Time Series for the Year 2016 at http://pfbach.dk/

Data from the ENTSO-E Transparency Platform

In my note from 16 December 2016, I have recommended the use of the ENTSO-E Transparency Platform, which is supposed to become a more correct and more complete source of data than my collection.

For my own use, I have downloaded 2016-data for several countries from the ENTSO-E Transparency Platform. Unfortunately, practical all the time series were incomplete. Therefore, I extended my data conversion software by a module for estimating missing data in order to minimize the manual work. Missing data within the same day are replaced by linear interpolations. When complete days (24 hours) are missing, I have manually inserted data from a similar day.

The time resolution of the ENTSO-E time series can be 15, 30 or 60 minutes. Therefore, I have three different sets of conversion software for the creation of hourly time series in my format. This is still must simpler than using individual software per country or, as for Germany, for each transmission system operator.

I decided to upload the mended time series to http://pfbach.dk/. They are complete, bus include more or less estimated data.

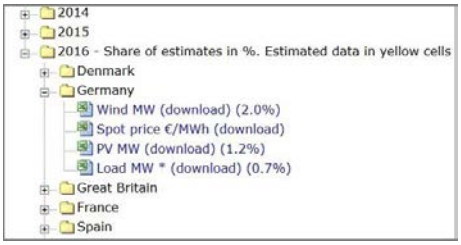

Fig. 1 – The download page informs about shares of estimated data

The percentage of estimated data is indicated in the download page for most time series in 2016. In the data sheet, cells with estimated data are yellow. I hope that this gives the users of my data a fair idea of the data quality.

	A	B	C
1	Source:	ENTSO-E	
2			DE
3	Date	Hour	Wind
4			MWh
1429	29.02.2016	9	11064
1430	29.02.2016	10	10318
1431	29.02.2016	11	10415
1432	29.02.2016	12	11010
1433	29.02.2016	13	11711
1434	29.02.2016	14	11947
1435	29.02.2016	15	12314
1436	29.02.2016	16	12208
1437	29.02.2016	17	11471
1438	29.02.2016	18	10411
1439	29.02.2016	19	9947
1440	29.02.2016	20	10055
1441	29.02.2016	21	9627
1442	29.02.2016	22	9157

Fig. 2 – From a sheet with estimates

The estimated data in fig. 2 may look wrong. The reason is that the interpolation was made in the 15 minutes original, where only some of the quarters were missing.

I am still improving the tools, so errors may occur. I am, as always, grateful for information on any problem with my collection of data.

British data are from http://www.gridwatch.templar.co.uk/. Even this data source is incomplete. A better data quality is available from https://www.elexonportal.co.uk/, but first after several months.

From a European wind power point of view, Irish data are quite important. However, these data are so poor that a reconstruction with reasonable authenticity is not possible. Therefore, I have asked Eirgrid to send me the 2016 time series for load and wind power, as they kindly did last year.

Generally, I can quite easily download and convert time series of good quality from the ENTSO-E Transparency Platform to my usual format. I am ready to consider requests for additional 2016 data and extend the selection correspondingly.

Available Data at the Transparency Platform

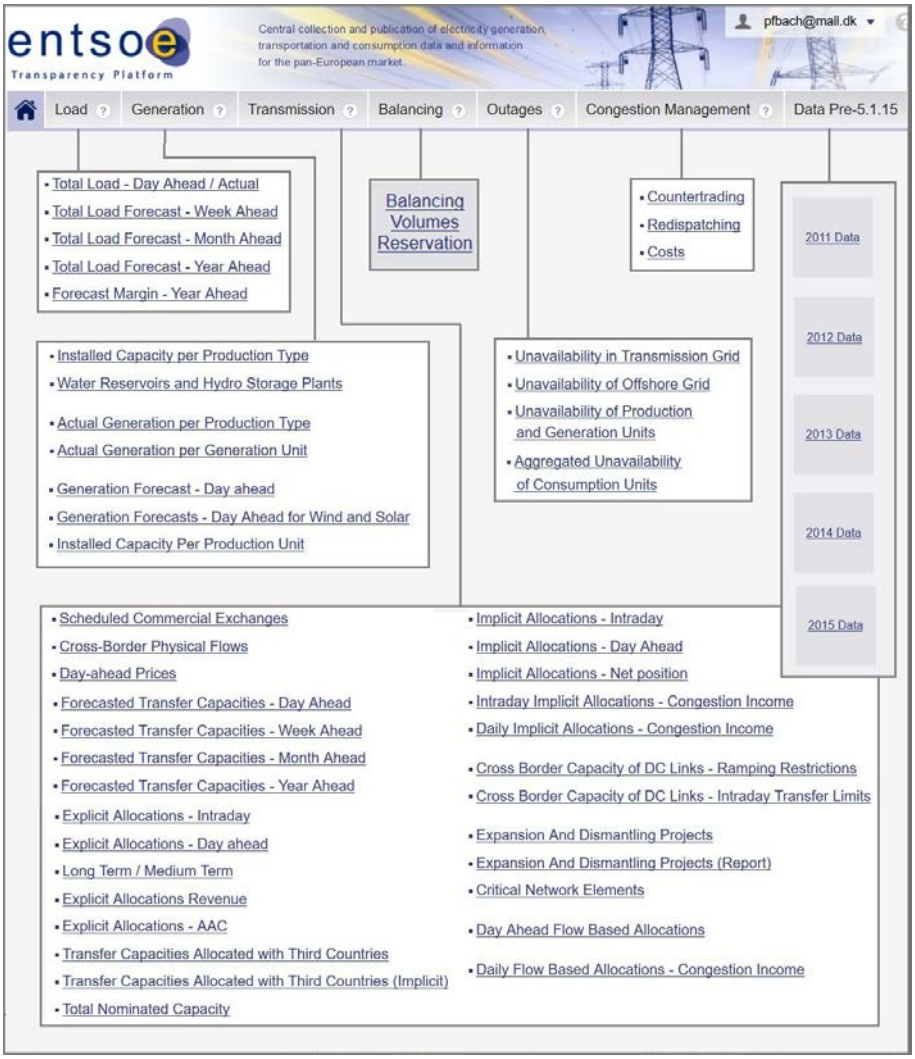

Fig. 3 - New ENTSO-E data structure from 5 January 2015

How to Download Time Series from the ENTSO-E Transparency Platform

Some data users find it difficult to download data from the ENTSO-E Transparency Platform. The following guide may be helpful.

Go to https://transparency.entsoe.eu/ and log in (fig. 4).

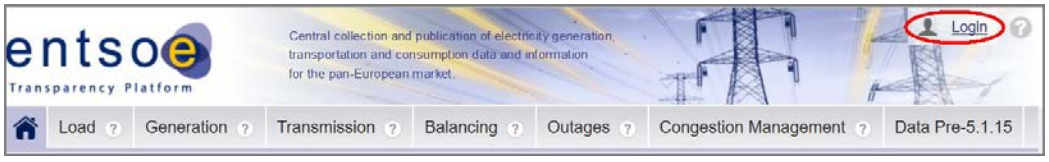

Fig. 4 - Login at the ENTSO-E Transparency Platform

Select (for instance) “Load” and “Total Load – Day Ahead / Actual” (fig. 5).

Loads can be given for control areas, bidding zones or countries.

Select (for instance) in this sequence (fig. 6):

1. "Country"
2. Belgium
3. Any date within the year, you want to download
4. "Export" opens the next menu
5. "Total Load – Day Ahead / Actual (Year, XLSX)"

The word "Year" (fig. 6) is the key to download a full year instead of just one day.

Fig. 5 - Select Total Load

Now wait for a pop-up menu (fig. 7). The waiting time sometimes seems to be long.

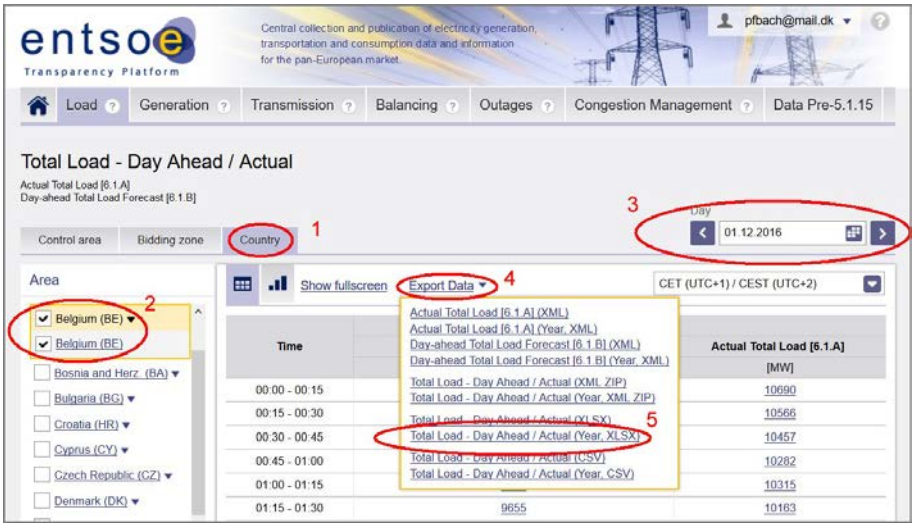

Fig. 6 - Downloading time series for a full year

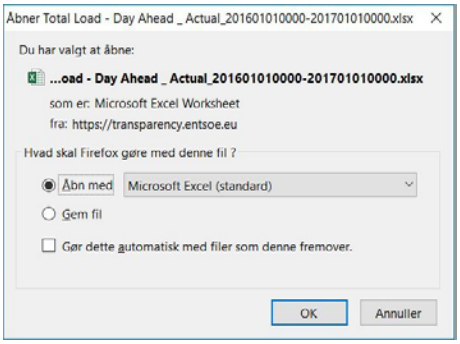

Fig. 7 - Download to my computer

	Time	Belgium (BE) Day-ahead Total Load Forecast [MW]	Belgium (BE) Actual Total Load [MW]
1	Total Load - Day Ahead / Actual		
2	Actual Total Load [6.1.A]		
3	Day-ahead Total Load Forecast [6.1.B]		
4	01.01.2016 00:00 - 01.01.2017 00:00 - CET		
5			
6			
7			
8			
9	00:00 - 00:15	9164	8909
10	00:15 - 00:30	8940	8802
11	00:30 - 00:45	8725	8599
12	00:45 - 01:00	8534	8470
13	01:00 - 01:15	9352	8426
14	01:15 - 01:30	9265	8271
15	01:30 - 01:45	9132	8174
16	01:45 - 02:00	9045	8031
103	23:30 - 23:45	10067	8711
104	23:45 - 00:00	9948	8564
105			
106	02.01.2016		
107			
108	00:00 - 00:15	8827	8424
109	00:15 - 00:30	8688	8259

Fig. 8 - ENTSO-E Load data for Belgium

Time series from ENTSO-E have largely the same format (fig. 8), but with some tricky differences in the first four rows with specifications. For reading these specifications by a computer program, separate programming is required for each type and for each country.