

Subject: FEBEG's position regarding the public consultation on the Federal Development Plan of the Belgian Transmission system 2024–2034

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Introduction

FEBEG thanks ELIA for having the opportunity to react to *ELIA's Public consultation on the Federal Development Plan of the Belgian Transmission system 2024–2034*¹.

The comments and suggestions of FEBEG are not confidential.

Preliminary comment

FEBEG appreciates the structured and detailed information with regard to the federal development plan. Given the importance of such plan for the Belgian energy system and the associated costs and considering the impact it has on market functioning and market parties, it is key that stakeholders have the possibility to express an opinion on the proposed projects. **In that respect, FEBEG would suggest to involve market parties at an earlier stage, not only for the definition of the reference scenarios. It would be easier for market parties to provide qualitative and quantitative feedback on the proposal if they are involved at an earlier stage so that they are able to better understand the proposed choices. Also, it should be investigated whether an update of the plan at shorter notice than 4 year would not be more appropriate, given the fast evolutions in the electricity sector.**

General evaluation

FEBEG recognizes that the energy transition, and more specially the development of renewables, the electrification of some sectors and the further integration of the European energy market will require important investments in the networks, both at DSO and TSO level. It is the task of grid operators to facilitate such evolutions and anticipate the future needs in the networks. Grid extension and upgrades in the network are indeed necessary and also offer commercial opportunities for market parties.

¹ https://www.elia.be/en/public-consultation/20221102_public-consultation-on-the-federal-development-plan-2024-2034

However, FEBEG is of the opinion that grid operators first need to correctly prioritize projects and invest in non-regret solutions for the networks, taking into account optimizations of existing infrastructure – also at regional level – and development of new capacities in the Belgian system such as the batteries needed in the framework of the CRM. Only after a complete and transparent cost and benefit analysis clearly showing the positive impact for the Belgian consumers, the project should be proposed for approval to the Ministry. **In this report, FEBEG fails to see the concrete benefits of several proposed projects for the Belgian consumers compared to the impact on transmission tariffs.**

FEBEG fears that the 10-year development plan is over-dimensioned compared to the needs of Belgian consumers, and especially when it comes to new interconnectors and that Belgian consumers risk to finance interconnectors that bring little to no benefits to the Belgian consumers (and only some benefits to the neighboring countries?).

Authorities need to understand that the proposed plan reinforces the position of Belgium as a transit country which accommodates flows for the rest of the region to the benefits of European consumers, but without guarantee for Belgian consumers of being supplied with reliable and affordable energy, while still having to bear the investment costs.

This is, for instance, particularly the case with the Triton interconnection where the report fails to show the real benefits for the Belgian consumers.

Given the limited contribution of Germany to the Belgian SoS in the latest CRM calibration report (delivery year 27–28), FEBEG also questions to which extent a second interconnection between Germany and Belgium will bring benefits for the Belgian consumers.

In any case, any evaluation “in depth” is not possible, as there are no detailed comparisons made between various alternatives. For example, would an additional interconnector to the Netherlands, U.K. or France be more cost efficient than an interconnector to Denmark?

With increased dependency on neighboring countries, Belgian consumers will be more exposed to volatile electricity prices resulting from regional system stress events or from energy policy decisions of those countries. This has been particularly demonstrated this year, with the big impact the stop of multiple French reactors had on the Belgian power prices. This, in a situation where most nuclear reactors in Belgium have not been phased out yet. Political choices on the energy mix throughout Europe will strongly influence the export opportunities of our neighboring countries. For this reason, the building of new interconnectors should be carefully designed, taking into account all costs and benefits for the Belgian market even in most extreme scenarios as the situation we are currently facing.

Maintaining reliable and affordable electricity –reflected in both the energy and the grid transport costs – for Belgian consumers in the long run should be the guiding principle for future investment decisions in the energy system. With this respect, a broader cost-benefit analysis is necessary, considering macro-economic aspects (impact on trade balance and other vectors such as utilization of existing gas infrastructure, competitiveness of the Belgian electricity sector, etc.).

Finally, FEBEG also wonders if Elia has sufficient incentives to provide the optimal infrastructure plan for the society, given that its remuneration is based on the regulated asset base. In that respect, FEBEG welcomes the consultation of the CREG in the process but would find it relevant to also involve other stakeholders such as the Federal Plan Bureau, universities or even other stakeholders such as Fluxys or the DSOs in order to ensure all elements of the energy system are considered in this important reflection.

Impact on grid losses of new IC projects

Elia presented the Plenary meeting of 09/06/2022 the evolution of the grid losses in the recent years. FEBEG and its members were surprised to see to what extent these losses keep going up (from 1.4% in the past to 1,8% for 2023). The fact that the BRPs need to bear the costs of these losses adds to the already challenging market circumstances the BRPs are facing, and a less burdensome solution should be considered in any case.

In this respect, we like to underline that Elia has confirmed (in a recent study) that these increased losses can be explained due to every increasing integration of offshore energy and increasing cross border flows. The members of FEBEG therefore see important risks of over-investments in additional interconnections adding to the increase of the grid losses, which are ultimately (via the BRPs) passed on to the final consumers. The risk of increased grid losses (costs) is not addressed in the study, which is a sign that the TSO is not completely objective when evaluating its own project proposals.

One specific element related to the grid losses which is worrying is the use by Elia of HTLS technology, which also increases significantly the losses on these lines ([Avelgem–Avelin](#)).

Detailed comments and suggestions

Infrastructure-oriented comments and suggestions

A lot of the benefits presented in the plan can be reaped with an optimized usage of existing grid elements, through a better international cooperation.

The question can be raised if some other countries should not invest in their grid first, instead of transferring the cost to Belgian consumers.

Under the proposed plan, it is clear that Belgium will continue to act as a transit country; is this a real benefit for Belgian customers? If such projects would be deemed beneficial for the support of the pan-European grid, **those projects should be proposed as European Projects of Common Interest (PCI) and, as a consequence, be funded as European projects and not be funded by the Belgian customer.**

In this respect, Elia should duly consider, in the scenarios analysis, a possible split of the German system. Indeed, this seems no longer to be an impossible scenario, and it would be a game-changer for potential loop-flows in Belgium or other neighboring countries of Germany but it would also change the economics of the CBA analysis performed by Elia.

Comments and suggestions as regards new interconnectors

The proposed increase of interconnectors level is highly questionable:

- The plan gives little information on the impact of interconnections on the security of supply aspects (coverage of the peak demand). For instance, Elia did not show evidence that increased interconnection level improves the security of supply of the country.
 - o As a matter of fact, the (additional) contribution of interconnections to the security of supply is doubtful since there is **no guarantee that there is sufficient excess of generation capacity available in the neighbouring countries** to import to Belgium because similar unfavourable market circumstances exist in those countries: lack of profitability of conventional generation assets in the longer run combined with progressively more stringent emissions requirements, which leads to the absence of new investments and the decommissioning of existing generation assets.
 - o In addition, it is questionable whether interconnecting countries with similar energy mix have a real value for Belgian citizens (what is the likelihood that there will be very high winds in Denmark, and no wind in Belgium).
 - o In its report, **Elia did not compute the effective contribution of the import capacity in case of simultaneous tensed situations and low RES generation throughout Europe.**

Additionally, in the proposed plan **FEBEG fails to see clear alternative solutions to the building of interconnectors to address market congestion issues at CWE level caused a.o. by unscheduled flows.** FEBEG believes that an optimized use of existing infrastructure at EU level, with some infrastructure optimization, could also help solving this structural problem.

- Has Elia considered the **impact of these new interconnectors on the competitiveness of Belgian power plants**? In that respect, it is important to remind that Belgian power plants pay injection tariff which is not the case in some neighbouring countries such as Germany or Netherlands (and to a lesser extent in France). Some of the cost of the proposed projects would thus contribute to the deterioration of the competitive position of Belgian power plants.
- **New IC with UK (Nautilus):** FEBEG doubts that a new IC with the UK, a country with higher electricity prices and which is expected to become more volatile in the future with the increased RES capacity, will actually benefit to the Belgian consumers.
- The most questionable project which is proposed by Elia is the **TRITON link**. One – first – very important element to consider, is the extremely high cost of this interconnection. The annuity (cost/year) of a “normal” interconnector is estimated (by Elia) at +/- 45 Million EUR, while for the Triton Project the estimations of Elia point

at a cost of 248 Million EUR. Put differently, we can add 5 interconnectors to neighbouring countries for the same cost of one interconnector such as Triton. In addition, from the cost/benefit analysis it is clear that the normal interconnectors offer much more benefits to Belgium (in relative terms) compared to Triton. Indeed, the Belgian welfare for Triton is in the range of about 230–330 Million/year (note that in some cases, we would lose 20 Mio/year), while the welfare of an additional connector the U.K. is estimated to be very similar (200–300 Mio/year) at only a fraction of the cost. FEBEG is very worried about the extremely high costs of projects such as Triton, since, given the high uncertainties of the various scenario (certainly in the current market situation) it is not certain that these costs will also bring the benefits needed to end up in a positive business case. Why did Elia, for example, not compare Triton with alternative options?

- In addition, if the princess Elizabeth zone (3.5GW) would be connected for 2.1GW with the Belgian grid, and 1.4GW with 2 interconnectors, it will impact the financial consequences of the contract-for-difference. In fact, if electricity prices drop below the offered strike price in the future, the cost for society and the Belgian consumers will increase.

Finally, it is important to bear in mind that Belgium is already highly a interconnected country, well beyond European targets.

- A higher interconnectivity could contribute to the further integration of (volatile) renewable generation in the European system, e.g. to allow the excess of RES generation in one area to be absorbed by other areas (e.g. from France to Germany – or vice versa –, etc). In that case, it should be put in a European perspective. **Therefore, those projects should be proposed as European Projects of Common Interest (PCI).**

Comments and suggestions on the cost-benefit-analyses

FEBEG is of the opinion that the cost-benefit-analyses are fragmented, partial and non-transparent throughout the document.

- FEBEG fails to see a **proper combination of costs and benefits that gives an overall picture**. It is very difficult for market parties to actually verify the numbers. Why is the total investment costs not provided ? How did Elia calculate the annuities (with uncertainties?).
- FEBEG fears that benefits for Belgian citizens could be inflated in the scenarios used by Elia where high costs of electricity make the interconnections more profitable. Structurally, according to Elia assumptions, Belgium seems the most expensive country in the region (prices possibly impacted by important volumes of DSM). Elia would therefore assume that politicians would not react, which FEBEG considers to

be unrealistic. On top of this, Elia assumes that in other countries security of supply is assumed guaranteed, limiting the important spikes in the neighbouring countries.

However, recent events on the French nuclear assets prove that such assumption should be considered with a lot of precaution. In addition, the benefits of the additional IC should also be reviewed in the framework of the nuclear prolongation of 2 GW. Finally, the selection of 44 flow based domains with full application of 70% minRam seems ambitious to FEBEG because exemptions are still granted on a regular basis.

- In a more balanced and correct cost/benefit analysis, **multiple variants or options should be compared in full transparency** (all the costs should be properly included) and only the most clear winners should be selected. Here, Elia seems to look at the projects they have chosen up-front of the study. In addition, it is not clearly demonstrated that not doing the investment in the network would be detrimental or more costly for the Belgian consumers. Finally, there could also be in the future innovative breakthrough, requiring a different grid configuration..
- **More information on the congestion levels should be provided to market parties.** In this respect, FEBEG supports the request of CREG in its advice dated of 15/09/2022: *“En particulier, pour ce qui est des résultats relatifs au développement du réseau interne de 380 kV, la CREG estime que ceux-ci devraient fournir une représentation et une analyse du nombre d’heures de congestion par élément de réseau, de l’ampleur de la surcharge et de l’impact sur les écarts de prix avec les pays voisins pour les différents scénarios et horizons de temps, tant pour le réseau de référence que pour le plan de développement proposé”.*
- **Overall, there is a lack of clear communication on the net welfare:**
 - o Elia states that the welfare is increased for all projects, but there is no comparison to all associated costs (for example additional grid losses).
 - o It would be interesting to have a split on the benefits for customers and producers, as well as on the congestion rent generated by the proposed new projects.
- Further along, **there is no clear downstream assessment of price divergence versus grid tariff impact for the final customer.** Elia did not provide an estimate of the impact on grid tariffs. However, this is a very important information for both the Belgian authorities, the regulator but also the grid users and end-consumers. How will the costs be split among grid users?

Comments and suggestions on the process

More **clarity is needed on the next steps** for some projects.

Some projects are included but ‘conditional’: The final decision should be based on clear criteria and involve a cost-benefit analysis, with involvement of relevant stakeholders.

Comments and suggestions as regards future evolutions

Priority should be given on **no-regret solutions, also maximizing CO₂ objectives and to ensure sufficient capacity for the connection of local projects in the framework of the CRM (e.g. batteries).**

It should be clarified how much flexibility this plan still allows for future trends: the pro-active approach that Elia proposes in the plan also means taking decisions before some of the underlying assumptions have been realized. Are there ‘early indicators’ foreseen that some assumptions may be wrong and projects may have to be adapted?

A more considerate approach – given the substantial financial costs associated with the projects – would be to only decide pro-actively on large-scale projects that bring **no-regret solution for Belgian citizens**. In this respect, massive development of transmission networks should be put into perspective with some elements:

- **congestion management and local services** provided by the market as well as curtailments/dispatching actions can be an alternative to new grid elements
- **expected development of decentralized storage**; this relatively recent and exponential trend could undermine the business case of some costly grid development projects
- **electrification** of the transport industry, with impact on peak consumption
- further efforts in terms of **energy efficiency, digitalization and development of demand response**, also at residential levels
- **investments should be dimensioned also for days without RES and with maximum RES in Belgium.**

Final remarks

Permitting

FEPEG also wants to point out that realizing the targeted objectives will be a real challenges from the perspective of permitting. The energy sector – system operators as well as generators – need swift permitting procedures and legal/regulatory stability in order to be able to realize the necessary – often large – infrastructure projects. This will be key in order to realize the energy transition: a sustainable and reliable electricity system needs to be developed in due time and with limited costs in order to maximize welfare gains.

Therefore, as mentioned in the past, FEBEG calls the federal and regional authorities to align and - to the extent possible - simplify their permitting procedures and to ensure that these procedures and permits ensure investment stability.