



Report on Transparency

Final Version (13.09.2007)

IG Transparency

**Electricity Regional Initiative
Northern Regional Electricity Market**



Executive Summary

The Northern Electricity Regional Energy Market (REM), which is a part of ERGEG's Electricity Regional Initiative, is engaged in harmonizing congestion management and transparency in the Northern electricity market consisting of Denmark, Finland, Germany, Norway, Poland and Sweden.

This report contains transparency requirements based on the Congestion Management Guidelines (Commission Decision of 9 November 2006, 2006/770/EC, amending the Annex to Regulation (EC) 1228/2003 on conditions for access to transmission network for cross-border exchanges in electricity, hereinafter cited as CM Guidelines) but taking also into account the ERGEG Guidelines of Good Practice on Information Management and Transparency (GGP-IMT).

Generally, the basis for harmonization of the transparency rules within the Northern REM is provided by this report. It covers transparency regarding generation, transmission and interconnection, load, balancing and wholesale markets. Implementing this report will lead to improvements in the current practice of publication. For the first time, generation data, including information about unavailability of consumption and generation units will be available region wide. However there are some restrictions. It has to be stressed that the report only refers to the information requirements set out in the CM Guidelines that are regularly updated. Other publication duties, e.g. according to point 5.2, 5.3, 5.4 CM Guidelines, refer to information that has to be published once (e.g. information on the applied congestion management method). Also, national publication requirements which might go beyond what is prescribed here are not touched. At last, although information on lines that are not fully open to third party access is important applicability of the publication requirements set up by this report for these lines shall be decided separately by the relevant IG.

One of the main impediments identified by the IG transparency was the data delivery from generation and consumption units located in the distribution grids. Market participants concerned (also generators and significant consumption units) are obliged to provide the TSOs responsible for publication of all relevant data concerning cross-border trade with the relevant data according to point 5.5 S. 2 CM Guidelines. Therefore TSOs shall be able to get data from generators and significant consumption units connected to the transmission network. Consequently, it is proposed here that each national regulatory authority or other competent authority could oblige DSOs to provide data on generation connected to distribution grids to the TSOs in case TSOs do not have access to the data required.

Regarding the location of publication a publication on a common European website (like ETSOVista) is envisaged. This is important as transparency should not only be harmonised at a regional level but also at a European level in order to allow for a true internal electricity market to develop.

As publication on the homepages of the power exchanges is partly already established practise and this also results in some kind of aggregation this could be accepted by regulators. Power exchanges as information platform provider are widely acknowledged as a helpful tool.

The timeframe for implementation takes into account the type of information required. Information on load (cf. chapter 4.1), transmission and interconnection (cf. chapter 4.2) and balancing (cf. chapter 4.4) has to be provided on national homepages of TSOs (alternatively on the homepages of the power exchanges) until 1st of January 2008. As this data is mainly aggregated data a publication of these data on a common European website has to be in place until 1st of July 2008.

Information on generation (cf. chapter 4.3) shall be published on national homepages of TSOs (alternatively on the homepages of the power exchanges) until 1st of July 2008 as publication of these transparency requirements would take some effort for implementation as data delivery processes from generation and consumption units connected to distribution grids to the TSOs have to be established.

Publication of wholesale market data (chapter 4.5) can be published voluntarily. This information is already available to a large extent.

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1 Introduction

Transparency is important for a solid development of the electricity and gas markets. By creating a level playing field for the relevant parties transparency is a precondition for efficient functioning of the competitive market. This assessment is also given by the European Commission which stressed the importance of market transparency in its Strategy Energy Review of 10. January 2007.

Some general requirements for provision of information in order to improve transparency are already given by the Regulation (EC) 1228/2003 on conditions for access to the network for cross-border exchanges in electricity (Reg 1228/2003). Additionally the European Commission in November 2006 adopted under the Regulation the Congestion Management Guidelines (CM-GL) which also include several publication duties in its chapter 5.

In August 2006 the European Regulators Group for Electricity and Gas (ERGEG) published Guidelines of Good Practice on Information Management and Transparency (GGP-IMT). These guidelines were subject to a public consultation and public hearing before their approval and publication by ERGEG¹.

Parallel to that, stakeholders have highlighted the importance of adequate information for the functioning and the improvement of the electricity markets². In spring 2006 Eurelectric provided a paper on transparency that was subject of discussion in the second round of the Mini-Fora in summer 2006 and also at the Florence Forum in September 2006. Also in 2006 ETSO implemented a common data platform (ETSOVista) to facilitate transparency³. In Germany, Austria, the Netherlands and France generators have started to publish data on generation voluntarily. In the Nordic market it is a precondition for being a member of Nord Pool Spot that certain information is supplied to Nord Pool Spot for publication.

Furthermore, the European Commission considers transparency important and therefore announced to include some legislative requirements regarding transparency within its so called 3rd package.

Approach taken in Northern Europe

ERGEG launched its Electricity and Gas Regional Initiatives in spring 2006 to promote concrete improvements in the operation and integration of EU electricity and gas markets. The Northern Europe REM is one of the Regional Electricity Markets which were established corresponding to those outlined in the CM Guidelines. One of the major targets is the harmonization of the practices of transparency within the regions and across regions in order to avoid informational asymmetries between market parties within one country and also between the market parties in different countries.

The Regional Coordination Committee of the Electricity Regional Initiative of Northern REM decided to establish an Implementation Group (IG) specifically dealing with this topic. The aim is to harmonise the rules applied to transparency. The Implementation Group is chaired by the Federal Network Agency of Germany and consists of all relevant stakeholders in the region, including transmission system operators, power exchanges, associations of traders, grid users and generators.

The first meeting of the Implementation Group on Transparency in the Northern REM was held on 24th October 2006 in Bonn. The basis of the discussion was an analysis of the status quo of information published in the Member States in the Northern REM, i.e. Denmark, Sweden, Norway, Finland, Poland and Germany. Based on the GGP-IMT the RCC in autumn 2006 provided proposals for the definitions of the data which should be published throughout

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http://www.ergreg.org/portal/page/portal/ERGREG_HOME/ERGREG_PC/ARCHIVE1/GGP_Transparency/ERGREG_GGPIMT_2006-08-02.pdf

² See e.g. positions of EFET (<http://www.efet.org>), Eurelectric (www.eurelectric.org)

³ <http://www.etsovista.org>

the region. The proposed definitions were discussed in the first meeting of the IG and were also subject to a written consultation procedure among the participants of the Implementation Group. The following participants provided comments:

- National Regulatory Authorities of the Northern REM, i.e.
 - Danish Energy Regulatory Authority (DERA), Denmark;
 - Energy Market Authority (EMV), Finland;
 - Federal Network Agency (FNA), Germany;
 - The Energy Regulatory Office (ERO), Poland;
 - Energy Markets Inspectorate (EMI), Sweden;
 - Norwegian Water Resources & Energy Directorate (NVE), Norway,
- Nordenergi,
- Nord Pool Spot,
- E.ON Netz,
- EFET, and
- Nordel.

Also, the developments in the Florence Transparency Working Group chaired by ERGEG and the Commission have been considered.

The results of the evaluation of the consultation constituted the basis of the first draft of the report which has been sent to the IG at the beginning of April 2007. The following market participants again provided comments:

- Nordenergi,
- Nord Pool Spot,
- E.ON Netz,
- Nordel
- VDEW.

The second meeting of the implementation group was dedicated to discussion of the draft report and the implementation of the transparency requirements set out in this report. After agreement by regulators the report was published.

Content of the Report

The aim of this report is to provide the basis for harmonization of transparency requirements within the REM Northern Europe. This is especially important as the Scandinavian and the German market will be coupled through implicit auctions from the beginning of 2008.

Taking the list of publication requirements of the CM Guidelines, this report includes common definitions for each item that shall be published. It also contains some general remarks on how market transparency can be improved, cf. chapter 2. The major part of the document is a list of information that should be made available to the market participants, including specified definitions of each data, (cf. chapter 4). For each item of information explanatory remarks are given considering the comments of the market participants received during the public consultation.

The schedule for implementation and requirements regarding the location of publication are included in chapter 2.

The other objective of this report is to provide those parties responsible for publication (primarily the TSOs) with an instrument to achieve implementation of the CM Guidelines. Therefore definitions used in this report were harmonized with the obligations of publication according to these guidelines. Proposed definitions contain therefore data that shall be published by the TSOs according to the CM Guidelines and that are recommended to be published according to the GGP-IMT.

Scope of the report

As the report focuses on publication requirements according to Community law the transparency requirements given in this report do not completely correspond to the publication duties for some market participants (mostly TSOs, PEXs) according to national law. The intention of this report is a harmonised implementation of transparency requirements set out in the CM Guidelines and it shows a common “minimum” of publication duties. National publication obligations may contain more data than given here. Any national requirement cannot be replaced by this report. Furthermore, reference is made only to those positions that need to be updated regularly (e.g. annually, monthly, weekly, daily). Those obligations for publication of the CM Guidelines which are not to be updated regularly have been omitted in this report. Those obligations are

- point 5.2 CM-GL (General description of the congestion management method applied, as well as general scheme for capacity calculation),
- point 5.3 CM-GL (Details on congestion management method in use, delivered to the market generally via Auction Rules), and
- point 5.4 CM-GL (Operational and planning security standards).

Even if these data are not contained in this report, naturally TSOs remain obliged to publish this information. At this time most of this latter information can be found on ETSOVista, the internet-based transparency platform created by ETSO at the end of 2006⁴. Here, data on net transfer capacities (NTCs) and auction rules are available. Finally publication of methodologies of congestion management shall be implemented there. The report should be applied in the countries of the Northern Europe Region. It is applicable for interconnections between bidding areas operated by transmission system operators.

Also, lines operated with direct current and not fully open to third party access play an important role in the electricity market of Northern Europe. Consequently the Northern REM has established an IG on this topic. There is a great interest in the publication of the data concerning these lines. Generally, transparency would be improved, if all information is published at one place, also the data on these lines as proposed by a participant.

The subject of the IG “Optimising the use of interconnectors – SwePol Link und Baltic Cable” is to clarify the obligations of the owners of the lines. The IG Transparency recommends to address the transparency requirements as a special topic within the aforementioned IG..

Benchmarking on status quo of transparency

During the consultation in autumn 2006 every NRA provided information about the situation of transparency in its own Member State in order to benchmark whether transparency was in line with the consulted list of specific definitions developed based on the GGP-IMT.

From that benchmarking it could be seen that the level of transparency in the Northern REM varies depending on the different areas (i.e. load, transmission and interconnectors, generation, balancing and wholesale market). Generation and load are the main areas where improvements are needed. Concerning the data on transmission and interconnectors (4.2 of this report), information already is widely available in the Northern REM. Nevertheless, differences in the implementation throughout the region were observed.

In the meantime improvements in transparency were made as some requirements set out in the CM Guidelines were already implemented either nationally or even on ETSO Vista.

⁴ <http://www.etsovista.org>

Following items are published on ETSOVista.

- Operational data
 - Cross-border physical flows for the last hour
 - D-1 cross-border schedules,
 - Final schedules
- Auction data
 - Daily (per each border)
 - Weekly (concerning border between Slovenia and Croatia)
 - Weekend (concerning France and the United Kingdom)
 - Monthly (common table for all borders)
 - Quarterly (concerning France and the United Kingdom)
 - Seasonal (Oct. 2007-March 2008; concerning France and the United Kingdom)
 - Yearly (common table for all borders)
- Publications
 - NTC-Tables
 - CM-Methodologies (no information implemented yet) and
 - Auction Rules

The benchmarking was based on definitions which partly had to be adapted during the consultation procedure. Therefore the results of the benchmarking will not be incorporated in the final report. Instead, a more elaborated benchmarking will be done in March 2008 along with the first implementation phase.

2 Implementation and further development

The first draft proposed an implementation of all transparency requirements within the report on a common European website until 1st January 2008. The comments of market participants showed that this timeframe is too ambitious. Therefore during the second meeting of the IG transparency on 5th of June 2007 in Bonn a revised proposal of Bundesnetzagentur for a schedule for implementation, location of publication and monitoring of implementation was presented. This could be agreed upon. It is described below.

2.1 Location of publication

In general, the responsible party for publishing the relevant information is the TSO, as it is obliged to publish the necessary market information according to the CM Guidelines. According to CM Guidelines all information published by the TSOs shall be made freely available in an easily accessible form (point 5.9 CM GL). The easiest accessible form of publication is the internet and it has also become a widely accepted method of publication.

Market participants supported the idea of a publication of data on a centralized internet platform, because it is important that market participants can find published information easily. That was supported by the view of the 1st meeting of the Implementation Group on Transparency in Bonn. The project of ETSOVista was welcomed, and it was acknowledged that ETSOVista could serve as this common platform. But it was also stressed that it is not realistic that all publication requirements set out in this report could be implemented on ETSOVista until 1st January 2008. TSOs reported that phase 2 of ETSOVista may only be operational in summer 2008. Therefore an interim solution is required.

During the second meeting of the IG transparency market participants and exchanges stressed that a publication on the homepages of the power exchanges would support transparency for the market.

Currently there are different approaches for publication of data in the countries of Northern Europe. It was mentioned that a large amount of the required information for the Nordic countries is already published on a common platform (i.e. the homepage of Nord Pool Spot). One IG member was in favour of developing this model further rather than putting a lot of effort into the implementation of a new platform. It was argued that the publication responsibility might be with the TSO whereas the means for publication might be different depending on the market structure.

This was also supported by German market participants. In Germany there is a voluntary publication of generation data in place at the power exchange EEX. The voluntary publication of price relevant data in Germany via the web site of EEX was supported by VDEW as market participants regard the best solution for the publication of such data to be as close to the marketplace as possible. Therefore, publication via the EEX is considered as the most pragmatic approach for data relevant for the German market. Furthermore it is important to avoid fragmentation of publication due to the German market consisting of four control areas.

Generally, a publication on a common European website (like ETSOVista) is envisaged. This is important as transparency should not only be harmonised at a regional level but also at a European level.

As publication on the homepages of the power exchanges is partly already established practice and results in some kind of aggregation this could be accepted by regulators. But if publication on the websites of the power exchanges is in place it has to be guaranteed that the information is published according to the legal requirements set out in the Congestion Management Guidelines (e.g. all generation units larger 100 MW are included). Furthermore the information has to be available for all market participants, not only those participating at the exchange. Also, it has to be assured that a proper monitoring of implementation can be done by the competent authority. However, also in this case responsibility of the publication lies with the TSOs as required by CM Guidelines. Therefore TSOs have to assure that publication is done in compliance with the aforementioned Guidelines.

If a publication is on a common European homepage or the homepage of the power exchanges the national TSOs have to set up a link to these platforms on their own homepages.

2.2 Implementation Schedule

The following implementation schedule was agreed by the IG. It foresees an implementation on national homepages of TSOs (alternatively or complementary on the homepages of the power exchanges) until 1st of January 2008 for data on

- load (cf. chapter 4.1),
- transmission and interconnection (cf. chapter 4.2) and
- balancing (cf. chapter 4.4).

As this data is mainly aggregated data a publication of this data on a common European website has to be in place until 1st of July 2008.

Information on generation (cf. chapter 4.3) shall be published on national homepages of TSOs (alternatively or complementary on the homepages of the power exchanges) until 1st of July 2008 as publication of these transparency requirements would take some effort for implementation as data delivery processes from generation and consumption units connected to distribution grids to the TSOs have to be established.

Information on wholesale market (chapter 4.5) can be published voluntarily. This information is already available to a large extent.

2.3 Monitoring of implementation

During the discussion the need for an adequate information management and proper supervision of the publication of data was stressed by several participants of the IG. It was considered important by Nord Pool Spot that publication is as close as possible to the source of the data.

It was pointed out that for information published at the power exchanges legislation which requires stringent disclosure rules is already in place. Thus many market players can be held accountable and monitored by regulated market surveillance directly linked to Power Exchanges, or via similar surveillance carried out by authorities that are set to monitor that market parties follows stipulated regulations. Although the scope and setup of such surveillance differs, both the Nordic Exchange and the German Exchange has such surveillance established.

It was stressed by the IG members that when price relevant data are published on a common platform like e.g. ETSO Vista this also has to be subject to a proper monitoring and surveillance by an independent and authorised body.

Regulatory authorities also see the need for surveillance and therefore decided to meet in autumn 2007 to discuss how surveillance of transparency requirements can be done with regard to information management processes, data quality and availability.

Furthermore it was decided to set up a general monitoring of implementation. Twice a year a report with the results of the monitoring of implementation will be published by regulators. The first report is due in March 2008 after the expiry of the first implementation deadline.

2.4 Further developments of transparency

After discussions in the IG meetings it was considered necessary to take a stepwise approach for implementation. As some issues still remained unresolved it was decided that the report will be revised during 2008. Among others, the following issues will be addressed in the revised version:

- the need for and the design of a harmonised definition of load
- the need for and feasibility of publication of disaggregated values for forecast and real-time data of generation

- the feasibility of a close-to-real-time publication of imbalance prices
- the need for long-term load forecasts in Nordic countries

These issues will be discussed on the basis of the implementation reports to be published. The first report is due in March 2008 after expiry of the first implementation deadline (1st January 2008).

2.5 Coherence with other regions

The European Commission and ERGEG decided to take a regional approach in order to move closer towards the internal electricity market. Within this regional approach the REM Northern Europe decided to address transparency.

Market participants stressed that it is important that transparency initiatives in other regions will correlate with the initiative in REM Northern Europe. It was also argued that the same level of transparency is required in regions which will be part of a market coupling.

This is also seen important by regulatory authorities. Regulators and stakeholders belonging to several regions have a natural incentive to take care of coherence issues. Especially, regulators belonging to several regions will not step back from what has been agreed in one region.

3 General Issues

In this chapter issues with a more general character are addressed.

3.1 Data provision

Generally, the TSO is obliged to provide certain data to the market. Most of these data is owned by the TSO itself and therefore there are no impediments for providing it to the market. According to the CM Guidelines the TSO is obliged to publish data of other market participants (e.g. generators), even data it does not own originally. Enabling TSOs to do so, point 5.5 S. 2 CM-GL obliges the market participants concerned to provide the TSOs with the relevant data.

TSOs pointed out that gathering data of generation units that are connected to DSOs' grids might be difficult as TSOs do not have contractual relations with those market participants. However, distribution system operators should have information on generation units and significant consumption units connected to their grids as well as the contractual relationships to them. Therefore – if necessary – distribution system operators can provide TSOs with the relevant information about consumption and generation in their grids.

This can also be enforced by NRAs or another competent authority (in Member States where competences of NRAs are restricted to the regulation of transmission system operators) as DSOs could be required to collect data from facilities connected to their grids and provide them timely to the TSOs. Regulatory authorities committed themselves to facilitate the process if necessary.

Some stakeholders have drawn attention to the fact that ownership of data could be an impediment to transparency.

In case that the publisher of data is not the provider of the data which might be the case if TSOs publish generation data collected from DSOs or if power exchanges serve as central information platform, the question arises, whether the provider can reject access to the published data for other market participants. This question is covered by the clear content of point 5.5, S. 2 CM-GL: Market participants shall provide the TSOs with the relevant data, in order that TSOs can fulfil their obligations for publishing data according to chapter 5 of CM Guidelines.

3.1.1 Liability of TSOs and other data provider for published data

Naturally there is high interest of the market participants in reliable market data. One of the issues raised, therefore, is to which extent the providers of information and the TSO as collector of data can be made liable for incorrect data.

Generally, every participant providing data is responsible for data being as correct as possible. Consequently only the provider of the data should have the right but also the obligation to change the data after being published and communicate the changes as soon as possible towards the TSO.

Furthermore, in the electricity market the inaccuracy of forecasts is generally known. Therefore, the provider of information (which can be the TSO, but also other market participants, e.g. generators and big consumers) can only be liable in case it intentionally provides wrong data.

On the other hand it is totally convincing that a market participant (here the TSO) cannot be responsible for mistakes of other market participants, unless it does not correct false data knowing their incorrectness. As EFET explained in the first meeting of the IG Transparency, the issue of liability has never been an issue, for example, in the UK market, as all parties are fully aware, that forecast data may be off track. It is important, however, that the publisher of the data undertakes all reasonable effort to deliver a high quality of forecasts.

Market participants should always be enabled to evaluate the quality of these aggregations. Therefore, when publishing forecasts, TSOs shall always indicate the basis for the calculation of the forecast (e.g. on which data it is based).

3.1.2 Data format

Point 5.9 CM-GL requires that all information published by the TSOs shall be made freely available in an easily accessible form. All data shall also be accessible by adequate and standardised means of information exchange, to be defined in close cooperation with market parties. Therefore, standard data formats should be used that enables easy data processing.

3.1.3 Availability

According to point 5.9 S. 3 CM-GL the data generally should be available for 2 years. To store all data for 2 years will require considerable investment in IT systems by the TSOs. EFET has proposed that data storing might be done by a service provider. Therefore, in a first step short term forecast data, i. e. monthly, weekly and daily (or shorter timeframes) forecasts, does not have to be stored. In a second step all short term forecast data has to be stored for 2 months (from the beginning of 2009). All other information has to be available for 2 years.

As stated by one market participant the inquiry of historic data has to be possible. Additionally, the download of data to use it for the own data processing has to be an option. Some market participants requested a download of data of one month and one year in a single computer file. This again facilitates market transparency because it is not necessary for market participants to download data daily and to aggregate it by themselves in one computer file. Therefore it shall be possible to download daily information each day. Also, the data provider should offer each month's and each year's data in a single computer file on the common platform.

3.1.4 Language of publication

All information contained in this report should be published in English. Additional publication in the national language is also possible, of course.

3.2 Time of publication

There are differences in the timing of daily capacity auctioning, trading and scheduling in the countries/ market areas/ borders involved in the region. To provide market participants with an overview on the timing of the electricity market, it is important that TSOs publish the applied timetable in the single countries/ market areas for the different borders. This publication should contain information on

- the name of the country or market area,
- publication time for daily transmission capacity,
- closing of bidding for daily transmission capacity,
- results of the daily capacity auction,
- closing of PEX,
- publication time for results of PEX,
- deadline for scheduling,
- publication time for intra-day transmission capacity,
- beginning of intra-day capacity allocation.

Additionally, there should be as few occasions as possible for periodical daily publications, i.e. for those that can be planned, like publication obligations concerning forecasts. For this kind of information two "fixed" times in this report, "early" (before daily capacity auctions/ closing of PEX) and "late" (after fixing of schedules) shall be applied. Accordingly, specified

time for the “early” and the “late” publication is defined below. Specified time has also been defined for data that has to be published close to real time (cf. 3.2.3 below).

Finally, because of the different designs of balancing markets in the countries of the Northern REM supplementing the three deadlines for publication referred above (early/ late/ close to real time) another specific point of time for publication is introduced in this part: “At the latest 2 hours before the next procurement procedure”.

This way of harmonising publication times improves transparency as market participants know exactly when to look for specific data. Additionally, it facilitates monitoring of implementation by NRAs.

3.2.1 “Early”

According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. Therefore information with relevance for the daily capacity auction and the daily electricity trading at the PEX has to be available at minimum one hour before the deadline for the bids for transmission capacity and the closing of the PEX. As there are wide differences in timing of transaction in the Northern REM, the early deadline is: minimum of one hour before closing of bidding for daily transmission capacity (explicitly or implicitly), at the latest at 11:00 h. This way of harmonising publication times improves transparency as market participants know when all data in the region will be available at the latest.

3.2.2 “Late”

Data to be published after verification of schedules should be published at the latest at 18:00 h. Considering the comments on the whole list of information this is the earliest possible time for the “late” publication.

3.2.3 “Close to real time”

Similarly, the publication of “real time”-data has to be harmonized. In general, ex post information should be provided as close to real time as possible. In order to allow a sufficient timeframe for implementation a step wise approach has to be followed. Therefore information that has to be published “as close as possible to real time” according to the CM Guidelines or the GGP-IMT has to be published “at the latest H+2” (beginning of 2008). From the beginning of 2009 the information shall be published “at the latest H+1”.

As a general rule a publication of data “close to real time” should be conducted all day around the clock. TSOs stressed that this would require a high amount of personnel and infrastructure for operating these procedures. But it was seen important by EFET that information is available at least during normal business hours on weekends as weekend trading possibilities in Europe are increasing. Therefore, a publication around the clock on weekdays and from 9 am to 5 pm at weekends will be required as a first step (from 1st January 2008). In a second step (beginning of 2009) data shall be published 24/7.

3.3 Publication per control area or per bidding area

GGP-IMT proposes publication per control area. One contribution stated that the bidding area is relevant for price formation and control areas are sometimes divided into several bidding areas. Another contribution stated that the data from Nordic TSOs have been published based on bidding areas since 1996 which has to be considered as an established market practice.

The discussion in the IG meeting confirmed that data provision should refer to bidding area as price formation happens at bidding area level. Therefore, a publication at bidding area level is required from the 1st July 2008. In case there are competition concerns regarding disaggregated publication for small bidding areas a diverging publication might be accepted by the competent national authority.

In the meantime the current practice could continue (either publication per control area or bidding area) as the implementation of a publication at bidding area level (if not already im-

plemented) will require some time. Each TSO has to indicate in the publication what area(s) it refers to.

3.4 Definition of peak/ off-peak hours

On several items it is important to distinguish between data on times of peak and off-peak. Result of the consultation is that the timeframes of peak and off-peak are different in the single countries.

Therefore it is proposed that TSOs shall take the timeframes applicable in its country to publish data concerning peak/ off-peak. Additionally it is necessary that the TSO also publishes the applied timeframes for peak and off-peak hours.

4 List of information

The following list of information has to be published in the understanding, in the way of publishing (especially location and time) and the data format as stated in the list. By that a first major step of market transparency harmonization shall be achieved.

This section is divided into five chapters on different topics: load, transmission and interconnectors, generation, balancing, and wholesale market. All these chapters contain data that have to be published according to the legal framework (mainly in CM Guidelines) and data which should be published according to GGP-IMT. It is always stated explicitly whether a legal obligation to publish the specific information exists. The number of the corresponding section/ item of information in the GGP-IMT is also given.

For each item of information mentioned either in the CM Guidelines or in the GGP-IMT an explanation is given, e.g. why it has been defined as it is.

It is important to note that for the publication of most of the transparency requirements listed (35) there is a legal basis according to the CM Guidelines. Proposals of the GGP-IMT that did not fully reflect specifications set up in the CM Guidelines were adopted in order to fulfil the legal requirements.

Information on wholesale market is the only part of this report where no legal obligation according to the Congestion Management Guidelines exists. Therefore a publication is recommended but not required.

4.1 Load

4.1.1 Actual load

(1.1 GGP-IMT)

I Definition	
What information	Actual load per control area/ bidding area (cf. 3.3 of this report) As a first step TSOs may stick to the currently applied definition of load. However, transparency about the method and its accuracy, especially on how much of the market is included, is required.
When	At the latest H+2 (cf. 3.2 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7, 5.8 CM-GL (ex post value of daily demand forecast)

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>There are differences in the definitions for load currently applied in the countries. Market participants noted that the term “load” should be defined in a harmonized way. But there was no clear preference from market participants what should be the basis for the load definition, i.e. whether it should include losses or not, whether it should be the horizontal or vertical load or which withdrawals should be taken into account (only those from the transmission grid or also distribution grid). Furthermore, it will require some effort to change from one definition to another. Therefore, for a first step TSOs may stick to the currently applied definition. However, transparency about the method and its accuracy, esp. on how much of the market is represented, is required.</p> <p>On the basis of the first implementation report (cf. 2.3) it will be discussed how the information regarding load could be harmonised. This will be incorporated in the revised version of the report.</p> <p>2. When</p> <p>“Actual load per control area/ bidding area (cf. 3.3)” should be published two hours after real time (H+2 for H). It is necessary that data on actual load is published near to real time, because it is relevant for price formation. Even if there is no liquid intra-day trade in all countries yet information on actual load should support market development. Therefore, an opposing contribution in the consultation process proposing publication at d+1 for d had to be rejected.</p>
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4.1.2 Day-ahead load forecast (1.2 GGP-IMT)

I Definition	
What information	Day-ahead load forecast per control area/ bidding area (cf. 3.3 of this report) As a first step TSOs may stick to the currently applied definition of load. However, transparency about the method and its accuracy, especially on how much of the market is included, is required.
When	D-1, early (cf. 3.2.1 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 months (from the beginning of 2009, cf. 3.1.3)
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 CM-GL (relevant information on forecast demand according to the timeframes referred to in 5.5 and 5.6)

II Explanatory Statement	<p>1. Definition</p> <p>Explanation concerning definition of load can be found in 4.1.1 of this report. GGP-IMT proposes that there should be a forecast for D+7. To ease implementation effort it was agreed, that as a first step the load forecast for D shall be implemented. Complete implementation of the GGP-IMT shall be discussed in a second step.</p> <p>For all forecasts methodology for calculating the forecast have to be published as well.</p> <p>2. When</p> <p>Information on day-ahead load forecast should be published on D-1, early.</p> <p>GGP-IMT proposes D-1, early, i. e. before gate closure of the PEXs. That is supported by a market participant's comment. Another comment refers to 18h because the verified schedules are not available until then.</p> <p>→ Publication is necessary in due time for the negotiation of all transactions (point 5.8 CM-GL). Day-ahead load forecast is important for the day-ahead electricity market. Also, it has to be available to the TSOs before the day-ahead market (it is necessary for calculation of transmission capacity.).</p> <p>3. Timeframe</p> <p>Information shall be given per hour. This is the relevant timeframe as trading is mainly done based on hourly products. That is why an aggregation in an average peak/ off-peak value would not be sufficient information for the market participants.</p>
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4.1.3 Week ahead load forecast (1.3 GGP-IMT)

I Definition	
What information	<p>Week ahead load forecast per control area/ bidding area (cf. 3.3 of this report)</p> <p>As a first step TSOs may stick to the currently applied definition of load. However, transparency about the method and its accuracy, especially on how much of the market is included, is required.</p> <p>As a first step this information will not be required in the Nordic countries as weekly forecasts are not considered relevant by market players.</p>
When	Friday W-1, early (cf. 3.2.1 of this report)
Which timeframe	Per day, for every day of the following week W average data on peak and off-peak hours shall be published
Update	Not necessary
Availability	For 2 months (from the beginning of 2009, cf. 3.1.3)
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 CM-GL (relevant information on forecast demand according to the timeframes referred to in 5.5 and 5.6)

II Explanatory Statement	<p>1. Reasoning</p> <p>Publication of information on weekly load forecast is obligatory according to point 5.7 CM-GL. Comments in the consultation procedure stress the importance of week-ahead load forecast, although at this time there are no weekly capacity auctions in the Northern REM. As some TSOs already use weekly load forecasts for their system operation to calculate week-ahead forecasts for the transmission capacity it should be possible to provide this information, though.</p> <p>Compared to 1.3 GGP-IMT this definition was changed concerning one issue. The proposal of a rolling mode over one to eight weeks is abandoned to prevent redundant publication. According to the CM Guidelines – enacted after GGP-IMT was finalized -information on month-ahead load forecast is required (4.1.4).</p> <p>Also other forms of publication in a rolling mode, e. g. on D-1 information on D to D+6, have been considered. But, as there is a daily load forecast (cf. 4.1.2) this is superfluous, too. Whereas a rolling mode over 52 weeks as proposed by Eurelectric is not considered necessary other forms of a rolling mode might be considered in the future if proven necessary.</p> <p>As with all forecasts methodology for calculating the forecast have to be published as well.</p> <p>As a first step this information will not be required in the Nordic countries as longer-term forecasts are not considered relevant by market players. This was stressed in the meeting of the IG. Only information on yearly peakload forecast has to be provided for the Nordic Countries.</p> <p>2. Definition</p> <p>Explanation concerning definition of load can be found in 4.1.1 of this report.</p> <p>3. When</p> <p>Data have to be available in due time for the negotiation of all transactions (point 5.6 CM-GL). Publication of the week-ahead load forecast is therefore necessary for the daily allocation during week W. As the schedules for the daily auction on Monday have to be submitted by Friday 14.30 h (at least in Germany), the time of publication should be Friday W-1 early.</p> <p>If in future there are weekly capacity auctions in the Northern REM the time of publication has to be harmonized with the time of the auction.</p> <p>4. Timeframe</p> <p>As there are differences in load from day to day and also during the day a publication per day and a differentiation between peak and off-peak is needed. Therefore every week 14 individual data have to be published: per every day there shall be aggregation concerning peak and aggregation concerning off-peak.</p>
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4.1.4 Month-ahead load forecast

(not contained in GGP-IMT, but in CM Guidelines)

I Definition	
What information	<p>Month-ahead load forecast per control area/ bidding area (cf. 3.3 of this report)</p> <p>As a first step TSOs may stick to the currently applied definition of load. However, transparency about the method and its accuracy, especially on how much of the market is included, is required.</p> <p>As a first step this information will not be required in the Nordic countries as monthly forecasts are not considered relevant by market players.</p>
When	One week before monthly transmission capacity auction, at the latest 15 th calendar day of the “delivery” month, i.e. the month which the capacity refers to, late, (cf. 3.2.2 of this report)
Which timeframe	Per week, for each week there should be published average data on peak and off-peak hours
Update	Not necessary
Availability	For 2 months (from the beginning of 2009, cf. 3.1.3)
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 CM-GL (relevant information on forecast demand according to the timeframes referred to in 5.5 and 5.6)

<p>II Explanatory Statement</p>	<p>1. Reasoning Publication is obligatory according to point 5.7 CM-GL.</p> <p>2. Definition Explanation concerning definition of load can be found in 4.1.1 of this report. As with all forecasts methodology for calculating the forecast have to be published as well. For explanation regarding the necessity of forecast information see 4.1.3.</p> <p>3. When According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of monthly transmission capacity) as well as to a fixed deadline.</p> <p>4. Timeframe It is considered necessary to differentiate between peak and off-peak, e.g. because of the different prices for energy for peak/ off-peak hours. Therefore every month-ahead load forecast shall contain aggregation concerning peak and aggregation concerning off-peak per every week of the month.</p>
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4.1.5 Year ahead load forecast (1.4 GGP-IMT)

I Definition	
What information	<p>Year ahead load forecast per control area/ bidding area (cf. 3.3 of this report) for the next year</p> <p>As a first step TSOs may stick to the currently applied definition of load. However, transparency about the method and its accuracy, especially on how much of the market is included, is required.</p> <p>As a first step this information will not be required in the Nordic countries as yearly forecasts are not considered relevant by market players.</p>
When	<p>One week before yearly capacity auction, at the latest 15th calendar day of the month before the “delivery” year, late (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51</p>
Which timeframe	Per month, for each month there should be published average data on peak and off-peak hours
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory based on point 5.7 CM-GL (relevant information on forecast demand according to the timeframes referred to in 5.5 and 5.6)

<p>II Explanatory Statement</p>	<p>1. Reasoning</p> <p>Publication of information on year ahead load forecast is necessary in the view of traders.</p> <p>2. Definition</p> <p>Explanation concerning definition of load can be found in 4.1.1 of this report.</p> <p>Regarding GGP-IMT one change is proposed. While GGP-IMT proposes a year-ahead load forecast “for at least next year (up to a max of 10 years)” this reports will start with the load forecast of the next year only in order to facilitate implementation. At a later point of time – to be determined by the IG – this could be extended up to 10 years.</p> <p>For explanation regarding the necessity of forecast information see 4.1.3.</p> <p>3. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions, i.e. capacity allocation and energy trading. Energy trading for the next year is possible until the end of the year. As there are differences in the market design in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p> <p>4. Timeframe</p> <p>The differentiation between peak and off-peak averages is necessary (cf. 4.1.3, 4.1.4 of this report). Beside this an aggregation level that gives sufficient information for market participants, but at the same time prevents information overflow is required. On one hand aggregation per week or even per day would not be workable. On the other hand yearly aggregation would not contain enough information. Therefore for the year ahead load forecast aggregation per month was chosen, i.e. every year 24 data have to be published: per every month there shall be aggregation concerning peak and aggregation concerning off-peak.</p> <p>5. Responsibility</p> <p>Responsible party for publication of this data shall be the TSO although provider for annual forecast may be another party (e.g. authority) besides the TSO.</p>
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4.1.6 Year-ahead forecast margin including peak load forecast (1.5 GGP-IMT)

I Definition	
What information	<p>Difference between yearly forecast of available generation capacity and yearly forecast of load (all withdrawals and losses to be included), both evaluated at time of annual peak load per control area/ bidding area (cf. 3.3 of this report)</p> <p>The following information shall be given regarding generation capacity:</p> <ul style="list-style-type: none"> • Forecast of total domestic generation capacity • Forecast of availability of generation • Forecast of reserves contracted for system services
When	<p>One week before yearly capacity auction, at the latest 5th calendar day of the month before "delivery" month, late (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51</p>
Which timeframe	Per year
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	Obligatory: based on 5.7 CM-GL with regard to year-ahead peak load forecast (relevant information on forecast demand according to the time-frames referred to in 5.5 and 5.6)

<p>II Explanatory Statement</p>	<p>1. Reasoning</p> <p>Publication of this information facilitates understanding of the market situation by market participants as it shows the balance between supply and demand. The result of consultation has been that such publications are already provided in some countries. Therefore, this practice should be extended to other countries as well. Data provision will be started with annual publication and later on other time frames could be considered.</p> <p>This information is also seen relevant by market players from the Nordic countries as the forecast of power balance during critical times, e.g. winter time, is important as high prices may arise due to the lack of power or capacity.</p> <p>2. Definition</p> <p>This definition is based on 1.5 GGP-IMT. As the GGP-IMT is not clear on this point, it had to be specified.</p> <p>3. Timeframe</p> <p>It is necessary to have a yearly overview on the forecast margin, esp. with regard to the peak load forecast, sufficiently before the yearly capacity auction.</p> <p>4. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p> <p>5. Update</p> <p>Taking into account the proposed publications on load and generation in this list an update of this information is not necessary.</p> <p>6. Legal background</p> <p>The publication of this information is obligatory based on 5.7 CM-GL with regard to the peak load and generation forecast.</p>
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4.2 Transmission and Interconnectors

4.2.1 Report on developments in transmission grid (2.1 GGP-IMT)

I Definition	
What information	<p>List of expansion and dismantling projects in transmission grid per control area/ bidding area (cf. 3.3 of this report) with the estimated impact on the interconnection capacity for the next minimum three following years. This information has to be given only for projects with a relevant effect on transmission capacity (i.e. in any case if larger than 100 MW).</p> <p>For every project the following information should be given:</p> <ul style="list-style-type: none"> ○ asset concerned, place (including affected bidding areas/ control areas), ○ type of asset, ○ effect on interconnector (between control/bidding areas) capacity, ○ project status, and ○ estimated time of completion.
When	<p>One week before yearly capacity auction, at the latest 5th calendar day of the month before that auction, late (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51</p>
Which timeframe	Yearly
Update	To be updated with changes, as soon as possible, latest end of W+2
Availability	To be kept for 3 years
Responsibility for publication	TSO
Legal background	<p>Obligatory: based on point 5.5 (a) CM-GL: annually: information on the long term evolution of the transmission infrastructure and its impact on cross-border transmission capacity) as “transmission infrastructure” is the same as “transmission grid” (in opposition to “<i>cross-border transmission capacity</i>” in the same ruling)</p>

II Explanatory Statement	<p>1. Definition</p> <p>According to point 5.5 (a) CM-GL the TSO shall publish annually “information on the long term evolution of the transmission infrastructure. 2.1 GGP-IMT refers to “review of the EHV grid expansion”. To meet both a list of projects is required. To facilitate understanding of the single projects some explanatory information should be given.</p> <p>A timeframe of three years is considered the minimum that this information shall be available. As the authorization procedures for the construction of new lines often last between 5-10 years and even longer information about the long term evolution of new capacity could also be made available on a voluntary basis (e.g. up to ten years).</p> <p>Additional to GGP-IMT this list shall also include projects on removals in the transmission grid as those have the same influences on market as the expansion projects. That is underlined by point 5.5 (a) CM-GL (“evolution of the transmission infrastructure”), as “evolution” contains both.</p> <p>According to TSOs the effect of an infrastructure investment on the available transmission capacity might be difficult to estimate. Therefore a rough estimation or even no estimation might be given. However, the reasons for this lack of information have to be described transparently.</p> <p>Eurelectric proposes to generally use “transmission grid” instead of “EHV grid”. As the responsible parties for publishing are the Transmission System Operators and as the term of “transmission” is uncoupled from the voltage level (some transmission grids are on the high voltage level) this proposal has been accepted.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p> <p>3. Timeframe</p> <p>The timeframe of one year is appropriate as the planning of the network should be on the basis of an annual development and assessment. The assessment of the impact on interconnection capacities might change as well and need to be adjusted annually.</p> <p>4. Update</p> <p>Update should be made as soon as possible after each decision. However, it was acknowledged that as it is a long-term planning there is no big impact of such changes on the short-term daily operations. Therefore, it is sufficient, if the update is published at the end of W+2 after each decision, at the latest.</p> <p>5. Availability</p> <p>The information should be kept at least for 3 years in order to follow the realisation of the planned investments.</p>
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4.2.2 Planned outages in the transmission grid and on interconnections

(2.2 GGP-IMT)

I Definition	
What information	<p>Planned outages (including maintenance and other works) in the transmission grid and on interconnections with dates and their impact on available capacity of interconnectors and between bidding areas, if the impact on the capacity is greater than 100 MW. This information should be published per control area/ bidding area (cf. 3.3 of this report).</p> <p>This information has to be given:</p> <ul style="list-style-type: none"> • asset concerned, • place (including affected bidding areas/ control areas), • type of asset, • start and estimated stop dates of the outage, • impact on available transmission capacity, • reasons.
When	<p>One week before yearly capacity auction, at the latest 5th calendar day of the month before that auction, late, i.e. until 18.00 h (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51</p>
Which timeframe	Yearly, per calendar year
Update	To be updated with changes, at the latest h+2 after information is known
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 CM-GL: TSOs shall publish all relevant data concerning cross-border trade: capacity requested and capacity offered by the TSOs

II Explanatory Statement	<p>1. Definition</p> <p>This definition is based on 2.2 GGP-IMT. For reasons of harmonization and based on the consultation three minor changes had to be made.</p> <p>Firstly, “impact on the capacity of the grid and each interconnection” has been replaced by “impact on available capacity of interconnectors and between bidding areas”. Market participants are mainly interested in information on capacity of every congested “border”. This can be a “border” between countries/ control areas (interconnectors) or between bidding areas. Capacity of the grid is one of the bases of calculation for the “border” capacity. Therefore, it has not to be published itself.</p> <p>Secondly, “(including maintenance and other works)” has been added, to stress that also (normal) maintenance work in the grid is contained.</p> <p>Thirdly “EHV grid” has been replaced by “transmission grid” as explained in 4.2.1.</p> <p>Participants proposed to harmonize this publication item with those concerning outages of generation (4.3.2) and load (4.3.3).</p> <p>→ The symmetry of the information on generation and consumption facilitates the publication practice. The purpose of the GGP-IMT is to inform the market participants in order to improve the functioning of a competitive wholesale market. As the market parties are mostly interested in outages that have influence on the capacity available for trading a limitation on information of these outages is considered to be appropriate. The limitation on outages of more than 100 MW as already practiced by Nord Pool Spot is a reasonable solution. This value is also fixed in point 5.5 (i) CM-GL for the outages of generation units. Therefore the same “limit of relevance” has been used as on the other information on outages.</p> <p>Additional information is necessary to describe the event exactly. Similar information is used at the system of UMMs at Nord Pool Spot.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. Timeframe</p> <p>The timeframe of one year is appropriate as the information is important for market parties sufficiently in advance of yearly capacity auction to include information in their business cases.</p> <p>3. When</p> <p>For explanation see 4.2.1.</p> <p>4. Update</p> <p>As maintenance work on the grid has impact on the transmission capacity it has to be updated as soon as there is additional information available.</p> <p>4. Legal background</p> <p>This information is obligatory because it is based on point 5.5 CM-GL. The data to be published concerns the availability of transmission capacity and is therefore relevant concerning cross-border trade.</p>
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4.2.3 Year-ahead forecasts of available transmission capacity (2.3 GGP-IMT)

I Definition	
What information	Year-ahead forecast of transmission capacity available to the market (relating to calendar year), taking into account all relevant information available to the TSO at the time of the forecast calculation (e.g. the impact of summer and winter seasons on the capacity of lines, maintenance on the grid, availability of production units, etc.) referring to the next calendar year (point 5.5 (b) CM-GL)
When	One week before monthly transmission capacity auction, at the latest 5 th calendar day of M-1, late, i.e. until 18.00 h (cf. 3.2.2 of this report)
Which timeframe	Per month
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (b) CM-GL: 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 (e.g. impact of summer and winter seasons on the capacity of lines, maintenance on the grid, availability of production units, etc.)

II Explanatory Statement	<p>1. Definition</p> <p>According to point 5.5 (b) CM-GL the monthly publication of month- and year-ahead forecasts of the transmission capacity is necessary.</p> <p>Eurelectric proposes not to use the term „interconnection capacity“. Instead of this it should be „available commercial capacity on borders“. This proposal has not been used, as the definition used in this report is based on the CM Guidelines (5.5 (b)-(c): „transmission capacity available to the market“). This is also the reason for the changes in comparison with 2.3 GGP-IMT.</p> <p>2. When</p> <p>According to point 5.5 (b) CM-GL the reporting of the year-ahead forecast of transmission capacity is required monthly. Therefore the time of publication has been harmonized with other monthly forecasts. According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions, i.e. capacity allocation and energy trading. As there are differences in timing of transactions in the Northern REM the chosen definition refers to a time period before the allocation (of monthly transmission capacity) as well as to a fixed deadline.</p> <p>3. Timeframe</p> <p>Yearly forecast on available capacity should be published per month (12 data per publication). That is also compatible with the obligation on TSOs to take into account the impact of summer and winter seasons on the capacity. Particularly, it is not necessary to publish data for every day of the next year as year ahead daily forecasts are unreliable.</p>
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4.2.4 Month-ahead forecasts of available transmission capacity (2.4 GGP-IMT)

I Definition	
What information	Month-ahead forecasts of transmission capacity available to the market, taking into account all relevant information available to the TSO at the time of the forecast calculation (e.g. the impact of summer and winter seasons on the capacity of lines, maintenance on the grid, availability of production units, etc.) (point 5.5 (b) CM-GL)
When	One week before monthly transmission capacity auction, at the latest 15 th calendar day of the month before the “delivery” month, late (cf. 3.2.2 of this report)
Which timeframe	Per week, for each week there should be published average values on peak and off-peak hours (in case such products are available)
Update	Not necessary
Availability	For 2 months (from the beginning of 2009, cf. 4.1.2)
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (b) CM-GL: 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 (e.g. impact of summer and winter seasons on the capacity of lines, maintenance on the grid, availability of production units, etc.)

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>According to point 5.5 (b) CM-GL the publication of month- and year-ahead forecasts of the transmission capacity available to the market is necessary taking into account all relevant information available to the TSO at the time of the forecast calculation. There are some changes in comparison with 2.4 GGP-IMT because of the harmonization with the CM Guidelines.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of monthly transmission capacity) as well as to a fixed deadline.</p> <p>3. Timeframe</p> <p>To prevent “information overflow” eight data per month shall be sufficient. It is considered necessary to differentiate between peak and off-peak, e.g. because of the different prices for energy for peak and off-peak hours. This was also proposed by a participant of the consultation procedure. Therefore every month-ahead forecast of available transmission capacity shall contain aggregation concerning peak and aggregation concerning off-peak per every week of the month, but only in case such products are available</p>
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4.2.5 Week-ahead forecasts of available transmission capacity (2.5 GGP-IMT)

I Definition	
What information	Week-ahead forecasts of transmission capacity available to the market, taking into account all relevant information available to the TSO at the time of the forecast calculation (e.g. the impact of summer and winter seasons on the capacity of lines, planned maintenance on the grid, availability of production units, etc.) (point 5.5 (c) CM-GL)
When	Friday W-1, early (cf. 3.2.1 of this report)
Which timeframe	Per day
Update	Not necessary
Availability	For 2 months (from the beginning of 2009, cf. 4.1.2)
Responsibility for publication	TSO
Legal background	Obligatory: based on 5.5 (c) point CM-GL: 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 maintenance works of the grid, availability of production units, etc.

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>According to point 5.5 (c) CM-GL the publication of week-ahead forecasts of the transmission capacity is necessary. Minor changes in comparison with 2.5 GGP-IMT can be explained with harmonization with the CM Guidelines.</p> <p>2. When</p> <p>The reporting is required weekly. At this time there is no weekly transmission capacity allocation in the Northern REM. Therefore, publication is necessary for the daily allocation during week W. As the schedules for the daily auction on Monday have to be submitted by Friday 14.30 h (at least in Germany), the time of publication shall be Friday W-1, early.</p> <p>If in the future there are weekly capacity auctions in the Northern REM the time of publication has to be harmonized with the time of auction.</p> <p>3. Timeframe</p> <p>The publication should refer to values per day of the next week, i.e. per each day average amount of transmission capacity should be available. When there are planned outages then their effect on forecasted capacity should be given for the outage period in addition to the daily average of available capacity.</p> <p>Point 5.5 CM-GL does not refer to values per market time unit for the week ahead forecast. Publication per hour could even lead to information overflow (as every week 168 individual items would have to be published).</p>
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4.2.6 Day ahead available transmission capacity (2.6 GGP-IMT)

I Definition	
What information	Day-ahead transmission capacity available to the market for each market time unit, taking into account all netted nominations before day-ahead allocation, day-ahead production schedules, demand forecast and planned maintenance works of the grid (point 5.5 (d) CM-GL)
When	D-1, early (cf. 3.2.1 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (d) CM-GL: 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 maintenance works of the grid

II Explanatory Statement	<p>1. Definition</p> <p>According to point 5.5 (d) CM-GL day-ahead transmission capacity available to the market for each market time unit, taking into account all netted nominations before day-ahead allocation,, day-ahead production schedules, demand forecast and planned maintenance works of the grid, has to be published. There are some changes in comparison with 2.4 GGP-IMT because of the harmonization with the CM Guidelines.</p> <p>2. When</p> <p>The reporting is required day-ahead. As the information should be available to the market in due time for the negotiation of all transactions (point 5.6 CM-GL) the publication shall be D-1 for D, early.</p> <p>3. Timeframe</p> <p>According to point 5.5 (d) CM-GL publication on basis of market time unit is necessary. As common market time unit the shortest trading unit in the Northern REM (i.e. hour) has been chosen.</p>
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4.2.7 Intra-day available transmission capacity (2.7 GGP-IMT)

I Definition	
What information	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 forecast and planned maintenance works of the grid (point 5.5 (d) CM-GL)
When	At the latest D-1, late (cf. 3.2.2 of this report)
Which timeframe	Per hour
Update	Updated with changes, as soon as possible
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (d) CM-GL: 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 maintenance works of the grid

II Explanatory Statement	<p>1. Definition</p> <p>Some changes have been applied to this item in order to reach a clarification on its meaning. For information 2.7 GGP-IMT is given below:</p> <p><i>“1. Intra-day allocations of available transmission capacity 2. Day D-1 for day D 3. Successive after issuing of indicated/ actual day ahead production schedules”</i></p> <p>According to point 5.5 (d) CM-GL 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 forecast and planned maintenance works of the grid, has to be published.</p> <p>2. When</p> <p>This information should be published at the latest D-1, late. For explicit auctions a publication of reliable data on an earlier time is not possible, as it is necessary to have verified schedules to calculate the intra-day transmission capacity. For markets where information is available earlier (e.g. markets with implicit auction mechanisms) publication should be as soon as possible after the day ahead market closure.</p> <p>3. Timeframe</p> <p>According to point 5.5 (d) CM-GL publication on basis of market time unit is necessary. As common market time unit the trading unit mostly applied in the Northern REM (i.e. hour) has been chosen.</p> <p>4. Update</p> <p>One comment proposed continuous updates, e.g. hourly, where a continuous intraday market is in operation.</p> <p>→ It is necessary to update the available capacity as soon as possible after each allocation as this will change the capacity that is available for other market participants (due to netting, etc).</p>
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4.2.8 Details on actual outages in the transmission grid (2.8 GGP-IMT)

I Definition	
What information	<p>Details on actual outages in the transmission grid and on interconnections (unplanned) with dates and their impact on available capacity of interconnectors and between bidding areas, if the impact on the capacity is greater than 100 MW. This information should be published per control area/ bidding area (cf. 3.3 of this report).</p> <p>This information has to be given:</p> <ul style="list-style-type: none"> • asset concerned, • place (including affected bidding areas/ control areas), • type of asset, • start and estimated stop date of the outage, • impact on available transmission capacity (between control areas/bidding areas) • reasons
When	Immediately, at the latest H+2 after occurrence (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 CM-GL: TSOs shall publish all relevant data concerning cross-border trade: capacity requested and capacity offered by the TSOs

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>This definition is based on 2.8 GGP-IMT. But instead of “EHV grid” “transmission grid” has been used as explained in 4.2.1.</p> <p>One comment states that information should be symmetric with information given on generation and consumption. Another comment states that only those outages that have influence on trading capacity should be reported. Comments also referred to the practice of Nord Pool Spot where the obligation of publication of information on outages is limited to outages concerning more than 100 MW.</p> <p>→ As result of the consultation the limit of 100 MW has been chosen to reach symmetry of the information on generation and consumption (see 4.2.2). Additional information is necessary to describe the event exactly. Similar information is used at the system of UMMs at Nord Pool Spot.</p> <p>This information requirement covers only unplanned outages as information on planned outages is not needed. They are already covered by 4.2.2 as changes have to be provided immediately after decision.</p> <p>The requirements for publication of reasons for outages are the same as for 4.2.14.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. When</p> <p>The reporting is required in case of occurrence of unplanned outages and information should be available as soon as possible, at the latest H+2 after occurrence.</p> <p>3. Timeframe</p> <p>The publication refers to hourly values. Eurelectric proposes to rely on the respective balancing market mechanism.</p> <p>→ An important goal of this report is harmonization of transparency. As long as the hour is the common market time unit information on outages on that basis is sufficient. Naturally, more extensive national publication obligations are possible.</p> <p>4. Availability</p> <p>In opposition to the proposal of 2.8 GGP-IMT the information should be kept only for 2 years, as indicated by one comment stating that a 10 years time-frame is too long.</p> <p>→ For first implementation of this report this proposal has been accepted to ease implementation for the TSOs.</p> <p>5. Legal background</p> <p>This information is obligatory because it is based on point 5.5 CM-GL. The data to be published concerns the availability of transmission capacity and enables market participants to compare the ex ante data on network outages with the real time data. Therefore it is relevant for cross-border trade.</p>
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4.2.9 Capacity offered, requested, assigned (2.9 GGP-IMT)

I Definition	
What information	<p>Applicable for congested borders with explicit auction mechanism only.</p> <ul style="list-style-type: none"> -Capacity offered by TSO -Capacity requested by market participants -Capacity allocated to market participants per border between bidding areas/ control areas
When	<ul style="list-style-type: none"> -Capacity offered by TSO Sufficiently before the allocation procedure (cf. 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7) -Capacity requested by market participants Immediately, at the latest H+2 for H after each capacity allocation session (cf. 3.2.3 of this report) -Capacity allocated to market participants Immediately, at the latest H+2 for H after each capacity allocation session (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	<p>Obligatory:</p> <p>Point 5.5 (f) CM-GL: allocated capacity as soon as possible after each allocation, as well as an indication of prices paid</p> <p>Point 5.5 CM-GL: TSOs shall publish all relevant data concerning cross-border trade: capacity requested and capacity offered by the TSOs</p>

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>Definition of capacity assigned is based on 2.9 GGP-IMT and has been harmonized with point 5.5 (f) CM-GL: allocated capacity as soon as possible after each allocation, as well as an indication of prices paid.</p> <p>To evaluate and understand the auction results the data on the amount of capacity offered by the TSO in the auction and the amount of capacity requested in the auction by auction participants is necessary. To get a better overview about supply and demand these three items shall be published together.</p> <p>This information is restricted to congested borders with explicit auction mechanism thereby accepting a market participant's proposal, as the information that shall be published according to this item 4.2.9 is not needed for implicit auctions. "Capacity offered" is published as "capacity available" (see 4.2.6/ 4.2.7), "capacity requested" and "capacity allocated" results from the price differences between the bidding areas (information on "price differences" as well on "capacity allocated" given in 4.2.13).</p> <p>2. When</p> <p>One comment proposes to use different times of publication for short-term capacity auctions on the one hand (at the latest H+2 for H) and long-term auctions on the other hand (at the latest D+1 for D).</p> <p>→ This proposal is not in line with the CM Guidelines. According to 5.5 (f) the information has to be published as soon as possible after each allocation. As the auction results are available to the TSOs at once publication should be possible on H+2 at the latest. To avoid unnecessary information asymmetries it should be also published at this time.</p> <p>3. Timeframe</p> <p>The publication refers to hourly values.</p> <p>4. Legal background</p> <p>This information is obligatory because it is based on 5.5 (f) and also on point 5.5 CM-GL, as it is relevant concerning cross-border trade (see 1. Definition).</p>
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4.2.10 Capacity requested as priority rights (2.10 GGP-IMT)

I Definition	
What information	Capacity requested as priority right by market participants and assigned as priority right by TSOs “Priority rights” in this context clearly means “capacity reservations based on long term contracts”.
Need for this information	This proposal for publication was drafted in GGP-IMT during a time before the judgement of the European Court of Justice on preferential access to transmission capacity for parties of historical long term contracts. From today’s point of view there is no need for the publication of this information. This data is no more relevant in the countries of the region, as it is not legal according to EU law to reserve capacity based on priority rights.

4.2.11 Capacity reserved for balancing market (2.11 GGP-IMT)

I Definition	
What information	Capacity reserved for balancing market
Need for this information	Where cross-border balancing markets exist in the Northern REM the remaining capacity after day-ahead and intra-day markets may be used for balancing markets. Therefore, at the moment there is no need for publication. If there will be reservations of transmission capacity for balancing markets in the future the reservations should be published.

4.2.12 Total capacity nominated (2.12 GGP-IMT)

I Definition	
What information	Applicable for congested borders with explicit auction mechanism only. Aggregated values of capacity nominated by market players on each interconnection
When	At the latest H+2 after nomination (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (g) CM-GL: total capacity used, by market time unit, immediately after nomination

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>Definition of total capacity nominated is based on 2.12 GGP-IMT and harmonized with point 5.5 (g) CM-GL: total capacity used, by market time unit, immediately after nomination.</p> <p>The referred action that defines the value to be published is the nomination, i.e. the announcement to the TSO that capacity allocated in the long-term capacity auctions (especially monthly and yearly auctions) will be used.</p> <p>Concerning implicit auction see “capacity used” in 4.2.13.</p> <p>Eurelectric proposes additional data: 1) Day ahead nominations split by Y-M-D allocated capacity rights, 2) D-1 at around noon, before the start of intraday 3) Per hour.</p> <p>As there is no nomination before day-ahead, this piece of information is not available to the TSO. This proposal has therefore not been accepted. Only on D-1 the TSO is aware of the sum of nominations from the yearly and monthly capacity auction and the sum of all schedules.</p> <p>2. When</p> <p>The information shall be available as soon as possible after nomination, but shall be published at the latest H+2 after nomination (cf. 3.2.3 of this report).</p> <p>3. Timeframe</p> <p>According to point 5.5 (g) CM-GL publication on basis of market time unit is necessary. As common market time unit the most important trading unit in the Northern REM (i.e. hour) has been chosen.</p>
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4.2.13 Capacity allocated, capacity price, congestion income (2.13 GGP-IMT)

I Definition		
What information	<p>Explicit auction:</p> <ul style="list-style-type: none"> - capacity allocated - capacity price (marginal price) - congestion income <p>per border between bidding areas/ control areas per hour and per allo- cation timeframe</p>	<p>Implicit auction</p> <ul style="list-style-type: none"> - capacity allocated (i.e. planned commercial flow) - price difference - congestion income <p>per border between bidding areas/ control areas per hour</p>
When	At the latest H+2 after each capacity allocation session (cf. 3.2.3 of this report)	
Which timeframe	Per hour	
Update	Not necessary	
Availability	For 2 years	
Responsibility	TSO	
Legal background	<p>Obligatory:</p> <p>“Capacity allocated/ congestion price” based on point 5.5 (f) CM-GL: allocated capacity as soon as possible after each allocation, as well as an indication of prices paid</p> <p>“Congestion income” based on 5.5 CM-GL: TSOs shall publish all relevant data concerning cross-border trade on the basis of the best possible forecast.</p>	

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>This information is based on 2.13 GGP-IMT and harmonized with point 5.5 (f) CM-GL: allocated capacity as soon as possible after each allocation, as well as an indication of prices paid.</p> <p>Although the best possible harmonization in transparency shall be achieved, due to different auction methods in the Northern REM, explicit capacity auctions and implicit auctions, differences in definition have to be made on this item. Only the item of “congestion income” has to be published for all kinds of auction, also for implicit auctions.</p> <p>According to Eurelectric congestion income is not relevant for market price formation and should not have to be published. This proposal cannot be agreed on, as CM Guidelines oblige TSOs to publish the congestion income (s. 3. Legal background).</p> <p>a) Concerning explicit auction</p> <p>An “indication of prices paid” for capacity allocated (point 5.5 (f) CM-GL) is shown best by publishing the marginal prices for explicit auctions (used in explicit auctions in the whole region).</p> <p>b) Concerning implicit auction</p> <p>TSOs should publish as “indication of prices paid” the price difference between the bidding areas, as it gives an indication of the value of capacity. This corresponds to the prices paid for capacity in the explicit auction scheme.</p> <p>Regarding “capacity allocated” it was added that this implies the “planned commercial flow” for implicit auctions (which is the result of capacity allocation via implicit auctions done by the PEX) as proposed by the IG members.</p> <p>2. Timeframe</p> <p>According to point 5.5 (e) CM-GL publication on basis of market time unit is necessary. As common market time unit the shortest trading unit in the Northern REM (i.e. hour) has been chosen.</p> <p>3. Legal background</p> <p>Information of “capacity sold” and “congestion prices” are obligatory according to point 5.5 (f) CM-GL. Information on congestion income is obligatory according to point 5.5 CM-GL, as it is relevant for cross border trade. Traders need the confidence that the capacity auctions are done properly.</p>
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4.2.14 Reasons and effects of actions taken by TSOs (2.14 GGP-IMT)

I Definition	
What information	<ul style="list-style-type: none"> – Any corrective actions taken by the TSOs (such as curtailment, reduction of grid feed-ins or withdrawals and grid related measures) for solving network or system problems – Effects of these actions on physical power flows – Reasons for any corrective action taken by the TSOs <p>This information shall be published per control area/ bidding area (cf. 3.3 of this report).</p> <p>Publication is only required, if effect of TSOs' actions on the capacity is greater than 100 MW.</p>
When	<p>Actions and effects immediately (if possible with short description of reasons), at the latest H+2 after real time (cf. 3.2.3 of this report)</p> <p>Reasons in more details: D+1, late (cf. 3.2.2 of this report)</p>
Which timeframe	Per hour, as soon as possible
Update	Not necessary
Availability	For 2 years
Responsibility for publishing	TSO
Legal background	<p>Obligatory:</p> <p>“Actions and effects” based on point 5.5 (h) CM-GL : ... description of the effect of any corrective actions taken by the TSOs (such as curtailment) for solving network or system problems,</p> <p>“Reasons” based on point 5.5 CM-GL</p>

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>For the information on action/ effects the definition of GGP-IMT was harmonized with point 5.5 (h) CM-GL.</p> <p>One comment emphasizes that only relevant actions have to be published. That is made clear in the CM Guidelines by the example of “curtailments” in brackets and the combination with the information on effects. The same “threshold of relevance” has to be used as that limit concerning outages of EHV grid (4.2.2), generation (4.3.2) and load (4.3.3).</p> <p>Information on reasons of TSOs’ actions is necessary for the market to understand those actions, but first priority is the elimination of the fault.</p> <p>2. When</p> <p>Information on TSOs’ actions, their effects and, if possible, a short description of reasons should be available as soon as possible after real time. At the latest it should be published H+2 (cf. 3.2.3 of this report). That is necessary for the market in order to react on the actions.</p> <p>It should be sufficient to publish a more detailed description of the reasons on D+1, late, at the latest.</p> <p>3. Timeframe</p> <p>According to point 5.5 (h) CM-GL publication on basis of market time unit is necessary. As common market time unit the trading unit mostly used in the Northern REM (i.e. hour) has been chosen.</p> <p>4. Responsibility</p> <p>CM Guidelines see the TSO as the responsible actor for publishing data.</p> <p>5. Legal background</p> <p>Publication of “actions” and “effects” is based on point 5.5 (h) CM-GL, the publication of their “reasons” on point 5.5 CM-GL, as the information on reasons for curtailment is relevant for the cross-border trade. Knowing them leads to increased confidence in the market. Also, market participants can forecast the duration of the effects of a system operation more easily knowing the reasons.</p>
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4.2.15 Aggregated realised commercial and physical flows per interconnection
(partly included in 2.15 GGP-IMT)

I Definition	
What information	- Sum of final scheduled exchanges per control/bidding area, i.e. after real time including intra-day changes - Realised physical cross-border flows aggregated per interconnection
When	At the latest H+2 (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	Obligatory: based on point 5.5 (h) CM-GL: as closely as possible to real time: aggregated realised commercial and physical flows, by market time unit

II Explanatory Statement	<p>1. Definition</p> <p>This publication is obligatory according to point 5.5 (h) CM-GL</p> <p>This information was also partly required according to 2.15 GGP-IMT (Hourly average physical flows vs. thermal ratings of the lines and transformers in the EHV grid). According to GGP-IMT this definition intended</p> <ul style="list-style-type: none"> • “to evaluate existing congestions on the interconnections and within the control areas, • to evaluate how security criteria are met.” <p>Result of the consultation procedure is that – in any case for the Northern REM – the information on thermal ratings is not the best approach to evaluate how security criteria are met. Firstly, it is not possible for all TSOs in the Northern REM to publish this data and, secondly, this proposal has not enough benefit for the market. Because of this the proposal of publishing the reference of physical flows to thermal capacity will be abandoned at the first phase.</p> <p>2. When</p> <p>The information should be available as soon as possible after real time. i.e. H+2 is appropriate (cf. 3.2.3 of this report).</p> <p>3. Timeframe</p> <p>According to point 5.5 (h) CM-GL publication on basis of market time unit is necessary. As common market time unit the trading unit mostly used in the Northern REM (i.e. hour) has been chosen.</p>
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4.3 Generation

4.3.1 Installed generation capacity

(3.1 GGP-IMT)

I Definition	
What information	<p>(I.) Installed generation capacity larger 100 MW per unit including foreseeable evolution at least for the following three years</p> <p>List of all generators contained:</p> <ul style="list-style-type: none"> • station name (including planned stations), • unit name (including planned units), • installed capacity, • location, • production type [i.e. hydro, renewables (differentiating between wind and others), nuclear, CHP, gas turbines, other thermal plants (differentiating between hard coal, lignite and others)], • forecast of available power for each year, • remarks <p>This information should be published per control area/ bidding area (cf. 3.3 of this report).</p> <p>(II.) Total sum of installed generation larger than 1 MW for each year</p>
When	<p>One week before yearly capacity auction, at the latest 15th calendar day of the month before "delivery year" of the yearly auction, late (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51</p>
Which timeframe	Per year
Update	Not necessary
Availability	For min 3 years
Responsibility for publication	TSO / relevant authority.
Legal background	<p>Obligatory: based on point 5.7 CM-GL: The TSO shall publish the relevant information ... on generation according to the timeframes referred to in point 5.5 and 5.6</p> <p>→ 5.5 (a) and (b): annually</p>

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>This definition is based on 3.1 GGP-IMT. Minor changes have been applied to this item. For harmonization with other information on generation a limit of 100 MW (instead of 10 MW) has been chosen (cf. c) Limit). Additionally this report requires a forecast of 3 years for the foreseeable evolution as well as for the availability (GGP-IMT: 5 years).</p> <p>a) Installed generation</p> <p>(I.) For the installed generation it is proposed to use a list of all included generation units using the given additional information to specify each generation unit exactly. This information should also be provided for the next three years showing the foreseeable evolution.</p> <p>Comments proposed to remove “available”, as unavailability information were given based on 3.2 and 3.7 GGP-IMT. Another comment argued the value of total installed generation should be given by authorities (as responsible parties for plant authorisation).</p> <p>→ As it is important as reference for the data on unavailability of generation (4.3.2, 4.3.7) also the amount of total installed generation has to be given on the transparency platform. Therefore the proposed additional information has to be used. TSOs should receive this information by generators, possibly via DSOs (cf. point 5.5, S. 2 CM-GL).</p> <p>The date of publication and the timeframe of validity should be included in the list of all generators.</p> <p>(II.) Additionally, the sum of installed generation (> 1 MW) for each year has to be published in order to provide for a comprehensive overview about overall installed generation capacity.</p> <p>b) Per unit</p> <p>Data on installed generation does not contain business secrets as it is not possible to review information on the business strategy of the individual unit. On the other hand data on single units is very important to the market participants to enable them to understand functioning of the electricity market.</p> <p>c) Limit</p> <p>(I.) Information on installed generation shall contain data on all generation units larger than 100 MW. Smaller generation units would be too difficult to manage for the TSO. Also the additional effect on the market transparency would be close to zero. The chosen amount of 100 MW is also used in the CM Guidelines (5.5 (i)).</p> <p>(II.) For the total installed generation capacity all generation facilities with more than 1 MW installed power should be included to provide for a comprehensive overview about overall installed generation capacity.</p> <p>d.) Production type</p> <p>Eurelectric proposes aggregation by fuel type for this information. Other comments stated that a publication of the “production type” would be useful in addition to “fuel type”. Production and also fuel type have an influence on the marginal costs of the power plants. Therefore, information on that is important for understanding the price formation and, consequently, is included in the report.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p>
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	<p>3. Update Update of installed generation is contained in 4.3.2/ 4.3.7.</p> <p>4. Availability Market participants should be able to compare this yearly information with those of earlier years. As generation projects take a longer development time, there should be a longer availability of these data.</p>
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4.3.2 Ex ante information on planned outages of generation units (3.2 GGP-IMT)

I Definition	
What information	<p>Ex ante information on planned outages of generation units larger than 100 MW per control area/ bidding area (cf. 3.3 of this report) including information on</p> <ul style="list-style-type: none"> • station name, • unit name, • installed capacity, • location, • production type [i.e. hydro, renewables (differentiating between wind and others), nuclear, CHP,, gas turbines, other thermal plants (differentiating between hard coal, lignite and others)], • estimated start and stop dates of the outages, • unavailable capacity, • remarks
When	<p>One week before yearly capacity auction, at the latest 15th calendar day of the month before the “delivery” year, late (cf. 3.2.2 of this report)</p> <p>If no yearly capacity auctions are conducted: at the latest at the end of week 51.</p>
Which timeframe	Per year
Update	Updated with changes as soon as possible
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.5 (i) CM-GL: ex-ante information on planned outages ... of generation units larger than 100 MW

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>Based on 3.2 GGP-IMT and point 5.5 (i) CM-GL. Additional information is necessary to describe the event exactly. Similar information is used at the system of UMMs at Nord Pool Spot.</p> <p>The reasons for taking a threshold of 100 MW are given in 4.3.1. Concerning one proposal to publish information concerning smaller units, other comments of the consultation indicate that such information does not have much relevance for the market, therefore it could lead to an information overflow which would be counterproductive.</p> <p>For explanation on production type see 4.3.1.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p> <p>3. Update</p> <p>As the information on the generation availability is very important to the electricity market it has to be up-to-date. That is why an update in case of changes is needed. Updates have to be provided in due time for the negotiation of all transactions (point 5.6 CM-GL), i.e. as soon as possible after information is known.</p>
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4.3.3 Ex ante information on the scheduled unavailability of significant consumption units (3.3 GGP-IMT)

I Definition	
What information	<p>Ex ante information on the scheduled unavailability of significant consumption units, including:</p> <ul style="list-style-type: none"> • consumption unit concerned, • place, • start and estimated stop dates of the unavailability, • maximum consumption capacity, • unavailable power <p>per control area/ bidding area (cf. 3.3 of this report). Significant is every consumption unit with consumption capacity > 100 MW.</p>
When	One week before yearly capacity auction, at the latest 15 th calendar day of the month before the “delivery” year, late (cf. 3.2.2 of this report)
Which timeframe	Per year
Update	Updated with changes as soon as possible
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 CM-GL: The TSO shall publish the relevant information on forecast demand ... according to the timeframes referred to in point 5.5. and 5.6.

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>Based on definition of 3.3 GGP-IMT. After the consultation procedure there is an agreement that the definition of „significant consumption unit” should be harmonized with the limit for the outage of generation units (see 3.3.2), to facilitate comparability between load and generation.</p> <p>In the consultation there were generally two proposals. Firstly, only consumption units with “capacity” over 100 MW should be significant, secondly, only those that have the same effects on the grid as 100 MW energy production.</p> <p>The second proposal cannot be used easily, as definition of energy consumption corresponding to the effects of a 100 MW production unit is different for different consumption facilities and therefore cannot be considered as a reliable limit.</p> <p>→ Therefore it was chosen to use consumption capacity > 100 MW.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.</p> <p>3. Availability</p> <p>For data on planned unavailability of consumption units the general time of 2 years is sufficient.</p> <p>4. Update</p> <p>As the information on the availability of significant consumption units is very important to the electricity market it has to be up-to-date. That is why an immediate update in case of changes is needed. Updates have to be provided in due time for the negotiation of all transactions (point 5.6 CM-GL), i.e. as soon as possible after information is known</p> <p>5. Legal background</p> <p>This information is based on point 5.7 CM-GL: relevant information on forecast demand. Part of forecast demand is also ex ante information on unavailability of significant consumption units. As this can influence flows as much as planned outages of generation units or grid components it is also relevant for the electricity market.</p>
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4.3.4 Ex ante aggregated information on scheduled generation (3.4 GGP-IMT)

I Definition	
What information	Ex ante aggregated information on the scheduled generation per control area/ bidding area (cf. 3.3 of this report)
When	D-1, late, i.e. until 18.00 h (cf. 3.2.2 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 CM-GL: The TSO shall publish the relevant information ... on generation according to the timeframes referred to in 5.5 and 5.6 → 5.5 (d): daily

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>This definition is based on 3.4 GGP-IMT where “ex ante aggregated information on the scheduled generation per control area” is proposed.</p> <p>One comment wishes to remove this piece of information from the list. It could be calculated from load forecast and interconnection flows. Also this information could be misleading, as it does not take intra-day trades into account. Publication of real time information on generation by fuel type (3.8 GGP-IMT) should be sufficient.</p> <p>→ This piece of information is nevertheless important. It is obligatory according to CM Guidelines. Even if it can be calculated from other data from this list its publication facilitates transparency, as the market participants are able to compare this information with their own calculations. It is not misleading, either, as it is common, that changes based on intra-day trade are not contained in the day-ahead “forecasts”. Furthermore, the present requirement for load definition may not facilitate the calculation of scheduled generation from load forecast and interconnection flows.</p> <p>Additionally, it has been noted by a participant in the consultation that in Scandinavia there are no final schedules. Therefore, it is possible that data published by Nordic TSOs are less reliable.</p> <p>It was put forward that aggregation should cover all production units not only those larger 100 MW. This could be accepted as this corresponds to the information that is available to TSOs.</p> <p>In the meeting market participants stressed that aggregation per bidding area is relevant and therefore the information should be published per bidding area right away. Nord Pool Spot emphasized that some information is already published per bidding area. Therefore the approach should be flexible.</p> <p>It was agreed that as a first step aggregated information on all scheduled generation per control area should be published. Additionally publication per bidding area should be provided.</p> <p>It will be considered whether more disaggregation (like e.g. per production type) is possible in a second step.</p> <p>2. When</p> <p>Information on scheduled generation is not possible before TSOs get day-ahead schedules after the closure of day-head markets. Therefore it should be D-1, late.</p>
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4.3.5 Filling rate of the water reservoirs (3.5 GGP-IMT)

I Definition	
What information	<p>Ex-post information on filling rate of the water reservoirs in an aggregated form, per control area/ bidding area (cf. 3.3 of this report) and per week in terms of percentage of the 100% filling. A comparison to the value of the year before should also be given.</p> <p>Only to be published for each control area/bidding area in countries with more than 15 % feed-in of this type of generation per year or for control areas/bidding areas with more than 30 % feed-in of this type of generation per year.</p>
When	Third working day of W+1, late, i.e. until 18.00 h (cf. 3.2.2 of this report)
Which timeframe	Per week
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO / relevant authority
Legal background	<p>Obligatory: based on point 5.7 CM-GL: The TSO shall publish the relevant information ... on generation according to the timeframes referred to in 5.5 and 5.6</p> <p>→ 5.5 (c): weekly</p>

II Explanatory Statement	<p>1. Note:</p> <p>The share of hydro energy in the fuel mix per country (taken from national contribution to the Benchmarking Report 2006) is given below for informational reasons:</p> <p>Denmark: 0,0 %</p> <p>Finland: 18 %</p> <p>Germany: 5 %</p> <p>Poland: 2,5 %</p> <p>Sweden: approx. 50 %</p> <p>Norway: > 90 %</p> <p>2. Definition</p> <p>This definition is based on 3.5 GGP-IMT. For reasons of clarification some changes compared to the GGP-IMT have been made. To harmonize obligations for publication “by hydroelectric exploitation zone,” has been replaced by “per control area/ bidding area (cf. 3.3 of this report)”.</p> <p>According to point 5.7 CM-GL all relevant information on generation has to be published. As hydropower is only available in the energy mix of some Member States in the Northern REM, the publication obligation should be limited to those where hydropower has measurable influence to the electricity market. This should be the case in a country with more than 15 % feed-in of this type of generation per year or in control areas/bidding areas with more than 30 % feed-in of this type of generation per year.</p> <p>Based on one comment publication of the filling rate of the water reservoirs should not only be compared to the maximal filling rate, but also with last year’s value. This comparison facilitates market participants’ view on the development of the water reservoirs and it is nowadays available in certain markets.</p> <p>3. When</p> <p>A publication at H+2 was proposed to avoid disparity between hydro and thermal generation units. As long as it is not obligatory for thermal units to publish its stock H+2 there is no disparity between the two. Therefore this proposal could no be accepted.</p> <p>This data has to be published ex post for the last week. Data is not available before the third working day according to the current practice in the Nordic countries. This is an established practice including data exchange with certain authorities. Therefore it should be published on the third working day of W+1.</p> <p>4. Responsibility</p> <p>For this information the responsible player should also be the TSO.</p> <p>One comment argues against that, saying publication by authorities has a long practice. According to the CM Guidelines the generally responsible party is the TSO. Additionally to further facilitation of transparency for the market the common platform of transparency is very important.</p>
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4.3.6 Forecast and actual generation of wind and solar power (so called intermittent generation) (3.6 GGP-IMT)

I Definition	
What information	<p>a) Forecast that TSOs themselves use for generation from plants difficult to forecast correctly due to the type of production (i.e. wind and solar power) per control area/ bidding area (cf. 3.3 of this report)</p> <p>b) Actual generation difficult to forecast correctly due to the type of production (i.e. wind and solar power) per control area/ bidding area (cf. 3.3 of this report)</p> <p>Only to be published for each control area in countries with more than 1 % feed-in of this type of generation per year or for control areas/ bidding areas with more than 5 % feed-in of this type of generation per year.</p>
When	<p>a) D-1, late, i.e. until 18.00 h (cf. 3.2.2 of this report)</p> <p>b) At the latest H+2 (cf. 3.2.3 of this report)</p>
Which timeframe	Per hour
Update	Updated in case of changes
Availability	For 2 years
Responsibility for publication	TSO
Legal background	<p>Obligatory: based on point 5.7 CM-GL: The TSO shall publish the relevant information ... on generation according to the timeframes referred to in 5.5 and 5.6</p> <p>→ 5.5 (d): daily</p>

<p>II Explanatory Statement</p>	<p>1. Note:</p> <p>The share of wind power in the fuel mix per country (taken from national contribution to the Benchmarking Report 2006) is given below for informational reasons:</p> <p>Denmark: 19 %</p> <p>Finland: 0,5 %</p> <p>Germany: 5 %</p> <p>Poland: 0,5 % (“other renewables”)</p> <p>Sweden: 0 %</p> <p>Norway: < 1 %</p> <p>1. Definition</p> <p>This definition is based on 3.6 GGP-IMT. To clarify the definition in GGP-IMT by following two comments in the consultation the description as given under “definition” was chosen, as “intermittent generation” is not clear enough and could refer to peak load generation units.</p> <p>Also it was clarified that TSOs shall publish forecasts they use themselves, as proposed by Eurelectric.</p> <p>According to point 5.7 CM-GL all relevant information on generation has to be published. Whereas one participant states that wind power has no great influence on the prices another player believes that wind forecasts are necessary if there is a considerable amount of wind in the system.</p> <p>→ Data on wind power is relevant for electricity markets. That is already shown by experiences in countries with higher share of wind energy. As this kind of intermittent power generation does not play a significant role in the energy mix of many Member States in the Northern REM, the publication obligation was limited to a fraction of 1 % of the energy mix of the country. In opposition to 4.3.5 (Filling rate of the water reservoirs (3.5 GGP-IMT)) this smaller amount was chosen because the influence of the unpredictability to the electricity markets might be high even with relatively small share of wind energy in-feed. This should be the case in a country with more than 1 % feed-in of this type of generation per year or in control areas/bidding areas with more than 5 % feed-in of this type of generation per year.</p> <p>2. When</p> <p>The most reliable forecast for wind energy is 2-4 hrs before operation hour. But there is also a – less reliable – forecast on D-1. To have the data available for the intra-day market the day-ahead forecast has to be published at the latest on D-1, late.</p> <p>The actual amount of hardly predictable power has to be published “in the time period following that to which the forecast applies” (point 5.8 CM-GL). As a start publication on H+2 shall be sufficient (cf. 3.2.3 of this report).</p>
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4.3.7 Ex post information on unplanned unavailability of generation units

(3.6 GGP-IMT – in consultation: 3.7 GGP-IMT)

I Definition	
What information	<p>Ex post information on the unplanned unavailability of actually running generation units larger 100 MW, including:</p> <ul style="list-style-type: none"> • station name , • unit name, • installed capacity, • location, • production type [i.e. hydro, renewables (differentiating between wind and others), nuclear, CHP, gas turbines, other thermal plants (differentiating between hard coal, lignite and others)], • start and (estimated) stop dates of the outages, • unavailable capacity, • remarks <p>per control area/ bidding area (cf. 3.3 of this report)</p>
When	At the latest H+2 (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	Obligatory: based on point 5.5 (i) CM-GL: ... ex post information for the previous day on planned and unplanned outages of generation units larger than 100 MW

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>Based on 3.6 GGP-IMT and harmonized with point 5.5 (i) CM-GL, also containing the limit of 100 MW. Additional information is necessary to describe the event exactly. Similar information is used at the system of UMMs at Nord Pool Spot.</p> <p>For explanation regarding production type see 4.3.1.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. When</p> <p>3.6 GGP-IMT proposes here “Close to real time”. One comment states that publication on D+1 should be sufficient as long there is no real intra day trade in the region.</p> <p>→ Cross-border intra-day trade is in place between most of the countries in the Northern REM. Additionally in most countries there is national intra-day trade. For these markets ex post information on the unplanned unavailability of generation units is very important and fast disclosure of unavailability is relevant market information. Therefore – also in line with point 5.5 (i) CM-GL – publication at the latest H+2 has been chosen. It should also be taken in account that this information even now is available in some countries of the Northern REM.</p> <p>Information on planned unavailability (incl. updates in case of changes) will be available according to 4.3.2, therefore this information is only required for unplanned unavailability.</p> <p>3. Update</p> <p>As the information on the generation availability is very important to the electricity market it has to be up-to-date. Especially information on the stop date of the unavailability has to be up to date. That is why an update in case of changes is needed.</p>
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4.3.8 Ex post information on the unplanned unavailability of significant consumption units

(3.7 GGP-IMT)

I Definition	
What information	<p>Ex post information on the unplanned unavailability of significant consumption units, including</p> <ul style="list-style-type: none"> • consumption unit concerned, • place, • start and estimated stop dates of the unavailability, • maximum consumption capacity, • unavailable power <p>per control area/ bidding area (cf. 3.3 of this report) Significant is every consumption unit with consumption capacity > 100 MW.</p>
When	At the latest H+2 (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	<p>Obligatory: based on point 5.7 and 5.8 CM-GL: The TSO shall publish the relevant information on forecast demand ... according to the timeframes referred to in 5.5. and 5.6 (5.7). When forecasts are published, the ex post realised values ... shall also be published ... (5.8)</p>

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>This definition is based on 3.7 GGP-IMT and was harmonized with 4.3.3 (planned unavailability of significant consumption units) and 4.3.7 (ex post data on planned and unplanned unavailability of generation units).</p> <p>As discussed in 4.3.3 for definition of „significant consumption unit” the term of “consumption capacity > 100 MW” was chosen.</p> <p>Ex-post information on unavailability is only required for unplanned unavailabilities as information on planned unavailability (incl. updates in case of changes) is already available ex-ante according to 4.3.3.</p> <p>When publishing estimates of either stop (with planned and unplanned outages) or start times (planned outages) the final update has to be the actual start and stop values of outages (either planned or unplanned). By this, it should be ensured that history data includes only actual realised values, not any estimated values.</p> <p>2. When</p> <p>For explanation see 4.3.7</p> <p>3. Update</p> <p>As the information on the availability of significant consumption units is very important to the electricity market it has to be up-to-date. Especially information on the stop date of the unavailability has to be up to date. That is why an update in case of changes is needed.</p> <p>4. Legal background</p> <p>As discussed in 4.3.3 publication duty of information on significant consumption units is based on point 5.7 CM-GL: relevant information on forecast demand. Publication on ex post information on those consumption units is based on point 5.8 CM-GL. According to this rule there shall be published information on ex post realised values for the forecast information. Market participants have to provide the data to the system operator according to 5.5 s. 2 CM-GL. Regulators will facilitate the process if necessary.</p>
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4.3.9 Ex post data on the actual generation (3.8 GGP-IMT)

I Definition	
What information	Ex post aggregated information on the actual generation per bidding/ control area (cf. 3.3 of this report) Generally, all generation should be included. But as a medium step TSOs can define the information they publish. Nevertheless, the publication should cover all generation as soon as possible.
When	At the latest H+2 (cf. 3.2.3 of this report)
Which timeframe	Per hour
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	Obligatory: based on point 5.7 and 5.8 CM-GL: The TSO shall publish the relevant information on forecast demand ... according to the timeframes referred to in point 5.5. and 5.6 (5.7). When forecasts are published, the ex post realised values ... shall also be published ... (5.8)

<p>II Explanatory Statement</p>	<p>1. Definition</p> <p>After the consultation in the Northern REM GGP-IMT concerning 3.8 was changed.</p> <p>A publication per unit was discussed in the IG meeting. The IG members suspect that a publication per unit would reveal business strategies, esp. for small control or bidding areas and close to real time. They recommend that this must be evaluated by the relevant competition authorities and must be considered carefully.</p> <p>VDEW stressed in the IG meeting that the bidding area is relevant and that a flexible approach is needed. Nord Pool Spot stated that publication is currently done by control area/bidding area.</p> <p>Based on the discussion it was agreed that aggregated values should be published as a first step.</p> <p>Aggregation shall be done per bidding area from 1st July 2008. Until that current practice can be continued (cf. 3.3).</p> <p>Whether more disaggregation (e.g. production type) will be possible will be considered at a later stage when revising the transparency report. It will be taken into account that in general information “per unit” enables market participants to better understand pricing mechanisms. The production costs depend on the production facility. Therefore it is necessary to get information about availability of generation units per unit.</p> <p>Generally, all generation should be included. But currently for some TSOs there are difficulties in data provision close to real time with regard to generators connected to the distribution grid. Therefore as a medium step TSOs can publish the figures available. If they do so they have to define transparently what is included in the figures published. Nevertheless, the publication should cover all generation as soon as possible.</p> <p>2. When</p> <p>The ex post data on the actual generation has to be published “in the time period following that to which the forecast applies” (point 5.8 CM-GL). The forecast of 4.3.4 (ex ante scheduled generation) (and also point 5.7, 5.5 (d) CM-GL) is per hour. As a start publication on H+2 shall be sufficient (cf. 3.2.3 of this report).</p>
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4.4 Balancing

4.4.1 Volume of balancing power

(4.1 GGP-IMT)

I Definition	
What information	Volume of balancing power contracted by TSO via tenders, auctions or bilateral contracts as reserves, separately for each type of balancing energy (e.g. primary reserve, secondary reserve, tertiary reserve) This information shall be published per control area/ bidding area (cf. 3.3 of this report).
When	At the latest 2 hours before the following procurement procedure
Which timeframe	Per balancing mechanism time unit = time unit relevant for the concerning balancing market (e.g. 4:00-8:00 hrs for the German balancing market)
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	Obligatory: 5.7: ... The TSOs shall also publish the relevant information necessary for the cross-border balancing market For participation on cross-border balancing market especially information on all national markets is needed and therefore relevant

II Explanatory Statement	<p>1. Reasoning</p> <p>This information is important for the market participants as the information on the overall amount of balancing power reserved by TSO is a prerequisite to estimate market size and attractiveness of the market, but also security.</p> <p>2. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. GGP-IMT proposes here “just after real time”. To facilitate implementation of the requirements for publication of this report as a first step the time of “At the latest 2 hours before the following procurement procedure” should be sufficient. Later on it should be harmonized with other data “close to real time”, i.e. H+2 (cf. 3.2.3 of this report).</p> <p>3. Timeframe</p> <p>In balancing there are different market designs in the Northern REM with different timeframes. In Germany, for example, the timeframe relevant for balancing is four hours. Although maximum of harmonization of market transparency is aimed for, these differences should be taken into account as long as there is no common balancing market. Therefore, the proposal to take one hour as common timeframe cannot be realized and a wider definition has been used “per balancing mechanism time unit”. As proposed by a market participant an explanation this has been added.</p>
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4.4.2 Average and marginal prices of bids/offers (4.2 GGP-IMT)

I Definition	
What information	<p>Relevant prices for balancing energy/ reserve power, depending on pricing mechanism applied i.e.</p> <ul style="list-style-type: none"> - Anonymous list of bids and offers separated for each type of balancing energy (e.g. primary reserve, secondary reserve, tertiary reserve) or at least average price (in case of pay as bid) - Market clearing price for up and down regulation (in case of market clearing pricing) <p>This information shall be published per control area/ bidding area (cf. 3.3 of this report).</p>
When	<p>Depending on the mechanism applied:</p> <ul style="list-style-type: none"> - sufficiently (at least 2 hours) before the following procurement procedure - at the latest H+2 after real-time e.g. for continuous trading
Which timeframe	<p>Per market time unit relevant for imbalance settlement = time unit relevant for the concerning imbalance settlement (e.g. quarter of an hour in the German balancing market)</p>
Update	Not necessary
Availability	For 2 years
Responsibility for publishing	TSO
Legal background	<p>Obligatory: 5.7: ... The TSOs shall also publish the relevant information necessary for the cross-border balancing market</p> <p>For participation on cross-border balancing market especially information on all national markets is needed and therefore relevant</p>

<p>II Explanatory Statement</p>	<p>1. Reasoning</p> <p>Information on balancing is important for the market participants. Although it has to be conceded that today there is no cross-border balancing market at all interconnectors of the Northern REM, integration of the regional electricity market is also possible if market participants from one country take part in balancing market of another country. To be able to do that information on the national balancing markets of that country is necessary.</p> <p>2. Definition</p> <p>This definition is based on 4.2 GGP-IMT. Goal of 4.2 GGP-IMT was to provide market participant with data concerning prices of balancing power called by the TSO (“with prices corresponding to global imbalance”). Differences in balancing market design – as also remarked by participants of the consultation – have been acknowledged. As balancing markets in the Northern REM use different mechanisms data referring to “pay as bid” as well as data referring to “market clearing pricing” are proposed.</p> <p>Not to publish single bids is an option, but in this case it is necessary to publish at least minimum, maximum and average prices (in case of pay as bid). The reference to control area/ bidding area has been added as proposed by a comment.</p> <p>3. When</p> <p>According to point 5.6 CM-GL the data has to be available in due time for the negotiation of all transactions. GGP-IMT proposes here “just after real time”. Due to the different mechanisms applied the timeframe for publication might differ. For day-ahead auctions where capacity and energy is traded at once “at the latest 2 hours before the procurement procedure” should be sufficient. For markets where energy is traded continuously data should be published “close to real time”, i.e. H+2 (cf. 3.2.3 of this report). A harmonisation of timeframes in that field depends on the harmonisation of balancing mechanisms applied.</p> <p>4. Timeframe</p> <p>In balancing there are different market designs in the Northern REM with different timeframes. Although maximum of harmonization of market transparency is aimed for, these differences should be taken as long as there is no common balancing market. Therefore the proposal to take one hour as common timeframe cannot be realized and a wider definition has been used “Per market time unit relevant for imbalance settlement”. As wished by a market participant an explanation has been added.</p>
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4.4.3 Imbalance prices (4.3 GGP-IMT)

I Definition	
What information	Imbalance prices per control area/ bidding area (cf. 3.3 of this report) including a definition of what is published
When	At the latest D+1
Which timeframe	Per market time unit relevant for imbalance settlement = time unit relevant for the concerning imbalance settlement (e.g. quarter of an hour in the German balancing market)
Update	Not necessary
Availability	For 2 years
Responsibility	TSO
Legal background	Obligatory: 5.7: ... The TSOs shall also publish the relevant information necessary for the cross-border balancing market For participation on cross-border balancing market especially information on all national markets is needed and therefore relevant

<p>II Explanatory Statement</p>	<p>1. Reasoning</p> <p>Information on balancing is important for the market participants. Although it has to be conceded that today there is no cross-border balancing market at all interconnectors of the Northern REM, integration of the regional electricity market is also possible if market participants from one country take part in balancing market of another country. To be able to do that information on the national balancing markets is necessary.</p> <p>In general, imbalance prices are those prices that are relevant for the account of the balance responsible parties. But there are differences in the definition of these prices. Therefore transparency regarding the definition is required.</p> <p>2. Definition</p> <p>This definition is based on 4.3 GGP-IMT. The reference to control area/ bidding area has been added as proposed by a comment.</p> <p>3. When</p> <p>GGP-IMT proposes “just after real time”. TSOs reported implementation problems due to complex calculation of imbalance prices. Therefore publication is required at the latest D+1.</p> <p>It will be considered in the future whether a publication closer to real time is possible as it was stressed by one TSO that it is important for market players to know imbalance prices as soon as possible to enable them to react on these prices.</p> <p>4. Timeframe</p> <p>For explanation on this item confer 4.4.2.</p>
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4.4.4 Control area imbalance volumes (4.4, 4.6 GGP-IMT)

I Definition	
What information	<ul style="list-style-type: none"> - Control area/ bidding area imbalance volumes - Volumes of manually activated reserve used and of automatic reserves used (actual use) distinguishing between <ul style="list-style-type: none"> o volumes of manually activated reserves used o volumes of automatically activated reserves used (e.g. primary, secondary reserves)
When	At the latest H+2 (cf. 3.2.3 of this report)
Which timeframe	Per market time unit relevant for imbalance settlement = time unit relevant for the concerning imbalance settlement (e.g. quarter of an hour in the German balancing market)
Update	Not necessary
Availability	For 2 years
Responsibility for publication	TSO
Legal background	<p>Obligatory: 5.7: ... The TSOs shall also publish the relevant information necessary for the cross-border balancing market</p> <p>For participation on cross-border balancing market especially information on all national markets is needed and therefore relevant</p>

II Explanatory Statement	<p>1. Reasoning</p> <p>Information on balancing is important for the market participants. Although it has to be conceded that today there is no cross-border balancing market at any of the interconnectors of the Northern REM, integration of the regional electricity market is also possible if market participants from one country take part in balancing market of another country. To be able to do that information on the national balancing markets is necessary.</p> <p>Eurelectric believes that volumes of manually activated reserves is not relevant for trading or price formation or can be deducted from the other information of the list. Therefore they propose to delete this information.</p> <p>→ Depending on the pricing mechanism applied for manually activated reserves information about activated volumes might be relevant for pricing the offers.</p> <p>2. Definition</p> <p>This definition is based on 4.4 GGP-IMT and 4.6 GGP-IMT. Changes made are done for clarification. This information shall contain the volumes of all types of balancing energy called by the TSO. The reference to control area/ bidding area has been added as proposed by a comment.</p> <p>Due to changes in the definition in comparison to the consultation paper data on the status quo are not available.</p> <p>3. When</p> <p>GGP-IMT proposes “just after real time”. “Real time” data shall be published according to this report at the latest H+2 (cf. 3.2.3 of this report).</p> <p>4. Timeframe</p> <p>For explanation on this item confer 4.4.2 of this report.</p>
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4.4.5 Financial balance of the market (4.5 GGP-IMT)

I Definition	
What information	<ul style="list-style-type: none"> - Expenses for balancing energy and power at the balancing market - Payments resulting from imbalance pricing - Difference between expenses and income <p>This information shall be published per control area (cf. 3.3 of this report).</p>
When	last calendar day of month M+3 for month M, late (cf. 3.2.2 of this report)
Which timeframe	Per month
Update	To be updated until final annual reconciliation in balance unit's economical balance sheet
Availability	For 2 years
Responsibility	TSO
Legal background	<p>Obligatory: 5.7: ... The TSOs shall also publish the relevant information necessary for the cross-border balancing market</p> <p>For participation on cross-border balancing market especially information on all national markets is needed and therefore relevant</p>

II Explanatory Statement	<p>1. Reasoning</p> <p>Eurelectric proposes to delete this item of information as according to Eurelectric it was not relevant for trading or price formation or can be deducted from the other information of the list.</p> <p>→ This information has to be provided anyway as it has relevance for markets where expenses for balancing do not equal income from imbalance pricing.</p> <p>2. Definition</p> <p>This definition is based on 4.5 GGP-IMT (“Information on the financial balance of the whole market (expenses on the balancing market / payment of imbalances”). For clarification the definition contains some changes in comparison to the GGP-IMT. Especially the difference between expenses and income is necessary to have complete information on the financial balance of the market.</p> <p>3. When</p> <p>The determination of the financial balance is very complex in most of the countries. Also, the information is not relevant for price formation etc. Therefore it is sufficient to provide the financial balance on the last calendar day of month M+3 for month M, late. In countries where only estimated values are available this should be noted in connection with the publication. Publication of final financial balance should be available as soon as it is available.</p> <p>4. Timeframe</p> <p>As GGP-IMT proposes this information should be given per month.</p> <p>5. Update</p> <p>As GGP-IMT proposes this information should be updated until final reconciliation.</p>
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4.5 Wholesale Market

4.5.1 Information on electricity trading at PEX

(5.1 GGP-IMT)

I Definition	
What information	Aggregated supply and demand curves (for auctions), Prices and volumes for each standard traded product and for all kinds of markets (spot, continuous intra-day, futures, etc.)
When	at the latest D+1
Which timeframe	Per market time unit
Responsibility for publication	PEX
Legal background	There is no publication duty concerning this information given in the CM Guidelines.

<p>II Explanatory Statement</p>	<p>1. Reasoning</p> <p>After the consultation procedure it has been decided to keep this information in the list of information to be published. That is also the opinion of most of the consultation participants.</p> <p>Additionally GGP-IMT has been changed after consultation. The new 5.1 GGP-IMT lists three reasons for publishing this information: it shall help to analyse market depth, to give a reference for the contracts negotiation and therefore to facilitate risk assessment.</p> <p>2. Definition</p> <p>This information relates only to data of PEX. As logical consequence no information concerning 5.5.1 needs to be published if there is no PEX in a country of the Northern REM. That is not the case in Northern REM, though.</p> <p>Market participants stress in their comments that with the continuous trade used in parts of Scandinavia it is not possible to formulate curves. Also, the availability of price curves just after trading might reveal business strategies in small bidding / price areas.</p> <p>Taking that into account price curves should be published only for auctions and on D+1.</p> <p>It should also be published what assumptions and characteristics (i.e. whether block bids are included or not) are included in the bidding curves published.</p> <p>3. When</p> <p>In 5.1 GGP-IMT “P-1 for period P, per illustrative product” is proposed as timeframe. This term “P-1 for period P” led to comments in consultation that publication “before or on the day of price publication is not acceptable”.</p> <p>→ Based on these experiences the difficult term of “P-1 for period P” has been abandoned. For clarification it is proposed to publish this information, at the latest D+1 (see 2. Definition).</p> <p>4. Timeframe</p> <p>As this information applies to different data on the Wholesale Market, the definition of the timeframe should remain open. That is why “market time unit” has not been defined further.</p> <p>5. Responsibility</p> <p>Responsible party shall be the PEX. Publication on the common platform for TSOs’ information is not necessary, because there is neither a publication obligation of the PEX nor a obligation to submit the data to the TSOs.</p>
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4.5.2 Prices and volumes of OTC standard contracts (5.2 GGP-IMT)

I Definition	
What information	Prices and volumes of the OTC market
When	One week before monthly transmission capacity auction, at the latest 5 th calendar day of M-1, late, i.e. until 18.00 h (cf. 3.2.2 of this report)
Which time-frame	Per month
Responsibility for publication	PEX/ Brokers
Legal background	There is no publication duty concerning this information given in the CM Guidelines.

<p>II Explanatory Statement</p>	<p>1. Reasoning For explanation concerning reasons confer to 4.5.1 (Information on electricity trading at PEX (5.1 GGP-IMT)).</p> <p>2. Definition Definition is based on 5.2 GGP-IMT. As stated by comments one clarifying addition is proposed. Instead of “Prices and volumes of the OTC market” it should be “Prices and volumes of OTC standard contracts”. Those standard contracts should be the only available information on OTC markets.</p> <p>3. When The information shall be published monthly. Comments state that there should be different timeframes depending on the product (day-ahead, intra-day or forward and derivatives market). But the idea of GGP-IMT is to reduce the number of publications. Therefore a monthly overview on the different products shall be sufficient. Also this publication shall be harmonized with other monthly publications. As there are differences in timing of transaction in the Northern REM the chosen definition refers to a time period before the allocation (of monthly transmission capacity) as well as to a fixed deadline.</p> <p>4. Timeframe The same applies to this as stated under 3. When.</p> <p>5. Responsibility Responsible parties shall be Brokers and PEXs. Publication on the common platform for TSOs’ information is not necessary, because there is neither a publication duty of the PEX nor a duty to submit the data to the TSOs.</p>
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5 List of abbreviations

CM-GL, CM Guidelines	Congestion Management Guidelines (Decision of the EC-Commission 2006/770/EC by 9th November 2006)
D+1, W+1, M+1, Y+1	Day, week, month, year after D, W, M, Y
D-1, W-1, M-1, Y-1	Day, week, month, year before D, W, M, Y
“delivery” year/month/...	The timeframe to which the capacity product refers to
DSO(s)	Distribution System Operator(s)
EHV	Extra high voltage
EREGG	European Regulators' Group for Electricity and Gas
ETSO	European Transmission System Operators
Eurelectric	Union of the Electricity Industry
GGP-IMT	EREGG Guidelines of Good Practice on Information Management and Transparency
H, D, W, M, Y	Hour, day, week, month, year
H+2	2 hours after H
IG	Implementation Group
MW	Megawatt
N.A.	Not available
Nomination	The notification to the TSOs by a market participant of the usage of long-term physical transmission right awarded to him
NPS	Nord Pool Spot
NRA	National Regulatory Authority
NTC	Net transfer capacity
NTCs	Net transfer capacities
OTC	Over the counter
PEX(s)	Power Exchange(s)
REM	Regional Energy Market
RCC	Regional Co-ordination Committee

Schedule	Exchange schedule as defined in the UCTE Operation Handbook
TSO(s)	Transmission System Operator(s)
TTC	Total transmission capacity
UMM(s)	Urgent Market Message(s)
Verification of Schedules	Confirmation by the TSO of schedules declared by the market participant
Week	The timeframe of seven days beginning with Monday, 00:00 h and ending Sunday, 24.00 h.