Specific national considerations

Data Expert Group

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1. Geographical perimeter and coverage ratio of data

1.1. Specific national considerations

The regularly updated document, "Specific national considerations", will be made available for all statistical data users on www.entsoe.eu. Each NDC and STC must describe here, in detail, all cases in which the specific situation of the corresponding country does not fit well with the definitions provided. This is very important for ex-post analyses. The correspondent must guarantee that all data and all the circumstances of deviations from the definitions can be kept track of.

It should include/report on any specific considerations concerning the data reported for each country, especially:

- The **geographical perimeter** covered by the data delivered, in the case that it is not exactly the perimeter of the country;
- Explanation concerning the **coverage ratio** of data delivered.
- Any other consideration concerning quality, availability and interpretation of data.

1.2. Geographical perimeter

The objective of statistics is to deliver values per country, which reflect the activity of the electric system. With this aim, the geographical perimeter covered by data related to a given country may be restricted to the geographical part of the country, which is connected to ENTSO-E network. For example, isolated islands, which are not connected to ENTSO-E network, may be excluded from the perimeter.

In this case, national specific considerations must accurately dictate which geographical areas are not taken into account. Once defined, the perimeter should be stable in time and all consumption and generation within it should be reported. The consistency of the geographical perimeter covered by the data delivered should be reported in the publications.

1.3. Coverage ratio

On a given country perimeter, part of the generation / consumption data may be unavailable in compliance with the data collection process, e.g.:

- Unmeasured auto-generation / auto-consumption;
- Generation / consumption not measured in due time;
- Geographical area not observable (although belonging to the geographical perimeter);
- Data from third parties not delivered or not delivered in due time.

In these cases, the data delivered does not represent 100% of the geographical perimeter but only a part of it. The **coverage ratio factor** is the estimation of this part.

The coverage ratio factor should account for the part of generation / consumption which is missing in the data delivered. By definition, this part is relatively unknown, yet it should be roughly estimated taking into consideration other information issued by third parties (e.g. government, national statistics, DSO, other operators). Information may, for example be accessible, but not in compliance with the schedule of the



monthly statistics collection process. For example, the part of auto-consumption may have already been known from the previous year, and not updated since then. The explicit calculation of the coverage ratio factor is on NDCs/STCs own responsibility and should be explained in the "Specific national considerations" document.

The Data Correspondent should decide whether to extrapolate data before delivering it, so that coverage ratio is increased to 100%, or to deliver raw data and mention the coverage ratio factor under 100%. In this case, the coverage ratio factor will be applied to extrapolate delivered data in the consolidation process of data before the publication of overall statistics.

It is recommended to deliver data directly with 100% coverage ratio.



2. Specific national considerations

AT - Austria (16/06/2014)

The hourly total load data submitted to ENTSO-E represents the load of the whole country (coverage ratio approx. 100%) including own production of industry and losses excluding pumped energy. Because of unavailability of a total load curve for the whole month (see comment below) the hourly load data is estimated based on the load curve of public grid under consideration of the total load curve of 3rd Wednesday and the monthly total consumption. Dependent on the estimation method discontinuities can occur before and after 3rd Wednesday.

Comment: Two kinds of official statistics are available: total values and values for the public grid. The total values are available as load curve only for 3rd Wednesdays. The values for the public grid are available as load curve for the whole month; Energy values on a monthly basis are available for both.

BE - Belgium (16/06/2014)

The figures on the Elia web pages concern the Elia control area. They comprise the Elia grid in Belgium and the Sotel grid in Luxembourg. The Elia grid is limited to the voltage level 30kV or higher. Finally, the figures on the Elia website reflect real measurements that are given on quarter-hourly basis.

The Belgian figures on the ENTSO-E web pages are related to the Belgian territory and reflect the Belgian national figures (including all voltage levels in Belgium). Furthermore, the figures on the ENTSO-E web pages are based on the hourly average of real measurements and estimates.

The Belgian transmission network losses are the losses from the 380 kV, 220 kV and 150 kV network, including losses of internal transformers (380 kV < > 150 kV) and excluding the losses of transformers towards HV-networks < 150 kV.

BA - Bosnia and Herzegovina ()

None

BG - Bulgaria (16/06/2014)

ESO EAD is responsible for the Bulgarian control area that includes all of Bulgaria's territory. The transmission system which comprises of three main grids with voltages of 110 kV, 220 kV and 400 kV is also owned and operated by ESO. Transmission network losses presented on ENTSO-E web site concerning Bulgaria reflect all losses across the above mentioned voltage levels.

Due to network specifics the monthly hourly load values published on data portal represent gross generation plus imports minus exports minus consumption of pumps. This means that they also include power plants' auxiliaries. That fact should be taken into account when comparing the sum of the monthly hourly load values with the National electrical consumption which is a calculated value on the basis of net generation. There will always be a significant mismatch between the two.



Finally, all figures published on ENTSO-E web site regarding Bulgaria are either real measurements or estimations reflecting all Bulgarian national territory.

HR - Croatia (16/06/2014)

Until 1997, the Slovenian and the Croatian values were collected together. They are identified by the country code (SH). From 1998 on, separate values are available for Slovenia (SI) and Croatia (HR).

CY - Cyprus ()

None

CZ - Czech Republic (28/05/2014)

All Czech load values are based on gross production data which is available online for ČEPS or for distribution system operators. The net production values for the load formula are only calculation made by the system afterwards; they are based on information published regularly by Czech Regulatory Office. The fuel type information is the best estimation; it could be updated continuously.

Transmission losses value includes also losses of transformers from transmission system to distribution

Transmission losses value includes also losses of transformers from transmission system to distribution systems (i.e. 400/110 kV and 220/110 kV).

DK - Denmark ()

None

EE - Estonia ()

None

FI - Finland ()

None

FR - France (17/03/2017)

French monthly data regarding national consumption and generation include Corsica but exclude overseas French territories, which are not electrically connected to ENTSO-E network (e.g. Antillas).

French hourly load data and highest / minimum are related to the continental connected network. It thus excludes Corsica as well as overseas territories. In doing so, it is consistent with load data published in real time on RTE web site.



Losses are given only for 220 kV and 400 kV as requested by MS Guidelines. As the French transmission network includes lines down to 63kV, these values represent only a part of the whole transmission losses (which are published on RTE web site).

French physical energy and power flows towards Great Britain takes into account exports made towards Jersey island.

DE - Germany (28/08/2014)

The values identified by the country code D only cover the former Federal Republic of Germany (Bundesrepublik Deutschland) until June 1995. From July 1995 on, the country code D identifies values for re-unified Germany (including the five new eastern states of Germany of the former German Democratic Republic, GDR).

The hourly load data is obtained from sources of the German TSOs representing so-called "Common / Public supply" including network feed-in of electricity originating from renewable energy sources into the distribution grid. The coverage ratio until the end of the year 2013 was estimated to 91%, according to experience gained in the past before the liberalization of the electricity industry.

Hourly load values are aggregated by the four German TSOs. Since January 2014 a coverage ratio of approx. 98% is achieved due to a better database. The remaining gap is due to not covered parts of the distributed generation, industrial and traction power stations.

The consumption data is assembled from official German statistics and TSO's own data on the generation from renewable energy sources.

For some parts of the border between Austria and Germany the values represent the energy exchange between the control-blocks.

GR - Greece (08/09/2014)

The hourly load energy values as well as the monthly aggregated energy values are net, corresponding to the interconnected part of the Greek territory, thus, excluding isolated islands. The values refer to 100% coverage ratio.

HU - Hungary (16/06/2014)

Monthly consumption values are net while the hourly load data values are gross until end of 2009. Since January 2010, load values are net.

IE - Ireland ()

None



IS - Iceland () None IT - Italy () None LV - Latvia () None LT - Lithuania () None LU - Luxembourg () None MK - FYR of Macedonia () None ME - Montenegro () See [RS – Serbia and Montenegro]

NL - The Netherlands (16/06/2014)

Explanation on a significant "load decrease" between 2007 and 2008:

The load decreased only from the view of the TSO (TenneT). It can't be concluded implicitly that the energy consumption also has a downward tendency. There are two phenomena accounting for that: There are some irregularities in TenneT's measurements on which the hourly load data is based. These accountable measurements are done in the scope of the national balancing system of the Netherlands and included until the beginning of 2008 nearby 93% of the national load. Electrical energy, which is generated by some industries and auto-generators for their own use isn't included in this balancing system. So to reach a 100% coverage ratio for data multiplication by factor 1,07. These data can be downloaded from TenneTs website as measurement data:

http://www.tennet.org/english/operational management/export data.aspx.



The amount of CHP generation installed with green growers and small renewable units increased the last years very fast. Even on hours of high load there's a higher export than ever before and it can be concluded from that that in the meantime, their installed power increased to 8000-9000 MW. TenneT does not know exactly how much power is fed in on certain hours on lower voltage grids but it appears anyhow as a lower load of the high voltage network. That means that the correction factor will have to be adapted after official figures about electricity consumption from the National Statistics are published.

NI - Northern Ireland (05/11/2014)

See please GB - United Kingdom

NO - Norway ()

None

PL - Poland (13/06/2014)

The consumption, the generation and load data till the end of 2003 has been gross data.

Since beginning of 2012 (monthly data) biomass generation includes biogas and biomass co-fired in conventional thermal units (also for 2011 as yearly data).

Since beginning of 2014 (monthly data) other fossil fuels generation represents industry generation (many different primary fuels), which previously has been classified to hard coal (also for 2013 in YS&AR 2013).

Data for statistics represents whole Poland territory.

Until 2014 coverage ratio factor has not been calculated, provided data represents 100% of data known to Polish TSO.

PT - Portugal (28/11/2014)

All Portuguese data, both load and energy data represent net values corresponding to the interconnected part of Portuguese territory, thus excluding Azores and Madeira islands. As coverage ratio factor is expected to have a complex dynamic in the near future, the Data Correspondents have decided to extrapolate data before delivering it, so this parameter is always set to 100%.

RO - Romania (28/11/2014)

- 1. All the hourly load net values are obtained by subtracting from the gross hourly metered generation of the following: the hourly metered value of consumption of pumps, the metered borders exchange values and the hourly consumption value of generating auxiliaries. The consumption value of generating auxiliaries is obtained from a formula using the difference between gross and net energies metered in power plants on monthly basis.
- 2. All the submitted data have a 100 % coverage ratio factor.



3. According to Romanian legislation all hydro power plants are considered as renewable sources, but only a part of them are benefiting from green certificate support scheme.

RS - Serbia ()

None

SK - Slovak Republic (21/08/2014)

The monthly hourly load values and installed capacities of power plants are gross values.

SI - Slovenia (16/06/2014)

Until 1997, the Slovenian and the Croatian values were collected together. They are identified by the country code (SH). From 1998 on, separate values are available for Slovenia (SI) and Croatia (HR).

SE - Sweden ()

None

CH - Switzerland (19/12/2014)

The main source of the published data (example net generation capacity, generation inventory and so on are taken out of the statistical data of the Swiss Federal Office of Energy SFOE (Yearly Swiss electricity statistic).

Data published before January 2015

The hourly load values for the whole year in the ENTSO-E database are vertical load values and do not represent the complete load for the country as is the case for most of the ENTSO-E countries. Only the hourly load values of the 3rd Wednesday, as published in the monthly reports, represent the whole load. Load curves (incl. Monthly peak load) and total load are varying since the data sources are different. Hourly values are only vertical load of the transmission grid; load curves (including peak loads) as well as => production mix are from the (SFOE). Total load curves and production mix on hourly base are not available to Swissgrid at this time Swiss data exchange processes do not yet foresee to collect this data Therefore it is not possible to deliver data with an additional snap shot than 3rd Wednesday.

Data published from January 2015 on

The "hourly load values" for Switzerland are the complete load for the control area Switzerland. Consumption including losses, energy used for pumps in Pump storage power plants and energy used by power plants to support the power production. Load curves (incl. Monthly peak load) and total load are varying since the data sources are different. Hourly load values are based on data collected by the transmission grid operator based on the national data exchange processes, load curves (including peak loads) as well as production mix are from the SFOE. The production mix on hourly base are not available



to Swissgrid at this time Swiss data exchange processes do not yet foresee to collect this data. Therefore it is not possible to deliver data with an additional snap shot than 3rd Wednesday.

Serbia and Montenegro (16/06/2014)

Please note that until end of 2006, the values for Serbia and Montenegro were collected together. They are identified by the country code CS. From 2007 on, separate values are available for Montenegro (ME) and Serbia (RS).



ES - Spain (16/06/2014)

The commission of the cable between the island of Mallorca and Spanish mainland at the end of 2011 changed the situation of the statistics of Spain.

The new link means that, in normal conditions, some of the production in Spanish mainland will be consumed in Balearic Island and, hence, we will not be able to report the energy balance like in the past (until December 2011 the geographical perimeter of Spanish statistics is Spanish Mainland).

Due to the reasons mentioned above, from January 2012 on, the geographical perimeter of the various statistics reported is as follows:

	Spanish Mainland (AC Interconnected System)	Total Spain
Statistical data (monthly)	(TE Interconnected System)	
Monthly hourly load values	X	
Monthly domestic values		X
Physical energy power flows	X	
Network reliability	X	
Unavailability of international tie lines	X	
Statistics and adequacy (yearly)		
Yearly energy data		X
Net generating capacity		X
Monthly power balance	X	
Inventory of generation from 2008 on		X
Inventory of transmission network installation	X	
Characteristics of cross-frontier line	X	

CH - Switzerland ()

None

GB - United Kingdom ()

From January 2016 data for Northern Ireland is included in the figures of the United Kingdom as Statistical publications are based on countries.

For clarification it should be noted that although SONI (Northern Ireland TSO) and EirGrid (Ireland TSO) operate in an all-island market each TSO responsibility for the transmission system operation in its own jurisdiction. SONI is part of the EirGrid group, however All SONI figures are supplied separate from those of EirGrid.

French physical energy and power flows towards Great Britain takes into account exports made towards Jersey island. Great Britain physical energy and power flows towards France do not takes into account Jersey island hence the differences in French and GB data for flows.

