



European Network of
Transmission System Operators
for Electricity

TYNDP
PUBLIC CONSULTATION
REPORT ON RECEIVED COMMENTS

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1 BACKGROUND

As requested by the 3rd Energy Package, ENTSO-E has the mandate to publish every 2 years the Ten Year Network Development Plan - *"ENTSO-E shall adopt a non-binding Community-wide 10 year network development plan, including a European generation adequacy outlook, every two years"*¹.

For the 2012 version ENTSO-E has created a package of reports (8 in total) which underlines not only the pan-European view but also the regional perspective:

- the Community-wide TYNDP report 2012;
- the 6 Regional Investment Plans 2012; and
- the Scenario Outlook and Adequacy Forecast 2012.

In order to increase the understanding and to get the initial feedback from the stakeholders, ENTSO-E had organized during 2011-2012, 9 European and regional workshops²:

- Workshop on 2020 Scenario: Brussels, 10 January 2011
- Workshop Baltic Sea Region on Scenarios and TYNDP process; Stockholm 24 March, 2011
- Workshop on Assessment of Projects of European Interest: Brussels, 15 June 2012
- Workshop Continental South West Region: Madrid, 29 November 2011
- Workshop Continental Central East Regional Group: Prague, 5 December 2011
- Workshop Continental Central South Region: Stuttgart, 7 December 2011
- Workshop Continental South East Region: Zagreb, 12 December 2011
- Workshop Baltic Sea Region: Stockholm, 14 December 2011
- Workshop North Sea Regional Group: Brussels, 15 December 2011
- Workshop TYNDP 2012 package: Brussels, 28 March 2012.

The TYNDP 2012 package was also opened for public consultation from 1 March to 26 April 2012. During this 6-week consultation, ENTSO-E received approximately 250 comments from more than 20 stakeholders³.

The present report proposes a synthesis of all feedback received. Detailed response for each consultation comment can be found in the TYNDP response the consultation excel-table which is published with the TYNDP 2012 package.

¹ Legal requirements set for the TYNDP by Regulation 714/2009 are summed up in Appendix § A2.1 of the TYNDP report.

² All material presented in the workshops can be accessed from the ENTSO-E website: <https://www.entsoe.eu/system-development/tyndp/tyndp-2012/>

³ Eurelectric; NordEnergi; Iberdola; Vattenfall; Greek Ministry of Environment, Energy & Climate Change; SO UPS JSC (Russian TSO); IFIEC; RGI (Renewables Grid Initiative); EWEA; TuNur; Europacable; EDF; EDF Energy; MedGrid; Edison; Svensk Vindenergi; SSE; Agder Energi; NorthConnect; Tractabel; Dong Energy; Danish Energy Association; DII; Alpiq Suisse; Association of Austrian Electricity Companies; French regulator; TIWAG – Tiroler WasserkraftAG.

2 ANSWERS TO THE CONSULTATION PROCESS

All the received observations were embedded in 5 groups as follows:

- Involvement of the stakeholders
- Inclusion of the 3rd party projects in the TYNDP
- Scenarios and assumptions
- Methodology
- Transparency

2.1 INVOLVEMENT OF STAKEHOLDERS

Main concern: There were several comments related to stakeholder involvement in building the development plans: from the scenarios methodology and data gathering to the involvement in the permitting part.

Answer: ENTSO-E would welcome commitment of stakeholders in the TYNDP process and their support to grid development, especially by sharing views in order to limit uncertainty. ENTSO-E is currently looking together with ACER for the optimal way to further integrate and increase stakeholders' participation. The idea of setting up a stakeholders group has been briefly debated during the workshop and ENTSOE will investigate this idea to develop a stronger collaboration with the ENTSO-E stakeholders. The proposed scheme must interact nicely and not duplicate existing exchange platforms, be they organized by ENTSO-E or proposed by other bodies. A stakeholder group would complement and not substitute the existing framework of workshops and consultations. A stakeholder group must also ensure all stakeholders' point of view can be represented in an appropriately balanced manner.

ENTSO-E will look to improve the consultation web-tool for the future TYNDP, in order to increase the stakeholders' feedback during the consultation period.

2.2 INCLUSION OF THE 3RD PARTY PROJECTS IN THE TYNDP

Main concern: There were several comments on inclusion of third party projects within the TYNDP. The stakeholders requested mainly less stringent admission criteria and some requested also the inclusion of the 3rd party projects in the present TYNDP (in the light of the 2012 EC PCI⁴ selection exercise).

Answer:

ENTSOE proposed in January 2011 a Procedure for selecting the 3rd party projects, which was published on its website and advertised during the ENTSO-E workshops. Although encouraging the stakeholder's reaction,

⁴ Project of Common interest

ENTSO-E did not receive any comments related to the established criteria from the stakeholders; nor did any contacts occur before September deadline for project submission.

For nondiscriminatory reasons, ENTSO-E shall respect the criteria published in the beginning of 2011 related to the inclusion of the 3rd party projects in the present TYNDP, and therefore will not change the display of 3rd party projects in the TYNDP 2012 final report.

Taking into consideration the observations received during the TYNDP2012 package workshop held on 28 March, and those comments underlined in the present consultation, ENTSO-E will look to improve the 3rd Party guidelines for the next TYNDP 2014.

Please note that EC, in its first PCI exercise for 2012, is considering additional to the TYNDP projects also the feasible 3rd party projects. Therefore ENTSO-E is encouraging⁵, for this initial step, all the interested stakeholders to submit their projects directly to the EC. The rules for inclusion of third party projects in the TYNDP 2014 will directly derive from the latter.

2.3 SCENARIOS AND ASSUMPTIONS

Main concerns:

- ENTSO-E's stakeholders underlined the need for further looking visions and scenarios, not limited to the 10 year horizon.
- Establishing the amount of RES in the two TYNDP 2012 scenarios
- Various sensitivity analyses are suggested considering the economic crises, decentralized RES, demand response, etc.
- Prices of fuel and CO2 used
- Assumptions for the 2030 visions -> the answers to this concern can be consulted in the SOAF consultation excel table.
- Assumption on the nuclear and fossil fuels in the 2020 scenarios -> the answers to this concern can be consulted in the SOAF consultation excel table.

⁵ All the 3rd party promoters that submitted their projects to ENTSO-E (either during the TYNDP 2012 – 3rd party process in 2011 or through the TYNDP 2012 consultation March-April 2012) were proactively informed by ENTSO-E on the EC open request for information about non TYNDP projects for identification as potential Projects of Common Interest (PCI).

Answers:

Related to the longer time horizon, 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. All the inputs received during this workshop are taken into consideration in building the future 2030 scenarios - TYNPD 2014. 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.

Related to the RES data from the two 2020 scenarios (EU 2020 and B) it was based mainly on the National Renewable Action Plans, the other national available forecasts and the TSO expertise.

Appropriate sensitivity analyses have been conducted whenever required by the TSO experts involved in the study process, complying with a subsidiarity principle.

Prices of primary fuels and CO₂, used for the conventional generation are directly inspired from the World Energy Outlook 2010 of IEA. Two different sets were used as leverage in order to make the switch between the coal and gas in the merit order. In order to have this change, one either approximate (guess) different prices for the coal or gas for this specific scenario or one can use CO₂ value as leverage. ENTSO-E has chosen to modify the last parameter.

The purpose of the scenarios is to cover a large area of uncertainties. By choosing extreme scenarios (EU 2020 was based for the RES part on the NREAPS data) ENTSO-E can determine the flexibility of the projects which must stand different probable futures.

2.4 METHODOLOGY

Main concerns:

- prioritization of the projects (weighting)
- complex color scheme for the indicators
- need to study the effects of delay and critics on only one time point (2020)
- comments on generation savings as criteria
- Pan-European studies
- Transmission adequacy

Answers:

The legislation requires the TYNDP to develop a complete and consistent vision. ENTSO-E gives a clear view of the benefits stemming from every project implementation. Projects benefits can be assessed in different dimensions and therefore ENTSO-E developed a multi-criteria approach. Every benefit can be valued differently by the stakeholders, based on their targets and the regional/national/local environment the prioritization process takes place in. Choice and weighting of criteria, to prioritize projects and corridors is a political issue that ENTSO-E is not entitled to solve: the EC and Member States intend to address this through the development and implementation of the Energy Infrastructure Package (EIP) scheme.

The color scheme for the indicators relies basically on three-level scales, in order to compact and in the same time to underline the main advantages of the projects. The social and economic indicator and the RES indicator have been complemented in order to distinguish the specific case of direct connection of the RES giving more detailed information. The rationale behind is that 80% of projects of pan-European significance strongly help RES integration, and the advanced indicator for RES helped sort between projects directly involved in connecting generation and those addressing additional market integration demanded by RES development; furthermore, SEW benefits developed by direct connection facilities of RES (their absence being equivalent to permanent congestion for the concerned plant) is an order of magnitude larger than SEW benefits developed by transmission lines (addressing marginal congestion) and it appeared useful to be able to distinguish them. For more information please look at the appendix 3 of the TYNDP report.

Such critic shows the difficult trade-off ENTSO-E must find between sufficiently high-level, synthetic or more detailed information, the two options and any compromise between the two being both favored and criticized by stakeholders.

Related to the generation savings criteria as indication for social and economic welfare, ENTSO-E selected to use savings in generation costs as common criteria for the social and economic welfare. When demand is considered inelastic the net decrease in generation costs is a relevant measure for social benefit. In addition it is easy to understand. By removing restrictions in the grid the projects can facilitate better competition between the generators and the least-cost generators are not blocked behind bottlenecks and can reduce the cost to the end consumers. However, it was also commented on the responses that demand response will grow in the future. ENTSO-E is developing the Cost-Benefit-Analysis methodology for the EIP. In the future TYNDPs ENTSO-E will use the outcome of the CBA-methodology which will be consulted with stakeholders and approved by ACER.

Related to the pan-European studies for the TYNDP 2012 the main bulk of common studies were performed at the regional level. Firstly, this was firstly selected in order to increase the efficiency and the speed of the process and secondly, ENTSO-E took benefit of the knowledge and the experience gathered at the regional level. The Pan-European view was reassured by common scenarios and databases. During the process, the consistency was ensured through data exchange and through common TSO members that belong to several regional groups, which are intentionally overlapping.

The need for a synthetic map displaying transmission adequacy in chapter 8 has been requested in the consultation process. The issue is multifold, with different understanding of what transmission adequacy is. By definition, the TYNDP projects address the identified investments gaps and solve them in the framework of the scenarios, with few exceptions: when a solution is still to be found, or its feasibility is still to be confirmed, or if the solutions do not secure adverse but rare situations. Although its complexity, ENTSO-E, considering the stakeholder's request, has developed and introduced in the final TYNDP 2012 package the TYNDP 2012 transmission adequacy map which can be consulted in all the reports (chapter 8).

2.5 TRANSPARENCY

2.5.1 CLUSTERING OF INVESTMENTS INTO PROJECTS,

Large amount of comments was received on clustering of the investments onto larger units, i.e. "Projects", and the need to have the data available per investment item.

Having a more structured way to present the TYNDP projects was requested by the stakeholders (including the EC) in the previous TYNDP 2010 consultation, showing the interaction between all investment items. Therefore ENTSO-E has answered with a more didactic presentation through this clustering, packaging investment items working together towards specific benefits, namely developing grid capacity along a corridor or across a grid section. Also having the projects that are related (all supporting the increase of grid capability at a boundary) analyzed together will give the stakeholders a better view of the benefits that solving this congestion point (boundary) will bring. E.g. if one builds the infrastructure to accommodate RES in the North Sea but one cannot increase/reinforce to internal infrastructure within the countries that wind energy will transit, the benefit of just connecting the wind plans is very limited. Benefits per investment item is sometimes easy to assess (e.g. when investment items "add up": parallel point to point connections to address offshore wind development); misleading (the first investment constructed will have the highest benefit, while the last one the least, the two having however a certain global benefit) and sometimes even pointless (for instance the sole benefits of an interconnector, disregarding the upstream and downstream grid reinforcements needed to connect it to the main grid might look null).

2.5.2 DATA AVAILABILITY

Making data available is a complex issue. Every market and network study handles huge sets of data and experts to properly understand and manipulate them. These data describe generation assets and may contain commercially sensitive information if disclosed to market players. Different country legislations make it also difficult to find a common satisfactory format to disclose such information. Additionally, beyond the sake of synthesis, complying with statistic confidentiality rules also demands rather synthetic display of both input and output study data. Finally, the subsidiarity principle was applied in order to increase our investigation power: if basic datasets are developed and shared at European level among ENTSO-E members, within the ENTSO-E regional groups this data is further developed and all the appropriate variants analyzed in order to get a comprehensive understanding of the studied phenomena.

ENTSO-E would like to thank all the involved stakeholders for their valuable input, and is looking forward to increase the collaboration for the future ten year network development plans.