– Consultation Response –

ACER public consultation on prioritising the removal of barriers to electricity demand response

Brussels, 2 February 2024

1. Based on your own experience and considering the information contained in ACER's report, please rank the following barriers included in the report by order of relevance and required effort to overcome, on a scale between 1 and 7.

1.1. Ranking of overall barriers included in Chapters 3 to 9 of ACER's report by order of relevance.

A score of 7 corresponds to the highest relevance. Each score may be assigned only once.

- Lack of a proper legal framework to allow market access: 2
- Unavailability of lack of incentives to provide flexibility: 6
- Restrictive requirements to providing balancing services: 4
- Restrictive requirements to providing congestion management services: 7
- Restrictive requirements to participating in capacity mechanisms and interruptibility schemes: no response
- Limited competitive pressure in the retail market: 1
- Retail price interventions: 5

1.1.1 Please explain your answers with reference to the underlying indicators included in the report and/or to other factors you consider relevant for each overall barrier.

We would like to clarify that since each score could only be assigned once, we had to introduce an artificial hierarchy for barriers which we believe are of similar relevance. Hence, we would have given an equal score of "7" to "unavailability or lack to incentives to provide flexibility" and "restrictive requirements to providing congestion management services".

Concerning the latter, we agree with the report's conclusions that significant barriers exist for demand response to provide congestion management services. The same applies to platform solutions (e.g., DSO-level local flexibility markets) which are needed to create suitable economic framework conditions for the development of flexibility. As the Clean Energy for All Europeans Package defines market-based integration of demand-response and distributed energy resources as the European target model for flexibility, it should be uniformly applied across all Member States.

Another major barrier for the integration of demand response and distributed energy resources is the wide-spread lack of incentives to provide flexibility. Specifically, the comprehensive deployment of smart meters, as providers of granular data, is a critical prerequisite for the integration of demand response in the wholesale electricity market. Smart meters are necessary to be able to offer retail electricity contracts with time differentiation that exactly reflect the wholesale electricity price and thus allow consumers to benefit from price signals by adapting their consumption behaviour. Moreover, consumers often suffer from information asymmetries as they are insufficiently aware of the role they can play in demand response themselves.

The lack of national measures incentivising consumers to opt for flexible contracts can hinder competition in retail markets. Against this background, we have assigned the lowest score to the *"Limited competitive pressure in the retail market"* as this barrier is directly dependent on the given incentives to provide flexibility.

Retail price interventions constitute another relevant barrier since they limit or fully offset the role of price signals by deleting incentives for consumers to react to them.

Overly complex technical requirements represent a major barrier for the participation of demand response in the provision of balancing services. It is clear that a minimum set of requirements needs to be in place, but these should be proportionately restrictive and non-discriminatory so that a broad range of market participants can compete in this market. All relevant technical requirements need to be coherent and be put in a proper legal framework that ensures a European-wide approach and foster market-based solutions.

Finally, we would like to report a minor observation on Chapter 3.6. The minimum bid size in the Netherlands and Poland is 0.1 MW and not 0.5 MW as incorrectly stated in the report.

1.2. Ranking of overall barriers included in Chapters 3 to 9 of ACER's report by order of required effort to overcome.

A score of 7 corresponds to the highest required effort. Each score may be assigned only once.

- Lack of a proper legal framework to allow market access: 2
- Unavailability or lack of incentives to provide flexibility: 6
- Restrictive requirements to providing balancing services: 4
- Restrictive requirements to provide congestion management services: 7
- Restrictive requirements to participating in capacity mechanisms and interruptibility schemes: no response
- Limited competitive pressure in the retail market: 1
- Retail price interventions: 5

1.2.1. Please explain your answers with reference to the underlying indicators included in the report and/or to other factors you consider relevant for each overall barrier.

In line with our response to the previous question, we have used the same order to classify the required effort to overcome the listed barriers to the integration of demand response in the wholesale energy market.

Engaging with and making consumers aware of their opportunities in demand response remains challenging. Moreover, concerning retail electricity contracts, there is a need to establish clear transparency principles for retailers to provide consumers with the necessary information to make conscious decisions.

Regarding retail price interventions, the recent energy crisis has demonstrated that policy makers often choose temporary relief measures that may cause higher barriers in the long-term. In principle, energy prices should never be capped as this distorts the price signal and hinders retail competition. If deemed necessary, retail price interventions should be tailored to vulnerable end-consumers only.

As for technical requirements that may constitute a barrier, clear rules and a comprehensive monitoring process should be established to ensure harmonisation and non-discrimination.

Finally, regarding the lack of a proper legal framework, we believe that the difficulty to overcome this barrier is lower because of the upcoming new Network Code on Demand Response which should pave the way for the establishment of terms and conditions at national level. In the first draft, the principles of technology neutrality and non-discrimination of distributed energy resources were established as well as a first definition of roles and responsibilities. Nevertheless, the document could have been more ambitious in fostering market-based flexibility procurement.

1.3. Ranking of other relevant barriers included in Chapter 10 of ACER's report by order of relevance.

A score of 7 corresponds to the highest relevance. Each score may be assigned only once.

- Insufficient cross-zonal transmission capacity: 6
- Bidding zones not reflecting structural congestions: 3
- Limited competitive pressure and/or liquidity in wholesale electricity markets: 2
- Complex, lengthy, and discriminatory administrative and financial requirements: 5
- Lack of incentives to TSOs and DSOs to consider non-wire alternatives: 7
- Scope for improving transparency, cost-reflectivity and non-discrimination in network tariffs: 4

1.3.1. Please explain your answers with reference to any factors you consider relevant for each barrier.

The lack of incentives for TSOs and DSOs to consider non-wire alternatives is a significant barrier for the development of flexibility. System operators need more incentives to procure flexibility in a market-based manner, for example, by moving from a CAPEX approach, in particular for new grid infrastructure, to a TOTEX approach which also considers non-wire alternatives. Given the importance of this matter, it should be put forward in the next reports, e.g., with a dedicated chapter on incentives for system operators and possible solutions to overcome this barrier.

Cross-zonal transmission capacity is a critical element for the integration of wholesale electricity markets. To increase and maximise the available cross-zonal transmission capacity available for trading must be a key objective to provide additional flexibility to the overall market.

An appropriate set of administrative and financial requirements should be required for the participation of demand response in the wholesale energy market. If these requirements are too complex, lengthy and discriminatory, however, they may indeed represent a high barrier.

Moreover, we believe that "improving transparency, cost-reflectivity and non-discrimination in network tariffs" is a medium-rated demand response barrier. For more details, please see our response to Question 2.9 about the importance of market-based redispatch and market-based procurement of demand response by DSOs.

Concerning the alleged barrier of "bidding zones not reflecting structural congestions", it remains unclear to us from the report why and how this would represent a specific barrier for demand response. In our view, it is not a given that bidding zones with structural congestions have to be a specific, or at least significant, barrier for demand response.

Finally, regarding the consulted barrier of "limited competitive pressure and/or liquidity in wholesale electricity markets", it remains unclear to us why examples of EU-wide spot and forward electricity markets with limited liquidity would explicitly represent a specific barrier for demand response. The two topics are not necessarily related, among others, because the commercialisation and usefulness for the power system balance and SoS of demand response takes place particularly in the short-term. Consequently, we do not see this as a major barrier.

1.4. Ranking of other relevant barriers included in Chapter 10 of ACER's report by order of required effort to overcome.

A score of 7 corresponds to the highest required effort. Each score may be assigned only once.

- Insufficient cross-zonal transmission capacity: 6
- Bidding zones not reflective structural congestions: 3
- Limited competitive pressure and/or liquidity in wholesale electricity markets: 2
- Complex, lengthy, and discriminatory administrative and financial requirements: 5

- Lack of incentives to TSOs and DSOs to consider non-wire alternatives: 7
- Scope of improving transparency, cost-reflectivity and non-discrimination in network tariffs: 4

1.4.1. Please explain your answers with reference to any factors you consider relevant for each barrier.

Concerning the lack of incentives for TSOs and DSOs to consider non-wire alternatives, please see our earlier comment on the issue. This point should be extended by a discussion on the design of network tariffs.

The insufficient level of cross-zonal transmission capacity made available for trading seems to remain a difficult barrier to overcome because, according to the latest ACER report, most Member States are still far from reaching the minimum 70% target. Nevertheless, it must be specified that according to Regulation (EU) 2019/943, Member States can use action plans and/or derogations to reach the stipulated requirement only within a set number of years. As highlighted in the Europex response to "ACER's 2023 market monitoring report on cross-zonal capacities" the elements that limit the availability of cross-zonal transmission capacity for trading are the lack of a mechanism to share remedial action costs as well as the lack of coordinated capacity calculation methodologies on some borders.

Regarding the administrative and financial requirements, it is important to establish common high-level principles at European level. Those should then be applied at national level and should be closely monitored to ensure that the requirements are non-discriminatory, easy to handle and non-restrictive.

Regarding the issue of bidding zone configuration, please see our earlier comments.

Possible responses to questions from 2.1 to 2.8: strongly agree / agree / neutral / disagree / strongly disagree.

2.1. To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.1 ''Lack of a proper legal framework to allow market access'' of ACER's report?

- ACER urges Member States to define a proper national legal framework for all new entrants in line with the Electricity Directive: strongly agree.
- National rules should legally allow all energy resources to become eligible parties in all electricity markets, balancing and congestion management services: strongly agree.
- To ensure participation of distributed energy resources through aggregation in all electricity markets, balancing and congestion services, the national rules should define at least one aggregation model applicable to all types of distributed energy resources for each market and SO service in line with the requirements of the Electricity Directive: no response.
- To ensure new actors can offer innovative services and promote demand response, the national rules should recognise them as eligible parties to access final customer data: no response.

- ACER considers that new actors should get access to data of non-customers in a level playing field compared to suppliers while the Member States ensure data protection and security: no response.
- To ensure they all have access to data in a non-discriminatory manner and simultaneously, all Member States should give access to the same type and amount of data and through the same data platform or tool: no response.

2.2. To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.2 ''Unavailability or lack of incentives to provide flexibility'' of ACER's report?

- ACER recommends accelerating the penetration of smart meters in the Member States with legal plans to reach the 80% target in place but still far from this target and in the Member States that have not set the 80% target in their national rules yet, despite a positive rollout decision: strongly agree.
- ACER also invites Member States with low penetration levels of smart meters but no legal plans nor target to accelerate the development of these devices: strongly agree.
- Where time-differentiated network tariffs are introduced, the NRA should regularly evaluate their impacts and their appropriateness. NRAs should obtain sufficiently granular temporal data on network conditions, on individual network users subject to the rollout of fit for-time-of-use meters, and on the network use by individual network users: neutral.
- Where time-differentiated network tariffs are introduced, the network tariff structures and the signals should be mandatory for all network users, without a possibility to opt-out from them. Optionality may be temporarily reasonable when transitioning to a new time-of-use schedule to limit tariff impacts on network users: neutral.
- Where no time-of-use signals apply in transmission and/or distribution network tariffs, NRAs should investigate the need to introduce such signals from a cost-efficiency and/or network congestion point of view. Such studies should aim to identify which elements affect the effectiveness and efficiency of time-of-use signals to justify a decision to apply such signals or not in each context: neutral.
- Where fit-for-time-of-use meters are largely missing, as a temporary solution, NRAs may design network tariffs by determining for different user profiles their contribution to the system peak: neutral.
- All NRAs should track and monitor the level of penetration of all types of retail electricity contracts: agree.
- National authorities need to do even more to inform consumers on the benefits and potential risks of providing demand response. ACER recommends all Member States to strengthen national measures to raise consumer awareness and mobilise flexibility and to share good practices that can be followed: strongly agree.

2.4. To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.4 ''Restrictive requirements to providing congestion management services'' of ACER's report?

- ACER urges MS to ensure that the reasons for not suing market-based re-dispatching at transmission or distribution level do not contravene the exceptions allowed in the CEP: strongly agree.
- ACER reminds all MS to urgently define a regulatory framework to allow and provide incentives to DSOs to procure congestion management in the areas and to ensure they can procure such services from DER pursuant to Art. 32 of the El. Directive: strongly agree.
- Most MS should define an iterative national reassessment process with a transparent decision-making procedure as soon as possible. ACER reminds MS that in a context with increasing network congestions and more and more DER and new actors willing to provide flexibility, some market conditions such as predictability of network congestions or lack of competition may become inapplicable. As a result, the lack of market-based re-dispatching may not be sufficiently justified: strongly agree.

2.5. To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.5 ''Restrictive requirements to participating in capacity mechanisms and interruptibility schemes'' of ACER's report?

- Less restrictive requirements allow for more competition which may potentially reduce the costs of capacity mechanism for consumers. To ensure these mechanisms are effectively available to all resources with non-discriminatory design features and processes, ACER recommends removing the requirements that directly exclude some distributed energy resources, such as restrictions to aggregation to lower voltage levels. ACER also invites all MS with capacity mechanisms to relax those requirements that can facilitate participation of DER capable of fulfilling the required technical performance without jeopardising the quality of the service delivery: agree.
- Interruptibility schemes or new ancillary services-related schemes targeted to DR may weaken the competitive and direct participation of demand response units into capacity mechanisms, balancing markets or network reserves by establishing a separate specific DR product for the provision of these services. To ensure a level-playing field among all technologies and actors and to maximise competition and avoid market fragmentation, ACER recommends the services related to interruptibility or DE schemes to preferably be integrated within the existing wholesale electricity markets and SO services. Dedicated mechanisms for DR should only be left to cases where no parallel procurement channels exist, or when there is a need to kick-start the development of DR: no response.
- When the introduction of an interruptibility or a new ancillary service-related scheme targeted to DR is justified, ACER recommends all MS to carefully review the requirements and design features of these schemes to ensure they do not restrict participation of smaller interruptible loads or new actors capable of fulfilling the required technical performance. ACER also reminds the MS to follow the approval procedures envisaged by EU legislation: no response.

2.7 To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.7 ''Retail price interventions'' of ACER's report?

- Retail price interventions, including regulated prices, are not a barrier when targeted and aimed at those most in need. However, in some markets, price intervention essentially kills the business case for new actors, aiming at unlocking flexibility from DER. ACER therefore recommends MS to ensure these interventions are targeted and aimed at those most in need. MS should adopt detailed definitions and criteria for vulnerable consumers in line with Electricity Directive: neutral.

2.8. To what extent do you agree with the following findings and recommendations illustrated in Chapter 12.8 ''Focal topic: Network tariffs as both potential 'facilitators' and 'barriers' to active customers and providing demand response'' of ACER's report?

- MS should conduct a study, pilot project and/or IA to determine whether the network charges for active customers must have some differentiation compared to non-active customers to ensure they are cost-reflective and non-discriminatory: neutral.
- MS should apply differentiated network tariffs for active customers providing explicit DR as long as they reflect the different network costs triggered by their network use and they are not discriminatory vis-à-vis other network users: neutral.
- MS should apply exemptions, discounts or other differentiations in network tariffs for specific consumers only when duly justified. In a context of increasing network congestions and flexibility needs, NRAs should periodically assess the need and adequacy of any network tariff differentiation, taking into account the overall network impacts, not to provide disincentives for efficient network use: neutral.
- As described in ACER's 2023 Report on Electricity Transmission and Distribution Tariff Methodologies in Europe, ACER considers appropriate a gradual move to increasingly power-based network tariffs to recover those costs which show correlation with contracted or peak capacity. In particular, ACER recommends against using flat-rate energy-based charges (EUR/MWh), i.e., which are not including any time element which corresponds to the peak network usage, to recover infrastructure costs from network users: neutral.
- ACER recommends avoiding net-metering where volumetric/energy network charges apply. Moreover, to be in line with Article 15(2) of El. Directive, ACER reminds MS that net metering (with an exception) should not apply to active customers after 31 Dec. 2023: neutral.

2.9. Please use the box below if you wish to explain your answers to questions 2.1 to 2.8

Regarding the current lack of a proper legal framework to allow market access, we agree with ACER on the need to align national terms and conditions with a pan-European legal framework to be established in the new Network Code on Demand Response. In addition, we believe that national rules should uphold the principles of technology neutrality and non-discrimination among different distributed energy resources.

When it comes to the lack of incentives at retail level, we identify a lack of transparency in retail electricity contracts. Consumers should be adequately provided with all necessary

information that can support them when choosing their retail electricity contract, also highlighting their possible contribution to and subsequent financial benefits from demand response.

As for the findings and recommendations of Chapter 12.4 on restrictive requirements to providing congestion management services, we welcome the ACER assessment of the national implementation of Arts. 13 and 32 of the Clean Energy Package. We strongly support the recommendations to introduce a transparent national process to assess whether market-based redispatch can be used, to provide a regulatory framework setting incentives for DSOs for market-based flexibility procurement and to introduce an iterative process to review whether exemptions from market-based redispatch have become inapplicable. In addition, ACER concludes that "when it comes to the DSO level, there is a lack of information on the reasons for not implementing market-based redispatching". We therefore suggest making public the reasons for not implementing market-based redispatch in all Member States.

DSOs and TSOs should establish and publish on a regular basis a cost assessment about the cost-savings of market-based procurement compared to non-market-based procurement, such as reduced redispatch costs, reduced or deferred grid investment costs and/or reduced grid operation costs. This will bring more transparency about the choice for or against market-based flexibility procurement and lead to better decisions.

It is important to consider that the national transposition of Art. 32 of the Electricity Directive can sometimes differ from reality. Therefore, we believe the next ACER reports should take a close look at whether at national level, differences can occur in practice between legal transposition and reality.

Regarding the exemption from market-based flexibility procurement when "the number of available power generation, energy storage or demand response facilities is too low to ensure effective competition", this exemption needs to be carefully monitored as the creation of a market-based procurement fosters investments in more assets that can then participate in the market. Local flexibility markets build trust and transparency and thus incentivise the development of additional flexibility, increasing the number of market actors and volumes, and thus leading to effective competition in the market. These recommendations to foster market-based flexibility procurement for congestion management should be seriously considered and be included in the new Network Code on Demand Response.

We generally agree with the findings and recommendations of Chapter 12.5, especially when it comes to restrictive requirements for capacity mechanisms. Too arduous requirements on DSR will represent an entry barrier for all timeframes and open wholesale and DSO level markets plus TSO single buyer/seller balancing mechanisms.

Regarding Question 2.7 on retail price interventions, we tend to remain neutral. On the one hand, we believe retail price interventions, including regulated prices, constitute a barrier to the development of distributed energy resources as they disrupt the price signal to end-consumers. On the other hand, however, we recognise the necessity to introduce retail interventions which are tailored to support vulnerable end-consumers. Hence, despite seeing

the need, in certain, limited and temporary occasions for retail interventions, these still limit the participation of end-consumers to demand response services.

Finally, we also remain neutral with respect to the recommendations related to the time-differentiated network tariffs under Chapter 12.8 since we believe that each tariff which is cost-reflective and provides price signals may encourage demand response, despite not being the most effective mean to incentive flexibility. Network tariff signals may not persuade users to change their electricity consumption habits. As fixed costs and taxes occupy a large part of the network electricity bill, the dynamic portion of the costs does not change significantly and the changing range of price signals with time is very limited. Moreover, the implementation of time-based tariffs may be risky since regulatory authorities must ensure fairness among all consumers by charging the same group of consumers the same tariffs. If this was not the case, there could be uneven tariffs.

4. With respect to overall barriers and/or underlying indicators that hinder the participation of distributed energy resources, including demand response, energy storage and distributed generation, to wholesale electricity markets and the provision of balancing and congestion management services, in accordance with the provisions of the Electricity Directive, the Electricity Regulation and the relevant Network Codes and Guidelines:

4.3. Would you suggest any additional overall barriers?

The barrier of "lack of incentives to consider non-wire alternatives" for SOs is a key barrier for SOs to engage in market-based flexibility procurement. In the present report, this barrier is only addressed in a short paragraph in Chapter 10 together with a list of other additional barriers. However, this particular barrier should be assessed in more detail in the next edition of the report, e.g., in a dedicated chapter. Concrete policy recommendations how to overcome this barrier should be developed as well.

Moreover, an additional barrier to the integration of demand response in the wholesale electricity market is the unclear concept of "interoperability". It is fundamental to define clear principles of interoperability in the legal framework, and consequently, develop them in national terms and conditions. Otherwise, market segregation could occur as well as a reduction in business opportunities for demand response.

5. What kind of additional information and/or analyses do you think that future editions of the report could benefit from?

Case studies and other (please specify)

5.1. Do you have any specific case study topics to propose? For which countries?

The Local Flexibility Market (MLF) is the trading venue organised and managed by GME through which the participating DSOs can procure local ancillary flexibility services according to a market-based approach. The Italian DSO ARETI has joined the market organised by GME for the operational launch of its **RomeFlex** pilot project. According to the initial estimates the procurement of local ancillary services could lead to investment savings of about 600 million

EUR, against an expenditure of about 130 million EUR over 10 years for flexibility. The use of flexibility would allow for an efficiency enhancement of infrastructure investments, through the prioritisation of grid interventions with respect to the real needs of the system determining consequently a reduction in Capex.

The OneNet project's Northern Cluster Demonstrator. One key deliverable involved three EU Member States, namely Finland, Estonia and Latvia and addressed the two themes of congestion management and balancing. Within that demonstration project an intraday pilot was carried out by connecting the Nord Pool Intraday Market (platform) to the Single Flexibility Platform to demonstrate the possible short-term congestion management use case given by allowing (local) congestion management to be linked to (or be part of) a multi-bidding zone international and liquid wholesale intraday market. The Demonstrator provided insights into the fact that only fairly small system level exceptions and modifications and operative processes are needed to make it possible for all (many) SOs, FSPs and independent service providers to participate in local e.g., DR flexibilities into regional (international) intraday based flexibility markets.

UK Power Networks local flexibility market. Great Britain's largest DSO UK Power Networks intends to achieve £410m in customer savings by 2028 by utilising flexibility in a market-based way as an alternative to the traditional approach of building more grid infrastructure. EPEX SPOT has been selected as the flexibility market platform provider and operator after a competitive tender. The day-ahead flexibility procurement on the new platform will start as of February 2024, followed by long-term flexibility procurement from May 2024 onwards. While GB is not within the geographical scope of the present report, Europex recommends to include GB in future editions of the report because as it is one of the frontrunners in Europe in the development of local flexibility markets and market-based flexibility procurement by system operators, and via involvement of different market operators (e.g., PXs) that provide platforms for trading on local DSO-level utilising local production and demand response flexibilities.

5.3. Please specify other additional information and/or analyses.

Comment on Table 1 "Overview of barriers to distributed energy resources and other new entrants and small actors per Member State (p. 8): Germany is ranked "moderate" for the barrier "restrictive requirements to providing congestion management". We disagree and suggest ranking the barrier as "high" because in Germany no market-based congestion management by TSOs or DSOs is currently possible. Germany opted out from Art. 13 of the Electricity Regulation and does not implement Art. 14c of the German Energy Act which transposes Art. 32 of the Electricity Directive into national law.

8. What monitoring analyses would you suggest using to assess actual status in bringing flexibility through the market?

- Metrics pointing to inflexibility in the system (e.g., increased price volatility, negative prices).
- Diversification of sources providing flexibility (i.e., who is providing flexibility).

About

Europex is a not-for-profit association of European energy exchanges with 29 members. It represents the interests of exchange-based wholesale electricity, gas and environmental markets, focuses on developments of the European regulatory framework for wholesale energy trading and provides a discussion platform at European level.

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