



Report on Transparency

Final Version (26.01.2009)

IG Transparency

**Electricity Regional Initiative
Central Southern Regional Electricity Market**



Executive Summary

The Central Southern 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 Central Southern electricity market consisting of Italy, France, Germany, Austria, Slovenia and Greece.

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 ERGEG Guidelines of Good Practice on Information Management and Transparency (GGP-IMT).

Generally, the basis for harmonization of the transparency rules within the Central Southern REM is provided by this report. 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. Also, national publication requirements which might go beyond what is prescribed here are not touched. Furthermore, the change of the market design or the legal background might require adoptions of the publication requirements foreseen in this report. One of the main impediments identified by the regulators 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 according to point 5.5 CM Guidelines, with the relevant data. 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 NRA 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. However, first priority is to harmonise the information-items to be published and get this information published (here, publication on each TSO's website could be a first step).

As publication on the homepages of the power exchanges is partly already established practice and this also results in some kind of aggregation this could be accepted by regulators. PEX'es as information platform is 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 July 2009. 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 January 2010.

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 January 2010 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 voluntarily be published. 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 the Congestion Management Guidelines (CM Guidelines) 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 ERGEG.¹

Parallel to that, stakeholders highlighted the importance of adequate information for the functioning and the improvement of the electricity markets.² 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 transparency.³ 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 Central Southern 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 Central Southern Europe REM is one of the Regional Electricity Markets which were established to the outlined in the CM Guidelines. One of the major targets in the region is the harmonization of the practices of transparency within the region and across regions in order to avoid informational asymmetries between market parties within one country and also between the market parties in different countries.

Regulators of the Central Southern Europe REM value the issue of transparency as very important for improvements in the Central Southern REM. The RCC has noticed that until now already there are published three transparency reports in the REMs of Northern Europe, Central Western Europe and Central Eastern Europe. This excellent work shall be taken as basis for the process to harmonize transparency inside the CSE region. Therefore, on basis of the final transparency report of Central Western Europe REM, adapted to the regional specific context of the CSE region, this report has been publicly consulted by all relevant market participants for four weeks. Regulators evaluated the comments received by market parties and partly changed the draft version. Finally, the RCC concluded on the Final Transparency Report for the Central Southern European Region and its publication on the 12 February 2009.

¹ http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_ERGEG_PAPERS/Electricity/2006/ERGEG_GGPIMT_2006-08-02.pdf

² See e.g. positions of EFET (<http://www.efet.org/default.asp?Menu=76>), Eurelectric (www.eurelectric.org)

³ <http://www.etsovista.org>

Content of the Report

The aim of this report is to provide the basis for harmonization of transparency requirements within the REM Central Southern Europe. According to article 1.10 of the Congestion Management Guidelines regulators have the authority to set conditions in order to provide an interpretation of the requirements of the Congestion Management Guidelines. 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 were given according to the positions of the market players already known and will be completed by 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.

Also, the developments in the Florence Transparency Working Group chaired by ERGEG and the Commission have been considered in this draft report on transparency.

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.

⁴ <http://www.etsovista.org>

The report should be applied in the countries of the Central Southern Europe Region. It is applicable for interconnections between bidding areas operated by transmission system operators. Furthermore, the change of the market design or the legal background might require adoptions of the publication requirements foreseen in this report.

Benchmarking on status quo of transparency

A first benchmarking of the status quo of implementation of the CM Guidelines was done in ERGEG's Compliance report. This report also tackled the issue of Transparency (cf. chapter 5 of CM guidelines).

It can be noticed that some requirements set out in the CM Guidelines were already implemented either nationally or even on ETSO Vista.

Following items are published on ETSOVista.

- Congestion management
 - Operational Data
 - Cross-Border Physical Flows,
 - Cross-Border Commercial Schedules,
 - Planned Schedule Evolution,
 - Final Cross-Border Schedules
 - Physical Cross-Border Flows Vs Final Cross-Border Schedules
 - Explicit Auction
 - Daily (per each border)
 - Monthly (common table for all borders)
 - Yearly (common table for all borders)
 - Implicit Auction
 - Daily (per each border)
- Balance area profile
 - System Vertical Load
 - Balancing Market
- Network capacity
 - D-1 Net Transfer Capacity
 - Outage Information
- Publications
 - especially NTC Matrix and Base Case Maps

2 Implementation and further development

The following proposal for the implementation of the transparency requirements was discussed among the regulators, taking into account the remarks made in the discussions of the Northern Europe REM and the Central Western REM. Based also on the comments received during the public consultation Regulators of the Central Southern Region agreed on the approach for the further proceeding, a schedule for implementation, location of publication and monitoring of implementation as 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.

Regulators support the idea of a publication of data on a centralized internet platform, because it is important that market participants can find published information easily. The project of ETSOVista is welcomed, and it can be acknowledged that ETSOVista could serve as this common platform.

Another approach discussed is a publication on the homepages of the power exchanges which would support transparency for the market.

Currently there are different approaches for publication of data in the countries of Central Southern Region. One might argue that the publication responsibility might be with the TSO whereas the means for publication might be different depending on the market structure.

Generally, a publication on a common European website (like ETSOVista) is envisaged. However, this may not cause any delay regarding the publication of the information-items. Therefore, publication on TSO's own website is an acceptable first step. 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 practise 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 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 decided by the RCC. Compared to the consultation document TSOs will have more time for implementation of this Report. The schedule foresees an implementation on national homepages of TSOs (alternatively or complementary on the homepages of the power exchanges) until 1st of July 2009 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 January 2010.

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 January 2010 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 markets (chapter 4.5) can be published voluntarily. This information is already available to a large extent.

2.3 Monitoring of implementation

The need for an adequate information management and proper supervision of the publication of data is obvious. It might also be considered important that publication is as close as possible to the source of the data.

It has to be clarified if for information published at the power exchanges legislation which requires stringent disclosure rules is already in place and 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.

Also in case of publication of price relevant data on a common platform like e.g. ETSO Vista this has to be subject to a proper monitoring and surveillance by an independent and authorised body.

Furthermore Regulators will decide if a general monitoring of implementation will be established.

2.4 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 Central Southern Europe decided to address transparency.

Market participants stressed that it is important that transparency initiatives in other regions will correlate. It has also to be mentioned 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.

Problems may arise in gathering of data of generation units that are connected to DSOs' grids, 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 impediment to transparency could be the question of ownership of data.

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. 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 enable easy data processing.

3.1.3 Availability

According to point 5.9 S. 3 CM-GL generally the data should be available for 2 years. To store all data for 2 years will require considerable investment in IT systems by the TSOs. Therefore, in a first step short term forecast data, i.e. monthly, weekly, daily (or shorter time-frames) forecasts, does not have to be stored. In a second step all short term forecast data has to be stored and published for 2 months (from the beginning of 2010 as a minimum requirement, i.e. in countries, where this information is already published nowadays this information regime shall be continued). All other information has to be available for 2 years.

Additionally the inquiry of historic data has to be possible and also the download of data to use it for the own data processing has to be an option. To increase the quality of the publications a download of data of one month and one year in single computer file should be provided. The information provided in this file should be easily extractable. 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. However, if publication should be available in more than one language this might cause difficulties for publication at a common homepage.

3.2 Time of publication

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

- the name of the country or bidding 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. those that can be planned, like obligations for publication 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 Central Southern 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 (at the latest). 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 Central Southern REM, the early deadline is: minimum of one hour before closing of bidding for daily transmission capacity (explicitly or implicitly), at the latest 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 18:00 h. This seems to be 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” (1. July 2009). From the beginning of 2010 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. It is conceded, that this will require a high amount of personnel and infrastructure for operating these procedure on the side of TSOs. But it is important that information is available at least in 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 1 July 2009). In a second step (beginning of 2010) data shall be published 24/7.

3.3 Publication per control area or per bidding area

GGP-IMT proposes publication per control area. For market participants, e.g. traders, bidding area is most relevant for price formation. Additionally control areas can be sometimes divided in several bidding areas.

Because of these arguments 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 of January 2010. In the meantime the current practice could continue (either control area or bidding area) as the implementation of a publication at bidding area level (if not already implemented) will require some time. Generally, aggregation could be a means to avoid disclosing commercially sensitive information. However, for small bidding areas aggregation for these areas might not be sufficient to ensure this. In this case a diverging publication might be accepted by the competent national authority.

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 times of off-peak, as it is possible, that the timeframes of peak and off-peak are different in the single countries.

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 final version of the following list of information taking into account remarks of the stakeholders will be seen as terms and conditions set by regulatory authorities under the principles and rules of the Congestion Management Guidelines according to Point 1.10 of the CM Guidelines. 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 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 (34) 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) Currently, there are different definitions of load in Central Southern REM as well as in whole Europe. Therefore, as a first step TSOs may stick to the currently applied definition of load. However, the timing as stated below should be followed and 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) |

| | |
|---------------------------------|---|
| II Explanatory Statement | <p>1. Definition</p> <p>There are differences in the definitions for load currently applied in the countries of the Central Southern Region. Therefore it could advance comparability of load data if the term “load” is defined in a harmonized way. But at this moment there could not be developed a clear preference on 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 (but the proposed timing for publication should be followed). However, transparency about the method and its accuracy, esp. on how much of the market is represented, is required.</p> <p>In the mid term, definition of load should be harmonized in a European way. Such a harmonized definition could be incorporated in a revised version of the Transparency report(s).</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.</p> |
|---------------------------------|---|

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, esp. on how much of the market is represented, 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) |

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| <p>II Explanatory Statement</p> | <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 is proposed 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 daily transmission capacity auction. However, it has been seen that verified schedules are not available before 18h.</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 of an average peak/ off-peak value would not be sufficient information for the market participants.</p> |
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4.1.3 Month-ahead load forecast

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

| I Definition | |
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| 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>This information will not be required in the first stage of implementation, but should be published by 1 Jan 2010.</p> <p>.</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) |

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| <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.</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 Central Southern 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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4.1.4 Year ahead load forecast

(1.4 GGP-IMT)

| I Definition | |
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| 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, esp. on how much of the market is represented, is required.</p> <p>This information will not be required in the first stage of implementation, but should be published by 1 Jan 2010.</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) |

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| II Explanatory Statement | <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. 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>3. When 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 Central Southern 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 The differentiation between peak and off-peak averages is necessary (cf. 4.1.3 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 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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4.1.5 Year-ahead forecast margin including peak load forecast

(1.5 GGP-IMT)

| I Definition | |
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| 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) |

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| <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. 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 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 Central Southern 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 | |
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| 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 five 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 after each decision |
| Availability | To be kept for 3 years |
| Responsibility for publication | TSO |
| Legal background | 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) |

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| 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>It is proposed 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).</p> <p>Regulators of the Central Southern region agreed to have information on infrastructure development for the next five years. Naturally, TSOs can make available on voluntary basis information about long term evolution of new capacity, 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>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 Central Southern 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 | |
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| 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 |

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| <p>II Explanatory Statement</p> | <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>It has been seen necessary to harmonize this publication item with those concerning outages of generation (4.3.1) 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 some PEX 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>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 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 | |
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| What information | <p>1. Year-ahead forecast of total transmission capacity available to the market</p> <p>2. Year-ahead forecast of transmission capacity available to the market in yearly capacity auction (yearly values 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) per each border and direction</p> <p>In case structural internal congestion is limiting cross border capacity, TSOs shall indicate:</p> <ol style="list-style-type: none"> 1) Where the limiting constraint on their network is located 2) To what extent this constraint affects the level of transmission capacity (how many hours/days/weeks/months in the year) 3) The possible corrective measures that could be implemented to increase the yearly capacity, together with their estimated cost 4) TSOs shall describe and publish the methodology and projects for achieving the long-term solution. |
| 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 points 1.7, 5.1 and 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.) |

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| <p>II Explanatory Statement</p> | <p>1. Definition</p> <p>Regulators propose a monthly update of the year-ahead capacity forecast. That is in line with the CM Guidelines. According to point 5.5 (b) CM-GL the monthly publication of month- and year-ahead forecasts of the transmission capacity is necessary. Therefore the first year-ahead forecast of available transmission capacity will be published in January and will be updated monthly.</p> <p>Basis of this definition are therefore the CM Guidelines (5.5 (b)-(c): „transmission capacity available to the market“) and not 2.3 GGP-IMT.</p> <p>a) Total transmission capacity</p> <p>This information is relevant for market participants in order to be able to estimate convergence of market prices in adjacent countries. To facilitate transparency this information should therefore be published.</p> <p>b) Transmission capacity available for yearly capacity auctions</p> <p>Complementary to the information above TSO shall publish here the amount of capacity available in the yearly auction. It is therefore not needed, if no yearly auction is conducted. From January until two months before year-ahead capacity auctions TSOs publish their <u>forecast</u> of capacity for the auction of yearly transmission capacity for the next year. In the month before the auction TSOs have to publish the capacity actually offered in the auction (not only a forecast of it).</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 Central Southern 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 | |
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| What information | <p>1. Month-ahead forecast of total transmission capacity available to the market</p> <p>2. Month-ahead forecasts of transmission capacity available to the market in monthly capacity auction, 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) per each border and direction</p> |
| 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.) |

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| <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>a) Total transmission capacity</p> <p>This information is relevant for market participants in order to be able to estimate convergence of market prices in adjacent countries. To facilitate transparency this information should therefore be published.</p> <p>b) Transmission capacity available for monthly capacity auctions</p> <p>Complementary to the information above TSO shall publish here the amount of capacity available in the monthly auction. It is therefore not needed, if no monthly auction is conducted.</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 Central Southern 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> <p>4. Update</p> <p>An update is not necessary as also weekly and daily forecasts of transmission capacity available to the market are obligatory to the TSOs and are therefore available to the market.</p> |
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4.2.5 Week-ahead forecasts of available transmission capacity

(2.5 GGP-IMT)

| I Definition | |
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| What information | <p>1. Week-ahead forecast of total transmission capacity available to the market</p> <p>2. Week-ahead forecasts of transmission capacity available to the market in weekly capacity auction, 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) per each border and direction</p> |
| 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. |

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| II Explanatory Statement | <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>a) Total transmission capacity</p> <p>This information is relevant for market participants in order to be able to estimate convergence of market prices in adjacent countries. To facilitate transparency this information should therefore be published.</p> <p>b) Transmission capacity available for weekly capacity auctions</p> <p>Complementary to the information above TSO shall publish here the amount of capacity available in the weekly auction. It is therefore not needed, if no weekly auction is conducted.</p> <p>2. When</p> <p>The reporting is required weekly. At this time there is no weekly transmission capacity allocation in the Central Southern 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 Central Southern 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 | |
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| What information | <p>1. Day-ahead forecast of total transmission capacity available to the market</p> <p>2. Day-ahead transmission capacity available to the market in daily capacity auction for each market time unit, taking into account all netted nominations before day-ahead allocations, day-ahead production schedules, demand forecast and planned maintenance works of the grid (point 5.5 (d) CM-GL) per each border and direction</p> |
| 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) and 5.6 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 |

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| <p>II Explanatory Statement</p> | <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 allocations, 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>a) Total transmission capacity</p> <p>This information is relevant for market participants in order to be able to estimate convergence of market prices in adjacent countries. To facilitate transparency this information should therefore be published.</p> <p>b) Transmission capacity available for daily capacity auctions</p> <p>Complementary to the information above TSO shall publish here the amount of capacity available in the daily auction.</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 most-applied trading unit in the Central Southern 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 | |
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| 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 |

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| 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 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 mostly applied trading unit in the Central Southern 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 intra-day capacity allocation as the market participants need this information for trading.</p> |
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4.2.8 Details on actual outages in the transmission grid

(2.8 GGP-IMT)

| I Definition | |
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| 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 | <p>Reasons in more details: D+1, late (cf. 3.2.2 of this report)</p> <p>All other information immediately (if possible with short description of reasons), at the latest H+2 after real time (cf. 3.2.3 of this report)</p> |
| 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 |

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| II Explanatory Statement | <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>It has been seen necessary that information is symmetric with information given on generation and consumption. Also, only those outages that have influence on trading capacity should be reported.</p> <p>→ Therefore, 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 e.g. 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>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>First duty of TSOs is to deal with the outage. Therefore, the requirements for publication of reasons are the same as for 4.2.14, i.e. it should be sufficient to first – if possible – publish only a short description of reasons and secondly to publish at the latest on D+1, late, a more detailed description of the reasons.</p> <p>3. Timeframe</p> <p>The publication refers to hourly values. Another aggregation level could be 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 (see 3.1).</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. To ease implementation for the TSOs that should be sufficient for a first implementation of this report.</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 | |
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| What information | <p>A table indicating:</p> <ul style="list-style-type: none"> -Capacity offered by TSO -Capacity requested by market participants (for explicit auctions only) -Capacity allocated to market participants (or via the power exchanges for implicit auctions) <p>per border between bidding areas/ control areas</p> |
| When | <p>This table shall be provided immediately, at the latest H+2 for H after each capacity allocation session (cf. 3.2.3 of this report) This does not replace the requirements according to. 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7.</p> |
| Which timeframe | Per allocation time frame |
| 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> |

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| <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. The value of offered capacity is identical with the ones referred in section 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7 (transmission capacity available for the each relevant auction). The information of section 4.2.9 shall be published additionally to the referred items in order to allow a comparison of the capacity values for each auction at a glance. To get a better overview about supply and demand these three items shall be published together.</p> <p>2. When</p> <p>It is legally impossible 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) because such a proposal was 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 | |
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| 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 | |
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| What information | Capacity reserved for balancing market |
| Need for this information | As no cross-border balancing markets exist in the Central Southern REM the remaining capacity after day-ahead and intra-day markets is not used for such 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 | |
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| What information | Applicable for congested borders with explicit auction mechanism only. Aggregated values of day-ahead nominations (i.e. the nominations of capacity obtained in the yearly, monthly capacity auctions) by market players on each interconnection in both directions |
| 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 |

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| <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 allocated” in 4.2.13.</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 applied trading unit in the Central Southern 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 | | |
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| What information | Explicit auction: - capacity allocated - capacity price (marginal price) - congestion income per border between bidding areas/ control areas per hour and per allo- cation timeframe | Implicit auction - capacity allocated (i.e. planned commercial flow) - price difference - congestion income per border between bidding areas/ control areas per hour |
| When | At the latest H+2 after each capacity allocation session (cf. 3.2.3 of this report) | |
| Which timeframe | Per allocation time frame for yearly and monthly auctions Per hour for daily auctions | |
| Update | Not necessary | |
| Availability | For 2 years | |
| Responsibility | TSO | |
| Legal background | Obligatory: "Capacity allocated/ congestion price" based on point 5.5 (f) CM-GL: allo- cated capacity as soon as possible after each allocation, as well as an indication of prices paid "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 fore- cast. | |

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| <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 the two different auction methods in the European electricity markets that may be used according to the CM Guidelines, 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>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).</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 most applied trading unit in the Central Southern 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 | |
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| 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>This information has to be given only for actions with a relevant effect on transmission capacity (i.e. in any case if larger 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> |

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| <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>In case a neighbouring TSO limits capacity this TSO is obliged to publish the information on this. The other TSO give the statement that the limitation emanates from the neighbouring TSO.</p> <p>Of course 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 Central Southern 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 | |
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| What information | - Sum of final scheduled exchanges per control/ bidding area (cf. 3.3 of this report), 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 |

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| II Explanatory Statement | <p>1. Definition</p> <p>This publication is obligatory according to point 5.5 (h) CM-GL 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>It has been acknowledged that – 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 Central Southern 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 Central Southern 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 | |
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| What information | <p>(I.) Installed generation capacity for units larger 100 MW per single unit including foreseeable evolution at least for the next 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, • control area/ bidding area (cf. 3.3 of this report). • remarks <p>(II.) Total sum of installed generation larger than 1 MW for each year aggregated per the different production types</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> |

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| <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>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>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>Market participants stressed that to understand the formation of electricity prices it is very important to have information not only regarding the overall sum of generation but also regarding the different production types.</p> <p>Central Southern regulators acknowledge that the Transparency report for the Central Southern REM will differ in this point from the other Transparency reports. But from their point of view aggregation per production type is necessary and a further improvement of the level of transparency. Additionally, convergence to the other Transparency reports is ensured as the information required in those reports can easily be derived by summing up the data for the single production types as requested in this report.</p> <p>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>Limit of 100 MW</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>Production type</p> <p>It has been acknowledged that both production and fuel type have an influence on the marginal costs of the power plants. Therefore, both were combined in this piece of information.</p> |
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2. 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 Central Southern REM the chosen definition refers to a time period before the allocation (of yearly transmission capacity) as well as to a fixed deadline.

3. Update

Update of installed generation is contained in 4.3.2/ 4.3.7.

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.

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 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, • control area/ bidding area (cf. 3.3 of this report), • 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 |

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| <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. Especially information per unit is mandated by the CM Guidelines.</p> <p>The reasons for taking a limit of 100 MW are given in 4.3.1. Information concerning smaller units (e.g. 20 MW) does not have much relevance for the market, therefore it could lead to an information overflow which would be counterproductive.</p> <p>Production type</p> <p>There are two possible ways of aggregation of this information, per fuel type or per production type. But it has been acknowledged that both production and fuel type have an influence on the marginal costs of the power plants. Therefore, both pieces of information are important for understanding the price formation and, consequently, this is proposed in this report.</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 Central Southern 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, aggregated per control area/ bidding area (cf. 3.3 of this report), including:</p> <ul style="list-style-type: none"> • start and estimated stop dates of the unavailability, • maximum consumption capacity, • unavailable power. <p>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 | 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. |

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| <p>II Explanatory Statement</p> | <p>1. Definition</p> <p>Based on definition of 3.3 GGP-IMT. The definition of „significant consumption unit” shall be harmonized with the limit for the outage of generation units (see 3.3.2), to facilitate comparability between load and generation. Therefore it was chosen to use consumption capacity > 100 MW. Consumption capacity refers to the capacity of the consumption unit’s connection to the grid.</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>Regarding less liquid intra-day markets in and between some countries of the Central Southern REM it is proposed to publish such data as a first step in an aggregated way.</p> <p>Several Regulators may request publication per single consumption unit if they consider appropriate. Then publication should contain: consumption unit concerned, place, start and estimated stop dates of the unavailability, maximum consumption capacity and unavailable power. This would be also in line with Regulators’ statement concerning coherence of this Transparency Report with the other REMs, especially the Northern Transparency 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 Central Southern 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 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 | |
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| What information | Ex ante aggregated information on the scheduled generation per production type (cf. 4.3.1 of this report) and 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 |

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| <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>It is also 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>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>It is proposed 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>Regulators of the Central Southern REM decided to enclose aggregation per production type here. Further explanation can be found in 4.3.1 of this report.</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 | |
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| 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> |

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| <p>II Explanatory Statement</p> | <p>1. 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 Central Southern 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. This does not include pump storage plants.</p> <p>2. When</p> <p>As first step a weekly information on the water reservoirs has been chosen. It could be thought about advancement to publication H+2. But as long as it is not obligatory for thermal units to publish its stock H+2 there is no need for this advancement.</p> <p>This data has to be published ex post for the last week. It should be published it on the third working day of W+1.</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 | |
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| What information | <p>a) Forecasts that TSOs themselves use for generation from plants difficult to forecast correctly due to the type of production (i.e. wind, solar power, mandatory generation and generation under test-run operation) per control area/ bidding area (cf. 3.3 of this report)</p> <p>b) Actual values of generation difficult to forecast correctly due to the type of production (i.e. wind, solar power, mandatory generation and generation under test-run operation) per control area/ bidding area (cf. 3.3 of this report).</p> <p>Information a) and b) shall be published separately for each type of production.</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> |

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| <p>II Explanatory Statement</p> | <p>1. Definition</p> <p>This definition is based on 3.6 GGP-IMT. To clarify the definition in GGP-IMT 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.</p> <p>According to point 5.7 CM-GL all relevant information on generation has to be published.</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 Central Southern 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) 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)

| I Definition | |
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| 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, otherthermal plants (differentiating between hard coal, lignite and others)], • start and (estimated) stop dates of the outages, • unavailable capacity, • control area/ bidding area (cf. 3.3 of this report), • remarks. |
| When | At the latest D+1, early (cf. 3.2.1 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 |

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| <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 e.g. at the system of UMMs at Nord Pool Spot.</p> <p>Explanation regarding definition of production type cf. 4.3.1 of this report.</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”.</p> <p>Regarding less liquid intra-day markets in and between some countries of the Central Southern REM it is proposed to publish such data as a first step on the morning of the next day (early).</p> <p>Several Regulators may request a publication H+2 as deadline for publication if they consider appropriate. This would be also in line with Regulators’ statement concerning coherence of this Transparency Report with the other REMs, especially the Northern Transparency Report.</p> <p>As 4.3.2 (Ex ante information on planned outages of generation units) also contains update for scheduled unavailabilities, these planned outages are not included in 4.3.7.</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 current. 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 | |
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| What information | <p>Ex post information on the unplanned unavailability of significant consumption units, aggregated per control area/ bidding area (cf. 3.3 of this report), including</p> <ul style="list-style-type: none"> • start and estimated stop dates of the unavailability, • maximum consumption capacity, • unavailable power. <p>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 | 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) |

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| II Explanatory Statement | <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. Consumption capacity refers to the capacity of the consumption unit’s connection to the grid. 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>Regarding less liquid intra-day markets in and between some countries of the Central Southern REM it is proposed to publish as a first step such data in an aggregated way.</p> <p>Several Regulators may request publication per consumption unit if they consider appropriate. Then publication should contain: consumption unit concerned, place, start and estimated stop dates of the unavailability, maximum consumption capacity and unavailable power. This would be also in line with Regulators’ statement concerning coherence of this Transparency Report with the other REMs, especially the Northern Transparency Report.</p> <p>As 4.3.3 (Ex ante information on the scheduled unavailability of significant consumption units) also contains update for scheduled unavailabilities, these scheduled unavailabilities are not included in 4.3.8.</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 should be published information on ex post realised values for the forecast information. Market participants would 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 | |
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| What information | Ex post aggregated data on the actual generation per production type (cf. 4.3.1 of this report) and 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 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 5.7 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) |

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| <p>II Explanatory Statement</p> | <p>1. Definition</p> <p>As a first step publication of actual generation shall be done in an aggregated way. Aggregation shall be done per bidding area from the 1st of January 2010. Until that current practice can be continued (cf. 3.3).</p> <p>Regulators of the Central Southern REM decided to enclose aggregation per production type here. Further explanation can be found in 4.3.1 of this report.</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>3.8 GGP-IMT proposes here “Close to real time”.</p> <p>Publication of actual generation close to real-time is important to allow market participants to use this information as background information for the price formation on the following day. Furthermore, this enables them to compare forecast and actual generation and to assess the quality of the forecast.</p> <p>Regarding less liquid intra-day markets in and between some countries of the Central Southern REM it is proposed to publish such data as a first step on the morning of the next day (early).</p> <p>Several Regulators may request publication of the information at H+2 if they consider appropriate as deadline for publication. This would be also in line with Regulators’ statement concerning coherence of this Transparency Report with the other REMs, especially the Northern Transparency Report.</p> |
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4.4 Balancing

4.4.1 Volume of balancing power

(4.1 GGP-IMT)

| I Definition | |
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| 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 |

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| <p>II Explanatory Statement</p> | <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 Central Southern 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”.</p> |
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4.4.2 Average and marginal prices of bids/offers

(4.2 GGP-IMT)

| I Definition | |
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| 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> |

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| <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 Central Southern 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 have been acknowledged. As balancing markets in the Central Southern 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 Central Southern 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”.</p> |
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4.4.3 Imbalance prices

(4.3 GGP-IMT)

| I Definition | |
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| 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 |

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| <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 Central Southern 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. Also a reference to control area/ bidding area has been added.</p> <p>3. When</p> <p>GGP-IMT proposes “just after real time”. But it has to be conceded that there may arise implementation problems for the TSOs due to complex calculation of imbalance prices. To meet this concerns, publication at the latest D+1 could be accepted as a medium step.</p> <p>It will be considered in the future whether a publication closer to real time is possible as 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 | |
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| 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> |

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| 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 Central Southern 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>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. Also reference to control area/ bidding area has been added.</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 | |
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| What information | <ul style="list-style-type: none"> - Expenses for balancing energy and power at the balancing market; TSOs shall also calculate the share of balancing costs due to relevant mismatches between cross border schedules and cross border flows - Payments resulting from imbalance pricing - Difference between expenses and income <p>This information shall be published per control area.</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> |

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| II Explanatory Statement | <p>1. Reasoning This information has to be provided in order to make the impact of cross border trading on balancing costs transparent.</p> <p>2. Definition 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”).</p> <p>3. When 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 As GGP-IMT proposes this information should be given per month.</p> <p>5. Update 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. |

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| <p>II Explanatory Statement</p> | <p>1. Reasoning</p> <p>Although there is no publication duty for this item of information it is proposed to keep it in the list of information to be published.</p> <p>Additionally, in 2007 GGP-IMT has been changed. 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 a REM.</p> <p>As it was acknowledged, that it may be not always possible to formulate curves and sometimes publishing curves might reveal business strategies in small bidding / price areas, it shall be proposed that 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>→ Because of possible misunderstandings based on these experiences the difficult term of “P-1 for period P” proposed by GGP-IMT has been abandoned. For clarification it is proposed to publish this information, at the latest D+1 (cf. 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 | |
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| 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.3.2.2of 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. |

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| <p>II Explanatory Statement</p> | <p>1. Reasoning For explanation concerning reasons confer to 4.5.1 (Information on electricity trading at PEX).</p> <p>2. Definition Definition is based on 5.2 GGP-IMT, but 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 market.</p> <p>3. When The information shall be published monthly, because 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 Central Southern 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

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| 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 |
| EREG | European Regulators' Group for Electricity and Gas |
| ETSO | European Transmission System Operators |
| Eurelectric | Union of the Electricity Industry |
| GGP-IMT | EREG 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 |
| Nomination | The notification to the TSOs by a market participant of the usage of long-term physical transmission right awarded to him |
| 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) |

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| 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. |