, as well as any other relevant information (REMIT Art. 8(1)). "Other relevant information" should enhance data about the background of a trade and allow identification of the level of abusive actions. For example, being able to identify whether a trade is cancelled, part of a combination trade, a correction or reversal of a previous trade, or a transfer of a previously reported trade would enhance market surveillance. EUROPEX suggests that other relevant information should include the name of the initiator of an order, the name of the account, the client's name in the case of third party trading, the time during which the order was in the order book, or nomination data by a TSO.

According to EUROPEX, principally the whole transaction lifecycle is relevant for market surveillance but should be considered on a case by case basis. The deal lifecycle includes orders to trade as well as unmatched, changed, and deleted orders. Both trading OTC and via an exchange should be subject to the same harmonized rules in order to guarantee a level playing field and to avoid regulatory arbitrage.

An efficient reporting infrastructure needs to distinguish between data which has to be regularly reported and data which has to be provided in the case of an in-depth investigation only.

4.4.2. List of contracts and derivatives and appropriate de minimis thresholds

EUROPEX considers all markets relevant for reporting obligations as from a market manipulation perspective there could be price relevant interdependencies. Specific products offered by the various exchanges need to be taken into account. ACER should have all relevant information that mirrors the full spectrum of contracts on the balancing and futures markets. These contracts include the following:

- Spot contracts: financial instruments traded OTC, on a regulated market, or MTF (data to be received via the competent financial authority);

- Intraday contract: standardised contracts traded OTC or via intraday markets;

- Futures contracts: financial instruments traded OTC on a regulated market or MTF (data to be received via the competent financial authority);

- Balancing contracts: standardised contracts traded in balancing markets run by an energy exchange or TSO platform.

Introducing de minimis thresholds for reporting for small players who are not final customers would raise issues such as how to cover small renewable producers. In general, EUROPEX suggests that de minimis thresholds are unsuitable for both exchange-traded transactions and OTC transactions because certain abusive behaviour is likely to remain undetected by ACER's monitoring system. If introduced, a de minimis threshold should be based on volume, not on the number of trades. EUROPEX states that more and more trading takes place by smaller, decentralised producers who are small on an individual basis, but on an aggregate basis have a considerable impact on the market and should therefore be taken into account. These small renewable producers are very active on balancing markets as well. However, some energy exchanges would welcome appropriate minimum thresholds as the added value of such data is conceived as marginal. When introducing such thresholds for transaction reporting, the same approach as suggested for fundamental data (100 MW thresholds) should be applied. In the case of suspicious behaviour, more detailed information including trade data for trades under the threshold can be provided if the respective authority specifically asks for this data.

Defining thresholds for the energy market is considered more complex than for financial markets since national markets with specific characteristics prevail.

4.4.3. Uniform rules on the reporting of transactions and orders to trade

EUROPEX recommends that data fields for the registration of market participants should receive a unique identification code that can be used generally in the market. As the registration of market participants is seen to be in close connection to reporting obligations, the coding scheme for registration should enhance the usability for wholesale energy market participants, such as producers, trading companies, financial institutions, agency traders, and large end users, while avoiding extra costs. EUROPEX recommends using registration data not only for assessing REMIT compliance but also for other sets of regulation that will enter into force in the coming years.

From EMIR, the following points may be relevant to consider:

- According to Recital (22) of EMIR, it is important that market participants report to trade repositories all details regarding derivative contracts into which they have entered.

- According to Recital (24) of EMIR, counterparties and CCPs that conclude, modify, or terminate a derivative contract should ensure that the details of that contract are reported to a trade repository. When preparing the draft regulatory technical standards regarding reporting, ESMA should take into account the progress made in the development of a unique contract identifier and the list of required reporting data in Annex I, Table I of Regulation

(EC) No 1287/2006 implementing MiFID and consult with other relevant authorities such as ACER. This MiFID implementing regulation covers both firm and counterparty identification by using unique code identifiers. The other fields suggested by EUROPEX as to parties of the contract are not separately mentioned.

- ESMA shall develop draft regulatory technical standards specifying the reporting obligations and submit those to the Commission by 30th of September 2012. Minimum contents of the report to the trade repository or ESMA are the parties to the contract and, where different, the beneficiary of the rights and obligations arising from it, and the main characteristics of the contracts, including the type, underlying, maturity, notional value, price, and settlement date (EMIR proposal Art.6(4)).

EUROPEX references ESMA's preliminary data fields from annex II of the EMIR discussion paper. The ESMA field list should be used to derive a REMIT reporting standard. EUROPEX further points out that information obtained for both OTC and exchanges should be harmonized (with a distinction between voice-brokered deals and those conducted via a trading platform). Further, it is stated that a distinction between regulated and non-regulated market appears to be necessary.

EUROPEX emphasises the taking into account of the specificities of the reporting of spot products. These differences are due to auctioning mechanisms that differ from continuous trading. Auction transactions in the spot market are not matched, so buyers are not matched to sellers. In auction trading, the results are published with executed buy and sell volumes by each market participant.

EUROPEX underlines that the specific products offered by energy exchanges might differ because of national market structures and state legislation.

4.4.4. Timing and form for the reporting of transactions and orders to trade

Energy exchanges believe daily transaction reporting (at the end of the trading day) on a daily basis is best. Moreover, the frequency of reporting should take the different "business hours" in the European gas markets into account so long as these days are not yet harmonised.

As mentioned before, EUROPEX recommends coordinating data format and coding with ESMA. Some energy exchanges are active in spot markets, others in both spot and derivative markets, and are thus operating under different regulatory regimes. Trading platforms use different specifications of e.g. ticks on day-ahead or intraday market, or price/volume ranges. This could negatively affect the comparability of trades.

4.4.5. Reporting channels

The use of data aggregators like organized markets can enhance the quality and completeness of reporting. In their response to the questionnaire, EUROPEX members indicated that they consider themselves as falling under Article 8 (4) point (d) of REMIT, i.e. a party who may report data on behalf of market participants. According to Article 8 (1) of REMIT, the overall responsibility lies with market participants, but once the required information is received from a person or authority listed in points (b) to (f) of paragraph 4, the reporting obligation shall be considered fulfilled.

EUROPEX stresses that neither an obligation to report via pre-defined channels should be introduced by means of implementing acts nor should the ultimate responsibility for reporting shift from market

participants. Instead, transaction reporting should be based on a voluntary arrangement between the market participant and a third party. According to EUROPEX, energy exchanges should have the opportunity to decide voluntarily on the scheduling of fees or on how to take legal risks into account. Exchanges should also be free in deciding whether or not to act as a third party reporting channel on behalf of market participants. Some energy exchanges are operating under national regulation, and recovering costs via regulated tariffs. Since they constitute regulated monopolies, EUROPEX highlighted the importance of such exchanges being allowed to recover those additional costs that come with the reporting of data on behalf of third parties.

EUROPEX thinks that market participants' flexibility in the choice of a reporting channel will help develop the most efficient and market friendly solutions. Further, one key element should be a defined validation scheme which the applying company has to pass in order to be eligible for reporting. Such a scheme should contain, among other characteristics, security standards and certain IT infrastructure requirements.

A validation scheme should be defined, which the service provider should pass (security standard, IT requirements, etc.). Exchanges may offer reporting services for trade data to their clients. Finally, costs for reporting on behalf of third parties should be recoverable; setting a fee must remain the responsibility of the service provider.

4.4.6. Reporting of fundamental data

According to Article 8 (5) of REMIT, the reporting obligations on market participants shall be minimised by collecting the required information or parts thereof from existing sources where possible. However, developing unified definitions of fundamental data on a national, regional, or even more so on a European basis, is challenging and might cause high adaption costs. EUROPEX therefore suggests largely accepting and using already existing regional definitions. The fact that the data may not be 100% comparable between different zones can be technically adjusted, and should be taken into consideration when being evaluated by market surveillance authorities. Additionally, the creation of a wholesale energy market surveillance ad hoc expert group seems to be essential during the implementation phase and thereafter in order to develop a common understanding of the energy markets.

According to EUROPEX, the existing ERGEG Guidelines may serve as a good reference during the technical implementation phase of REMIT as they are indeed adjusted to different regional peculiarities. Energy exchanges and other data possessing groups may contribute to this effort, according to EUROPEX. Fundamental data has been less discussed for the gas market than for the electricity market. EUROPEX highlights that a common process for gas is key for the overall success of REMIT and should be prioritised by ACER and the NRAs.

The situation, as highlighted, differs from country to country (e.g. transparency platform run by EEX in Germany/Austria and run by Nord Pool Spot for the Nordic region); accordingly the data might not be 100 % comparable.

4.4.7. Uniform rules on the reporting of regulated information

EUROPEX recommends doing market abuse monitoring on a market-by-market basis since too many differences exist between individual markets in terms of e.g. market structure, production sources, and number of participants.

Setting the reporting threshold for installed production capacity at 100 MW can still create significant black spots in ACER's market monitoring. As described above, a steadily increasing number of independent local producers have become active in the market in order to arbitrage price differences. According to EUROPEX, this applies in particular to decentralized combined heat and power plants.

Fundamental data for the gas market has to be clearly defined.

4.4.8. Timing and form for the reporting of regulated information

EUROPEX states that not all European exchanges are involved in collecting fundamental data. The implementing acts should establish uniform rules to ensure appropriate monitoring. Yearly reporting of fundamental data is insufficient for efficient market surveillance. Information should be available at least in the same timeframe as applied for trade data

The future format should be flexible and easily accessible. European exchanges are not aware of a specific existing data format. While data reported for monitoring purposes can be broken down into single power plants, LNG terminals, and storage facilities, published data is available on an aggregated level.

For the reporting of economically sensitive data, secure data connections and adequate encryption standards must be in place.

4.5. Transport Data

4.5.1. Electricity TSO data

4.5.1.1. Summary feedback on future reporting requirements

Table 9 Feedback on future reporting requirements – Electricity TSOs

Topic	Content
Records of transactions	• No creation of unnecessary burdens • Use existing channels as far as possible • ENTSO-E has developed the MADES (Market Data Exchanges Standard) format, which is widely used among TSOs to communicate transactional data
Lists of contracts and derivatives and appropriate de minimis thresholds	• No views on the list of contracts and derivatives are expressed by stakeholders • Existing formats should be used • Work on data exchange currently under way, especially via ENTSO-E WG EDI • Defined thresholds should be introduced according to REMIT. In general, this may be 100MW but differs for various regions. Lower thresholds can be considered for

	certain cases
Uniform rules on the reporting of transactions and orders to trade	• Use existing sources in order to avoid double reporting requirements • Consider ongoing workstreams • Standardised reporting format (MADES) has been established by ENTSO-E
Timing and form for the reporting of transactions and orders to trade	• Since the reporting is for the purpose of market monitoring, periodic reporting is more suitable than real-time reporting and daily reporting is seen as the best option. A higher frequency, if at all possible, would require a sophisticated and thus too expensive IT infrastructure; a lower frequency might lead to missing details. • Distortion of competition through online publication obligations should be avoided.
Avoidance of double reporting and reporting channels	• Data is currently supplied to the NRA, in most cases, for market monitoring purposes although reports may be published on the TSOs websites • Suspected market abuse is efficiently reported from the market surveillance functions at Nord Pool Spot and Nasdaq OMX in Sweden to the respective NRAs • Other formal ad hoc processes may be in place
Reporting of fundamental data	• ENTSO-E has issued recommendations for the exchange of data and is complementing its work for the publication of additional information for fundamental data • Some data related to electricity market fundamental data are already published on the entsoe.net platform using ENTSO-E XML documents. These documents are based on the core components defined by ENTSO-E WG EDI (see https://www.entsoe.eu/resources/edi-library/) • ENTSO-E is monitoring the data being received from each member TSO to entsoe.net. The target is over 80%, but the data request is not yet binding and currently voluntary
Uniform rules on the reporting of fundamental data	• See above – suggest use of the data available on the transparency platform

Timing and form for the reporting of regulated information	• Daily reporting is seen as the best option for
	  • planned fundamental data,
	  • allocated capacities,
	  • nominated transmissions,
	  • final allocated transmissions.
	• Unplanned/sporadic changes of fundamental data should be published ad hoc

4.5.1.2. Records of transactions

In general, the creation of unnecessary burdens should be avoided just as much as double reporting should be avoided. If possible, existing channels should be used for providing a record of the transactions undertaken. For market data, ENTSO-E has developed the MADES standard, which provides for the exchange of information on the basis of an XML scheme. This standard is already widely used.

Considering the purpose of avoiding unnecessary burdens, the required records of transactions to be submitted to the Agency should not include data items which are not reflected by MADES and should furthermore be submitted on the basis of a compatible data format (e.g. based on the ENTSO-E XML schema).

4.5.1.3. List of contracts and derivatives

Stakeholders have not expressed their view on which contracts and derivatives should be developed in accordance to Article 8.2 (a) REMIT.

When determining on the reporting requirements, existing formats should be used. Work on data exchange is currently under way, especially via ENTSO-E WG EDI. ENTSO-E is also tasked with developing a network code on data exchange and settlement. As concerns developments underway to standardise reporting, please refer to ENTSO-E WG EDI Implementation Guides as well as MADES for communication in collaboration with IEC 62325.

Defined thresholds should be introduced according to REMIT. In general, this may be 100MW but could differ for various regions. Taking into account, for example, emerging distributed generation, a lower threshold can be considered. There may not be a need for a threshold for reporting transactions (e.g. for bid offer acceptances or balancing services).

4.5.1.4. Uniform rules on the reporting of transactions and orders to trade

The stakeholder view is to use existing sources in order to avoid double reporting requirements and to base any reporting requirements on existing standardised reporting formats, or those currently under development by ENTSO-E. For instance, MADES has been established by ENTSO-E for market data.

4.5.1.5. Timing and form for the reporting of transactions and orders to trade

As regards the timing and form for the reporting of transaction of orders to trade, there is a distinct stakeholder view in place. As communicated via ENTSO-E, the electricity TSOs stress that the purpose of the reporting requirements is to ensure market monitoring. Therefore, periodic reporting is seen as more suitable than real-time reporting, and daily reporting is seen as the best option.

A higher frequency, if at all possible (some hourly data are interdependent and monitoring tasks would not be possible in real time to compensate for the associated costs and efforts), would require a sophisticated and thus expensive IT infrastructure. A lower frequency might lead to missing information details and thus undermine the purpose of market monitoring.

Distortion of competition through online publication obligations should be avoided.

4.5.1.6. Reporting channels

Data is currently usually supplied to the NRA for market monitoring purposes, although reports may be published on the TSOs websites. Suspected market abuse is efficiently reported from the market surveillance functions at Nord Pool Spot and Nasdaq OMX in Sweden to the respective NRAs. According to ENTSO-E, other formal ad-hoc processes may be in place.

4.5.1.7. Reporting of fundamental data

ENTSO-E has issued recommendations for the exchange of data and is complementing its work for the publication of additional information for the fundamental data. Some data related to the electricity market fundamental data are already published on the entsoe.net platform using ENTSO-E XML documents. These documents are based on the core components defined by ENTSO-E WG EDI (see https://www.entsoe.eu/resources/edi-library/). ENTSO-E is monitoring the data being received from each member TSO by entsoe.net. The target is over 80%, but the data request is not yet binding and currently voluntary.

4.5.1.8. Uniform rules on the reporting of regulated information

See above – suggest the use of data available on the transparency platform.

4.5.1.9. Timing and form for the reporting of regulated information

Daily reporting is seen as the best option for planned fundamental data, allocated capacities, nominated transmissions, and for final allocated transmissions. Unplanned/sporadic changes of fundamental data should be published ad hoc.

4.5.2. Gas TSO data

4.5.2.1. Summary feedback on future reporting requirements

Table 10 Feedback on future reporting requirements – Gas TSOs

Topic	Content
Records of transactions	• In general, requirement to avoid unnecessary burdens and, if possible, use existing channels • Views vary between players
Lists of contracts and derivatives and appropriate de minimis thresholds	• Existing formats should be used • Work on data exchange currently under way, especially via the interoperability working group- standard should follow that • No de minimis thresholds; if introduced, will need to be market specific
Uniform rules on the reporting of transactions and orders to trade	• Key to avoid double reporting- requirement to use existing sources • Consider ongoing workstreams (CMP, interoperability, etc.) • Do not see themselves as an aggregator for trade data
Timing and form for the reporting of transactions and orders to trade	• Range of views in relation to frequency of reporting of capacity allocation and nominations data (from daily to yearly). Various levels of granularity also suggested , changing depending on type of data (e.g. daily/monthly for capacity bookings, hourly/daily for nominations)
Avoidance of double reporting and Reporting channels	• Currently no regular standard reporting channel to NRAs in place for trade data
Reporting of fundamental data	• Use TSO individual reporting and/or ENTSOG transparency platform • Requirements from Chapter 3 Annex I of Regulation 715/2009 should be sufficient • No de minimis thresholds currently used, mostly would prefer not to introduce

Uniform rules on the reporting of fundamental data	• See above – suggest the use of data available on the transparency platform
Timing and form for the reporting of fundamental data	• Similar to capacity data, range of views in relation to the frequency of reporting (ranging from daily to yearly to even triggered)

4.5.2.2. Records of transactions

In general, a number of TSOs have indicated their preference not to create unnecessary burdens, to avoid double reporting, and if possible, to use existing channels for providing a record of the transactions undertaken.

In particular, as regards capacity bookings data, nominations, and balancing transactions data, gas TSOs have provided a number of views regarding the data items and data formats appropriate for TSOs to use to report relevant data. Several players have also suggested that existing formats should be used; these views are outlined in further detail below.

A number of TSOs responding to the questionnaire have also highlighted that work on data exchange is currently underway, in particular in the context of ENTSOG's interoperability working groups, and have indicated that consistency with these other workstreams is required.

As regards security standards, and specifically in relation to how data should be encrypted and electronically signed, various solutions have been indicated by respondents. In particular, a number of respondents suggested the AS2 protocol, included as part of the EASEE GAS approved common business practices. Similar to other points, some participants suggested waiting for recommendations that are coming from the ENTSOG interoperability working group in this area.

4.5.2.3. List of contracts and derivatives and appropriate de minimis thresholds

ENTSOG did not provide a consolidated view on the list of contracts that should be reported. Some TSOs questioned the requirement of including nominations as part of the reporting requirements, in terms of the interpretation of nominations as "use of capacity," or whether they should be considered as transactions or contracts.

Gas TSOs did not express a homogeneous view on the potential introduction of de minimis thresholds in the context of capacity bookings . The majority of TSOs did not consider the introduction of de minimis thresholds as appropriate (e.g. indicating that with the introduction of thresholds, it would no longer be possible to reconcile the aggregate capacity bookings with individual capacity portfolios and use of capacity per shipper). However, other TSOs suggested that minimum thresholds may be useful, especially if they are set on a member state or market basis.

4.5.2.4. Uniform rules on the reporting of transactions and orders to trade

In the discussions held with gas TSOs, it has emerged that TSOs do not typically see themselves as aggregators of trade/transportation contract data (capacity bookings and nominations) in the context of REMIT. Also in their responses, TSOs highlighted the requirement to avoid double reporting and to use existing sources as much as possible.

4.5.2.5. Timing and form for the reporting of transactions and orders to trade

TSOs provided a wide range of opinions on the proposed frequency of reporting and granularity of trade/transportation data (i.e. primary and secondary capacity bookings, nominations, balancing transactions), ranging from daily reporting to yearly reporting. A number of respondents also suggested potential granularity of data, providing different types of answers depending on the type of data reported (e.g. daily/monthly for capacity bookings, hourly/daily for nominations).

Some of the TSOs responding highlighted that reporting frequency and granularity would depend on ACER's needs and goals, and suggested taking the actual requirement into consideration in order to avoid an unnecessary reporting burden on market participants.

When asked whether they suggested the use of an existing format for reporting capacity booking and nominations, gas TSOs provided a range of answers, outlining formats such as csv, xls and xml. A number of respondents (specifically a number of TSOs from Germany) suggested the use of the existing Edig@s format according to EASEE-Gas CBP 2003-003/02 Edig@s protocol. Other respondents suggested waiting for recommendations to come from the interoperability working group, indicating that, whilst an early view has been established that XML is the preferred standard for data exchange, the specific formats for XML messages are yet to be defined and agreed.

4.5.2.6. Reporting channels

Currently, there is no standard reporting channel for trade/transportation contract data to national regulatory authorities in place for a large number of TSOs. Some TSOs provide information in relation to capacity allocation, but no consistent approach is currently undertaken across Europe.

4.5.2.7. Reporting of fundamental data

Gas TSOs have provided a number of views in relation to the data items and data formats appropriate for TSOs to report fundamental data. Several players have indicated that existing resources should be used, and xml was the preferred format in a number of cases.

Some players also highlighted that work on a data exchange is currently underway, in particular in the context of ENTSOG's interoperability working groups, and have indicated that consistency with these other workstreams is required.

The majority respondents indicated that there are currently no de minimis thresholds in the fundamental data they publish, and expressed a preference for not introducing thresholds in this area. Some respondents indicated that if thresholds are introduced, these should be set on a market-by-market basis.

Only a limited number of TSOs responding to the questionnaire indicated the availability of fundamental data in relation to production, storage, and LNG. Typically this data included capacity and nomination data (at user or point level).

4.5.2.8. Uniform rules on the reporting of fundamental data

As noted previously, TSO highlighted the importance of keeping reporting obligations to a minimum and to avoid double reporting by using existing reporting channels in relation to fundamental data (either the fundamental data published on national TSO websites in the context of the requirements outlined in Chapter 3 Annex I of Regulation 715/2009, or on the ENTSOG transparency platform).

4.5.2.9. Timing and form for the reporting of regulated information

Similar to the responses received on trade / transportation contract data, TSOs provided a range of views in relation to the proposed frequency of reporting of fundamental data. Some respondents suggested relatively infrequent reporting for capacity data (e.g. monthly or yearly), whilst one respondent suggested a daily reporting for allocations and nominations by point / direction.

A number of the respondent referred to the requirements of Chapter 3 Annex I of Regulation 715/2009, and some respondents suggested that the corrections / amendments to fundamental data should be "event-triggered", i.e. that changes should be made when new data is available.

4.5.2.10. Ongoing harmonisation work

A number of TSOs in their responses have made reference to existing workstreams undertaken to harmonise processes at the EU level. Overall, the gas harmonisation framework has been defined in the context of third energy package and the 2014 target date for an Internal Gas Market target set by the European Council.

The Council for European Energy Regulators (CEER) has consulted upon and developed a vision for a European Gas Target Model, which includes key recommendations (such as the recommendation to adopt and implement the Capacity Allocation Mechanism (CAM) Network Code and the Commission's Congestion Management Proposals (CMP) guideline by 1st January 2014 at the latest.

ACER has also developed Framework Guidelines on Capacity Allocation Mechanisms for the European Gas Transmission Network, Framework Guidelines on Gas Balancing in Transmission Systems, and has recently issued a consultation on Draft Framework Guidelines on Interoperability and Data Exchange Rules for European Gas Transmission Networks. On the basis of these guidelines, and in the context of the tasks outlined for ENTSOG in Regulation 715/2009, work has been undertaken by ENTSOG on the development of:

- **Capacity Allocation Mechanism (CAM) Network Code**. A final draft of this document was officially presented by ENTSOG for ACER review on 6th of March 2012, and will be subject to Comitology procedure. The document includes provisions relating to:
    - Allocation of firm capacity, including proposed allocation methodology at interconnection points (auctions), and definition of standard capacity products, applied booking units, and types of auctions introduced;
    - Proposed auction algorithms, including items to be specified for a bid in an Ascending Clock auction (Registered Network User ID, relevant Interconnection Point and

direction of the flow, Standard Capacity Product, per price-step amount of capacity applied for) and items to be specified for a bid in a Uniform-Price auction (Registered Network User ID, relevant Interconnection Point and direction of the flow, Standard Capacity Product, amount of capacity applied for, minimum amount of capacity accepted and bid prices);
    - Bundled capacity services to be offered at cross-border points and amendment of existing capacity contracts;
    - Interruptible capacity;
    - Tariffs / auction prices;
    - Establishment of booking platforms.

- **Draft Network Code on Gas Balancing in Transmission Systems**, upon which ENTSOG is currently consulting. This document includes a number of provisions in relation to balancing (including principles of balancing systems, cross-border cooperation, imbalance charges, within day obligations, neutrality arrangements, provision of information to network users, linepack flexibility, implementation arrangements). In addition, chapter V of this document includes provisions in relation to nominations, including the following minimum requirements for information provided in relation to nominations at Interconnection Points:
    - Interconnection Point identification;
    - Direction of contractual gas flow;
    - Network User identification or, if applicable, its Portfolio identification;
    - Network User's Counterparty(-ies) identification or, if applicable, Network User's Counterparty(-ies) Portfolio Identification;
    - Start and end time for which the nomination is submitted;
    - The gas day D;
    - The gas quantity to be transported .

- **Interoperability Network Code**, on which work is at an earlier stage; a draft of this document has not been issued yet. This document is likely to contain, among other things, principles and rules in relation to the exchange of data between TSOs and network users.

It is expected that work on the above mentioned Network Codes will be completed by 2013[36].

4.6. NRA view

4.6.1. Records of transactions

Necessary contents in general:

Transactions should include all information NRAs need to monitor potential abusive market behaviour according to REMIT, e.g. information specific to optional products, references to individual traders, usernames of various venue systems, reference to the original trade messages (in the case of an update), venue identification, CCP identification, type of transaction, ultimate beneficiary, etc.

The records of transaction should support the NRAs to avoid and detect the financial types of manipulation (e.g. front running, cross venue manipulation, etc.).

Moreover there is a focus on the following abusive practices specific to energy markets

[36] Source: CEER Vision for a European Gas Target Model

- market manipulation and insider dealing in relation with fundamentals (physical assets, transparency, cornering through creation or exacerbation of transmission, or other physical constraints)

- cross-market manipulation, e.g. between spot and reserve markets or balancing markets.

NRAs want to highlight that a clear view on what abusive practices might occur is necessary to develop appropriate data reporting. This could require inquiries with market surveillance departments and monitoring authorities.

Minimum Contents:

For bilateral contracts, the principal applies that the information to be reported shall enable NRAs and ACER to fulfil their monitoring tasks under REMIT. Where possible, the same information as exchange-traded contracts should be reported, as well as other relevant information that allows for the identification of specific and tailored features of those individual contracts. If data relating to price and quantity are not known at the point of execution, the written materials associated with the transaction (or agreement) should be accessible.

The list of fields and the procedure to modify it should be flexible enough to allow extending and/or modifying the minimum information to be reported, according to monitoring needs and the experience progressively gathered by ACER and NRAs.

Possible Threshold for transaction reporting:

Most NRAs believe that no threshold is needed: thresholds would be too complex to define and might induce transaction fragmentation in order to avoid reporting. Some NRAs, however, stress that very small market participants should not be subject to the reporting obligation (e.g. feed-in tariffs contracts). The question then depends on the definition of wholesale energy products.

Issue of lifecycle data (trade amendments / cancellations / novations) and / or portfolio snapshots and nominations:

Lifecycle data is important in order to have a complete picture of trading, to know the exact positions of market participants, and to identify possible market misconduct. It is not sufficient to use nominations, both data are required.

Issue of information regarding beneficiaries:

NRAs do not have a common opinion:

1. For some NRAs, it may be sufficient for now to provide it on request, but provisions should be made to allow that information to be reported now when it is available (e.g. in those cases where the trading venue already has that information, or if the market participant reports a trade itself) and in the future if it becomes necessary for monitoring purposes (e.g. significant increase in third party fund management with wholesale energy products as underlying assets)

2. For other NRAs, beneficiaries of trade should be required in order to avoid potential market manipulation or insider trading. Platforms would need to introduce sufficient processes and technical changes to make this information known. Provision of this information just on request would unnecessarily make the analysis difficult. In a market of many smaller suppliers, the beneficiary may very often be different from the initial trader.

4.6.2. List of contracts and derivatives

In their response, NRAs referred to Annex II of the draft ACER discussion paper on the records of transactions.

4.6.3. Uniform rules on the reporting of transactions and orders to trade

Issue of order reporting:

The reporting of trade orders (bid/ask offers) as any process of price discovery is important to monitoring the market and detecting market misconduct.

Coordination with ESMA when setting up rules:

NRAs highlight the necessary coordination between ACER and ESMA to ensure that reporting mechanisms under EMIR suit ACERs needs in monitoring the energy markets regarding:

- the information included in the reporting
- the timing of reporting
- the cost-effectiveness for market participants

In terms of timing, there should be provisions for a possible period of time where reporting obligations are in force under REMIT only.

NRAs want to stress the need for coordination between ACER and ESMA, and that it is highly important that consultants take the design in financial markets into consideration when designing the transaction reporting scheme.

4.6.4. Timing and form for the reporting of transactions and orders to trade

NRAs have indicated that daily transaction reporting is sufficient for monitoring purposes. Any derogation to this rule should be justified and clearly defined. Real time reporting should, however, not be excluded if this proves to be the most cost efficient way of reporting.

Regarding contracts being concluded before the applicability of REMIT, the following can be noted:

All contracts with delivery dates after 28th December 2011 should be reported as soon as reporting is in place, even though they were concluded before REMIT entered into force. The reporting obligations should be the same as for similar contracts concluded after the 28th December 2011, whether standard contracts (venues should be requested to provide a backfill of those transactions) or bilateral non-standardised contracts.

Integration with registration data and shareholder structure:

NRAs believe that the shareholder structure should be included in the registration data. Transactions data will be matched with the information from the register for monitoring purposes.

NRAs more generally believe that a strong coordination between the registration format and the shape of transaction reporting is needed as the information gathered in the registration process might strongly influence what information is to be reported on transactions. There is currently a consultation on the registration format: the proposition is to collect data on “parent undertakings” and/or “related undertakings” and can be identified following the council directive 83/349/EEC 13

June 1983. However, this is provisional. The final decision will be taken by ACER by 29th June 2012 at the latest.

Regarding the data format, there is no common view on that question among NRAs. Some prefer CSV format whilst others mentioned structured XML. The format could actually depend on the type of data, e.g. structured XML for trees, graphs, and notably messages, but CSV format for table data.

NRAs generally agree that this should be discussed with all stakeholders and in particular with operators, and expect consultants to give a recommendation given the huge amount of data to be transferred.

In terms of encryption and electronic signatures, the data transmission must be secured with standard best practices in order to protect sensitive data and avoid possible legal consequences in case of a breach in communication or to identity spoofing. A first step would be to identify reporting parties; consultancy input is then desirable on IT security.

Regarding standardisation, NRAs have neither discussed nor agreed on reporting data formats, although they acknowledge such a need. They highlight that there are already some advanced examples of reporting data format standardisation, especially in the countries where oversight of wholesale energy markets by NRAs started before REMIT entered into force. Therefore, it would be advisable to adopt harmonised standards that take existing examples into account as much as possible.

Regarding the question of nomination data, the following can be noted: As a minimum, TSOs (or platforms operating the nominations) should report nomination data per market participant so that the final nomination balance can be known. In addition, collecting nomination data from market participants, exchanges, or hubs could be useful to cross-check the data and ensure the data that is reported is consistent and of high quality.

4.6.5. Reporting channels

No specific input has been provided by the NRAs' response on reporting channels.

4.6.6. Reporting of regulated information (fundamental data)

The NRAs make clear that for questions relating the fundamental data reporting, the ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency could serve as a basis.

Note: The ERGEG Advice (European Regulators Group for Electricity and Gas – Predecessor of CEER) was issued on 7th December 2010 (Ref: E10-ENM-27-03, published on the internet)

The guidelines laid down in the document aim especially at establishing a minimum common level of fundamental data transparency as a precondition of the efficient functioning of wholesale electricity markets and define a minimum common level of publication of the defined data on a fair and non-discriminatory basis across all EU member states. Thus it describes, amongst others, the content of the transparency requirements and timelines for publication regarding load, transmission and interconnectors, and generation and balancing.

4.6.7. Uniform rules on the reporting of regulated information

Regarding the critical question of third country market participants' compliance, the NRAs stress the following:

It is a very difficult issue with no easy answer. It is of particular relevance for the gas market where a great part of the upstream market is outside the EU, but also with regard to electricity at the EU borders.

All market participants should comply with the obligation to report fundamental data, irrespective of where their headquarters are. They should, in particular, report inside information even if the information is about upstream facilities outside the EU.

However, a first step would be to impose this obligation on those parties that could be easily monitored by ACER and on market participants that know those data even if they are not the owners / operators.

In connection with a possible threshold, the NRAs stress that thresholds should depend on the relative dimension, integration, concentration, and type of each market. Regional / national markets differ considerably in size, but within a country thresholds might be different for spot markets and for balancing markets.

Even though some thresholds could be harmonised for the minimum requirements, the definition of thresholds should be left to the national authorities and allow them to reduce general thresholds, taking into consideration the relevant local market features and specificities.

4.6.8. Timing and form for the reporting of regulated information

Frequency of reporting:

NRAs did not have a common answer to this question, although they share the ideas that:

- reporting obligations should not be too burdensome for market participants;
- the frequency of reporting should very much depend on the nature and materiality of fundamental data.

Some NRAs put forward that in order to carry out timely analyses on trade and fundamental data according to an integrated approach, it would be preferable in principle to gather fundamental data on a basis consistent with the frequency of trade data collection (i.e. real time to daily). Other NRAs stress that lower frequency might be more adapted to the nature of event (e.g. planned unavailabilities, network capacities, or LNG cargo arrivals planning could be reported monthly) or to ensure data reliability.

Data Format:

There is no common view on that question among NRAs. Some prefer CSV format whilst others mentioned structured XML. The format could actually depend on the type of data, e.g. structured XML for trees, graphs, and notably messages, but CSV format for table data.

But NRAs generally agree that this should be discussed with all stakeholders, in particular operators, and expect consultants to give a recommendation given the huge amount of data to be transferred.

In terms of encryption and electronic signatures, the data transmission must be secured with standard best practices in order to protect sensitive data and avoid possible legal consequences in case of a

breach in communication or to identity spoofing. A first step would be to identify reporting parties; consultancy input is then desirable on IT security.

NRAs have neither discussed nor agreed on standardised reporting data formats, although they acknowledge such a need. They highlight that there are already some advanced examples of reporting data format standardisation, especially in the countries where oversight of wholesale energy markets by NRAs started before REMIT entered into force. Therefore, the adoption of harmonised standards that take existing examples into account as much as possible is advisable.

Regarding the question of nomination data, the following can be noted: As a minimum, TSOs (or platforms operating the nominations) should report nomination data per market participant so that the final nomination balance can be known. In addition, collecting nomination data from market participants, exchanges, or hubs could be useful to cross-check the data and ensure the data that is reported is consistent and of high quality.

In connection with the data to be collected regarding the capacity and use of transmission systems, the following should be noted:

Information to be reported shall in principle enable NRAs and ACER to fulfil their monitoring tasks under REMIT.

The capacity itself as well as all capacity allocation mechanism results (long and medium term, daily), and eventually nominations and the use of capacity, should be subject to reporting.

More generally, the list of fields and the procedure to modify it should be flexible enough to allow extending and/or modifying the minimum information to be reported, according to monitoring needs and the experience progressively gathered by ACER and NRAs.

5. Advice on reporting requirements

5.1. Advice on reporting requirements

5.1.1. Records of transactions

Terminology concerning transaction types

Traders interact with each other and with TSOs/SSOs/LSOs in energy wholesale markets for gas and power. Their interaction results in commodity, transport, and storage contracts. A generic definition of wholesale energy products is included in Art. 2 (4); hovever for the purposes of our analysis we use the term "transactions" in order to refer to the complete life-cycle of a transaction, and the term "contract" to describe the contracting stage of a transaction life cycle as further described below:. Following this terminology the reporting obligation under REMIT comprises the following:

- Commodity transactions for the supply of electricity or natural gas where delivery is in the Union (including LNG transactions)
- Derivative transactions relating to electricity or natural gas produced, traded, or delivered in the Union (including LNG transactions)
- Transactions relating to the transportation of electricity or natural gas in the Union
- Derivative transactions relating to the transportation of electricity or natural gas in the Union
- Transactions relating to the storage of natural gas in the Union
- Derivative transactions relating to the storage of natural gas in the Union

Storage transactions for natural gas and derivatives are considered a major part of the trading activities in the energy wholesale markets and they need to be included in such a definition accordingly.

Recommendation:

Develop a non-exhaustive list of transaction types and transaction stages as part of the explanatory documents accompanying the further implementation of REMIT to specify the reporting obligation

Include LNG and storage transactions and derivative transactions relating to LNG and storage in the list of wholesale energy products.

Terminology concerning transaction lifecycle stages

Regarding the lifecycle of such transactions, it is not considered sufficient to merely incorporate concluded contracts in the reporting, as certain commercial decisions are taken before and after contract conclusion. Likewise, the speed of implementation of reporting may be different for different

venues and stages of the deal lifecycle. Reported transactions may have an incomplete coverage of the market for some time, but this will be partly addressed by gathering information about the same transaction at different stages of the deal lifecycle.

Three main stages of the deal lifecycle of transactions in wholesale energy products shall be addressed in the reporting ("transaction stages"):

- Orders as well as bids/offers before a deal is entered into ("order stage");
- Concluded transactions ("contract stage");
- Execution of a contractual right for physical delivery which may include the use of optionality/ flexibility at the agreed point in time after contract conclusion ("scheduling/ nomination stage").

In what regularity/ format and from whom such information is collected is covered in the later sections of our recommendation.

Recommendation:

Specify in further explanatory documents the three transaction stages of order, contract and scheduling/ nomination in such a way that the reporting obligation under REMIT principally includes these three stages for each transaction.

5.1.2. List of contracts and derivatives

Geographical scope of reporting obligation

Regarding to the scope of the reporting obligation REMIT refers in the existing legal definition of Art.2 (4) to "contracts (…) where delivery is in the Union" as well as "contracts relating to the transportation (…) in the Union" (and derivatives relating to such transactions). In our understanding, this definition can be made even more specific by designating the area of physical delivery within the power and gas transmission networks within the Union as a constituting factor for the reporting obligation. Besides designating the area of physical delivery within the Union in such a way in the Implementing Act, a list of such power and gas transport networks within the Union together with their relevant network codes can be created, maintained, and published on a regular basis by ACER, making the checking of reporting obligations a clear-cut task for market participants.

Recommendation:

Specify a list of transmission systems for power and gas in the European Union as a basis for the definition of the reporting obligation.

Define the reporting obligation as being applicable for all gas and power transactions (and derivatives relating to such transactions) which may result in delivery, transportation rights, or storage rights in a transmission system under the operation of a power/ gas TSO, SSO, or LSO included in the previous list.

ACER product taxonomy

A taxonomy helps to categorise energy wholesale transactions following a set of criteria such as commodity, transaction type, market, etc. The introduction of a standard financial product taxonomy is discussed within neighbouring regulatory regimes such as the Dodd-Frank Act and EMIR in order to classify transactions in a standardised way.

The question is still open as to whether such a standard categorization (joint with Dodd-Frank and EMIR) makes sense as energy products are characterized by their physical deliveries. If delivery points and markets are additionally used for categorization, a taxonomy can only be used locally within the scope of REMIT or as an extension to a standard category. This has to be clarified in connection with neighbouring regulatory regimes.

Should an existing, external taxonomy be adapted for REMIT, market participants or indeed third parties to which the reporting is delegated will have to perform a mapping from their proprietary product codes to the ACER standard product taxonomy in order to report against this standard product taxonomy.

If the ACER taxonomy does not cohere with other regulatory regimes, it can be implicitly derived from the following dimensions, each with standardized closed lists of values:

- Commodity type (power, gas). In the case of financial transactions like options on indexes, the commodity type of the underlying index is chosen. Capacity transactions in the power TSO network are of the commodity type power, likewise for gas.
- Transaction type (physical, financial),
- Transaction category (Commodity, TransportCapacity, StorageCapacity, LNG Terminal Capacity),
- Country code (ISO country code 3166-1 of the country of physical delivery or underlying for derivatives),
- DeliveryPointArea (EIC codes of market areas and delivery points).

Characteristics like delivery period, delivery point, quantity, and price are not specified as a closed list and will be included in the REMIT Reporting Document Format description in the annex.

Recommendation:

Define a standard product taxonomy which is binding for the industry in order to categorize transactions by their product types. Contrary to proprietary energy product codes on exchanges, this ACER product taxonomy will not be a list of codes such as "FoBM" or "DBF Nov-12", the proprietary codes for monthly base load on EEX and APXENDEX, respectively. Split the product taxonomy into separate dimensions, each dimension having a finite and well defined number of possible values.

5.1.3. Uniform rules on the reporting of transactions and orders to trade

Coding scheme for market participants from ongoing ACER registration procedures

In order to fully use, analyze, and – where appropriate - distribute the data collected under Article 8, it is of primary importance to identify market participants and locations relevant for the aforementioned purposes by applying a standardized, global coding scheme.

This project was run partly in parallel to consultancy services on the technical implementation of a register of market participants performed by a different firm on behalf of ACER. Due to timing constraints, the results of the two projects could not be fully synchronized, resulting in the following assumptions/ recommendations for the coding on our part:

- The ACER code database (European Register System, "CEREMP") should be available to the REMIT database in a consistent and closely connected form. Should the connection to the database maintaining ACER codes be too slow, essential data may have to be extracted from the CEREMP database and duplicated within the ACER database.

- Market participants, NRAs, and third parties to which reporting obligations have been delegated (e.g. exchanges, providers of fundamental data), in other words all organisations with a role in the ACER system, receive an ACER code as well.

- Coding of these entities should include the usage of existing code schemas (e.g., EIC codes, broker codes) such that import mapping of data provided by report sources can be performed correctly. As there are only a few broker codes in use, these should be replaced by EIC codes. This has already started in the industry for some processes.

- Code standards for traders: EIC codes are commonly used in OTC transactions across Europe. Apart from this, each trading venue uses proprietary member identification codes. An emerging standard is the LEI code (Legal Entity Identifier), which is required as part of the Dodd-Frank Act and EMIR standardizations. For parties, it is assumed that EIC codes are at least used as a secondary code.

- Locations (physical delivery points) within the power and gas TSO networks should be encoded using EIC codes.

Recommendation:

Use the EIC code as a basis for the ACER code, used to identify market participants in the REMIT reporting format or at least supply as a secondary code

Delimitation of markets with different tenure

Referring to previous explanatory paragraphs in this reports on the transaction lifecycle, three time periods of markets may be split up to further specify the scope of the reporting obligation:

- The bilateral contracts (forwards/ futures) markets for commodities with or without physical delivery which operate from a year or more ahead of real time (i.e. the actual point in time at which commodity is delivered), typically up to 24 hours ahead of real time;

- Short-term markets which are operated until a point in time when market participants notify the TSO of their intended final physical position; such markets enable sellers and buyers to fine-tune their rolling delivery positions as their own demand and supply forecasts become more accurate as the delivery time is approached;

- Balancing markets operated from gate closure through to real time and operated with the TSO acting as the sole counterparty to all transactions.

Principally, all market phases fall under the reporting obligation under REMIT while the balancing markets are already under close supervision of the NRAs. TSOs are always a party to such transactions and may be considered less relevant to market supervision by ACER.

Recommendation:

Specify in further explanatory documents that balancing markets are within the overall reporting obligation but do not make balancing transactions a part of an initial reporting phase

Specification of reporting obligation of market participants in the transaction stages

The reporting obligation of market participants will need to be further specified for the three transaction stages defined above. Principal envisaged reporting requirements could be as follows:

- Order stage:
  For commodity, transport, and storage transactions, the reporting obligation for the order stage is with the trader who has submitted such order or bid/offer in a market or trading venue. Having said this, the delegation of reporting of orders to RRMs (exchanges, broker platforms) may be the natural course of action. In the instance of auctions, exchanges would be the only provider of full auction data.

- Contract stage:
  The reporting obligation for the contract stage is with both parties of a transaction. In contrast to the Dodd-Frank rules, there is no definition of a preferred reporting party per transaction.

    - For commodity transactions, both the buyer and the seller report.

    - For transport transactions in primary capacity, the buyer of capacity and the TSO report, for secondary capacity transactions, both the buyer and the seller report.

    - For storage transactions in primary capacity, both the buyer of storage capacity and the SSO/LSO report, for secondary capacity transactions both the buyer and the seller report.

- Scheduling/ nomination stage:
  The reporting obligation for the scheduling/ nomination stage is with the trader who schedules/ nominates and with the TSO who receives such scheduling/ nominations information. As all scheduling/ nominations information is with TSOs they may be seen as natural provider of such reporting.

Recommendation:

By transaction type, the respective stages of a transaction and for both parties involved in a transaction clarify the reporting obligations of market participants.

Reporting obligations for the order and contract stage:

A "standard commodity transaction" is a transaction where the offer and contract transaction stage can be transformed into the applicable REMIT standard reporting format (long form) without losing their resemblance to the key economic terms of the original transaction.

A split of "long form" and "short form" reporting is made in order to ensure practicality in the reporting obligation for commodity contracts. Each standard commodity transaction has to be reported either in long form or in short form, depending on the designation by ACER outlined below. Non-standard commodity transactions are always reported in short form.

The split of long form and short form reporting is only applicable to the contract stage of the trading of power and gas. For the order stage, the scheduling/ nomination stage, and for the contract stage as far as capacity is concerned, only one form of reporting is applicable.

For each phase of the implementation of REMIT, ACER should clearly define a subset of the standard commodity transactions for which long form reporting is mandatory. For these standard commodity transactions, detailed (possibly multi-line) and frequent (daily) long form reporting under the REMIT standard reporting format is prescribed. Standard commodity transactions, for which long form reporting is not mandatory in a given phase, have to be reported either in short form, or – voluntarily and at the discretion of the reporting party - in long form.

Short form reporting under the REMIT standard reporting format shall be used for all non-standard commodity transactions. Further, short form reporting shall be used for those standard commodity transactions, for which long form reporting is not mandatory and which have not been reported voluntarily in long form either. Compared to long form reporting, short form reporting is less detailed (one line item per transaction) and can be less frequent (at maximum monthly).

Over time and with subsequent implementation phases, mandatory long form reporting will be applied to an increasing share of standard commodity transactions until it covers all or almost all of the standard commodity transactions.

Table 11 Envisaged long form and short form reporting in REMIT implementation phases

REMIT Implementation Phase	Long form reporting is mandatory for standard commodity transactions defined by	Reported as short form
Phase 1	"White list", see below	Anything not on the "white list"
Phase 2	"White list" + "1st extension" (subset of "grey list" to be designated by ACER)	Anything not on "white list" + 1st extension
Phase n+1…	White list + 1st extension + 2nd extension (as designated by ACER, likely full "grey list")	"Black list"
Convergence to fullest possible extent of standard reporting	For all standard commodity transactions, the reporting in long form is mandatory	Only non-standard commodity transactions are reported in short form

Non-standard commodity transactions and standard commodity transactions, for which long form reporting is not mandatory in the given implementation phase, shall be reported in short form under the REMIT reporting obligations.

The designation of standard commodity transaction for which long form reporting is mandatory needs to be unambiguous and simple to apply. Long form reporting should apply to a defined set of standard commodity transactions which are processed by the following intermediaries and trading venues for electronic deal conclusion or deal settlement. ("**white list**"). In phase 1, long form reporting is mandatory for all:

- Transactions on electronic brokerage platforms (e.g. Trayport)
- Transactions on exchanges (e.g. members of EUROPEX)
- Transactions confirmed by means of electronic deal matching systems (e.g. using EFET eCM)
- Transactions nominated electronically for clearing by means of automated deal clearing systems (e.g. EFET eXRP)

The designation should also take into account the prevalence of data aggregation in order to streamline the delegation of reporting obligations. In phase 1, it should be possible to delegate all reporting obligations regarding commodity transactions to a data aggregator, without prejudice to reporting parties performing their reporting obligations themselves.

The following transactions are further examples of standard commodity transactions, for which long form reporting is, however, not mandatory in phase 1 ("**grey list**"). These transactions must be reported, but they can be reported in short form in phase 1. The designation of which standard commodity transactions must be reported in long form will be extended in later phases by ACER guidance.

- Bilateral transactions without broker or outside brokerage SEFs, but under a standard master contract (closed list: EFET, ISDA, ZBT, NBP, GTMA) with unchanged reference terms
- All transactions nominated electronically for clearing by means of an automated deal clearing system specific to a certain clearing provider (e.g. bespoke clearing interfaces of individual banks)

Examples of non-standard commodity transactions ("**black list**"), which must be reported in short form:

- Bilateral transactions without a broker and not under a standard master contract (closed list: EFET, ISDA, ZBT, NBP, GTMA), but in long form, where the terms and conditions of the long form contract deviate materially and substantially from the standard master contracts.
- Bilateral transactions without a broker and not under a standard master contract (closed list: EFET, ISDA, ZBT, NBP, GTMA), but under a bilateral custom master contract, where the terms and conditions of the custom master contract deviate materially and substantially from the standard master contract
- Long-term contracts with varying prices and/or flexibiblity provisions expressed as daily/monthly/yearly minimum and/or maximum-take quantities

- Bilateral transactions with take or pay clauses over extended time frames which require splitting into several sub-transactions when entered into nomination or scheduling systems

As a technical specification the following XML message types are foreseen for reporting of market participants or of third parties to which reporting has been delegated to (see Table 12 below).

Table 12 Overview of envisaged XML message types

Message Type under REMIT Reporting	Short description	Trans-action Stage	Reporting frequency	Commodity Type	Type of recommend ation in this report.	Short Form or Long Form
CommodityOrder	Bids to buy and sell, bids for auctions both exchanges and electronic broker platform	Order stage	Daily on trading days T+1 (2)	Power, gas commodity	Summary	Long form only, complete standard reporting at time of introduction
LongFormCommodityC ontract	Executed deals, both OTC deals and exchange deals	Contract Stage	Daily on trading days T+1 (2)	Power, gas commodity	Detailed	Standard Transactions included in the “white list” must be long form, rest short form
CapacityBiddingPower	Bids for capacity rights in explicit capacity auctions	Order stage	Consideratio n for later stage	Consideratio n for later stage		Consideration for later stage
CapacityBookingPower	Booking of capacity with power TSO, only primary auctions based on ECAN (document “allocations results”)	Contract stage	Less frequent	Power transmission capacity	Summary	Long form only, complete reporting at time of introduction

Message Type under REMIT Reporting	Short description	Trans-action Stage	Reporting frequency	Commodity Type	Type of recommend ation in this report.	Short Form or Long Form
CapacityBiddingGas	Bids for capacity rights in explicit capacity auctions (e.g. TracX)	Order Stage	Consideratio n for later stage	Consideratio n for later stage		Consideration for later stage
CapacityBookingGas	Booking of capacity with gas TSO, only primary auctions	Contract stage	Less frequent	Gas transmission capacity	Summary	Long form only, complete reporting at time of introduction
StorageBooking	Booking of gas storage and LNG terminal capacity	Contract stage	Less frequent	Gas	No, clarify market participant role first	Long form only, complete reporting at time of introduction
ShortFormCommodityC ontract	List of Non-standard commodity transactions	Contract stage	Monthly	All	Detailed	Used for all short form reporting

Market participants or their delegated RRMs will receive a receipt message of the message type REMITBusinessAcknowledgement for each transaction report, detailing the number of reported transactions including their identifiers. This receipt message will enable reporting parties to reconcile their reporting obligations with actual reports made. In case of an unsuccessful report, a failure message of the message type REMITRejection Message will be sent to the reporting parties enabling the fixing of the problem and retry.

For the long-form reporting of commodity transactions a report document format covering both OTC and exchange based transactions has been developed. It is based on a detailed comparison with the data standards prevalent in the market: EMIR (ESMA Draft Technical Recommendation), broker platforms , EFET CpML (super-set of EFET eCM and eXRP), exchange platforms, and CRE reporting scheme, and with ENTSO-E ESS and EDIG@S.

Regarding transport and storage transaction formats, further effort towards standardization is ongoing in the market. Because of these efforts not being sufficiently advanced at the time of the implementing act, the proposed standard reporting formats (message types CapacityBooking and StorageBooking) have less detail than other messages.

Non-standard commodity transactions and transactions for which long form reporting is not yet mandatory in phase 1 will have to be reported in short form using the ShortFormCommodityTransaction message type. Such short form reporting shall enable the regulators to follow up with further investigation into the details of selected transactions on a case-by-case basis. Therefore, all transactions reported in short form have to be identified per transaction on a line item level and with a unique reference to the transaction (deal ID and trade date) and to the counterparty. To allow the selection of worthwhile transactions for a spot check, in addition the total value of the transaction has to be given. This way, the amount of transaction activity reported only in short form is measured at regular intervals. Should this amount increase in comparison to the bulk of transactions reported in long form, countermeasures and detailed checks can be taken. The objective is to cover as much activity as possible under long form reporting.

Short form reporting using the ShortFormCommodityTransaction message type should be performed at maximum on a monthly basis and in a machine-readable format. For each transaction reported in short form, this message needs to contain one line with at least:

- Unique Contract ID as assigned by the reporting party to the transaction reported in short form allowing for manual ad hoc querying by ACER
- ACER ID of deal counterparty for this transaction reported in short form
- Transaction Date of the transaction reported in short form
- Commodity (Gas, Power)
- Transaction type (physical, financial)
- Category of transaction reported in short form (Commodity, TransportCapacity, StorageCapacity,age, LNG Terminal Capacity)

- Start and End Date of delivery. For physical transactions, these are the actual start and end dates of delivery in local time at the point of delivery. For financial transactions, these are the earliest and latest dates of possible execution.

- Indication of contract value in EURO. If the transaction is valued in a currency other than EURO, the contract value has to be calculated by applying the FX rate current at the time of reporting, and given in EURO as well.

The introduction of thresholds would help to limit reporting workload for market participants in particular in the context of short-form reporting, where automated reporting out of a trading system holding such transactions may be limited. However the introduction of de-minimis thresholds is seen as problematic due to the different size and regional specifics of European gas and power markets.

The Appendix to this report includes:

- For long form reporting to be enacted in Phase 1: Detailed field lists for reporting the Contract Stage for Commodity Transactions, for the message type LongFormCommodityContract

- For long form reporting to be enacted in Phase 2: Summary recommendations with draft key fields for reporting the Order, Contract and Scheduling/Nomination Stages for Commodity Transactions, for the message types CommodityOrder, CapacityBookingPower, CapacityBookingGas

- For short form reporting which is enacted in phase 1: detailed draft field list for reporting for the message type ShortFormCommodityContract

Recommendation:

Split the overall reporting obligations for commodity transactions into long form and short form reporting from the start of the reporting regime.

Publish a list of intermediaries and request explicitly that at minimum all commodity transactions processed by these intermediaries need to be reported in long form ("white list"). Keep such an intermediary list extendable by giving notice hereof in a versioned ACER guidance document.

Apply the REMIT Reporting Document Format for commodity, transport and storage transactions while mentioning that the scope of long form reporting may be adjusted by issuing new versions of the REMIT reporting standard in case further standardization is achieved.

Reporting obligations for the Scheduling/nominations stage:

Scheduling/nominations data originates from the execution of physical delivery under commodity, transportation and storage contracts. Notice periods are defined under the specific network code (e.g. nomination for gas becomes valid two hours after the full hour). Such information is held by traders on a contractual level and transmitted to TSOs as an aggregate of buy and sell volumes to be scheduled with a trading counterparty at a defined market or network point location.

Scheduling/nominations data generally refer to a market area or physical network connection point and are triggered by the following events:

- Deliveries under commodity contracts between two traders shall be executed (standard and non-standard commodity contracts as defined above);
- Upstream gas production or power plant production shall be entered into a transport network;
- Transport capacity shall be used;
- Storage capacity linked to a transport network shall be used by injecting or withdrawing natural gas.

For the sake of clarity, it should be mentioned that scheduling/nominations activity requires a deliberate action from a market participant as opposed to end users who are demanding energy deliveries upon their own discretion (i.e. without explicitly telling their counterparty in advance how much energy they intend to consume).

As a technical specification the following XML message types are foreseen :

Table 13 Envisaged XML message types – scheduling/nominations

Message Type under REMIT Reporting	Short description	Trans-action Stage	Reporting frequency	Commodity Type	Type of recommendation in this report.	Short Form or Long Form
SchedulingNominationPower	Scheduling nomination with power TSO, based on ESS	Scheduling / Nomination Stage	Daily on all days	Power	Detailed	Long form only, assumed fit of all scheduling/nominations in ESS
SchedulingNominationGas	Scheduling nomination with gas TSO, based on subset of EDIG@S	Scheduling / nomination stage	Daily on all days	Gas	Detailed	Long form, assumed fit of all scheduling/nominations in Edigas

A field list for reporting the scheduling/nominations stage has to naturally cover all types of transactions previously mentioned with the message types SchedulingNominationPower and SchedulingNominationGas. Physical flows between markets as well as within markets are considered to be vital in understanding cross-border linkage between markets and providing an overview on overall transaction activity of traders.

In the interest of an efficient reporting process, TSOs are considered as being naturally in the position to deliver such aggregated data on a daily basis under REMIT. If TSOs (and traders in parallel) shall deliver such data, they would follow a structure of market places or market areas or network connection points to which scheduling/ nominations activity based on the above mentioned triggering events refer. The TSO is for a specific network in the best position to define such physical structure.

While different formats are adopted by the individual TSOs, standard nomination formats for gas (EDIG@S) and power (ESS) have been used as orientation for defining a REMIT reporting standard for the scheduling/nominations stage.

The Appendix to this report includes:

- For long form reporting to be enacted in Phase 1: Detailed field list for reporting the Scheduling/Nomination Stage, for the message types SchedulingNominationPower, SchedulingNominationGas.

Recommendation:

Apply the REMIT Reporting Document Format as described above for the scheduling/nominations transaction stage of all gas and power transactions from the start of the reporting regime.

5.1.4. Timing and form for the reporting of transactions and orders to trade

Real-time reporting causes high overheads under other regulatory regimes for both the industry and repository operators, leading to an adversely high economic impact of regulation. In addition, there is a trade-off between real time and data quality: the longer the time span between an event and the reporting of the event, the fewer errors ("noise") will be in the reported data. For example, one nightly report on T (trading days following the European commodity trading calendar) would already reduce noise; a nightly report on T+1 would further eliminate the necessity to report short-term document lifecycle events. Thus it is proposed to follow matching suggestions from exchanges and traders (T+1 best endeavour, T+2 maximum).

Reporting of commodity transactions in short form should be performed on a monthly schedule (total number of deals reported in short form and for each deal unique identifier and counterparty and some more details, see above). Reporting of final daily nominations should be once a day.

Double reporting of a transaction will be counteracted by subsequent pairing of transactions at ACER. If this data reconciliation through pairing is not fully successful, this should not cause significant damage to the data integrity of the ACER database, as portfolio valuation is out of scope under REMIT. If reported data is well identified, the ACER database can reconcile reports from different sources by pairing reports of the same transaction. However, as opposed to deal confirmation, a perfect pairing of all multiple reports of one transaction is neither possible with automatic mechanisms, nor necessary to perform the required analysis.

The reporting of wholesale energy transactions should cover all three major transaction stages: order, contract, and scheduling/nomination. Reporting in the latter two transaction stages (contract and scheduling/nomination) should be implemented in phase 1, with reporting in the transaction stage order to follow in phase 2. Thus even in phase 1, the majority of wholesale energy transactions will be reported twice: first in the contract stage, and then in the scheduling/nomination stage. In phase 1, all

physical wholesale energy transactions will be reported at least once, namely in the scheduling/nomination stage.

However, the reporting of deal /document lifecycle events beyond this concept of major transaction stages is a separate question. Other regulatory regimes such as Dodd-Frank follow a very fine-grained deal lifecycle approach, where even within the contract stage a single deal has to be reported at least three times: at RT (Real Time), PET (Primary Economic Terms, essentially at deal execution but with more details), deal confirmation. In addition, all other continuation data like daily valuation changes, amendments, cancellations and novations have to be reported as well. The added value in having higher transparency and more up-to-date/accurate data by following this approach needs to be balanced against the higher economic impact on market participants and resulting implementation delay implied by the burden that such deal / document lifecycle reporting generates. Apart from this, the receiving system(s) of ACER and the NRAs would have to be complex and of high resilience to handle such stream of update messages for transactions potentially years old.

Some deal / document lifecycle events, like recoding of delivery points or correcting differing trade dates or rounding errors, are of no substantial interest under REMIT. Given the incident rate of amendments and cancellations in OTC trading (reported to be in the order of 3 to 10% of all transactions from execution to final settlement), the rate of "interesting" events should be lower by a factor of two or three. The implementation of REMIT should err on the side of simplicity. During phase 1, the roll-out level achieved across the market will be the prime measure of success. We suggest it is better to achieve 95% REMIT-compliant reporting under simple rules with some 1% to 3% transactions displaying some deviations in the ACER system compared to the actual transaction caused by deal / document lifecycle events, rather than 50% reporting under very complex rules with fewer deviations.

Some of the trading venues, exchanges, and brokerage platforms which are definitive for the "white list" transactions do not have full visibility of all deal / document lifecycle events at the reporting parties. Thus imposing reporting of those events would prevent market participants from delegating the reporting of the standard transactions for which long form reporting is mandatory to these trading venues, exchanges, and brokerage platforms acting as RRM.

Thus we recommend that ACER defines deal / document lifecycle events as being out of scope in phase 1. Towards the end of phase 1, this approach should be reviewed. If need be, amendment and cancellation variants of the existing message types can be introduced then without sacrificing backward compatibility. This is possible by foreseeing document versioning in phase 1, which can be statically populated by version "1" in that phase only.

Having said this, errors do happen, and transaction reports in either long form or short form containing gross errors such as order of magnitude errors or the wrong assignment of counterparties due to faulty coding should not be allowed to linger in the ACER database for years. Otherwise, this may impede correct analysis for a long time. Such grossly wrong transaction reports would be wrong already at the time of transmission, not due to changing valuations thereafter. In such cases, reporting parties should be obliged to communicate such errors and the corrected wholesale energy transactions to ACER offline, i.e. not following the standard transaction formats, in channels as ACER sees fit. In the beginning, this might be as simple as a signed e-Mail or web form. If need be, ACER personnel can then dispose of those errors by accessing the ACER database directly.

Recommendations:

Define reporting obligation for wholesale energy transactions in all three major transaction stages: order, contract, and scheduling/nomination. Reporting in the latter two transaction stages (contract and scheduling/nomination) should be implemented in phase 1, with reporting in the order stage to follow in phase 2.

Define the cycle for long form reporting of the order and contract transaction stage for all commodity, transport and storage transactions to be T+1, i.e. by close of the following business day.

Define the cycle for reporting of the scheduling/nomination transaction stage for all commodity, transport and storage transactions to be T+1, i.e. by close of t day.

Define the cycle for short form reporting to be at maximum monthly, i.e. by close of the first business day in the calendar month for the preceding calendar month.

Consider wholesale energy transaction lifecycle events such as amendments, cancellations or novations as out of scope for reporting at least in phase 1.

Provide a way for reporting parties to communicate gross errors such as order of magnitude errors made in previous reports of wholesale energy transactions to ACER.

5.1.5. Reporting channels

A market participant can fulfil the reporting obligation himself or delegate it to a third party. Third parties could be brokers, exchanges, automatic deal confirmation matching platforms, etc. While the number of parties reporting to ACER should be kept within a certain range in the interest of an efficient reporting process and delegation of the reporting obligation should be encouraged it is advisable to impose certain minimum requirements upon all reporting parties. If market participants report themselves they would qualify as a "Certified Self-Reporting Party". Third parties offering such service to another market participants would qualify as "Registered Reporting Mechanism".

In order to operate as a Registered Reporting Mechanism (RRM), an organisation should demonstrate:

- Technical ability to report under the predefined REMIT format, therefore it must be capable of reporting data in the data format, time limits, and frequency predefined in the implementing acts; (RRM must have a system with a functioning interface for all relevant parts of the REMIT standard);

- Process ability to ensure that regularity of reporting is observed (Service Level Agreement in place, team size to realistically implement such an SLA);

- Long-term commitment to work as an RRM via financial and other size characteristics, in order to follow through on commitments and make the needed investments and upgrade in the future;

- Investment in qualified personnel and demonstrated commitment to sustain a team of professionals with the required credentials to undertake REMIT (RRM must have the "right people");

- For 3rd party providers: policies and safeguards in place to ensure safe handling of data (RRM must be a trusted organisation.);
- Appropriate mechanisms for authenticating the data source i.e. identification of the beneficiaries and for ensuring data security and confidentiality as data reported is economically sensitive (RRM must have the technical ability to ensure data security);
- Can be regulated under EU law inside EU jurisdiction.
- Incorporation of mechanisms for identifying and correcting errors in the reported data in order to ensure efficient monitoring by ACER;
- Establishment, implementation, and maintenance of an adequate disaster recovery plan aiming at ensuring the maintenance of its functions, the timely recovery of operations, and the fulfilment the reporting on behalf of their clients;
- Public disclosure of the prices and fees associated with services provided.

A clear and neutral procedure for qualifying needs to be foreseen in implementation acts / observance of ACER guidance. A 3rd party certification process would be the most appropriate.

TSOs may be considered as being naturally in the position to deliver scheduling/nominations data, while the exemption of traders from delivering such data at the same time is recommended. As such reporting obligation is asymmetric, TSO organisations should not be obliged to undergo a full certification; however, they will need to have the technical capabilities in hand and should be certified accordingly.

Recommendation:

Define criteria and a procedure on how to register centrally with ACER as "Certified Self-Reporting Party" for market participants and as "Registered Reporting Mechanism" as third-party service provider and accept reporting only from such registered organizations; foresee an adjusted registration process for TSOs.

5.1.6. Reporting of fundamental data

Fundamental data is defined within Art. 8 (5) as "information related to the capacity and use of facilities for the production, storage, consumption, or transmission of electricity or natural gas and use of LNG facilities, including planned or unplanned unavailability of these facilities". Such information shall be reported centrally to ACER. The following considerations do not refer to the already applicable obligation to publish insider information in Art.2(1)-

Gas

One of the key principles required by DG Energy in undertaking this work is that in order to keep costs and the burden on market participants at a minimum, existing reporting and publication channels should firstly be identified and assessed.

This section provides a view on fundamental data requirements in relation to gas TSOs (as they have been a specific category with whom workshops have been undertaken as part of this project, as agreed with DG Energy). At the end of this section we also provide a view on fundamental data reporting for

gas storage and LNG data. It is assumed that fundamental data requirements in relation to gas production will be, at least at an initial stage, fulfilled via the requirement of gas flows (via nominations data) at entry points. However, further information requirements on gas production could be considered at a subsequent stage.

Based on our discussions with the Commission, we have focused our analysis of the necessary information on data collected by TSOs under Regulation (EC) 715/2009, as amended by Commission Decision 2010/685/EU, amending Chapter 3 Annex I to the above mentioned Regulation. The context of transparency requirements in relation to gas, including the data items to be published according to transparency regulations, is outlined in more detail in previous sections.

In particular, whilst these transparency obligations are currently fulfilled by TSOs on an individual basis, we understand that currently there are ongoing discussions at a European level in relation to the potential introduction of requirements to publish transparency data via a central European platform, likely to be some extension of the ENTSOG transparency platform. However, work in this area has not commenced yet. We consider that, for practicality and cost reasons, the development of harmonized transparency platforms should set the timeline for development of fundamental data reporting by gas TSOs under REMIT.

It is important to highlight that transparency data currently published by TSOs is on an aggregate basis by individual entry / exit / delivery point (not broken down to the level of individual market participants).

It may also be appropriate to collect fundamental data (including data on capacity bookings) on a disaggregated basis (i.e. by individual shipper), and to do so in a centralised manner via an extension of existing transparency platforms. Such data can then be passed through to ARIS. However, it should be noted that gas TSOs have expressed a number of concerns in relation to liability (e.g. which party is liable for data held by TSOs) and data confidentiality (i.e. in relation to data submitted to a centralised platform); any such centralised approach would therefore require sufficient clarity around confidentiality and liability provisions to address these concerns.

As outlined in Section 4.5.2.10, there is ongoing harmonization work in the gas sector (including work on development of ENTSOG's Capacity Allocation Mechanism Network Code, Balancing Network Code and Interoperability Network Code). Therefore for cost and practicality reasons, as well as in the context of the principle of the avoidance of creation of unnecessary burdens or duplication of reporting channels, we would recommend the introduction of an approach by which nominations data is collected in the first instance (based on the data requirements outlined in the Draft Balancing Network Code). This data includes:

- Interconnection point identification;
- Direction of contractual gas flow;
- Network user identification or, if applicable, its portfolio identification;
- Network user's counterparty(-ies) identification or, if applicable, network user's counterparty(-ies) portfolio identification;
- Start and end time for which the nomination is submitted;
- The gas day D;

- The gas quantity to be transported.

The proposed approach for the collection of data on nominations is outlined earlier in this section. Accordingly, for the purposes of this section, this is treated as trade/transportation contract data.

On the other hand, the collection of capacity allocation data and balancing data on an individual shipper/trader level from TSOs should be introduced at a later stage, taking into account the further harmonization of capacity mechanisms at a European level (i.e. following the publication of a final version the ENTSOG codes mentioned above and their implementation at a national level), as well as the potential introduction of a harmonised ENTSOG platform.

In the meanwhile, capacity allocations on a disaggregated basis could be monitored to some extent (depending on the amount of data collected) with the capacity bookings data collected from traders/shippers as well as from individual TSOs acting as data aggregators for this limited data.

Power

This section provides a view on fundamental data requirements in relation to electricity TSOs (as they have been a specific category with whom workshops have been undertaken as part of this project, as agreed with DG Energy).

Based on our discussions with the Commission, we have focused our analysis of the necessary information on data collected by TSOs under Regulation (EC) 714/2009 and the ERGEG Advice on Comitology Guidelines on Fundamental Electricity Data Transparency. The context of transparency requirements in relation to electricity, including the data items to be published according to the transparency regulation, is outlined in more detail in Sections 3.4.1 and 4.4.1.

Currently, TSOs comply with the transparency requirements by publishing the required data on their individual websites. We understand that there is an ongoing discussion on a potential introduction of requirements to publish such data on a central, pan-European platform, likely to be some extension of the ENTSO-E transparency platform. We consider that for reasons of practicality and minimisation of costs, the reporting requirements for electricity TSOs and the development of harmonised transparency platforms should be synchronised time-wise.

It is important to highlight that transparency data currently published by TSOs is on an aggregate basis, e.g. electricity load flows at cross border points (not broken down to the level of individual market participants and single nominations). It is our understanding that the transparency data as currently available (especially on individual TSO websites) contains fundamental data (as outlined in previous sections) which largely fulfil the requirements of REMIT (Art. 8(5)).

Against this background, it may be appropriate to collect fundamental data (especially data on capacity bookings) on a disaggregated basis. It would be possible to get disaggregated data using the ENTSO-E's data formats (ESS and ECAN) relating to nomination and scheduling processes. Furthermore, data could be published in a centralised manner via an extension of existing transparency platforms; any such centralised approach would require sufficient clarity around confidentiality and liability provisions.

As outlined in Section 3.4.1, there is ongoing harmonisation work in the electricity sector. This especially includes ENTSO-E's data format standardisation and ENTSO-E's network code development on the following areas:

- Capacity allocation and congestion management;
- Requirements for generators;
- Balancing;
- Forward markets;
- Demand connection;
- Operational security;
- Operational planning & scheduling;
- Load frequency control & reserves.

Such harmonisation efforts should be taken into account when determining on the manner in which transparency requirements under REMIT shall be met. Matters of efficiency and avoidance of cost should be considered and lead to as much uniformity and centralisation as possible.

Recommendation:

Reporting of fundamental data should be undertaken via central transparency platforms, to fulfil relevant transparency requirements. Collection of disaggregated fundamental data should be undertaken via the same transparency platforms, provided appropriate confidentiality and data ownership provisions are in place. In the interim, collection of limited selected capacity information from market participants should be via ARIS.

5.1.7. Uniform rules on the reporting of fundamental data

As outlined previously, power and gas TSOs do not necessarily see themselves as aggregators for any data in addition to the data required under transparency requirements, and in particular they have expressed a view that currently the requirement to report fundamental data on a disaggregated basis (i.e. by shipper) is not clearly mentioned within REMIT. These issues should be addressed via the drafting of the implementing acts.

Recommendation:

Clarify role of TSOs as data aggregators and the requirement to report disaggregated fundamental data as part of drafting of implementing acts.

5.1.8. Timing and form for the reporting of fundamental data

Gas

The frequency of reporting fundamental data is to some degree dependent on the type of data collected (for instance, yearly capacity allocations from auctions held once a year would not require frequent reporting), therefore we would suggest the introduction of a requirement to report upon change of data, with a maximum frequency of daily reporting (expected to be undertaken by end of day). We would expect that the benefits of the introduction of within day reporting of capacity bookings and nominations in terms of additional data availability would be outweighed by the costs,

both for market participants terms of compliance and for ACER and the NRAs in terms of ability to analyse this data.

Power

The time frames covered by the reported fundamental data and the respective due dates for the data submissions vary depending on the type of data collected. The ERGEG Advice on Comitology Guidelines for Fundamental Electricity Data Transparency sets forth a thoroughly structured data matrix, ascribing to each data item which is to be reported, the respective time frame to which it is related and the due date to which the data item is to be reported. Where applicable, a requirement to update the data item is also included in the overall reporting requirement for the respective data item. We would suggest reflecting the reporting frequency scheme laid out in the aforementioned ERGEG Advice.

Recommendation:

Introduce a requirement to report fundamental data upon change, with a maximum frequency of daily reporting.

5.1.9. Gas storage and LNG fundamental data

The definition of fundamental data outlined in Art. 8 (5) refers also to capacity and use of storage facilities and use of LNG facilities. Transparency requirements in this area are outlined in Regulation (EC) 715/2009, and include requirements to make available:

- Information on the services offered and technical information;
- Information on contracted and available storage and LNG facility capacities on a numerical basis and on a regular and rolling basis;
- Amount of gas in each storage and LNG facility and available storage and LNG facility capacities, updated at least daily (Communicated also to the TSO, which shall make it public on an aggregated basis). A request for confidential treatment of this data may be submitted by storage operators to the NRA in cases in which a storage system user is the only user of a storage facility.

A number of transparency requirements are also outlined in the Guidelines for Good TPA Practice for Storage System Operators (GGPSSO) published in 2005 and amended in 2011.

Currently, the transparency requirements are fulfilled on an individual level by storage operators and LNG facility operators by publishing data on their own websites.

The following harmonization initiatives have been undertaken on a **voluntary** basis:

- A central transparency platform ("Aggregate Gas Storage Inventory") is currently published on Gas Infrastructure Europe (GIE)'s website, publishing gas storage inventory data on an aggregate basis (by hub). The following data is published on a daily basis:
    - Storage inventory level (current inventory level of gas in storage at 06:00, in mcm)
    - Injection (storage increase at 06:00 compared to 06:00 on previous day, in mcm)

- Percentage of maximum available storage in use
- Daily storage increase or decrease in %
- Data status (confirmed/estimated)
- Declared total maximum technical storage in mcm
- Declared total maximum technical injection / day in mcm
- Declared total maximum technical withdrawal / day in mcm

- GLE (Gas LNG Europe) members have agreed to implement on a voluntary basis a common transparency template to facilitate the access to this great amount of information. However, their transparency obligations remain fulfilled at an individual level. The template includes the following data:
  - Contact details
  - Terminal characteristics: Facilities main characteristics (e.g. nominal annual capacity, regassification capacity, LNG storage capacity, number of LNG tanks), service characteristics, LNG quality specification, gas quality conversion equipments
  - Details on how to become a customer/user
  - Capacities:
    - Primary market: allocation rules (CAM/CMP), available capacity (in particular, data published in accordance with transparency requirements of Reg. 715/2009 Art. 19.4)
    - Secondary market - allocation rules, available capacity, list of players, IT platform, if available, for secondary market management

We recommend the extension of the requirements for publication of transparency data (although this is likely to be outside the scope of REMIT), in order to enable a centralised collection of this transparency information. The implementation of a centralised collection of fundamental data (consistent with the transparency requirements) via TSOs relating to gas storage and LNG directly on the ARIS database is likely to create a significant additional number of interfaces and impact on the implementation costs. The centralised transparency platform could be used also as a means to collect disaggregated data, provided that appropriate confidentiality and data ownership provisions are in place.

Recommendation:

Reporting of fundamental data should be undertaken via central transparency platforms to fulfil relevant transparency requirements. Collection of disaggregated fundamental data should be undertaken via the same transparency platforms, provided appropriate confidentiality and data ownership provisions are in place. In the interim, collection of limited selected capacity information from market participants should be via ARIS.

5.2. Phased approach for reporting of trade data

In the following, a recommendation to a phased approach for implementing reporting under Article 8 REMIT is made. The definition of transaction types falling under "wholesale energy products" and the scope of transactions to be reported should be clarified initially to provide sufficient clarity for market participants as to the initial planning of implementation activities ensuring adherence. While on the traders' side the definition of standard products and the refining of reporting obligations are sufficiently broad and thus not expected to be inapplicable in a few years time, the exact content of the phasing and the time between phases may have to adapted based on actual implementation speed and the needs for regulation arising out of market conditions. Regarding the reporting from TSOs, a sufficient level of standardization for initial reporting of scheduling/nominations data will need to be set. Therefore, we recommend that the phasing is put into the Implementing Act only in principle, with the details left to ACER guidance.

ACER should always aim to give clear guidance on the current phase (i.e. in its first guidance on the phase to be implemented, phase 1), and to provide the outline of the next phase (i.e. in its first guidance, phase 2), together with a defined estimate of the time span before such next phase will be implemented. Over the course of one phase, more precise guidance on the next phase can be issued such that market participants have sufficient time to prepare their processes and systems to implement it.

Care has to be taken that investments made following the obligations of a certain phase are not made obsolescent through the introduction of the next phase. This can be achieved primarily by following the principle of backward compatibility. In addition, the scope of reporting in subsequent phases should be extended by whole process steps or trading venues, the idea being that a certain information node (be it a market participant and their trading system, a market system or a scheduling system) only needs costly changes at interfaces and the master data level once or at most twice.

From the perspective of a market participant, the current and next phase of REMIT reporting should be reviewed, with a view of planning for changes needed in processes and systems over the next years. This should be aligned with upgrades, migrations, mergers, and other major changes planned independently, such that changes can be planned, implemented, and tested in clusters rather than staggered out over time. Other reporting regimes such as EMIR, MiFID, and Dodd-Frank need to be taken into account as well. Such planning should enable the market participant to have a schedule and combination of possible major changes.

From the business and legal perspective of a trader, the portfolio of wholesale energy transactions has to be reviewed in light of REMIT. The next step is the identification of those parts of the portfolio to be reported in the long form and short form reporting regime. For both parts, make or buy decisions have to be made. Phase 1 is intentionally designed such that market participants other than TSOs should be enabled to delegate all of their long form reporting obligations to RRMs, provided the exchanges, broker platforms, and matching services used by the market participant opt to qualify as an RRM.

Following the focus of REMIT on the physical character of gas and power markets in the EU, it is considered highly relevant to properly engage gas and power TSOs in a phase 1 reporting scheme. In contrast to markets which focus on trading of financial products, gas and power markets are set up as a combination of commodity transactions with logistical transactions ensuring availability of transport (and in gas storage) capacity as a link between the commodity markets. As regards the

implementation of REMIT reporting, this requires combining long form and short form reporting from traders with adequate reporting of scheduling/nominations data from TSOs already in phase 1.

The following tables give an overview on how a phased approach could look like for the reporting of trade data, summarizing the considerations taken in the chapter 5.

Table 14 Reporting of trade data – Phase 1

Reporting party	Transaction Stage	Long Form Reporting (LFR) / short form Reporting (SFR)	Message Type under REMIT Reporting
Trader	Order Stage	Non applicable	
	Contract Stage	LFR: At least "white list" (see chapter 5.1.3)	LFR: LongFormCommodityContract
		SFR: All other commodity transactions	SFR: ShortFormCommodityContract
	Scheduling / Nomination Stage	Non applicable	
Power TSO	Order Stage	Non applicable	
	Contract Stage	Non applicable	
	Scheduling Stage	Commodity: all nominations	Comm., Transport: SchedulingNominationsPower
		Transport: all nominations	
Gas TSO	Order Stage	Non applicable	
	Contract Stage	Non applicable	
	Scheduling Stage	Commodity: all nominations	Comm., Transport, Storage: SchedulingNominationGas
		Transport, Storage: non-existent	

Table 15 Reporting of trade data – Phase 2

Reporting party	**Transaction Stage**	**Long Form Reporting (LFR) / short form Reporting (SFR)**	**Message Type under REMIT Reporting**
Trader	Order Stage	Only LFR: * Transactions on Electronic Brokerage Platform * Transactions on regulated	Only LFR: CommodityOrder SFR:

		exchanges	non applicable
	Contract Stage	LFR: “white list” plus “grey list” SFR: All other commodity, capacity, storage, LNG terminal	LFR: LongFormCommodityContract SFR: ShortFormCommodityContract
	Scheduling / Nomination Stage	Non applicable	
Power TSO	Order Stage	Bidding following ECAN process (“bid document”)	To be defined
	Contract Stage	Transparency platform format	To be defined
	Scheduling Stage	Commodity: all nominations Transport, Storage: all nominations	Comm., Transport: SchedulingNominationsPower
Gas TSO	Order Stage	Non applicable (no standardized bidding process in place so far)	CapacityBiddingGas
	Contract Stage	Transparency platform format	To be defined
	Scheduling Stage	Commodity: all nominations Transport, Storage: non-existent	Comm., Transport, Storage: SchedulingNominationGas
SSO, LSO	Order Stage	Non applicable	
	Contract Stage	Transparency platform format	To be defined
	Scheduling Stage	Non applicable	

<u>Recommendation:</u>

Follow a phased approach for the reporting of wholesale energy product transactions to reflect the current amount of standardization in the market, taking into account the economic impact of the implementation.

Indicate the duration of phase 1 (and of any further phases as may be required) as being around two years. Sufficient clarity on the framework for subsequent phases should be provided initially.

As further clarity becomes available following the implementing acts, further non-binding guidance can be provided to market participants

5.3. Phased approach for reporting of fundamental data

The table below summarises the proposed approach in relation to reporting of fundamental data, outlining the reporting requirements for key players in this area, both on "day one" of implementation of REMIT and in a later stage, following the potential implementation of central EU transparency platform from ENTSO-E and ENTSOG. As outlined previously, it is considered appropriate that for cost and practicality reasons, the development of harmonized transparency platforms at the EU level should be delayed to ensure the development of fundamental data reporting by gas TSOs under REMIT.

Table 16 Reporting of fundamental data – Phase 1

Reporting party	Fundamental data reported	Reporting channel
Power TSOs	Transparency data reported on a national level published under Regulation (EC) 714/2009	Individual TSO websites, same as current approach. No link with ARIS envisaged.
Gas TSOs	Transparency data reported on a national level published under Chapter 3 of Annex I to Regulation (EC) 715/2009	Individual TSO websites, same as current approach. No link with ARIS envisaged.
Generators	Transparency data reported on a national level published under Regulation (EC) 714/2009	Generation data published by TSOs on individual TSO websites, plus requirements to keep data at disposal of relevant authorities
SSOs and LSOs	Transparency data to be made available by individual operators as per Regulation 715/2009 and Guidelines for Good Practice for Storage	Individual websites, same as current approach
Producers	No reporting obligation under current transparency requirements. Could consider applying same principles on storage.	Currently no data publication obligation

Table 17 Reporting of fundamental data – Phase 2

Reporting party	Fundamental data reported	Reporting channel
Power TSOs	Transparency data reported published under Regulation (EC) 714/2009 and data requirements outlined in ERGEG's Advice on Draft Comitology Guidelines (and any other future regulation)	Central collection via ENTSO-E Transparency Platform
Gas TSOs	Transparency data reported published under Chapter 3 of Annex I to Regulation (EC) 715/2009 (and any other future regulation)	Central collection via ENTSOG Transparency platform
Generators	Generation data outlined in ERGEG's Advice on Draft Comitology Guidelines	Central collection via ENTSO-E Transparency Platform (some collected directly via platform, some collected via TSOs)
SSOs and LSOs	Transparency data to be made available by individual operators as per Regulation 715/2009 and Guidelines for Good Practice for Storage (and any other future regulation)	Could consider introduction of central transparency platform.
Producers	Could consider applying same reporting principles as storage for continental production	Data on EU production could be linked to SSO central transparency platform

Recommendation:

Reporting of fundamental data should follow existing and proposed regulations. Develop harmonised transparency platforms to set the timeline for introduction of fundamental data reporting. Consider introduction of central transparency platforms for storage, LNG and EU production data.

Consistent with the approach outlined in the previous section define a clear timeline for the introduction of Phase 2, which could estimated to be around 2 years. If central collection of fundamental data is not introduced by TSOs (and other relevant market participants as outlined above) within a defined timescale, introduce a REMIT reporting obligation and format in order to collect fundamental data directly from participants in ARIS as part of Phase 2.

6. Concluding remarks

Our recommendations on reporting requirements for trade and fundamental data have covered the following key areas:

- Records of transactions
- List of contracts and derivatives
- Uniform rules on the reporting of transactions and orders to trade
- Timing and form for the reporting of transactions and orders to trade
- Reporting channels
- Reporting of fundamental data
- Uniform rules on the reporting of fundamental data
- Timing and form for the reporting of fundamental data
- Gas storage and LNG fundamental data

In addition, we have provided our views on the potential introduction of a phased approach to implementation of such reporting requirements.

The recommendations outline a potential approach for reporting under REMIT, taking also into account practicality considerations. For the avoidance of doubt: the proposed approach is not intended to limit in any way the scope of reporting obligations as outlined in REMIT.

Appendix - Glossary

Agency for the Cooperation of Energy Regulators

ARIS	ACER REMIT Information System
ARMs	Approved Reporting Mechanisms
Art.	Article
ATC	Available _Transmission Capacity
BNetzA	German Federal Network Agency
BRP	Balance Responsible Parties
CAM	Capacity Allocation Mechanism
CCP	Central Counterparty
CMP	Congestion Management Proposals
CEER	Council of European Energy Regulators
CIM	Common Information Model
CME	Chicago Mercantile Exchange
CSV	Comma Separated Value
D	Day
Delfor	Delivery Forecast message
DET	dependent feed-in profile total
DG Energy	Directorate-General for Energy
DLT	dependent load profile total
DSO	Distribution System Operator
EASEE-Gas	European Association for the Streamlining of Energy Exchange - Gas
EC	European Commission
ECAN	ETSO Capacity Allocation and Nomination System
EDI	Electronic Data Interchange
EEX	European Energy Exchange

EFET	European Federation of Energy Traders
EFET eXRP	EFET electronic eXchange Related Processes
e.g.	for example
EIC	Energy Identification Code
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSOG	European Network of Transmission System Operators for Gas
ERGEG	European Regulators' Group for Electricity & Gas
ERRP	ETSO Reserve Resource Process
ESMA	European Securities Markets Authority
ESP	ETSO Settlement and Reconciliation
ESS	ETSO Scheduling System
etc.	et cetera
ETRM	Energy Trading and Risk Management
ETSO	European Transmission System Operators (now ENTSO-E)
EU	European Union
EURELECTRIC	Union of the Electricity Industry
EUROPEX	Association of European Energy Exchanges
FCT	feed-in curve total
FSA	Financial Services Authority
GCV	Gross Calorific Value
GIE	Gas Infrastructure Europe
GLE	Gas LNG Europe
GTMA	Grid Trade Master Agreement
GTS	grid time series
H	operational hour
ICE	IntercontinentalExchange
ID	Identifier

IEC	International Electrotechnical Commission
i.e.	that is to say
ISDA	International Swaps and Derivatives Association Inc.
ISIN	International Securities Identifying Number
KWh	kilowatt hour
LCT	load curve total
LEI	Legal Entity Identifier
LNG	liquefied natural gas
LSO	LNG System Operator
M	month
MaBiS	Market Rules for the Performance of Balancing Group Accounting in Electricity
MADES	Market Data Exchange Standard
mcm	million cubic meters
MSCONS	Metered Services Consumption report message
MTF	Multilateral Trading Facility
MW	megawatt
MWh	megawatt hourm³(n) standard cubic meter
NRA	national regulatory authority
NSR	Non-Standard Reporting
NTC	Net Transfer Capability
OTC	over-the-counter
OTF	Organized Trading Facility
PTDF	Power Transfer Distribution Factor
PTR	Physical Transmission Right
pwc	PricewaterhouseCoopers
RRM	Registered Reporting Mechanism

SEF	Swap Execution Facility
SET	standard feed-in profile total
SLA	Service Level Agreement
SLP	standard load profiles
SR	Standard Reporting
SSO	Storage System Operator
T	Trade Date
TC	Technical Committee
TPC	Transparency Platform Coordinator
TSO	Transmission System Operator
UIOLI	use-it-or-lose-it
U.K.	United Kingdom
VAT	value added tax
WG	working group
XLS	Excel spreadsheet
XML	Extensible Markup Language
Y	year

Current legislation:

ACER Regulation
Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0001:0014:EN:PDF

Commission Decision 2010/685/EU
Commission Decision of 10 November 2010 amending Chapter 3 of Annex I to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:293:0067:0071:EN:PDF

Electricity Directive
Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0055:0093:EN:PDF

Electricity Regulation
Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0015:0035:EN:PDF

Gas Directive
Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:en:PDF

Gas Regulation
Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0036:0054:EN:PDF

MAD
Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (market abuse)
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0006:DE:NOT

MiFID
Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0039:DE:NOT

Regulation (EC) No 1287/2006 implementing MiFID
Commission Regulation (EC) No 1287/2006 of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards recordkeeping obligations for investment firms, transaction reporting, market transparency, admission of financial instruments to trading, and defined terms for the purposes of that Directive
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1287:EN:NOT

REMIT
Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011R1227:EN:NOT

Proposed legislation:

CSMAD
Directive of the European Parliament and of the Council on criminal sanctions for insider dealing and market manipulation (20.10.2011)
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0654:FIN:EN:PDF

EMIR
Regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories (19.03.2012)
http://register.consilium.europa.eu/pdf/en/12/st07/st07509-re01.en12.pdf

MAR
Regulation of the European Parliament and of the Council on insider dealing and market manipulation (market abuse) (20.10.2011)
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0651:FIN:EN:PDF

MiFID II
Directive of the European Parliament and of the Council on markets in financial instruments repealing Directive 2004/39/EC of the European Parliament and of the Council (20.10.2011)
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0656:FIN:EN:PDF

MiFIR
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http://easee-gas.eu/docs/cbp/approved/CBP2003-003-02_7Nov07.pdf

European Network of Transmission System Operators for Electricity (ENTSO-E): MADES Communication Standard, November 2011, https://www.entsoe.eu/fileadmin/user_upload/edi/library/mades/mades-v1r0.pdf

European Network of Transmission System Operators for Gas (ENTSOG): Network Code on Capacity Allocation Mechanism (CAP 0210-12), 6 March 2012,
http://www.entsog.eu/publications/camnetworkcode.html

European Network of Transmission System Operators for Gas (ENTSOG): Draft Code on Gas Balancing in Transmission Systems (BAL300-12), 12 April 2012,
http://www.gaslink.ie/files/Copy%20of%20library/20120423094253_Draft%20Code%20on%20Gas%20Balancing%20in.pdf

European Regulators' Group for Electricity & Gas (ERGEG): Advice on Comitology Guidelines on Fundamental Electricity Data Transparency (E10-ENM-27-03), December 2010
http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/ELECTRICITY/Comitology%20Guideline%20Electricity%20Transparency/CD/E10-ENM-27-03_FEDT_7-Dec-2010.pdf

International Swaps and Derivatives Association Inc. (ISDA): Commodities Trade Processing Lifecycle Events White Paper, April 2012
http://www2.isda.org/functional-areas/research/studies/

Appendix - REMIT Reporting Document Format

As a policy, recommended REMIT report formats should be selected based on the following criteria:

- Publicly available documentation,
- In use by a significant share of REMIT-related roles,
- European scope,
- XML formats are preferred since a higher level of syntactic format constraints applies here. The possible disadvantage of a redundant format overhead vs., e.g., EDIFACT or CSV formats is weight out by the possibility to compress XML when stored in the ARIS document store.
- If there is more than one format available that meet the above criteria one of them should be selected that allows accommodate data of the remaining formats such that the number of report formats per transaction category can be limited to one.

The following list of document types for reporting applies to phase 1, i.e., to the following MessageTypes:

- CommodityContract (Long Form and Short Form)
- SchedulingNominationPower
- SchedulingNominationGas

OTC trade data format for reporting of Commodity Contracts

Generally, the following channels exist partly with available document formats for reporting:

- **CPML standard report format** (Commodity Products Markup Language, see www.cpml.eu)**.** This format is based on the EFET eCM process (electronic Confirmation Matching) and is in use since the year 2004 by ca. 65 trading organizations and brokers. It is also in production use for reporting under Dodd-Frank since January 2012 for reporting of US-based OTC trades. A high share of trades executed bilaterally or on broker platforms are confirmed between energy traders based on the CpML standard.
- **FPML** (Financial Products Markup Language). This format is commonly in use in the US and partly by European investment banks. Its focus is on financial products while energy-specific features such as delivery schedules, delivery types, units of measures etc. are not represented.
- **Data output from broker platforms**. Information on XML document formats for broker platforms is not available as a sector-wide standard across broker platforms which unifies CommodityContract reporting across energy exchanges. Specific platforms provide APIs allowing users to retrieve information on trading organisations, accounts, orders, trades, instruments etc. In order to support a unified report format, an extraction logic is often required that transforms results of API queries into a document format that contains the entire trade data.

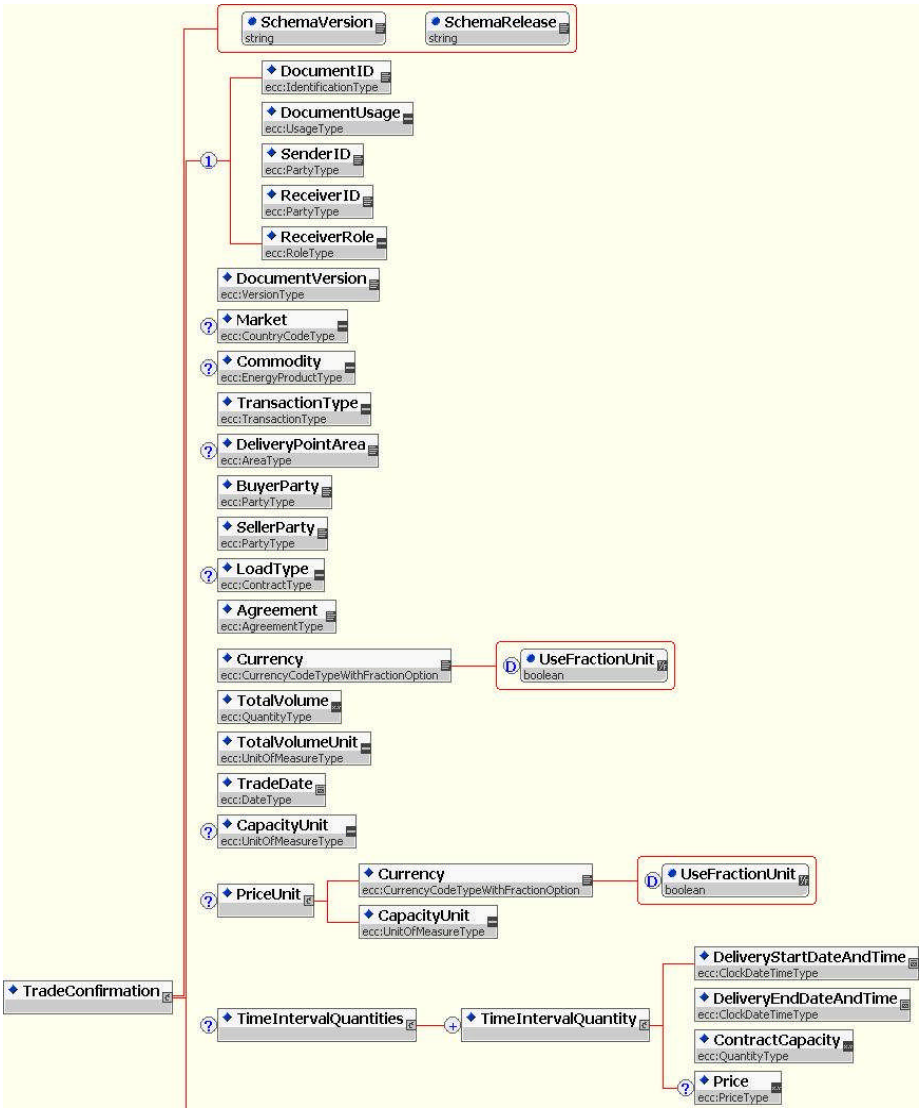
- **Data output from exchanges**. No standard format exists here that is shared across European energy exchanges. The main requirement is here to use a flexible and extensible format that can accommodate trade data reported by exchanges. “Any future format should be flexible and easily accessible” (from the Europex reply).

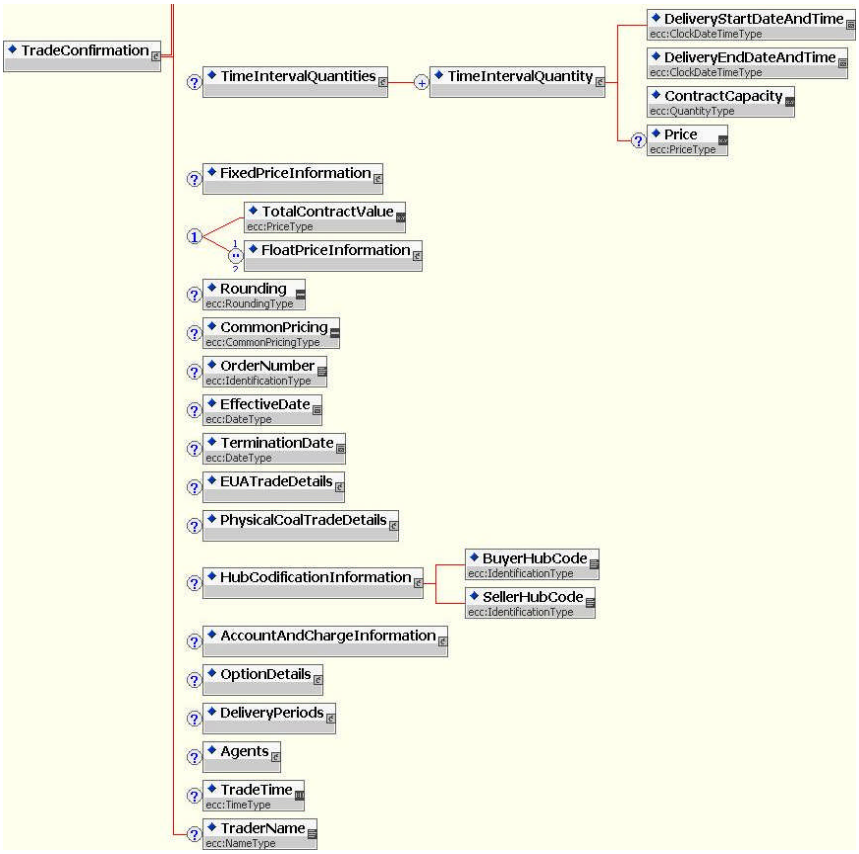
Since OTC CommodityContract formats are more detailed by nature, we followed the approach to use such a format as the canonical format for reporting CommodityContracts from exchanges, broker platforms, OTC traders, and clearing services. The CPML format is the candidate which comes closest to this requirement, specifically when extended by its report envelope that is already in use for reporting under Dodd-Frank. We will, therefore, describe in the following the CPML structure and provide additional mapping information for broker platforms and exchanges.

CpML can be extended for REMIT reporting by additional XML elements that accommodate specific regulatory information (e.g., venue information, a report identifier, etc.). This applies to regulatory requirements under Dodd-Frank and REMIT. It can also be expected that later-on also EMIR-specific data will be encapsulated in an according document section.

The following figure shows the structure of the CPML trade confirmation format for trade confirmations which is a candidate for trade reporting by traders, broker platforms, exchanges, and clearing services. Optional, conditional, or repetition of XML sections and data types used for XML elements are specified in the CPML standard which is – in turn – based on the EFET eCM4.1 standard.

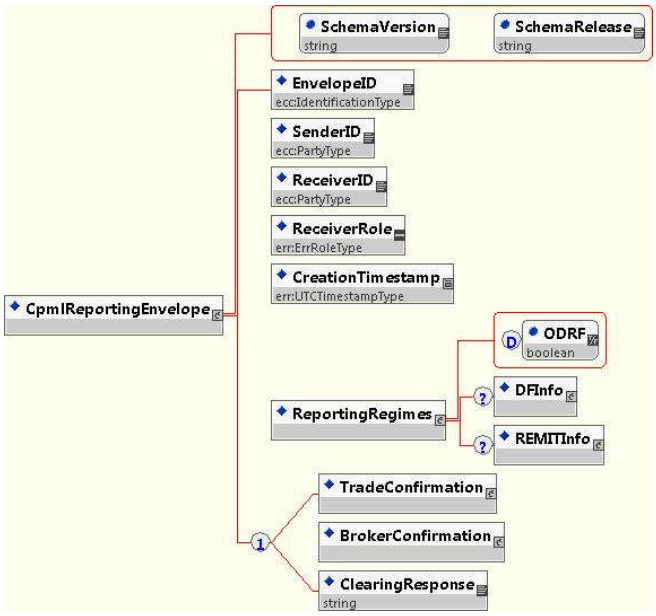
Figure: OTC trade data in CPML format





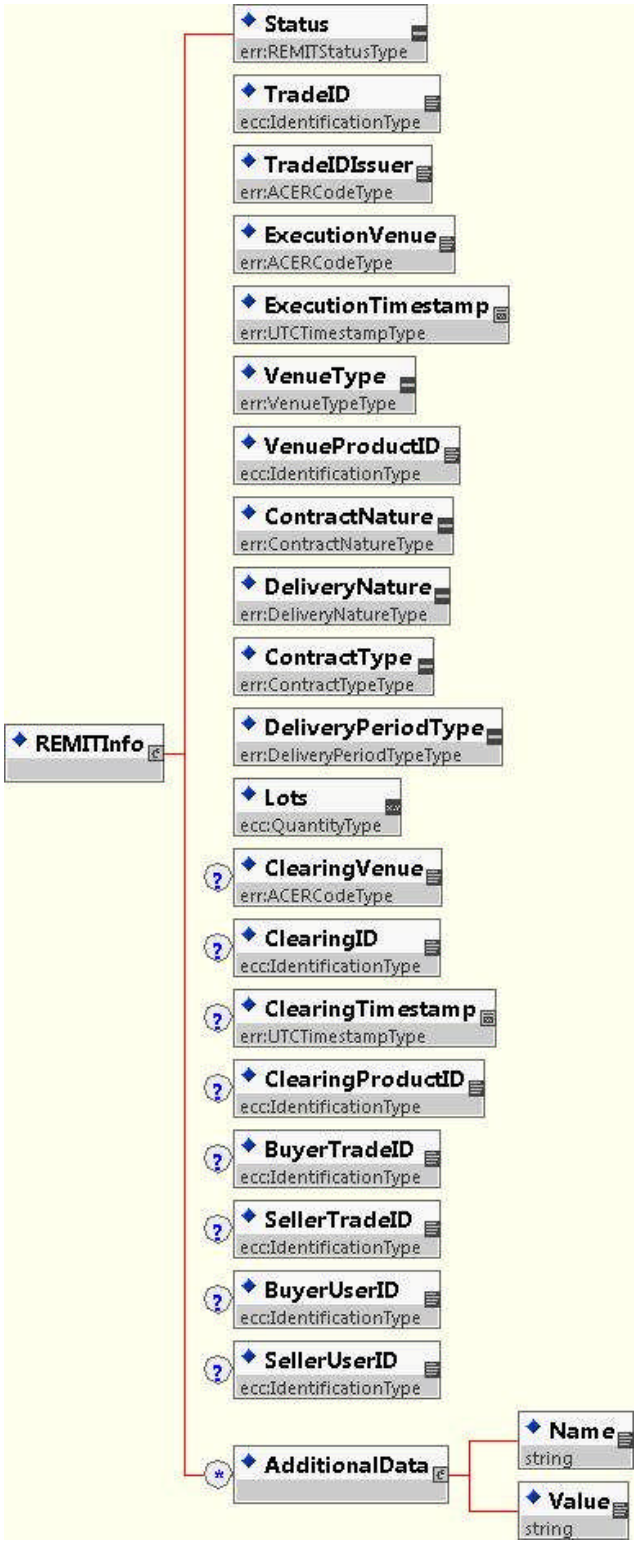
As an extension for regulatory reporting, CPML foresees a reporting envelope wrapping the above described trade confirmation document schema. The envelope holds additional data required by the different reporting regimes. The most advanced information is available for Dodd-Frank (live since January 2012), a REMIT section is already foreseen for future extension.

Figure: CpML Reporting Data



The REMITInfo XML Section can be further extended to accommodate specific additional report information in extension of CPML trade confirmation data.

Figure: CpML Reporting Data



Under EFET, a reporting-related standardisation group has been formed that is co-chaired by Filip Sleeuwagen (EFET) and Cemil Altin (EDF Trading). Its focus is on optimising report data for the different regulatory regimes. It is expected that the Cpml reporting header and its REMITInfo section will be adjusted as specific requirements come up over the second half of 2012.

Trade Data Mapping from Exchanges, Broker Platforms, and Clearing Services
The following table describes the mapping how the report output from

- Exchanges,
- broker platforms, and
- OTC clearing services

is mapped to the CPML reporting format for CommodityContracts. The entire report data is distributed across two parts,

1. the ReportingHeader as it is defined by EFET,
2. the REMITInfo section, and
3. the main document part which is equal to an OTC trade confirmation.

In the following, ACERIDs are used as an abstraction for a single code schema used under REMIT for the identification of market participants. It has to be agreed if EIC codes, LEIs or it may be an ACER-specific code.

1. StandardCommodityContract, Reporting Header

XML Element	Values to be mapped by Market Participants, Exchanges, Broker Platforms, or Clearing Services
SchemaVersion	Use value "1"
SchemaRelease	Use value "0"
EnvelopeID	Use a unique ID for the envelope.
SenderID	Use ACERID of market participant/RRM
ReceiverID	Use ACERID of ACER system.
CreationTimestamp	Date and time of the creation of the envelope (UTC time, ISO 8601 format).
ReportingRegimes	This section holds specific reporting metadata the goes beyond the report content in the embedded OTC trade confirmation data.
ReportingRegimes/DFInfo	Report metadata specific for reporting under Dodd-Frank, not relevant for reporting under REMIT
ReportingRegimes/REMITInfo	Data specific for reporting under REMIT

2. REMITtInfo Section

XML Element	Values to be mapped by Exchanges, Broker Platforms, or Clearing Services
Status	Status of the contract, allowed values are: “Unconfirmed”, “Confirmed”, “Cleared”, “Amendment”, “Cancelled” Exchanges: use “Confirmed” or “Cleared” broker platforms: use “Unconfirmed” or “Confirmed” bilateral trades: Use “Unconfirmed” or “Confirmed”
TradeID	This value must be unique per TradeIDIssuer Exchanges and broker platforms as RRM: use execution system trade ID here Clearing services as RRM: use trade ID of the execution system.
TradeIDIssuer	ACERID of the entity that has created the TradeID. This is either an exchange, a broker platform or a clearing service.
ExecutionVenue	Acer ID of the execution platform (exchange or broker platform), e.g., PowerNext, or Globalvision. This list is maintained as a list by ACER.
ExecutionDateTime	Date and time of the execution (UTC time, ISO 8601 format). Condition: use date & time in case of exchange or broker platform as venue. Bilateral trades: Use trading system timestamp
VenueType	One of the following: “Exchange”, “BrokerPlatform”, “Voice”, “Bilateral”. The actual broker is given in the “Agents” section of the TradeConfirmation.
VenueProductID	Proprietary product code of the execution venue. Delivery period information is not required as part of the product code. Examples are: “F0BM” (EEX), “DBF Aug-13” (ENDEX codes), “TD5 OCT10 C120” (NOS).
ContractNature	Use one of the following: “Commodity”, “Transport”, “Storage”, “Balancing”. Derive the value from the product definition.
DeliveryType	Either “Financial” or “Physical” Derive the value from the product definition.
ContractType	This element exists already in the TradeConfirmation as “LoadType” section but is not used for confirmation purposes. For trade classification under REMIT it makes sense to use one of the following values: “Base”, “Peak”, “OffPeak”, “Custom”, “Other”.

XML Element	Values to be mapped by Exchanges, Broker Platforms, or Clearing Services
	Derive the value from the product definition
DeliveryPeriodType	One of the following: “Hour”, “Day”, “Weekday”, “Weekend”, “Month”, “Quarter”, “Season”, “Year”.
	Derive the value from the product definition
Lots	Put number of traded lots here. In case of OTC trades, use “1”.
ClearingVenue	Acer ID of the clearing service (this is either a clearing house or an agency that acts as a market interface for the registration for clearing).
	Conditional: Use if trade is cleared
ClearingID	Conditional: Use if trade is cleared
ClearingTimeStamp	Date and time of clearing for this trade (UTC time, ISO 8601 format).
	Conditional: Use if trade is cleared
ClearingProductID	Proprietary product code of the clearing venue.
	Conditional: Use if trade is cleared
BuyerTradeID	Optional: if available report the local TradeID of the buyer’s trading system
SellerTradeID	Optional: if available report the local TradeID of the seller’s trading system
BuyerUserID	Put venue user ID of the buyer here, e.g., Acer code for trade responsible.
	Conditional: if unilaterally reported, only required for the buyer role otherwise required.
SellerUserID	Put venue user ID of the seller here Conditional: if unilaterally reported, only required for the seller role otherwise required.
AdditionalData	This is an optional, repeatable section which accommodates further report information that individual reporting entities are willing to provide.
AdditionalData/Name	Field name of type “string”.
AdditionalData/Value	Data value of type “string”.

3. **StandardCommodityContract, TradeConfirmation section**

Only deviations from the OTC use of the section “TradeConfirmations” are described here. Please refer to the CPML definition for further details.

XML Element	Values to be mapped by Market Participants, Exchanges, Broker Platforms, or Clearing Services
DocumentID	See EFET eCM rules
DocumentUsage	“Test” or “Live”
SenderID	ACERID of the server
ReceiverID	Use ACERID of ARIS
ReceiverRole	“REMIT”
DocumentVersion	Start with 1. In case on amendments (phase 2) increase by 1
Market	See element definition in CPML
Commodity	Derive from venue product definition. Only submit reports for “power” or “gas”
TransactionType	See element definition in CPML
DeliveryPointArea	For trades with physical settlement, use EIC code of delivwry point otherwise use EIC code for market area.
BuyerParty	ACERID of buyer
SellerParty	ACERID of seller
LoadType	Derive from venue product definition. Use “base”, “peak”, “off-peak”, or “other”
Agreement	Venues should use “MA” for member agreement
Currency	Derive from venue product definition. Use ISO code.
TotalVolume	Calculate #lots X #load hours for the delivery period.
TotalVolumeUnit	Mapping should be normalised to MWh.
TradeDate	Put execution date here
CapacityUnit	Not used
PriceUnit/Currency	Derive from venue product definition. Use ISO code.
PriceUnit/Currency/ UseFractionUnit	
PrictUnit/CapacityUnit	Should be only MW, mapping must normalize if necessary
TimeIntervalQuantities	Repeat “TimeIntervalQuantity” for each individual delivery.

XML Element	Values to be mapped by Market Participants, Exchanges, Broker Platforms, or Clearing Services
TimeIntervalQuantity/ DeliveryStartDateAndTime	Timestamp, derive from product definition
TimeIntervalQuantity/ DeliveryEndDateAndTime	Timestamp, derive from product definition
TimeIntervalQuantity/ ContractCapacity	= #lots if MW/lot = 1
TimeIntervalQuantity/Price	= price per delivery time interval if this is individual
FixedPriceInformation	See usage rules in the CPML standard
FixedPriceInformation/ FixedPRicePayer	ACERID, see CPML specification, derive value from venue's product definition
TotalContractValue	= #lots * contract value per lot * number of time units
FloatPriceInformation	See usage rules in the CPML standard
FloatPriceInformation/ FloatPricePayer	ACERID
FloatPriceInformation	Used for swaps float leg details, see CPML specification Values for commodity references have to be derived from the venue's product definition.
Rounding, CommonPricing, OrderNumber, EffectiveDate, TerminationDate, EUATradeDetails, PhysicalCoalTradeDetails, HubCodificationInformation, Account&ChargeInformation, DeliveryPeriods	Do not use these elements by exchanges, broker platforms, clearing services.
Option Data	Option section is optional. Only data items required for reporting are listed here
OptionType	Derive from venue product definition, either "put" or "call"
OptionWriter	ACERID of the Seller party
OptionHolder	ACERID of the Buyer party
OptionStyle	Derive from venue product, either "European" or "American"
StrikePrice	Derive from venue product definition.

XML Element	Values to be mapped by Market Participants, Exchanges, Broker Platforms, or Clearing Services
PremiumCurrency	Derive from venue product definition.
TotalPremiumValue	Derive from venue product definition.
Swaps Data	Swap leg details are repeated under “FloatPriceInformation”, follow the EFET population rules for swaps data.
FloatPricePayer	Derive from venue product definition.
CommodityReferencePrice	Derive from venue product definition.
IndexCommodity	Derive from venue product definition.
IndexCurrencyUnit	Derive from venue product definition.
IndexCapacityUnit	Derive from venue product definition.
SpecifierPrice	Derive from venue product definition.
Factor	Derive from venue product definition.
DeliveryDate	Derive from venue product definition.
Agents/.../BrokerID	Exchanges: Do not use Broker platform: Put ACERID of broker here
Futher optional root-level data	
TradeTime	Execution Time
TraderName	Mot mandatory for reporting since REMIT reporting header elements hold this information.

Trade Lifecycle events: Amendments (Phase 2)

An amendment to a commodity contract is submitted with the same DocumentID but an increased version number. It replaces the previous version which is not used anymore for calculations and data comparisons. However, updated versions of data should remain in the system to allow for doing a historic analysis.

The Status element within the REMITInfo section of the CPMLReportingEnvelope has to be set to “Amended”.

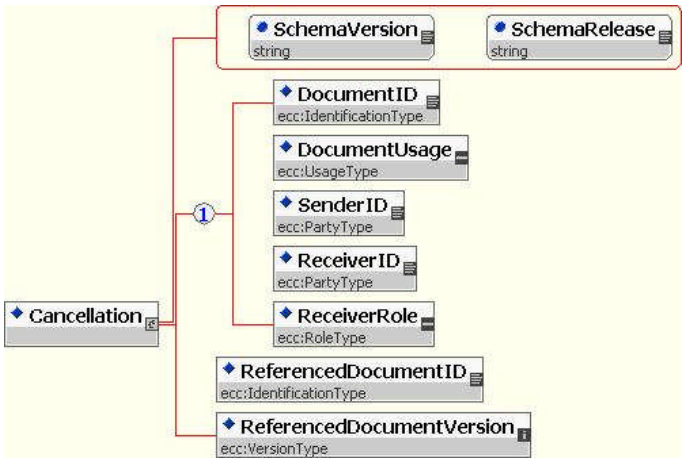
Trade Lifecycle events: Cancellations (Phase 2)

Market participants or RRMs may cancel reported data out of the ARIS system. This leads to the effect that trade data is not used for calculation anymore but still remains in the system for historic analysis.

The Status element within the REMITInfo section of the CPMLReportingEnvelope has to be set to “Amended”.

The CPML Cancellation document type is recommended here:

Figure: CPML Cancellation XML schema

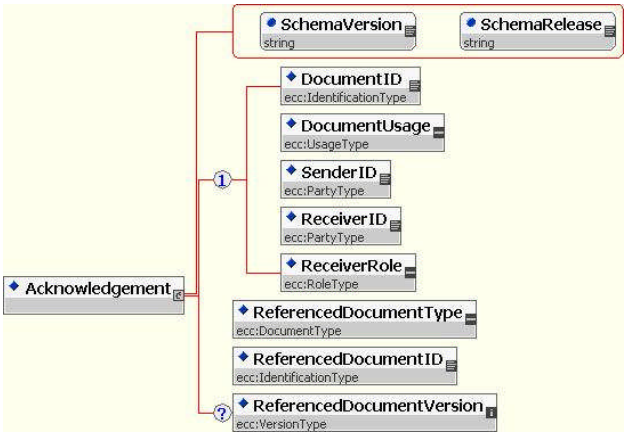


REMIT Business Acknowledgement

Apart from a technical acknowledgement which confirms reception and storage of the document for a report by ACER, the BusinessAcknowlegement confirms successful processing of the data received. This includes e.g., verification of codes, application of validation rules and successful storage of the report data in the operational database tables.

The REMIT Business Acknowledgement takes pattern from the CPMLformat:

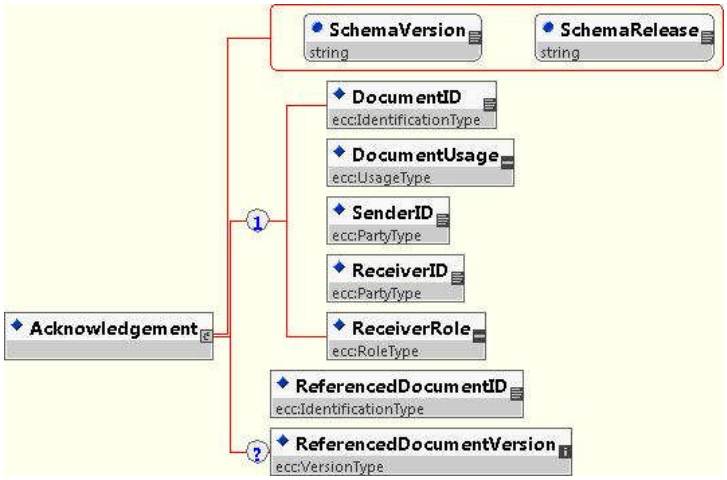
Figure: REMIT BusinessAcknowledgement



XML Element	
SchemaVersion	This is set to “1”
SchemaRelease	This is set to “0”
DocumentID	A unique ID within the ACER database
Sender	ACERID of ACER

Receiver	ACERID of the sender of the report document
ReceiverRole	Use: “ReportingEntity”
ReferencedDocumentID	Document ID of the received report
ReferencedDocumentVersion	Version ID of the received report

Figure: REMIT Business Acknowledgement



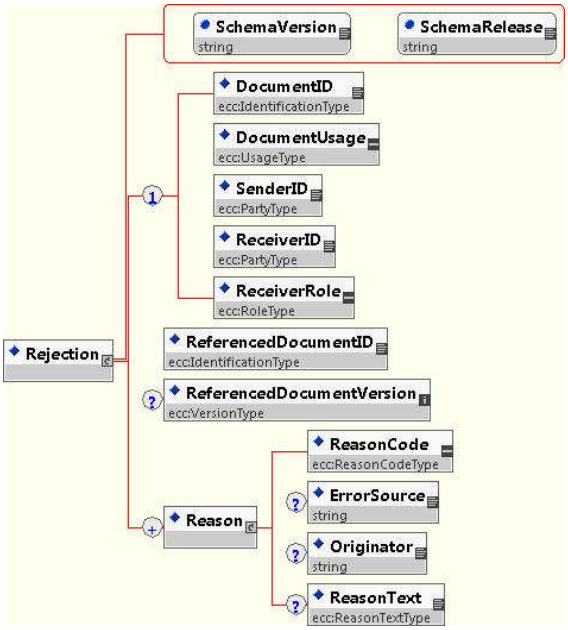
REMIT Rejection

If report data is invalid (syntactically or semantically), a Rejection document is sent back to the reporting entity.

XML Element	
SchemaVersion	This is set to “1”
SchemaRelease	This is set to “0”
DocumentID	A unique ID within the ACER database
Sender	ACERID of ACER
Receiver	ACERID of the sender of the report document
ReceiverRole	Use: “ReportingEntity”
ReferencedDocumentID	Document ID of the received report
ReferencedDocumentVersion	Version ID of the received report
Reason	Mandatory, repeatable section
Reason/ReasonCode	A list of rejection codes needs to be defined. As many validation

XML Element	
	error as possible should be codified
Reason/ErrorSource	Location of the receiving system where the error was detected, e.g., XML validation or business validation
Reason/Originator	Business entity that caused the rejection
Reason/ReasonText	Additional explanation of the reason for the rejection

Figure: REMIT Rejection



Short-Form Reporting of Commodity Contracts

Non-Standard CommodityContracts are reported in a dedicated format which allows to provide core trade information as a repeated list.

	Non-standard Trade Report															
	Issuer	RWE Supply & Trading	Report Date	31.07.2013												
	Issuer ACER Code	ABC_RWEST_1234_BlaBla														
#	Venue	Buyer	Seller	TradeID	Broker	Comm	DelType	Date	Volume	Unit/Load	Delivery to	Contr Value	Curr	/UoM	Del Period	
1	OTC	ABC_RWEST_1234_BlaBla	ABC_EDFT_4711_xyz	RWE_4711		Power	Financial	02.07.2013	1.000.000	MWh	DEL_50HERTZ	40	EUR	MWh	01.01.14-31.12.14	
2	OTC	ABC_RWEST_1234_BlaBla	ABC_CITI_9999_abc	RWE_4712	CDE_GFI_xxx	Power	Physical	04.07.2013	2.000.000	MWh	DEL_50HERTZ	45	EUR	MWh	01.01.14-31.01.14	
3	OTC	ABC_SW_HUBENDUEBEL	ABC_RWEST_1234	RWE_4713		Power	Physical	05.07.2013	3.000.000	MWh	DEL_RTE	45	EUR	MWh	01.02.14-28.02.14	
4	OTC	ABC_SW_DDORF_xxx	ABC_RWEST_1234	RWE_4714		Power	Financial	08.07.2013	4.000.000	MWh	DEL_AMPRION	46	EUR	MWh	01.01.14-31.12.14	
5	OTC	ABC_RWEST_1234_BlaBla	ABC_EON_4711	RWE_4715	CDE_ICA_xxx	Power	Financial	09.07.2013	5.000.000	MWh	DEL_AMPRION	47	EUR	MWh	01.01.14-31.03.14	
6	OTC	ABC_EON_xxx	ABC_RWEST_1234	RWE_4716		Power	Financial	11.07.2013	6.000.000	MWh	DEL_AMPRION	47	EUR	MWh	01.04.14-30.06.14	
7	OTC	ABC_RWEST_1234_BlaBla	ABC_EDFT_4711_xyz	RWE_4717	CDE_SPT_xxx	Power	Physical	12.07.2013	7.000.000	MWh	DEL_50HERTZ	47	EUR	MWh	01.01.14-31.12.14	
8	OTC	ABC_EON_xxx	ABC_RWEST_1234	RWE_4718	CDE_TPB_xxx	Power	Financial	12.07.2013	8.000.000	MWh	DEL_AMPRION	48	EUR	MWh	01.02.14-28.02.14	
9	OTC	ABC_SW_HUBENDUEBEL	ABC_RWEST_1234	RWE_4719		Power	Financial	15.07.2013	9.000.000	MWh	DEL_50HERTZ	49	EUR	MWh	01.01.14-31.03.14	
10	OTC	ABC_CITI_9999_abc	ABC_RWEST_1234	RWE_4720		Power	Physical	16.07.2013	10.000.000	MWh	DEL_RTE	49	EUR	MWh	01.04.14-30.06.14	
	<<< Prev. Page											Next Page >>>				

Figure: Excel entry sheet for Short Form reporting

The data fields for Short Form Reporting are:

Field Name	
ReportingEntity	ACERID of the issuer of a short form report
ReportDate	Date type of report creation, ISO 8601 format.
ReportPeriod	Should be a month, use start data and end date
TradeData	Mandatory, repeatable
Venue	Use ACERID of the venue, use "OTC" in case of OTC trades
Buyer	User ACERID of buyer
Seller	Use ACERID of seller
TradeID	Use trade ID of venue or in case of unbrokered OTC trades, use local trade ID of the local trading system
Broker	ACERID of the broker
Commodity	Either "Power" or "Gas"
DeliveryType	"Physical" or "Financial"
TransactionTypeDescr	Free text to describe transaction type
TransactionDate	UTC DateTime value
Volume	Use an estimation of the total volume. The calculation follows the one for the TotalVolume element
VolumeUnit	Should be MWh for power or "kWh/d" for Gas
DeliveryPointArea	EIC code for the delivery point or market area
ContractValue	Total value of the contract, possibly only estimated
ContractValueCurrency	Should be "EUR"
ContractValueCurrencyRate	FX vs. EUC rate at the time of the contract if ContractValueCurrency is not EUR
ContractValueUoM	Should be "MWh"for power or "kWh/d" for Gas
DeliveryPeriod	Start and end of the deliveryPeriod

Phase 1 Reporting by Power TSOs

For phase 1, only the message type ScheduleNominationPower information is required. Schedule data should be reported based on the most exact document that is exchanged between traders and TSOs.

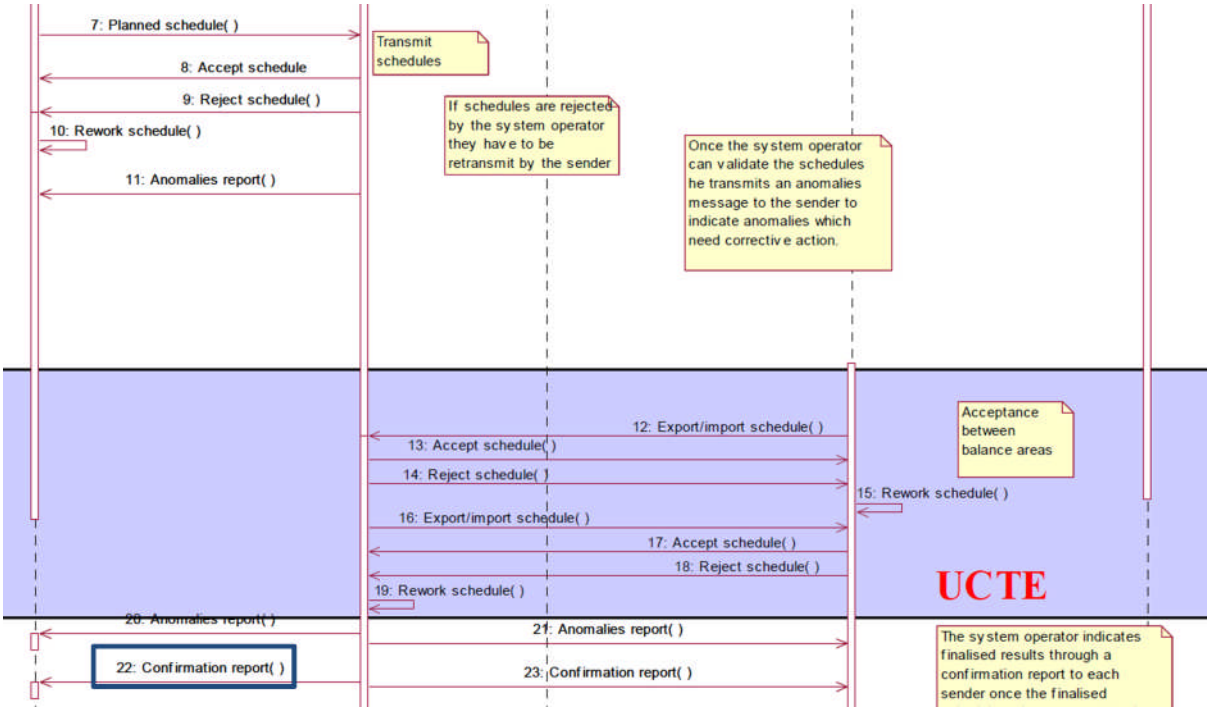
Since scheduling is a process that starts on D-1 with a sequence of possible intraday adjustments, only the last schedule for the last intraday time interval holds to most precise information.

The Scheduling process also foresees that TSO validate submitted data (against other traders and TSOs). If schedules received by TSOs are balanced, they confirm this by sending a *ConfirmationReport* back to each trader. This is exactly the document type that should also be used for reporting under REMIT.

Therefore it is expected that reporting takes place after the last time interval of delivery day D has been scheduled. Moreover, for all earlier time intervals of D the actually scheduled load has to be reported in the ScheduleNominationPower document.

The following figure shows the scheduling process as defined in the ESS Implementation Guide (https://www.entsoe.eu/fileadmin/user_upload/edi/library/schedulev3r3/documentation/ess-guide-v3r3.pdf):

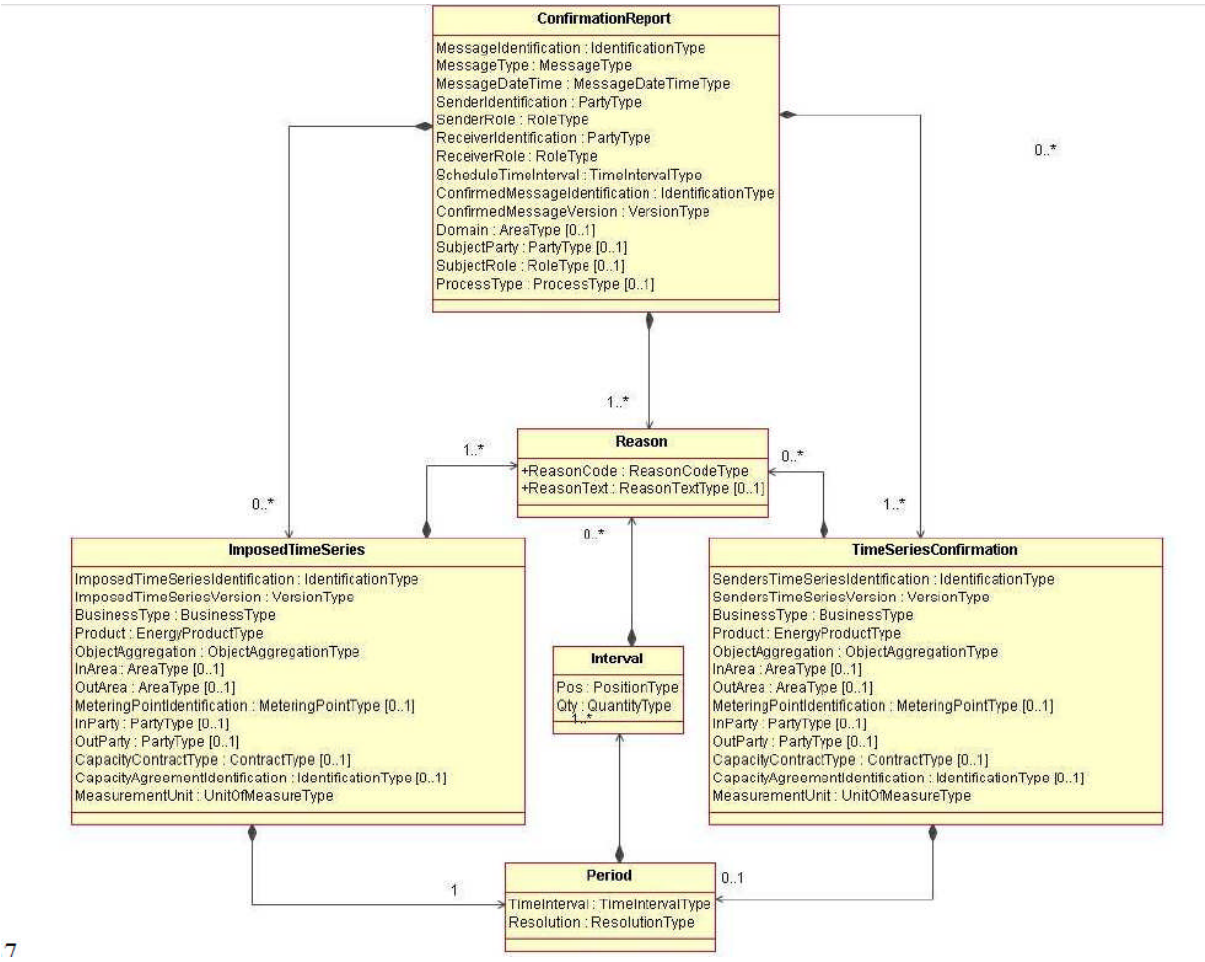
Figure: ESS scheduling process



Following the ESS documentation, the Confirmation Report uses a hierarchical data schema, consisting of the following sections:

- ConfirmationReport header (here messaging information, parties, and further identifications are located),
- a repeatable ImposedTimeSeries section (delivery point information is located here and further details on the type of delivery)
- period data: This data has to be normalised to a period of one day with hourly intervals for reporting to ARIS.
- Interval data: These are 24 hourly load values.

Figure: ESS Confirmation Report Document Schema



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Out of an ESS ConfirmationReport document, the following ARIS ScheduleNominationPower tables are populated. Not all data elements need to be used for reporting (these are omitted).

ConfirmationReport XML Element	Mandatory, Optional, Cond. / Data type	Description
ConfirmationReport Header		
MessageIdentification	M c35	Must be unique per TSO
MessageType	M enum	The confirmation report document type identifies the information flow characteristics.
MessageDateTime	M DateTime	Use UTC time here
SenderIdentification	M ACERID	The TSO's EIC code. Practically, the document may be reported through an RRM, e.g., a transparency platform.
ReceiverIdentififcation	M ACERID	The EIC code of the trader goes here.

ConfirmationReport XML Element	Mandatory, Optional, Cond. / Data type	Description
ScheduleTimeInterval	M DateTime	Beginning and end of the delivery period. The start and end date and time must respect the format: YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ. The time must be expressed as UTC time in ISO 8601 format.
Domain	C C18	See ESS Code list definition
SubjectParty	C	The party that is the subject of the being confirmed.
SubjectRole	C	
ProcessType		The nature of the process defined in the document being confirmed.
TimeSeriesConfirmation Section		
BusinessType		The nature of the time series for which the product is handled.
Product	M C3	Identification of an energy product such as Power, energy, reactive power, transport capacity, etc.
ObjectAggregation	M C3	Identifies how the object is aggregated.
InArea	O ch18	Area to which a delivery is directed, EIC code
OutArea	O Ch18	Area from which a delivery is provided, EIC code
InParty	O C16	The EIC of the Party to which a delivery is made
OutParty	O C16	The EIC of the Party who delivers
CapacityContractType	C C3	The contract type defines the conditions under which the capacity was allocated and handled. e.g.: daily auction, weekly auction, monthly auction, yearly auction, etc. The significance of this type is dependent on the in area and out area specific coded working methods. The transmission capacity allocator responsible for the area in question auctions defines the contract type to be used.
CapacityAgeement	C C35	The identification of an agreement for the allocation of capacity to a party.

ConfirmationReport XML Element	Mandatory, Optional, Cond. / Data type	Description
Measurement	M C3	The unit of measure which is applied to the quantities in which the time series is expressed.
Period		
TimeInterval	TimeIntervalType	
Resolution		Hourly
Interval		
Pos	Int	Running number, should be from 0 to 23 for the hours of a day.
Qty	Int	The scheduled quantity for a given hour

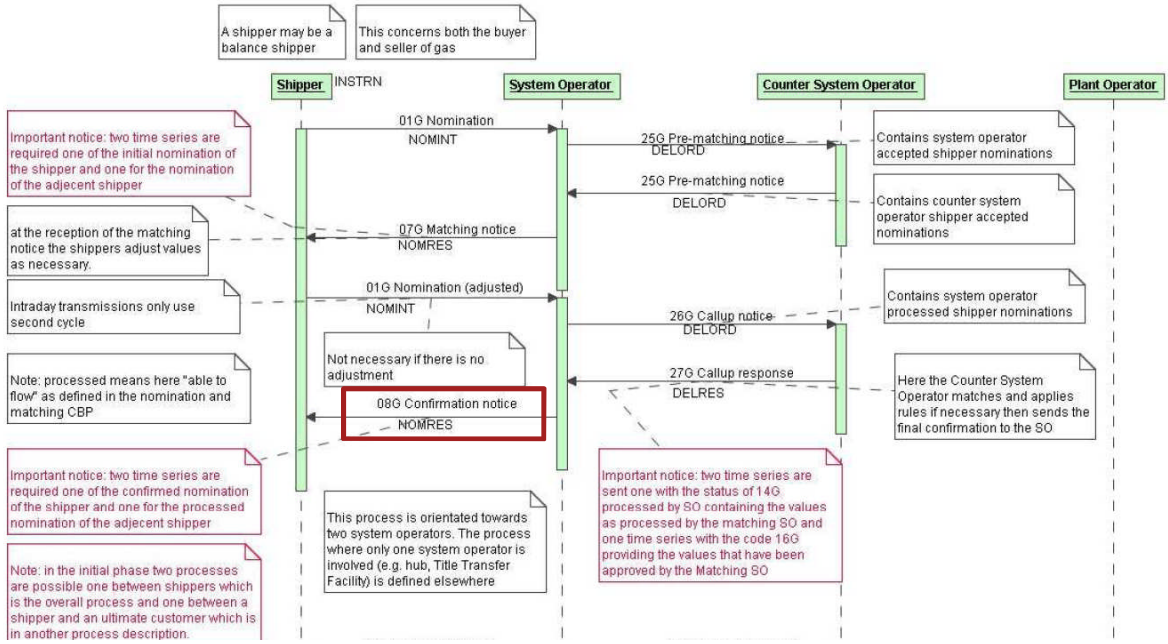
Phase 1 Reporting by Gas TSOs

For Gas nominations, the EDIG@S standard is proposed. It is important to highlight that the current use of EDIG@S is not sufficiently standardised across Europe. I.e., document semantics may vary from country to country.

In order to received the most precise nomination document for a given delivery day D (gas day), it is expected that gas TSOs use their NOM.RES document which is issued within the EDIG@S nomination process as the response document sent back to traders after having received NOM.INT (nomination documents) from both traders and after having balanced them.

Also as part of the gas nomination process, several nomination processes may be carried out by market participants. In this case the last possible nomination (possibly intraday) should be taken as the basis for reporting.

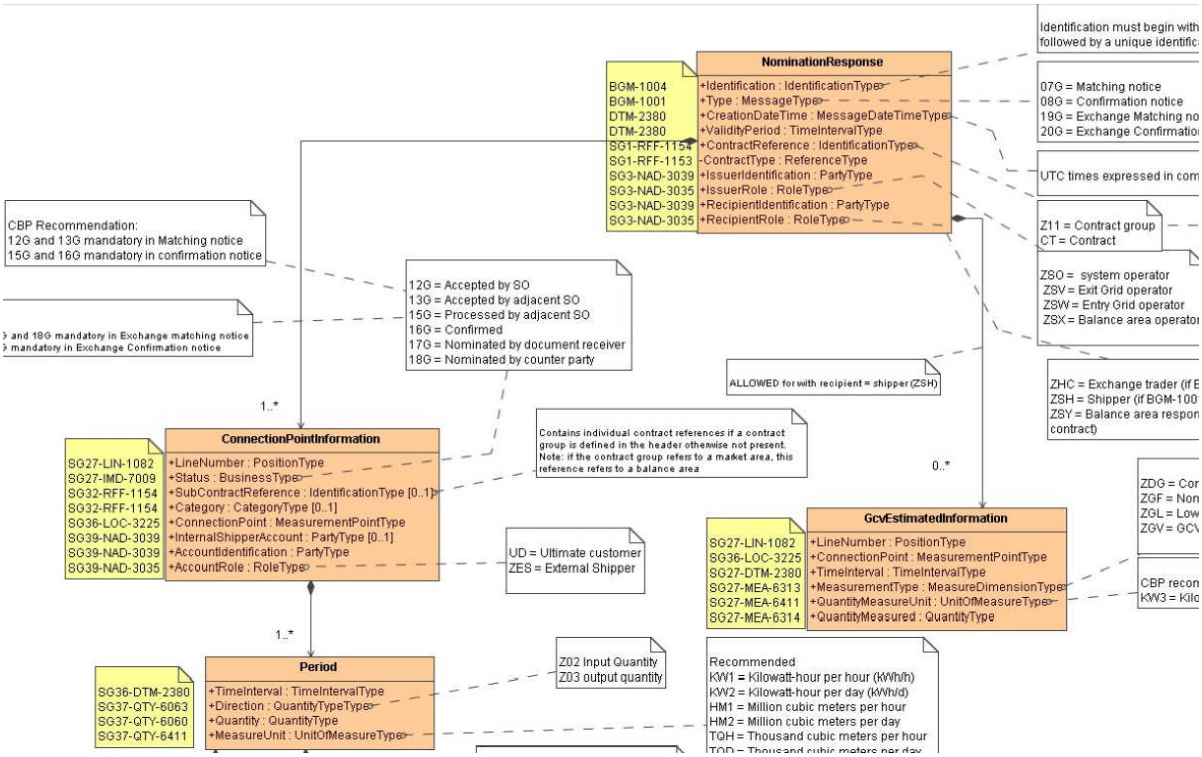
Figure: The EDIG@S NOMRES message should be used for REMIT Reporting



Following the EDIG@S documentation, the NOMRES uses a hierarchical data schema, consisting of the following sections:

- NominationResponse header (here messaging information, parties, and further identifications are located),
- a repeatable ConnectionPointInformation section (connection point information is located here and further details on the shipper (= trader))
- period data: This data has to be normalised to a period of one day with hourly intervals for reporting to ARIS.

Figure: EDIG@S NOMRES Document Schema



As identification of sender and receiver of a NOMRES has to be retained in order to obtain codes of TSO and shipper, the actual sender of the document (RRM, e.g., gas transparency platform) and the ACER as the receiver have to be identified as a part of the messaging envelope.

The following NOMRES fields may be used for reporting:

NOMRES Field	Mandatory, Optional, Cond. / Data type	Description
Nomination Response		
Identification	M c30	This is based on the Identification field in NOMRES. Must be unique per TSO
Type	M int	Should be a confirmation notice (originally sent to shipper) or an exchange confirmation notice
CreationDateTime	M DateTime	The date and time that the document was prepared for transmission by the application of the initiator (ISO 8601 format).
ValidityPeriod	M	Start and end date and time of the period of validity of the document.
ContractReference	M C35	Contract identification or contract group identification
ContractType		Indicates if ContractReference is either a contract number or a contract group.

NOMRES Field	Mandatory, Optional, Cond. / Data type	Description
IssuerIdentification	M EIC Code	The identification (EIC code) of the TSO that has originally sent the NOMRES document to the shipper
ReceipientIdentififcation	M EIC Code	The identifiфcation of the shipper / trader.
ConnectionPoint Information Section		Mandatory & repeatable within the root section
Status	M C3	Status = "16G" (Confirmed) should be used here.
SubContractReference	C C35	The subcontract reference identifies the contract identification that is relevant for the connection point.
Category	C C3	Type of yearly take-off
ConnectionPoint	M EIC Code	EIC Code for the connection point
AccountIdentification	M C35	The identification of an Account that is known to both system Operators.
AccountRole	M C3	The following Roles are permitted: UD = Utlimate Customer ZES = External Shipper
Period		Mandatory & repeatable
TimeInterval	M varchar100	Beginning and end of the delivery, should be a whole gas day of 24 hours.
Direction	M ch2	This identifies the direction of the energy flow. Intended codes are: Z02 = Input Z03 = Output
Quantity	M	The quantity for the connection point within the time interval in question.
MeasureUnit	M	The unit of measurement used for all the quantities expressed within a time series. The following are the codes recommended for use: - KW1 Kilowatt-hour per hour (kWh/h) - KW2 Kilowatt-hour per day (kWh/d) - HM1 Million cubic meters per hour - HM2 Million cubic meters per day - TQH Thousand cubic meters per hour - TQD Thousand cubic meters per day - MQ5 Normal cubic meters - P1 Percentage (only where Type = 20G). Should be normalised to MWh/h = MW.

NOMRES Field	Mandatory, Optional, Cond. / Data type	Description
Status		Optional, used if additional business information is added to the Period section.
QuantityStatus	M, C3	This information provides the status of the quantity for the time interval being reported. Currently only one of the following status values are permitted: - 06G = Mismatch. - 07G = Interrupted. - 08G = Interrupted firm. - 09G = Quality deficient. - 10G = Reduced capacity. - 11G = Below 100%. - 12G = Settled. - 13G = Unchanged settled. - 14G = No counter nomination. - 35G = Counter Party Prevailed. - 36G = No Match counter party prevailed. - 37G = Reduced Nominated Quantity.
ReasonText	C, Varchar512	If the code does not provide all the information to clearly identify the justification of an amendment then the textual information may be provided.