



European Network of
Transmission System Operators
for Electricity

ENTSO-E RESPONSE TO THE ACER OPINION ON
TEN-YEAR NETWORK DEVELOPMENT PLAN
2012

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FINAL

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1. Introduction

Regulation (EC) 714/2009 of the 3rd Package calls for the creation of the European Network of Transmission System Operators for Electricity (ENTSO-E) and according to Art. 8.3 (b) of the Regulation (EC) 714/2009, “ENTSO-E shall adopt a non-binding Community-wide ten-year network development plan” (TYNDP) with the objective to ensure greater transparency regarding the entire electricity transmission network in the Community and to support the decision making process at regional and European level.

The same legislation mandates ACER (Art.37) “to monitoring investment plans of the transmission system operators, and providing in its annual report an assessment of the investment plans of the transmission system operators as regards their consistency with the Community-wide network development plan referred to in Article 8(3)(b) of Regulation (EC) No 714/2009; such assessment may include recommendations to amend those investment plans”.

After two years of intensive work ENTSO-E has published its first official TYNDP package on July 5th which was followed by the release of ACER’s opinion on September 5th 2012.

ENTSO-E would like to thank, on this way, ACER for its opinion and close collaboration during the 2 year process of the TYNDP and is looking forward to improve the future TYNDPs along with a stronger stakeholders’ interaction.

The present document is based on the above mentioned opinion and represents the official ENTSO-E answer to the Agency’s concerns.

In order to make it easier to follow ENTSO-E has kept the structure of the Agency’s document.

2. Consultation processes and stakeholder involvement

The Agency underlines under this chapter 2 main recommendations:

- Increase the collaboration with the stakeholders in particular in the following areas: scenario development, definition of the expected level of information provided in the TYNDP and revision of the procedures for the inclusion of third party projects and
- Make publicly available the reports on public consultation, related documents and minutes from the ENTSO-E & stakeholders meetings.

Compared to the TYNDP 2010, ENTSO-E has increased the communication with the stakeholders at the European as well at the regional level. In total ENTSO-E had held 10 workshops during the TYNDP 2012 process. Based on the gained experience ENTSO-E will continue to increase the stakeholder’s engagement in the future TYNDP and be more transparent in the way it will take the comments into consideration along with the availability of the workshops & stakeholders meetings minutes on the ENTSO-E website.

Also ENTSO-E is currently creating a Long Term Development stakeholder group striving to incorporate a wide variety of stakeholders (generating companies, distribution companies, and electricity traders’ organizations, consumers’ representative NGOs (industrial consumers, households, and environmental Non-Governmental

Organizations (NGO's), electrical equipment manufacturers/suppliers organizations, local authorities, trade unions). The group will debate beside the TYNDP topics also other relevant development topics like R&D, 2050, permitting, etc.

Additionally, ENTSO-E will increase the number of workshops and consultations in the preliminary phase of the TYNDP 2014. ENTSO-E already started with the workshop on 2030 visions (17 April 2012), with the next ones (CBA, 3rd party procedure and 2030 scenarios) following in November 2012.

3. Other general issues on the TYNDP process

3.1. Ensuring transparent information

One important element in disclosing the data that ENTSO-E is using for the TYNDP process is the commercial sensitivity of this type of information. In this sense ENTSO-E will try, for the future version of the TYNDP, to increase the availability of this data without endangering the confidence the data providers have in ENTSO-E.

ENTSO-E welcomes ACER's suggestion on increasing harmonization of the presented outputs (how and what) in the TYNDP and Regional Investment Plans. This will duly be noted for the future packages. Additionally, due to regional particularities, ENTSO-E envisages to present, if relevant, on top of the common data, other information that may increase the stakeholders' understanding in some regional specificities.

3.2. Data consistency through the EU, regional and national level

ENTSO-E is confident that the cooperation of European TSO's is well working within the ENTSO-E, both at the European as well as at regional level. ENTSO-E will also in the future remain dependent on the good quality of data submitted by its members.

The increase in the consistency is achieved in a first step through a common database and very explicit guidelines.

Additionally, ENTSO-E created a group of experts for the TYNDP 2014, the main role of which is to check the consistency of all the input delivered by the TSOs and to construct, from a European perspective, the 2 top down scenarios: "Money rules" and "Green revolution".

3.3. Treatment of third party projects

As for the previous TYNDP, ENTSO-E will create, for the second official TYNDP 2014, a new 3rd party procedure in close collaboration with the ACER, EC and relevant stakeholders.

The aim of the ENTSO-E is to create a standard procedure that will support the relevant 3rd party projects incorporation in the pan-European Ten Year Network Development plan and which can be further used for the next releases.

The 3rd party procedure will be consulted with all the interested promoters by using the opportunity of a 3rd party workshop, to be held on 20th November, in which all the parameters of the procedure will be analyzed and suggestions noted. Additional to it, ENTSO-E will use the input received from the ENTSO-E's Long Term Development Stakeholders' Group which will hold its kick-off meeting on 12 November.

ACER's recommendation to incorporate an appendix in the TYNDP with all submitted 3rd party project is considered. Still to be decided is the level of detail that these projects will be presented with.

3.4. Investments involving non-ENTSO-E counties

Related to ENTSO-E – non-ENTSO-E members' relations, ENTSO-E takes note of the ACER suggestion and will, in the next TYNDPs, underline the relevant cooperation between the mentioned parties. This information will be presented in the regional investment plans.

3.5. Cooperation with long-term development initiatives

Reaching the 2030 & 2050 targets with a reliable infrastructure is very important to ENTSO-E. Therefore we consider for the 2014 release scenarios that tackle 2030 horizon. Additionally in the 1st phase (exploratory phase) of TYNDP 2014, all the RGs are encouraged to look into and make use of the existing regional/ bilateral 2030 studies (e.g. NSCOGI) to have an initial view of the future needs, bottlenecks and infrastructure.

In parallel to the TYNDP development, ENTSO-E is actively involved in the e- Highway 2050 project, thus the consistency between the 2030 and 2050 studies is achieved through a strong internal collaboration.

4. Scenarios

- SO&AF reports

The annual publication of the System Outlook and Adequacy Forecast aims to inform in advance all the TYNDP stakeholders of the scenarios and visions to be used for the following development plan. Additionally, it also fulfills a larger role in disseminating and presenting the information with respect to the future load and generation capacity development.

ENTSO-E intends to report in SO&AF report about the background and the main reasons for updating assumptions as well as comparisons in the adequacy forecast chapter. The performed updates and the deviations from the national renewable energies action plan, the reactions to Fukushima event, or the on-going economic crisis are very good examples of "unexpected" events that make necessary for ENTSO-E to review its scenarios, taking into consideration stakeholder feedback as well.

- Hydro, wind and solar data

The hydro modeling and use in Europe differs from country to country (e.g. Spain and Norway – yearly storage system, Belgium - daily storage system). Furthermore, the operation of these systems displays further differences. Multiple capacities connected, mixing natural in-flows and pumping capacity in an integrated valley centrally operated by a single agent do not play in the market in the same way as a standalone pumped-storage system.

Related to the wind and solar data, ENTSO-E will use for the TYNDP 2014 a Pan European Climate Database containing correlated time series for wind, solar and temperature for the last ten years, covering all ENTSO-E countries.

Additionally, ENTSO-E is preparing a more stable approach to ensure a higher consistency in the published data.

- **Load management aggregated values**

ENTSO-E already takes into account the load management (load shedding contracts of TSOs) when this data is available it is reported (already taken into account by 15 countries). Aggregated information could be published if necessary.

- **Visions 2030**

As previously mentioned, the TYDNP 2014 will tackle the 2030 horizons, far beyond the ten-year frame of the report (for which most of the infrastructure is already clearly defined), by using four 2030 visions (slow progress, money rules, green transition, green revolution).¹

The limited number of scenarios that will be analyzed is due mainly to the time and workforce constraints (due to the mandate to publish the report biennially). The advantage of concentrating on these 4 extreme visions is their divergence in trend, giving the possibility to assess the real need of the grid (reliability and flexibility) along with the social benefit and GTC increase.

ENTSO-E already prepared and consulted with the stakeholders the 2030 visions in the ENTSO-E's 2030 visions interactive workshop held in Brussels, on 17 April 2012. The received input was taken into consideration in building the four 2030 scenarios - TYNPD 2014². A second round of dialogue with the stakeholders on the 2030 visions will take place on 22 November and aims to present and exchange ideas on preliminary European results of the visions one and three for 2030, the parameters used in checking the data consistency at the European level and the methodology to derive the visions two and four for 2030.³

- **Sensitivity analyses**

The Agency regards as essential the use of a wider span across scenarios and the use of sensitivity analyses on the development of some generation technologies, particularly of nuclear, offshore wind and hydro storage.

Sensitivity analyses are being carried out at the regional level, taking into account the regional particularities. The number of variants needs to be limited in order to ensure the quality of the results as well as the proper correlation and interpretation of the data.

For the TYNDP 2014, a more systematic approach to stakeholder engagement has been introduced for the new process, ensuring that relevant parties are involved on the development of the methodological approach at an appropriate stage and that the inputs are derived from this involvement (see the paragraph above).

¹ 2030 Visions overview: https://www.entsoe.eu/fileadmin/user_upload/library/events/Workshops/2030_Visions/announcement_leaflet_2030_vision.pdf

² The material and the results of the workshop can be accessed at: https://www.entsoe.eu/nc/events/2030-visions/?sword_list%5B%5D=visions

³ [2030 visions stakeholders' workshop](#):

- **Public availability on the datasheets**

Along with the SO&AF report, ENTSO-E is publishing each year the excel table with the information on the generation capacity per fuel type, load development, available remaining capacity and the balance at a country level. ENTSO-E will analyze the possibility to publish additional data in the future TYNDPs, maintaining the careful balance between the principle of transparency and confidentiality of sensitive data.

5. Modeling approach

For a better understanding of the assumptions and the results presented in the TYNDP, as suggested by ACER, ENTSO-E will incorporate in the pan-European and regional plans:

- the merit order diagram (including the figures in MW) at the European and regional levels and the CO₂/ fuel prices used;
- enhance the explanation of the market and network study process and the link between them, and
- the scenarios description in excel files.

6. Multi-Criteria analysis

ENTSO-E is currently developing a new cost and benefit analysis methodology in strong collaboration with the EC and ACER. The new methodology respects the multi-criteria approach used in the previous TYNDP and is meant to respond to the needs of TYNDP and EC PCI process.

The improvements in the new methodology are related to: clear clustering criteria, improved explanation of the calculated indicators, increased visibility through improved thresholds. Additionally the iteration market & network study is better explained.

In order to create confidence and consensus around the proposed principles among all main stakeholders and to produce and deliver a final robust assessment methodology, ENTSO-E will also organize a one-day external CBA workshop on the 19th November 2012⁴.

7. Clustering of investments

As mentioned above, for the TYNDP 2014 ENTSO-E has incorporated in the CBA methodology clear clustering criteria (minimum 20% in the project GTC increase⁵). This will result in smaller, better defined and easy to understand projects.

Related to the suggestion to provide further details on the importance of an investment within the project it belongs to and delivering the cost per investment, ENTSO-E will check the feasibility of delivering this information in the TYNDP 2014 &/or in the further releases.

⁴ [CBA Methodology Workshop announcement](#)

⁵ [CBA draft methodology](#) – page 15

8. Investment requirements

ACER in its opinion underlines the need for TYNDP to concentrate on the cross-border capacity and suggests ENTSO-E to present the target GTC per cross-border boundary.

ENTSO-E will seek for ways to improve the information and the graphic presentation of the results on the cross-border bottlenecks, however, as also recognized by ACER, this is difficult to precisely determine. In this sense ENTSO-E envisaged delivering this information as value ranges (according to the studies scenarios).

9. Additional information on projects

In order to increase the level of understanding of the TYNDP projects, ACER suggested to include in the table of projects additional information such as: the type of investment item (OHL, underground, substation...); the GTC increase, the needed GTC at the border and the difference (in case it exists) should be commented. Additionally ACER suggested a unified labeling at the EU and national level.

The requested additional information will be presented in a clearer way in the TYNDP 2014. Related to the unified labeling, ENTSO-E suggests ACER to further request this change, through the national regulators, to the competent bodies that deliver the NDPs, since within the EU not all the TSOs are responsible for delivering this plan. ENTSO-E will also suggest this change through its TSOs members.

10. Resilience

The resilience of the European transmission system is very important for the TSO activity. This is shown through the strong collaboration and assessment between the ENTSO-E members. Therefore ENTSO-E is confident that the resilience issues are, and will continue to be well covered both regionally and Europe-wide.

11. Transmission adequacy

Recognizing the need for a better stakeholders' understanding of the 2020 and further European transmission system needs, ENTSO-E has incorporated in the final TYNDP 2012 package the transmission adequacy map.

In the next reports ENTSO-E will strive to increase the information (what and how) on the adequacy delivered to the stakeholders, based also on the feedback received in the stakeholders group and workshops.

12. Monitoring of previous plans

Monitoring the evolution of the proposed projects is important in the sense of identifying on time the bottleneck in their implementation. ENTSO-E takes note of ACER's suggestion and in the next TYNDP will include more detailed

information on the investments' status. Additionally ENTSO-E will publish in the mid of TYNDP process (June- July 2013) the TYNDP 2012 table of projects of European relevance with the updated information on the date of commissioning, status of the investment and the description of the investments (all these in case changes occurred compared to the published version from 5 July 2012).