Guidance for Member States on implementation plans
pursuant Art. 20 (3)-(8) of Regulation (EU) 2019/943 ("Market Reform Plans")

Introduction

Article 20 (3)-(8) of Regulation (EU) 2019/943[1] (Electricity Regulation) requires all Member States with identified adequacy concerns to develop an implementation plan, in which they set out how they intend to address the root causes of their adequacy problem with market reforms ("Market Reform Plans"). This requirement reflects the recognition that markets, if well designed, free of regulatory distortions and sufficiently connected to EU electricity grid, can provide the right amount and type of capacity to meet demand. Capacity mechanisms should only be introduced to address residual concerns, i.e. problems or circumstances which cannot be solely resolved by market reforms. Once the residual concerns have been eliminated and market reforms have started to work, adequacy problems are expected to decrease and ultimately disappear. To enable this, regulatory measures to eliminate distortions and to reform markets need to be effective and credible for investors and all other market participants.

To this end Article 20(5) of the Electricity Regulation provides that the Commission should issue a formal opinion whether the proposed measures are fit for purpose. If the Commission comes to the conclusion that the national Market Reform Plans do not sufficiently address the problem underlying the adequacy concern, it can propose necessary amendments to the Market Reform Plans. Member States should then adapt their plans in line with the Commission's proposed amendments.

The submission of a Market Reform Plan and the subsequent review by the Commission are a legal condition for the approval of any national capacity mechanism under Article 21(5) of the Electricity Regulation. No capacity mechanism can thus be introduced without submission of a reform plan and receiving the Commission's review.

In order to make sure that the Market Reform Plans are properly implemented, Member States are required to issue a yearly assessment of the implementation process ("Implementation Report"). The Commission is obliged to review these annual Implementation Reports and to issue a formal opinion on the reform process.

[1] Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity, *OJ L 158*

Developing the plan

Objectives

First, Article 3 of the Electricity Regulation sets out clear objectives for Member States. These objectives must be considered when developing market reforms.

In Article 20(3) the Electricity Regulation describes in detail the elements Member States have to address in their Market Reform Plans. The objectives include prices which solely reflect supply and demand conditions, better integration of renewables and demand response into electricity markets, free flow of electricity within and between Member States, free market entry and exit for all market participants and long term wholesale electricity products to be traded on transparent marketplaces.

Second, Article 20(3) of the Electricity Regulation mentions seven specific groups of measures which need to be considered by Member States in their Market Reform Plans to allow competition to take place, namely:

(a) removing regulatory distortions;
(b) eliminating wholesale price restrictions ("caps");
(c) making sure that the value of reserves in the system is appropriately reflected in prices;
(d) increasing interconnection and internal grid capacity;
(e) enabling self-generation, storage, demand side measures and energy efficiency;
(f) ensuring cost-efficient and market-based procurement of balancing and ancillary services;
(g) and that price regulation is phased out or at least it is adjusted to bring it in line with Article. 5 of Directive (EU) 2019/944[2] (Electricity Directive).

Completeness

Since the Electricity Regulation requires the Member States to submit a Market Reform Plan which addresses the identified regulatory distortions and market failures, it is important that the Market Reform Plans comprise both:

(i) an ***analysis*** of existing regulatory distortions and market failures and;
(ii) a ***plan*** setting out the concrete measures proposed to address the identified issues, including a timeline for the respective measures to address the identified distortions and market failures.

This will allow the Commission to verify whether the proposed measures are appropriate to address the problems.

In order to facilitate the analysis of possible regulatory distortions and market failures, the Commission requests Member States to answer the questions annexed to this document. The detailed answers to the attached questionnaire will allow the Commission to better understand the functioning and the specific problems of the electricity market in the respective Member State.

In a second part, the Market Reform Plans should then list and describe the proposed market reforms in detail. The market reforms should be concrete and clearly linked to the issues identified.

[2] Directive (EU) 2019/944 of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU

Their description should be sufficiently detailed and include a timeline (with milestones if necessary) for their implementation.

Only a complete plan consisting of both an analysis of regulatory distortions and market failures (including the answers to the annexed questions) and a comprehensive description of the proposed reforms will allow the Commission to assess the appropriateness of the proposed reforms.

Commission opinion

Once a Member State has provided the Commission with a complete Market Reform Plan, i.e. covering at least the issues set out in the present guidance, the Commission will first check the document for completeness. The Commission may consider Market Reform Plans not covering the issues set out in the present guidance as incomplete. Only if the Market Reform Plan includes all elements required, analyses the regulatory distortions and market failures and provides for a comprehensive description of the proposed reforms will the Commission be able to consider the Market Reform Plans as formally submitted. From the date of the submission of the complete Market Reform Plan, the Commission has four month to issue a reasoned opinion.

During the assessment process the Commission might seek meetings or written exchanges with Member States to clarify questions or issues as and if they emerge. The Commission will also be open to exchange with Member States at their request.

Approval or request for amendments

Depending on the outcome of its assessment the Commission might in its opinion either approve the proposed Market Reform Plan or ask the Member States to amend their market reform plans.

The Commission's opinion will be considered in the process of state aid approval of the national capacity mechanism in accordance with the Article 20(3) of the Electricity Regulation and recital 224 of the State Aid Guidelines[3].

[3] Guidelines on State aid for environmental protection and energy 2014-2020, OJ 2014/C, 200/1

ANNEX: QUESTIONNAIRE ON POSSIBLE REGULATORY DISTORTIONS AND MARKET FAILURES

Section 1 - General wholesale market conditions

In well-functioning markets, prices reflecting the true value of energy supplies can provide reliable signals for investment in the overall mix of capacity with the right flexibility and reliability characteristics needed to meet demand. Even if a capacity mechanism is introduced, appropriate electricity scarcity price signals will continue to be important.

Allowing prices to rise in periods of scarcity will entail very high potential wholesale prices at times of scarcity. However experience in several countries shows that wholesale market participants may be able to hedge against short-term price peaks, with limited additional costs for end consumers and possibly at an overall lower cost than relying on a capacity mechanism alongside wholesale prices to provide secure supplies.

Some Member States have currently in place artificially low price caps. Such price caps constrain prices to increase in periods of scarcity, thereby they are likely to create or contribute to a missing money problem.

The new rules in the Electricity Regulation (Article 10) require the removal of all price caps below the Value of Lost Load on wholesale and balancing market, thereby allowing the value of electricity to be fully reflected in the market[4]*.*

Questions to be answered by the Member State:

1. With regards to day-ahead and intraday electricity prices, are there any formal or informal price limits other than those currently applied within European single day-ahead and intraday coupling as set out in Article 41(1) and 54(1) of Regulation 2015/1222[5] (CACM)?
2. Are there any formal or informal rules or requirements that limit generators' ability to freely price their offers in wholesale markets?
3. Are there any rules or provisions which require the TSO to release generation reserves to the market when market prices rise above certain thresholds?
4. Are there currently any capacity mechanisms (i.e. in the form of reserves)? If yes, please elaborate on how they work?

[4] *Nominate Electricity Market Operators may apply nonetheless harmonised technical bidding limits which should reflect the value of lost load and be determined in accordance with Article 41(1) and 51(1) of CACM.*
[5] Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management, *OJ L 197/24*

Section 2 - Balancing markets

Prices in every market timeframe (i.e. intraday, day-ahead, etc.) are interdependent and the incentives of market participants are influenced by their expectations about prices in markets closer to delivery. The rules by which imbalance settlements are calculated will for instance affect bids in the day-ahead market: even if there is no price cap in the day-ahead market, electricity suppliers will never choose to pay more for electricity in the day-ahead market than what they would be charged for being out of balance through imbalance settlement.

Also, even if the balancing market price is in principle uncapped, the activation of operating reserves are sometimes used to balance supply and demand that supress price signals. If these balancing services are not charged to reflect their full costs, price signals in all market timeframes will be distorted and market participants will adapt their behaviour accordingly. In all these cases, balancing rules and interventions may impose an implicit cap on electricity prices.

Member States should therefore ensure that balancing market rules, even in the absence of an explicit price cap, do reflect the full costs of balancing and do not implicitly constrain electricity prices in forward markets.

Sub-section 2.1: Imbalance settlement

The demand for electricity is typically insufficiently responsive to prices because currently prevailing technical features of electricity delivery do not allow most customers to respond to price variations in real time. As a consequence, there may be situations when the wholesale energy market cannot clear, because demand remains above available generation capacity independently of the price level. In such circumstances, some kind of regulatory intervention is needed to bring supply and demand in balance, e.g. rationing demand and administratively setting a price.

Administrative scarcity pricing as mentioned in the Regulation 2017/2195[6] (EBGL) (Article 44.3) consists in the introduction of rules to ensure that electricity prices are automatically augmented as the probability of unmet demand increases, increasingly reflecting the value of lost load. This means that prices are not solely determined by the bids of generators when scarcity is anticipated, but include an administrative component. As the loss of load probability increases, for example as the TSO deploys available reserve capacity to meet demand, a price adder is applied automatically to the market price.

Questions to be answered by the Member State:

5. What incentives do balancing responsible parties have to reduce their imbalances (or help the overall system to be in balance)?
6. Are all market participants exposed to the TSO's imbalance settlement rules? Are the terms/rules of the imbalance settlement the same for all balance responsible parties?
7. How are the costs for procuring balancing services translated in imbalance settlement prices?
8. Are the full costs of balancing actions attributed to the balance responsible parties though the imbalance settlement price?

[6] Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, *OJ 312/6*

9. Has the Member State considered introducing an administrative scarcity pricing mechanism as referred to in Article 44(3) of EBGL?
10. How is the imbalance settlement price calculated for a balancing period in which the TSO has to disconnect one or more consumers involuntarily?
11. What is the estimated value of lost load in the Member State? Please provide a copy of any study providing a basis for this estimate.

Sub-section 2.2: Procurement of ancillary services

The increase of intermittent renewables has created more uncertainty in forward and day-ahead trading and more volume volatility during the day, with system frequency risking falling and rising more quickly and drastically following a system disturbance. It has therefore become more important to improve short-term markets to enable balance-responsible parties to balance their portfolios on the shorter term intraday and balancing markets, but also foster the development of ancillary services that can respond in ever shorter timeframes to system disturbances.

The EBGL (Article 30.1.a) emphasises the importance of the correct remuneration of balancing services. It defines minimum rules for the procurement of balancing services through a competitive process.

Questions to be answered by the Member State:

12. Are balancing reserves procured through a competitive process? Does the TSO procure (a portion of) its balancing reserves close to real time (day-ahead)?
13. Can demand side participants provide balancing services?
14. Are there any formal or informal rules or requirements that limit generators' ability to freely price their offers in balancing markets?

Section 3 - Demand-side response

On the demand side, increased demand responsiveness can have important impacts for resource adequacy because it has the potential to increase the price elasticity of demand and outright flatten demand peaks and thus reduce the need for additional generation capacity to ensure adequacy. Its role will further increase with the shift towards generation from variable renewables, as coping with shorter time generation peaks and gaps will be more in the focus of the balancing concerns in many Member States. Demand response can be realised both for household and small industrial/ commercial consumers – where smart meters are progressively being deployed together with dynamic price contracts that provide price signals from wholesale spot markets, and aggregators are facilitating participation in electricity markets - and for larger industrial consumers. Moreover a manageable demand side provides an additional tool to TSOs in balancing the system, by providing balancing or ancillary services to the TSO.

However at present, regulatory and other obstacles persist in a great majority of Member States, for instance explicit prohibitions on becoming active on the wholesale market, lack of smart metering infrastructure and availability of dynamic price contracts linked to the spot market. Moreover, national legal frameworks differ considerably across the EU, for instance on aggregation or the determination of baseline capacities.

The Electricity Regulation (Articles 6 and 7) harmonises some basic elements related to the participation of demand response in the various time frames. For demand response to effectively develop in all markets, Member States have to establish a complete framework that ensures that aggregators can compete on a level playing field with other market participants.

The Electricity Directive (Article 11 and 13) also provide that consumers have the right to request a smart meter and a dynamic price contract that incentivise them to use less electricity when it is expensive (when wholesale prices signal scarcity) and allows them to get rewarded for shifting consumption to times when energy is widely available and cheap. In addition, independent aggregators are fully recognised as market participants and final customers have the right to enter into contractual relations with aggregators without the consent of their supplier.

Questions to be answered by the Member State:

15. Are all types of demand-side response eligible to participate in the wholesale electricity markets (including day-ahead and intraday) as well as the balancing/ ancillary services markets?
16. Can demand-side response participate in markets both via individual players and via aggregators?
17. Are there any exemptions from network or energy-related costs as well as surcharges (RES, CHP, capacity mechanisms, etc) for specific classes of consumers which might affect demand response incentives?
18. What percentage of customers is provided with smart meters (please specify it separately for the following groups of customers: a) households, b) business customers, c) industrial users)

a.	90%+	b.	70-90%
c.	40-70%	d.	20-40%
e.	Less than 20%		

19. Are all the smart meters capable of metering and transmitting at least hourly metering values and do data management systems enable suppliers to settle customers on the basis of at least hourly metering values (i.e. against at least hourly spot market prices, for the purpose of dynamic pricing)?
20. Do customers in the retail market have access to a dynamic price contract linked to wholesale spot market prices?

Section 4 - Retail Markets: Regulated prices

Regulated prices for final customers can also have important impacts on resource adequacy. If the regulated price is too low, new entrants are excluded from the market. Moreover, when prices are artificially low, market players will not invest in new capacity.

R*egulated prices that are set at low levels compared to market prices and cover a large part of the market generate adverse effects for the development of competitive markets.*

The Electricity Directive (Article 5) provides clear conditions under which retail price regulation can take place. Member States can regulate prices for vulnerable consumers and households in energy poverty under certain and clearly defined conditions. Member States may regulate prices also for other household customers and micro-enterprises for the purposes of the transition to a competitive market. However this is subject to a comprehensive series of requirements to mitigate possible negative market impacts, including setting prices at a level where effective price competition can occur, ensuring the non-discriminatory treatment of suppliers, and being accompanied by measures to achieve effective competition.

Questions to be answered by the Member State:

Does the Member State have a system of regulated electricity prices for final customers? If yes, please detail the following

21. What is the percentage of total demand supplied under regulated prices?
22. Which customer groups are eligible for regulated prices?
23. What is the percentage of demand per customer group supplied under regulated prices?
24. Are there market-based energy offers which are more attractive than the regulated prices available to all customers, including regulated customers?
    a. Are regulated prices set at a level where effective price competition among suppliers can occur?
    b. What were the regulated prices for the different customer groups in 2018 in c/kWh?
    c. Please provide examples of available competitive market prices that compete with the regulated prices and their comparable price level in c/kWh?
25. What is the methodology for calculating each of the regulated retail prices currently in place? Who sets the methodology? Who approves the prices?
26. Has there been any significant switching of regulated customers to alternative suppliers?
    a. Please provide the share of customers under regulated prices in each customer category for the last five years consecutively.
27. How are the suppliers supplying regulated customers selected? How is non-discrimination in the selection process ensured?
28. What are the measures planned to fully effective market-based pricing of electricity for all final customers, and what is the timeline?
29. What is the timeline for price deregulation? Is it due to happen before the planned introduction of the capacity mechanism?

Section 5 - Interconnection

Increased import capacities available for trade can have important impacts for resource adequacy because it has the potential to reduce the need for additional generation capacity to ensure adequacy. In this regard, eliminating existing export and import restrictions and increasing import-export capabilities by further strengthening the internal transmission network can help create a more robust wholesale market.

However at present serious regulatory obstacles persist in some Member States. For instance some Member States are lagging behind in terms of reaching their interconnection targets. Where interconnectors exist, trade with neighbouring countries can be limited due to administrative import and export restrictions put in place by Member States. Interconnection capacity can also be underutilised due to loop flows/ unscheduled flows.

Regarding capacity calculation for cross-border electricity trading, the Electricity Regulation (Article 16) maintains the principle of maximising trade at the borders and to have a maximum limit of 30% for the deductions that TSOs can make before capacity calculation for loop flows, internal flows and reliability margins. The rest (minimum 70% of capacity) should be offered to the Regional Coordination Centre for capacity calculation – where further deductions for the N-1 standard and transit flows are possible.

Questions to be answered by the Member State:

30. Has the Member State developed interconnection with the view to reaching at least its interconnection targets as referred in point (d) of Article 4 of Regulation (EU) 2018/1999[7]?
31. Please describe the amount of interconnection capacities available for trading from and to the Member State and their current utilization
32. Are there currently administrative import and/or export restrictions on interconnectors limiting trade with neighbouring countries? If yes, please explain what is the impact of such restrictions on the market.
33. Are there any internal network congestions? What is the annual cost of redispatching/ countertrading in the Member State? Are there planned or ongoing network reinforcement measures?

[7] Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, OJ L 328