

Procuring Flexibility as part of cost-effective system development and integration

Context

- As the energy transition is progressing **electricity networks could increasingly become a bottleneck** to the further uptake of decentralised and variable renewable energy sources.
- **To meet these challenges, it would be both unrealistic and uneconomic to rely on grid expansion alone.** Instead, operational measures and related investments to optimise the use of grid capacity and the reliance on system services will play an increasingly important role. While all of these options could become subject of specific iAC advice, **this paper focuses on the procurement of system services¹ as alternative to network expansion or related investments by System Operators.**
- The European Clean Energy Package encourages a **market-based approach for the procurement of system services not only for grid balancing.** This approach is to be introduced also at the distribution level, which means that competition and coordination between the different levels are required.

Advice

The Advisory Council of ENTSO-E strongly supports the further development of a market-based approach for the procurement of flexibility services for the electricity system management in Europe. The present advice is targeted in particular to ENTSO-E and the role of the Transmission System Operators, for whom the following principles are recommended:

- In order to ensure the most cost-effective solutions for system management, **incentive structures should support the paradigm shift away from a CAPEX-focussed approach to a holistic perspective on system costs.** The incentive-scheme for system operators should consequently reflect total Operational and Capital Expenditures (TOTEX). In this respect, the benefits of delayed or avoided investments and reduced risk of stranded assets should be directly factored into the financial incentives for system operators. The shift away from a pure CAPEX-approach can be expected to also support a reduction of carbon emissions.
- The market-based approach for the procurement of system services requires a **strict separation between grid assets and market assets**, as recommended by the iAC in its dedicated recommendations on the topic. To implement this approach in cases where a flexibility asset is best placed on TSO property, the space may be leased out to market parties.
- To complement the financial incentive structures, transparency and regulatory oversight are essential for a holistic perspective on system planning, investments and operation. **Before investment decisions above a certain threshold (to be defined depending on the voltage level) are taken, the regulator should request a counter-factual-scenario from the system operator, based on a non-wire flexibility alternative.** A market check, as already foreseen by the European Electricity Directive for investments in storage², should be conducted also for network infrastructure investments by system operators. The regulator should ensure that a system operators is rewarded only once for an action under any incentive regime.

² Directive (EU) 2019/94 on common rules for the internal market for electricity, Articles 36 and 54

- **All market platforms for the procurement of system services should be directly accessible for all flexibility providers**, connected at the distribution or transmission level. It is important that platforms for the procurement of services for TSOs are sufficiently aligned or even merged with both the wholesale market as well as the procurement of services for Distribution System Operators, allowing flexibility providers to offer their services to different users while enabling competition between TSOs, DSOs and market parties for the relevant services. The iAC welcomes the emergence of different market platforms operated by Third Parties across Europe.
- **Products for congestion management and other system services should be defined from the perspective of system needs.** They should be open to all existing and new solutions, such as (distributed) generation, storage, Demand Response, including from transport and heating, as well as flexibility capacity from within the gas system, thus also allowing for optimal cost efficiency. Products should be defined for the largest possible market area to meet a requirement and portfolio bidding within a market area should always be possible.
- **Products should be diverse to meet all system needs and allow for optimal efficiency, but compatible** (e.g. in terms of durations that should be based on a common denominator) to enable the stacking of services or switching between different products or market platforms. **It is likely that availability and energy products will be required, both for the short term as well as the long term.**
- Market parties should be actively involved in the long-term planning in the Ten Year Network Development Plans and the **plans should systematically include non-wire alternatives for system development.** System monitoring, adequacy planning as well as the Ten Year Network Development plan should also integrate the contribution of decentralised energy sources at granular level, in terms of generation capacity and flexibility.
- The **procurement of flexibility services should be transparent and non-discriminatory.** Information on expected system challenges should be made available to market parties both concerning long-term investment needs as well as short-term congestion management actions. This information should be transparent and published by TSO in a common machine readable format.
- In some markets, concerns have been expressed about the potential of strategic bidding in case of structural congestion. While these concerns are to be taken seriously, they must not be used as a blanket-argument against a market-based approach. **On the contrary, a non-market approach tends to be less transparent and the most vulnerable to discriminatory practices.** The risk is limited also when the market is compared with a built network alternative. If the market does not deliver a cost-effective solution then a built network asset is in consumers' interests.
- **Directly negotiated bilateral deals between System Operators and flexibility providers should be avoided as far as possible and strictly limited to situations where market-based procurement cannot deliver.** Such deals should always be subject to regulatory scrutiny, be time-limited and clearly targeted to the specific constraint only, and information on their existence and use should be made public.