EFET\(^1\) welcomes this modelling exercise and the transparency given by REKK on the modelling principles.

EFET recognises that modelling necessarily represents a simplification of reality. The REKK model is already quite advanced, with detailed and extended geographic scope, monthly granularity, and a comprehensive approach to welfare. EFET is therefore quite confident that this exercise could deliver interesting and useful results, provided that proper parameters, assumptions and scenario definitions are used.

However, much more information is needed to anticipate the relevance of the future results:
- transparency on input data,
- quantitative sensitivities of the results to the different assumptions,
- clear and complete definition of the scenario that will be quantified.

Below are our preliminary comments based on our initial understanding of the elements presented in Budapest, which will be amended and completed during the next steps of the study. Further workshops would therefore be needed to improve our confidence in the results and our ability to make further constructive and operable comments.

Notwithstanding these comments, it remains imperative that the study be completed to provide a better view on the evolution of TSO unit tariffs and the risks around the sustainability of some transit TSOs’ business models (point 2 hereunder).

A. Critical modelling issue that must be solved:

1) Dominance of commodity Long Term Contracts (LTCs) with a fixed price not evolving from 2016 onwards

The model is relying on commodity LTCs with a price calibrated to match 2016 prices. All gas imported in Europe is contracted through these LTCs\(^2\). The issue is that the prices of these contracts are set in stone and do not react to any external factor (except oil prices) – whatever the demand, the time horizon, the volumes and prices of LNG, the infrastructure scenario, e.g. Russian gas delivered in Austria will remain at its 2016 level. This assumption is not in line

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\(^1\) The European Federation of Energy Traders (EFET) promotes competition, transparency and open access in the European energy sector. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and a competitive economy. We currently represent more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org.

\(^2\) In terms of modelling, a spot sale of a producer or an auction can be represented by LTCs with prices and volumes set accordingly. In itself, keeping a high level of LTC in the model, if the prices and volumes are correctly reflecting the influence of spot sales, will not change the results, all the more since the model also include a further layer of arbitrage deals to set the level of use of each contract and allowing the transportation in time and geography of the cheapest contracts.
with the evolution of the market. Hub indexation and spot sales have already had a considerably increased impact on prices in the European market, especially in the most liquid hubs. At the same time, we have serious doubts about whether the current market situation would encourage prolongation of long term contracts to the extent proposed.

This assumption has a tremendous impact on the main results of the model. Keeping it unchanged would yield highly misleading conclusions, and question the relevance of the modelling exercise. The model must include more flexible price projections for different sources, possibly allowing further sensitivity analyses, and a corresponding reactive pricing pattern.

B. Other issues linked with model assumptions:

2) Modelling of TSO transport tariffs
There are three issues linked with TSO transport tariffs when shifting away from existing long term transportation contracts:
   a. For most TSOs, the lowering of cross-border bookings will trigger a significant rise in unit tariffs, which does not necessarily create a revenue gap problem, nor does it necessarily challenge their revenues. Other factors, such as changes to the TSO’s regulatory asset base, will also influence the level of unit tariffs and may have act as a counterweight.
   b. Due to the dynamic described in point a above, some TSOs will however enter in a vicious circle whereby their low booking levels will generate a revenue gap problem.
   c. In the tariff reform or in the market mergers scenario, revenues currently collected at internal EU borders or internal regional borders will have to be collected at EU or at regional entries and/or at domestic exits. Here again, there is no revenue gap as such in principle, although TSOs expressed their desire to better understand the TCF mechanism.

In spite of the above, the model will fix TSO unit tariffs at their 2016 level. This is a major assumption. Although EFET does not deny the extent of the challenge of modelling each TSO’s allowed revenue and the retroactive loop on its tariffs, this assumption will not analyse the impact of the dynamics described above, i.e. risks of “vicious circles” resulting in tariffs spikes which could even challenge the economic sustainability of some TSOs and significant redistribution effects within Europe in the reference scenario. These fixed tariffs by definition also prevent to measure if a strong rise of cross-border unit tariff should be expected in Europe. This is also a major issue for Quo Vadis. To assess it, EFET understands this would require the modelling of the evolution of allowed revenues of TSOs and assumption on the evolution of the tariff allocation methodology.

Moreover, in the tariff reform or in the market mergers scenarios, the model is not handing back TCF revenues to the relevant TSOs. Neither does it model any impact on end-users exit tariffs. Although this should not necessarily affect the global welfare estimation, it can distort the identification of winners and losers geographically and per category of actors. Here again, some further analysis may be required to avoid false conclusions.

Some kind of further analysis is therefore required to illustrate these key issues if they cannot be directly incorporated in the model. This is a key part of determining the scale of any solution required in this area, as EFET has consistently raised in discussions on NC TAR and Quo Vadis.
3) Full implementation of existing regulation and perfect competition across Europe

This is another assumption not reflecting reality, especially for some member states, and could seriously distort results. Moreover, as already highlighted in our comments to the preliminary report, we doubt that even full implementation of the Third Package and the NCs could address all the regulatory barriers to cross-border trading or harmonise the tariffs at a regional level. Persistent interoperability issues (e.g. odorisation) between certain member states should also not be underestimated. Bearing this in mind, we believe that Quo Vadis should start with an assessment of the existing shortcomings identifying those which are likely to be addressed by proper implementation of the existing regulatory framework as well as those which would remain not addressed and pose fundamental barriers to trade in different regions.

4) Hub mergers at no costs

Testing hub mergers without any costs hypothesis means that the relevance of such solutions cannot be evaluated, leading to an overestimation of benefits (given that the necessary investment costs would not be taken into account when estimating cross-border tariffs). It also means that the technical credibility of a merger, i.e. whether suppression of internal bottlenecks is feasible, won't be tested. In such conditions, it would be more credible to keep technical cross-border capacity constraints unchanged, and test a tariff reform at a regional scale instead.

5) Storages operating at low costs

This hypothesis is, once again, not reflecting a sustainable reality. Either it is implying a widespread socialisation of storage costs without identifying stakeholders that would bear these costs or it ignores the fact that some market equilibrium must be found, with storages prices covering their costs and an adjustment of the available capacity to the needs of the market. The current assumption is artificially hiding the cost of modulation and, if possible, some alternative modelling approach should be proposed.

6) Hubs liquidity is not modelled

This means benefits of the scenarios improving the liquidity will be diminished compared to other scenarios, hiding the benefits of scenarios that maximise cross-border flows and stimulate the participation in the market of as many players as possible.

C. Issues linked with scenario definitions:

Many elements of the retained scenarios are still to be clarified. Among the most prominent issues:

- In the tariff reform and the market mergers scenarios, the only proposed scenario is a uniform unit price added to all existing EU entry (for the tariff reform) and to entry and exit tariffs to and from the merged zone (for the market merger). Other options should be tested, among others: allocation at exit points; different e/e split; equalisation; differentiated pricing based on elasticity of supply and demand, as to not exclude any pricing approach. The impacts of such solutions should be analysed with a view to guarantee a level playing-field for different supply routes to Europe, bearing in mind that the EU has a domestic production of gas insufficient to cover its needs. Consequently, tariffs should be able to attract import flows, particularly from those third countries that increase the diversification of sources. With this in mind, the impacts of moving all costs to EU entries should be carefully assessed.
Scope of investments considered to be finalized by 2020 and retained in the model must be clarified.

Retained year 2020 raises the questions of contrasted demand scenarios – projected shifts in demand should be further explained.

Alternative options for (commodity and capacity) LTCs prolongation level should be tested.

In any case, modelling should not completely replace qualitative analysis based on ‘real world’ situation (observed pricing strategies and market inefficiencies; unequal implementation of EU gas market legislation, etc.).