

ACER Decision on technical specifications for cross-border participation in capacity mechanisms: Annex II

For information only

Evaluation of responses to ACER's public consultation on technical specifications for cross-border participation in capacity mechanisms

The following provides a summary of stakeholder feedback to ACER's public consultation (PC_2020_E_12) on ENTSO-E's proposed technical specifications for cross-border participation in capacity mechanisms ('the proposed technical specifications')¹, together with a short commentary to explain how the points raised have been addressed in ACER's amendments set out in Annex I to this Decision.

ACER received 28 responses from the parties listed below. All the responses are non-confidential and published on ACER's website.

50 Hertz Transmission Energy Norway National Grid Interconnectors

AIGET Energy UK Naturgy

Amprion Engie Nemo Link

Aquind Eurelectric Regulatory Assistance Project

Baltic Cable FEBEC Statkraft

EDF GB Interconnectors Forum Terna

Edison Greenlink Developments Total Direct Energie

EFET Iberdrola TransnetBW

ElecLink IFIEC Europe
Enel Mutual Energy

¹ ENTSO-E, 'Cross-border participation in capacity mechanisms. Proposed methodologies, common rules and terms of operation in accordance with Article 26 of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast)', version of 3 July 2020 ('the proposed technical specifications'), available at https://www.acer.europa.eu/Official_documents/Public_consultations/Pages/PC_E_12.aspx



ACER carefully considered all stakeholders' comments in assessing the proposed technical specifications and finalising its positions. In some areas, this is explicit in the amendments made and reasoning presented in the Decision. In the table below, we make some additional observations in response to the main points raised in the written submissions. Comments pertaining to the related resource adequacy methodologies² are not considered here, as they go beyond the scope of this Decision.

The structure of the table corresponds to the questions of the consultation. Respondents' views are summarised in the left side of the table, and ACER's response is provided in the right side of the table.

² <u>ACER Decision No 24/2020</u> on the European resource adequacy assessment (ERAA) and <u>ACER Decision No 23/2020</u> on the methodology for calculating the value of lost load, the cost of new entry, and the reliability standard (VOLL/CONE/RS).



ACER	·*
European Union Agency for the Cooper of Energy Regulators	ation
or Energy Regulators	

ACER's response

Part 1: Methodology for calculating the maximum entry capacity (MEC)

1.1 Do you agree with the proposed methodology for calculating the MEC for cross-border participation? If not, please explain which elements of the methodology should be changed or otherwise improved.

Three respondents provided high-level views on defining the MEC.

On the one hand, two respondents stressed the importance of setting the MEC at a high level in order to ensure a wellfunctioning market for capacity mechanisms (CMs). In their view, setting the MEC too low might result in discrimination of foreign capacity, reduce/skew investment incentives for interconnectors and new generation, and increase costs and hamper market integration.

On the other hand, one respondent suggested that the MEC calculation should be as conservative as possible until appropriate incentives are placed on the TSOs to guarantee the effective cross-border adequacy contributions.

Seven respondents expressed concerns regarding the proposed approach to determine the expected contribution as the average

While acknowledging the importance to offer as much cross-zonal capacity as possible while ensuring secure grid operation throughout the year (including during system stress), ACER considers that incentives for the TSOs to guarantee effective crosszonal capacity are beyond the scope of the methodology. These matters are governed by Regulation (EU) 2015/12223 and Regulation (EU) 2016/17194.

In addition, ACER notes that these technical specifications provide a methodology for calculating MEC for the purpose of a recommendation of the relevant Regional Coordination Centre (RCC) to the relevant transmission system operators (TSOs). Setting the MEC, however, remains the competence of the relevant TSOs pursuant to Article 26(7) of Regulation (EU) 2019/943 ('Electricity Regulation')⁵, therefore adjustments of the recommended MEC value may be possible, where appropriate.

ACER considers that the average import at times of system stress provides a reasonable, simplified estimate of the expected contribution of the foreign bidding zones to the security of supply of

OJ L 197, 25.7.2015, p. 24.

³ Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management,

⁴ Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation, OJ L 259, 27.9.2016, p. 42.

⁵ 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, 14.6.2019, p. 54.



ACER's response

of imports from the electricity neighbour during all scarcity hours (Article 7 of the proposed technical specifications).

The respondents considered that this approach might:

- a) not reflect the actual technically possible import in a wide range of stress situations, thus leading to an overprocurement of foreign capacity compared to its actual contribution to system adequacy in the Member States concerned (5 respondents);
- b) overestimate the MEC (4 respondents);
- c) lead to security of supply issues and/or undermine the purpose of CMs (4 respondents);
- d) be inconsistent with Article 26(7) of the Electricity Regulation (2 respondents);
- e) be arbitrary and lack proper justification (1 respondent);
- f) not capture the impact of CMs on the expected flows (1 respondent);
- g) be deemed too risky for the local authorities, as it does not take the distribution of imports during stress events into account, and therefore does not reflect a wide variety of scenarios which may vary from net importer to net exporter (1 respondent);

On the contrary, one respondent supported the proposed use of the average imports during system stress periods, seeing it as a balanced approach. In this respondent's view, using the minimum level of imports might underestimate the foreign contribution and increase the costs to consumers, while using the maximum might overestimate the potential contribution of interconnectors and increase system risks.

the Member State applying a CM. ACER amended the proposed technical specifications to require that the RCC recommendation provides sufficient information to the TSOs, also with respect the distribution of contributions to MEC over all defined system stress market time units (MTUs) as well as information relating to capacity resource margin in the contributing bidding zone(s).



Alternative approaches to taking the average of imports were suggested:

- a) MEC should be set at the level of technically possible imports during stress events that reflects the expected net transfer capacity (NTC) and the level of foreign export margin that could be expected to be relied upon during stress events. The MEC should also capture more severe scarcity situations (1 respondent);
- b) MEC should be calculated as the minimum value between the expected NTC level and the level of foreign export margin that could be expected to be available during (both single and simultaneous) scarcity hours. This available margin should be simulated according to the existence or not of a CM also in the foreign country (as the latter might impact the export margin) (2 respondents);
- c) Taking a minimum value over all stress situations may be too extreme. The average indicators should be accompanied by the relevant information on the distribution of flows during stress events on each border (average, minimum, maximum, percentiles p50/p5/p95/..., etc.), the correlations of the cross-border flows between them and with the overall country position, etc. The TSO or the regulatory authority should then decide on the basis of a complete set of indicators which percentile of the distribution should be taken, depending on their risk appetite (4 respondents);
- d) Auction results for long-term cross-border capacity should determine the minimum value for MEC on each border. This is in particular since long-term capacity rights are financial transmission rights (FTRs) or should be so in the near future. (1 respondent);

ACER's response

Regarding point (a), ACER considers that scarcity situations should align with ERAA assumptions in order to ensure consistency between the identification of resource adequacy concerns and cross-border participation to CMs.

Regarding point (b), ERAA relies on a robust probabilistic approach and thus provides realistic results regarding the actual contribution of neighbouring bidding zones during system stress. Taking the minimum of the expected NTC and the level of foreign export margin values may not always lead to realistic results (e.g. in case of interaction among more than two bidding zones). However, ACER considers that information related to capacity margin should be part of the RCC recommendation to the TSO.

Regarding point (c), ACER amended the proposed technical specifications to require that the RCC recommendation includes additional information on the distribution of contributions to MEC over all defined system stress MTUs.

Regarding point (d), ACER notes that the contribution from neighbouring bidding zones may be below the long-term cross-zonal capacity, depending on the availability of foreign capacity resources during system stress, e.g. to reflect "the likely concurrence of system stress" in line with Article 26(7) of the Electricity Regulation.



Respondents' views	ACER's response
Four respondents expressed concerns as to how the proposed MEC calculation takes the expected availability of interconnection into account. One respondent stressed that the MEC calculation should take the expected availability of interconnections into account, considering the occurrence of simultaneous extreme stress events between neighbouring countries in order to avoid overestimation of available contribution of foreign capacity. Two respondents suggested an approach whereby the MEC should be determined by multiplying the physical capacity of interconnectors with the outage rates to reflect the "expected availability of interconnection" and with (1-the probability of simultaneous scarcity) to reflect the 'likely concurrence of system stress'. The likely concurrence of system stress could be calculated using ERAA (as suggested in the proposed technical specifications). In these respondents' view, this approach would be simple/more transparent and should in any case be used for HVDC interconnectors. Moreover, one of these respondents noted that the MEC calculation should only focus on the expected availability of interconnectors, as the likely concurrence of system stress should be handled by the market. One respondent noted that the proposed technical specifications should explain how they take into account the expected availability of interconnection, i.e. both technical and commercial.	See ACER's response to the previous comment related to considering concurrence of system stress in the MEC. ACER considers that the ERAA enables a robust modelling of availability of interconnectors and simultaneity of system stress. Thus, detailed ERAA results already reflect the combined impact of these two factors, rather than relying on two separate factors. Simplified approaches may not fully reflect the complexity of the market and system behaviour (e.g. such as market functioning during system stress MTUs).
There were diverging views on how to define 'system stress' for the purpose of the MEC calculation. One respondent noted that this definition might be too narrow, i.e. defining system stress as periods of involuntary consumer	ACER considers that the MEC calculation should consider at least the MTUs of the CM delivery period for which energy not served (ENS) is positive in the bidding zone where the CM applies, because adequacy needs arise in this bidding zone during these MTUs. ACER



Respondents' views	ACER's response
disconnections only might not fully reflect the times when the system is stressed. The respondent suggested to broaden the definition to include periods where the loss of load probability is material or near-scarcity situations.	acknowledges that additional system stress MTUs may be considered, in justified cases.
One respondent was of the view that the MEC calculation should only consider situations where imports ensure that there is no scarcity (stress hours excluding scarcity hours). The aim of CMs is not to ensure security of supply by avoiding scarcity/load shedding in any situation, but to ensure that a given reliability standard is met. During the hours where scarcity is observed in the ERAA simulations, if the number of these hours is smaller than or equal to the applicable reliability standard, then this scarcity is deemed as accepted and the amount of imports or exports during these hours should not matter for the parametrisation of CMs. One respondent noted that the MEC should factor more severe scarcity situations.	
Five respondents commented on the potential impact of the proposed revenue-sharing methodology on the MEC calculation. According to them, the latter might place a strong incentive on TSOs operating CMs to lower the MEC. The TSO operating the CM would have to estimate the likely concurrence of system stress. The higher the concurrence, the lower the MEC and the greater the proportion of the revenues from allocation of entry capacity that would go back to that same TSO. In that respect, one respondent further explained the potential	See ACER's response to comments in Part II related to the revenue-sharing methodology.
inconsistency between the concepts of MEC and Simultaneous Scarcity Factor (SSF), namely that the MEC methodology does not exclude the possibility of an interconnector receiving both a high MEC and a high SSF. In this case, a relatively high amount	



Respondents' views	ACER's response
of capacity tickets can be sold, however the revenue would mostly accrue to the CM TSO as a result of the high SSF. In that sense, the CM TSOs would have a financial benefit of targeting both a high SSF and a high MEC, which is inconsistent and might lead to either an overestimate of the MEC (which would risk security of supply) or an overestimate of the SSF (which would unfairly reduce the income of the interconnector TSO). Eight respondents provided comments on the link of the MEC methodology with the ERAA methodology. Most of them noted that the complexities of modelling de-rating capacity factors would largely stem from the assumptions, scenarios and models of the ERAA (5 respondents) and that there is a need for consistency between the two methodologies (2 respondents). Two respondents noted that given the ERAA is not yet available, one would need experience with the model before committing to using it in connection with calculating MEC, otherwise it may lead to unintended consequences. One respondent was concerned that it will not be possible for market participants to review, understand and challenge the calculation of the MEC; and that the methodology may not represent fair and unbiased market positions. One respondent noted that the energy market simulation must	ACER notes that the ERAA relies on a robust probabilistic approach and as such provides realistic results regarding the actual contribution of neighbouring bidding zones during system stress, enabling realistic MEC estimates. To ensure full transparency of the MEC calculation, ACER introduced transparency provisions requiring RCCs to publish a minimum set of data items so that stakeholders are able to understand the results from the MEC calculation, along with the main underlying assumptions. The comment on the energy market simulation relates to ERAA and is beyond the scope of this consultation.
comply with requirements set out in Article 10 of the Electricity Regulation.	
One respondent noted that the use of the ERAA central reference scenario with CM for estimating the MEC might be problematic as the scenario is based on TSOs' (subjective) decisions about the type and location of resources successful in a CM auction. This would in turn determine the resource mix of the future and, effectively, the contribution of interconnectors,	ACER considers that the ERAA central reference scenario with CM most accurately reflect the likely cross-zonal exchanges during system stress when a CM is implemented, and therefore is most suitable for MEC calculations. However, ACER considers that additional calibration should reflects the likely impact of the CM, i.e. should not necessarily focus on the Member State with the CM.



Respondents' views	ACER's response
making the whole approach circular. The respondent also noted that this concern holds especially if a simplified calibration is conducted on top of the ERAA central reference scenario. In view of the respondent, since calibration focuses on the Member State with the CM, it may lead to underestimating the MEC. The respondent suggested either using an average of the MEC in the two central reference scenarios (with and without CMs) or using a different calibration processes.	Finally, ACER intends to monitor the impact of scenario calibration on MEC values to ensure that the calibration improves the robustness of MEC values.
Two respondents disagree with Article 10(3) of the proposed technical specifications regarding transmission capacity assumptions . According to the respondents, basing the MEC calculation on not-yet-materialised projects is too risky and not consistent with Article 23(5)(1) of the Electricity Regulation. The respondents suggested considering only the existing grid plus projects already in the commissioning phase. One respondent found the provisions related to transmission capacity and grid modifications unclear, and sought further clarification on the purpose of this Article. In particular, the respondent questioned the reason for considering transmission capacity within a bidding zone since the latter is assumed to be congestion-free in the model.	The comments refer to the ERAA methodology and therefore are beyond the scope of this consultation.
Six respondents were unclear about the scope of derogations from the ERAA results in the National Resource Adequacy Assessments (NRAAs) , their practical application and potential impacts on the final MEC value (Articles 10(7), 10(8) and 10(9) of the proposed technical specifications). As noted by one of them, this approach might increase uncertainty and might discourage further investment in interconnection in the long run.	ACER understands that NRAAs complement ERAA, and may thus provide useful information when estimating the MEC (e.g. regarding particularities of national electricity systems and national demand). ACER considers that in exceptional circumstances, some calibration may apply to the scenario used to estimate the MEC in order to align the forecast level of resource adequacy with the reliability standard in every Member State with CM (in line with Article 22(1)(c) of the



Respondents' views	ACER's response
Another respondent commented that NRAAs should not override the results of the ERAA and the recommendation of the RCCs, and hence recommended that the results of the ERAA and NRAA be analysed together when deciding on the MEC, e.g. by taking into account the probability of the different EU-wide scenarios and national sensitivities and the outcome in each of them.	Electricity Regulation). This is specified in Article 6(4)(b)(ii) of Annex I. Furthermore, for a given CM, to ensure consistency of the calculated MEC on various CM borders, ACER considers that the same resource adequacy study shall apply for all CM borders. Finally, ACER considers that setting the MEC is outside the scope of the technical specifications.
In particular, two respondents were concerned about the proposed calibration of the ERAA scenario set out in Article 10(8) of the proposed technical specifications, noting that its purpose is unclear. One of them considered that the TSO should not decide on asset management, while another questioned the purpose of the exercise (in particular with respect to removing capacities) given that the goal of a CM is to achieve a certain RS. It was noted that the outcome of calibration might have a significant impact on the MEC and would require further investigation from ENTSO-E and ACER.	See ACER's response to the previous comment.
Five respondents reacted to the proposed option for the NRAAs to analyse the statistical distribution of the contribution over all scarcity hours set out in Article 10(9) of the proposed technical specifications.	ACER amended the proposed technical specifications to require that the RCC recommendation provide the information to the TSOs regarding the distribution of contributions over all defined system stress MTUs (see Article 6(7) of Annex I).
Two respondents explicitly supported this option, noting that it would allow the TSOs to deviate from the RCC recommendation and apply a more restrictive approach in determining the MEC. One respondent noted that this analysis should be a general rule, and not only a possible derogation.	The definition of extreme and rare events is a part of ERAA and NRAAs, and therefore beyond the scope of this methodology. Finally, ACER considers that setting the MEC is outside the scope of the technical specifications.



Respondents' views	ACER's response
One respondent insisted on the possibility for Member States to consider more extreme and rare events in the determination of the MEC (and not only the average value for the distribution of imports during stress events). The respondent observed that as security of supply is a national competence, the degree of relying on imports, and thus the coverage to take against more rare and extreme event, could also be a political choice. One respondent sought further clarification on the purpose of this exercise, the use of scenarios, sensitivities as well as the use of results. The respondent also questioned why this should be the responsibility of the NRAAs, and suggested that the RCCs provide this analysis as they are responsible for providing a recommendation to national TSOs about the MEC.	
Nine respondents saw the MEC methodology as complex, unclear, insufficiently advanced and/or lacking transparency/detail to allow for appropriate assessment.	ACER made considerable changes to the ENTSO-E proposed MEC methodology in order to enhance clarity and transparency of the MEC calculation process, e.g. by introducing mathematical
Seven respondents suggested improving transparency of the	equations.
MEC calculation and oversight over the annual calculation process by:	ACER further introduced transparency provisions requiring RCCs to publish a minimum set of data items so that stakeholders are able to
a) providing a timetable and broad constraints on how MEC is calculated based on ERAA (1 respondent);	understand the results from the MEC calculation, along with the underlying assumptions (see Article 10 of Annex I).
b) publishing the inputs and outputs of the modelling (3 respondents);	With respect to the implementation, ACER notes that pursuant to Article 26(13) of the Electricity Regulation, the regulatory
c) publishing the relevant information underlying the central values used for determining the MEC for each border, i.e. the distribution of flows during stress events, the correlations of the cross-border flows between them and with the overall country position, etc. (3 respondents);	authorities are responsible for ensuring that cross-border participation in CMs is organised in an effective and non-discriminatory manner. ACER expects to follow certain aspects of these technical specifications and may assist the regulatory authorities in sharing good practices, if required.
d) publishing reasons for (and consulting on) any deviation from the ERAA assessment (2 respondents);	



Re	espondents' views	ACER's response
e) f)	from the stakeholders at key stages during the process (4 respondents);	Finally, ACER notes that Article 41(1) of the Electricity Regulation requires regular interaction between RCCs and stakeholders.
Ot	her comments:	Regarding point (a), ACER considers that the calculated MEC
a)	delete the concept of ' contribution ' and replace it with the MEC. There needs to be a clear differentiation between cross-border contributions that a bidding-zone can rely upon	should reflect the average contribution that a bidding-zone can rely upon in moments of stress. Regarding point (b), ACER deleted Article 11 of the proposed
	in moments of stress and the MEC for cross-border participation in CM (1 respondent);	technical specifications, as it related to the ENTSO-E proposed revenue-sharing methodology, subsequently amended by ACER.
b)	clarify the purpose of the assessment in Article 11 of the proposed technical specifications (simultaneous scarcity ratio) and the link between the ratio and likelihood of	Regarding point (c), ACER notes that Article 26(7) of the Electricity Regulation requires that the MEC is calculated on an annual basis.
c)	concurrent system stress (Article 14.2.b) (2 respondents); possible annual variation of MEC (calculated by the RCCs) might create uncertainty regarding new interconnector investments and must be avoided unless justified (1 respondent);	Regarding point (d), ACER notes that the comment relates to an earlier version of the draft proposed technical specifications of 31 January 2020, which was subject to ENTSO-E's public consultation. The related wording has been deleted from the version submitted to ACER.
d)	Article 4 of the proposed technical specifications might be discriminatory against foreign capacity, as it obliges the Member State to exhaust all its local capability prior to even	Regarding point (e), ACER considers that this aspect is beyond the scope of the technical specifications, pursuant to Article 26(4) of the Electricity Regulation.
	considering foreign capacity (1 respondent);	Regarding point (f), ACER updated the relevant formula to reflect
e)	1 7 1 7	the possibility of negative contributions in the flow-based case.
f)	not available during system stress (1 respondent); ENTSO-E updated the NTC formula to reflect the possibility of negative contributions (in case of exports from the CM country) but has not done so in the case of flow-based. The respondent requested that the flow-based case is also updated accordingly (1 respondent);	Regarding point (g), ACER considers that harmonisation of CM designs is beyond the scope of these technical specifications. ACER also notes that Article 21(3) of the Electricity Regulation allows different types of CMs, under certain conditions.



Respondents' views	ACER's response
 g) need for harmonisation of CM designs in order to facilitate cross-border participation and to reduce system cost (1 respondent); h) regulatory distortions (i.e. price caps) might affect market functioning, thus the ERAA, and the MEC calculation (1 respondent); i) sequence of the Articles could be re-considered to enhance clarity/readability, e.g. Article 6 should follow Article 10 (1 respondent). 	Point (h) pertains to regulatory distortions which should be reflected by the ERAA, and is thus beyond the scope of these technical specifications. Regarding point (i), ACER introduced considerable editorial amendments in order to enhance the clarity and readability of the technical specifications.
1.2 Should the methodology allow for calculating capacity conwith the Member State applying the capacity mechanism?	tributions from Member States with no direct network connection
Eight respondents considered that the MEC calculation should include capacity contributions from Member States with no direct network connection with the Member State applying the CM (with two respondents supporting this approach only in principle). In view of those respondents, excluding this contribution might: a) decrease competition and diversity of resources that can contribute to security of supply (1 respondent); b) undermine efficient sharing of resources across the EU (2 respondents);	ACER notes that Member States applying CMs may limit cross-border participation to Member States with direct network connection, pursuant to Article 26(2) of the Electricity Regulation. As such, it is for the Member States to define the geographic scope of cross-border participation in their CMs, while the relevant regulatory authorities are responsible for ensuring that cross-border participation in CMs is organised in an effective and non-discriminatory manner, as per Article 26(13) of the Electricity Regulation.
c) lead to suboptimal investments (1 respondent); d) artificially inflate the amount of capacity needed by the Member State applying the CM and understate the contribution of foreign capacity to the security of supply of the Member State applying the CM, thereby increasing inefficiencies and costs to consumers (1 respondent);	ACER considers that, where allowed by Member States, the MEC should be computed for Member States with no direct network connection. ACER amended the proposed technical specifications to reflect this (see Title 2 of Annex I). Furthermore, ACER notes that section 15.3 of Annex I of the Electricity Regulation requires RCCs to provide maximum entry capacities for the system operation region as a whole.



Respondents' views	ACER's response
e) be inconsistent with the Electricity Regulation which does not impose such restrictions but leaves it up to the Member States to decide in that respect (1 respondent);	
However, with respect to including contribution of Member States with no direct network connection, it was also noted that this approach might: a) require specific de-rating capacity factors and/or eligibility criteria and/or other type of assessment to appropriately reflect adequacy contribution of such capacities (8 respondents). Adequacy contribution of capacities installed in Member States with no direct network connections might be strongly impacted by network constraints or other issues related to the bidding zones between the concerned Member State and the bidding zone of the Member State applying the CM (5 respondents). Moreover, a lack of appropriate derating capacity factor might lead to distortions (1 respondent); b) be difficult to implement in practice and/or challenging to model (4 respondents); c) be unnecessary given the temporary nature of CMs (2 respondents);	See above for ACER's response to the previous comment on the geographic scope of cross-border participation in CMs. ACER considers that the calculation of specific de-rating capacity factors for foreign capacity providers is beyond the scope of the technical specifications.
Ten respondents were of the view that priority should be given to the implementation of cross-border participation of capacities located in Member States with direct network connection with the Member State applying the CM. Seven respondents considered that enabling cross-border	See above for ACER's response to the previous comment on the geographic scope of cross-border participation in CMs.
participation of capacity providers from Member States with no direct network connection could then follow at a later stage (and	



Respondents' views	ACER's response
subject to robust assessment or eligibility criteria or derating, as noted by some respondents).	
Two respondents were explicitly against including contributions from Member States with no direct connection, and for considering only contributions from Member States with direct network connection. One of them highlighted the political sensitiveness of security of supply and suggested to require evidence of physical import of electricity from foreign capacity providers. The other respondent noted that there is a possibility whereby the Member States with no direct connection could benefit from capacity remuneration indirectly if there is a lack of capacity in the country in the middle (recursive approach).	See above for ACER's response to the previous comment on the geographic scope of cross-border participation in CMs. In addition, ACER notes that Article 26(4) of the Electricity Regulation prevents cross-border participation in CMs from affecting physical flows between Member States.
One respondent noted that the contribution of imports to security of supply in the Member State applying the CM should be assessed as a single value per bidding zone border regardless of whether this capacity is provided by units located in directly or indirectly connected foreign countries. The respondent noted that the question is rather how the MEC of the Member State applying a CM is shared among the other Member States eligible for cross-border participation. The respondent suggested not to define a rigid sharing of the MEC on a given border, but to define an additional set of MECs for the other borders, based on the exports of indirectly connected Member States during scarcity situations of the Member State applying the CM. These could then be combined similarly to the available transfer capacities (ATCs) in the energy market, with the caveat that there may be interdependencies between the MECs calculated for different CMs.	ACER considers that a single, independent MEC should be computed per CM border, in line with the calculation of one ATC per bidding zone border in the energy market.



One respondent noted that the proposed methodologies under flow-based and NTC diverge in terms how they treat contributions from non-directly interconnected systems:

Under flow-based, the consideration of net positions implies that there will be imports from non-directly interconnected systems that are ignored when setting the MEC. The net position of a bidding zone would only consider the flows that are attributed from that bidding zone to the Member State with a CM. As a consequence, the TSOs would procure more than is needed, since a part of imports to the country with a CM is ignored, and therefore impose higher costs to the consumers of the Member State with a CM. On the contrary, under NTC, all imports from a directly connected bidding zone to the county with a CM would be taken into consideration when setting the MEC.

The respondent suggested the following solution: (i) extend the NTC approach to the flow-based case (i.e. use commercial exchanges) or (ii) use net positions under the flow-based but also consider the imports attributed to non-directly interconnected systems when estimating the amount to procure. In the latter case, the foreign capacity in the non-directly connected systems would not be able to participate in the CM auctions, but their contribution to security of supply to the Member State with a CM will be taken into consideration, leading to over-procurement.

Two other respondents noted that taking a different approach towards transmission capacity within a country or bidding zone, where a copper plate is assumed, might result in discrimination (2 respondents).

ACER's response

See ACER's response to the previous comment on the geographic scope of cross-border participation in CMs.

Notwithstanding this, ACER acknowledges that contribution to security of supply of a Member State applying a CM may come from directly and non-directly connected Member States. ACER also considers that the capacity calculation approach should not fundamentally affect the main assumptions underlying the MEC (especially if flow-based or NTC would lead to similar capacity allocation patterns). Given the above, ACER removed the proposed differentiation between the flow-based and NTC approaches, in order to better reflect and harmonise the calculation of the contribution of non-directly interconnected Member States, where it is applicable.

ACER considers that an approach relying on net position should usually be preferred, because it may better reflect the geographic scope of cross-border participation (especially regarding Member States without direct network connection, if they are allowed to participate). Relying on cross-zonal exchanges is however acceptable, in ACER's view, if the geographic scope of cross-border participation is limited to bidding zones with direct network connection. In this case, the MEC computed based on net positions or cross-zonal exchanges would lead to similar values.



ACER's response

Part 2: Methodology for sharing the revenues from the allocation of entry capacity

2.1 Do you agree with the proposed methodology for sharing the revenues from allocating entry capacity? If not, please explain which elements of the methodology should be changed or otherwise improved

The majority of respondents were against the proposed methodology for sharing the revenues from the allocation of entry capacity. In particular, respondents' concerns related to the proposed sharing key, whereby a share of the total revenue considered for sharing is attributed to the TSO organising the capacity mechanism based on the likelihood of simultaneous scarcity (16 respondents). According to these respondents, the proposed sharing key might:

- a) be inconsistent with the Electricity Regulation and/or the principles of the Internal Energy Market:
 - Five respondents considered that allocating revenues to the TSO operating the CM (which does not own or develop interconnectors) might be inconsistent with the use of revenues for Article 19 objectives. Two of these respondents referred to the GB market, where the independent system operator that would be running the CM is forbidden by licence to build interconnectors.
 - Five respondents considered that allocating revenues to the TSO operating the CM might not promote the objectives of the Electricity Regulation and the fundamental principles of the Internal Energy Market, such as incentivising further investment to alleviate congestion, ensuring a level-playing field, non-discrimination, competition, system security (increased risk of blackouts), security of electricity supply and cost-efficiency;

Having considered all the comments received in the public consultation, ACER amended the ENTSO-E proposed revenue-sharing methodology for reasons set out in section 6.5.1.4 of the Decision.



Respondents' views	ACER's response
b) not constitute a fair reward for foreign capacity and physical cross-border infrastructure. In particular, it fails to take into account the role of interconnectors (4 respondents);	
c) promote inefficiency and distort investment signals, in that it does not adequately remunerate interconnectors and affects financial viability of both existing and new interconnector projects (9 respondents);	
d) provide perverse incentive to the TSO of the CM to set a high probability of simultaneous scarcity (to maximise revenue), resulting in lower MEC and lower cross-border participation (2 respondents);	
e) result in "double de-rating" of transmission capacity, in that it is based on likelihood of concurrent system stress, which is already taken into account in the calculation of the MEC (10 respondents). One respondent is of the view that the right indicator should be based on the probability of single scarcity (and not concurrent scarcity);	
f) be inconsistent with TYNDP CBA 3.0 in that the latter acknowledges the capacity benefit provided by interconnectors (1 respondent);	
 g) be overly complex, unclear and leaves room for interpretation (1 respondent) or uncertain (1 respondent); h) be not sufficiently justified by the ENTSO-E (1 respondent); 	



Respondents' views	ACER's response
Two respondents explicitly supported the proposed methodology for sharing the revenues from the allocation of entry capacity. In their view, the methodology might correctly consider the role of the interconnection capacity as the limiting factor for the contribution of a given bidding zone to the adequacy of the Member State applying the capacity mechanism. Two other respondents supported the proposed high-level principle that revenue sharing should remunerate only the scarce resources.	See ACER's response on p. 17.
Nine respondents suggested applying congestion income sharing key to revenues from allocating entry capacity. In their view, this approach might:	See ACER's response on p. 17. Regarding technical equivalence, see section 6.5.1.4 of the Decision.
a) comply with the legal framework and might not have the drawbacks of the ENTSO-E proposed sharing key (3 respondents);	
b) provide a fair reward to interconnectors for their services (1 respondent);	
c) be consistent with Article 19 of the Electricity Regulation (3 respondents);	
d) reflect the fundamentals of the energy markets (i.e. the same treatment of expected congestions) and might provide a more integrated and consistent European approach to revenue sharing (1 respondent);	
One respondent was explicitly against the 50/50 sharing key. According to this respondent, the sharing key should rather reflect the level of equivalence between foreign and national resources or that extra-derating factors could be applied temporarily to the offers of foreign eligible capacity (affecting their bids and hence, their position in the merit order in comparison to domestic capacity).	



Seven respondents commented on the proposed **determination of the total revenue considered for sharing** (see Article 13 of the proposed technical specifications).

The majority of concerns related to implicit allocation of entry capacity, whereby ENTSO-E proposes to determine the total revenue considered for sharing through the price difference between the price offered in the CM by last contracted capacity and the last contracted foreign capacity. According to the respondents, the proposed calculation assumes uniform pricing of the capacity market, which might not necessarily be the case. The respondents expressed concerns that the proposed calculation might not fully capture a variety of CM designs and clearing principles (decentralized markets, strategic reserves, pay-as-bid, etc.) and therefore the determination of the total revenue might be dubious (5 respondents). One respondent suggested that the price of the first non-contracted bid of foreign capacity (if any) could be used (instead of the last).

Other respondents commented that:

- a) the proposed determination of the total revenue considered for sharing in case of explicit allocation should not be based on a supply-demand balance, but should reflect the MEC calculation (i.e. the expected contribution of foreign capacity in times of system stress) (1 respondent);
- b) foreign capacity providers should not pay for any capacity tickets in cases of implicit allocation as this would be discriminatory vis-à-vis domestic capacity providers and/or would lead to double payments for the same transmission capacity (2 respondents), but that running an explicit auction is within Member State's discretion (1 respondent);

ACER's response

ACER considers that the determination of the total revenue considered for sharing, as well as the rules for allocation of entry capacity, go beyond the scope of these technical specifications, for the following reasons:

- a) pursuant to Article 26(11)(b) of the Electricity Regulation, the technical specifications shall solely specify how to share the revenues from the allocation of entry capacity;
- b) Article 26(9) of the Electricity Regulation determines that all revenues from the allocation of entry capacity shall accrue to the TSOs concerned;
- c) it is for the Member States to ensure that the entry capacity is allocated to eligible capacity providers in a transparent, non-discriminatory and market-based manner, pursuant to Article 26(7) of the Electricity Regulation.

Given the above, ACER deleted Article 13 of the proposed technical specifications.

Regarding comment in point (c), ACER considers that revenues from the allocation of entry capacity are distinct from the revenues from the allocation of other cross-border products, thus do not lead to double payments.

Regarding comment in point (d), ACER considers that the MEC below the cross-zonal capacity available to the market does not necessarily mean that the interconnection capacity is the limiting factor, because the MEC reflects the average of contributions. For example, the distribution of contributions to MEC may show that interconnection capacity was limiting during some system stress market time units.



Respondents' views	ACER's response
 c) there should be coordination between congestion rents and revenues from allocating entry capacity to avoid double payments (1 respondent); d) no revenue should accrue to the TSOs if the MEC falls below transmission capacity available to the energy market (signalling the scarcity of foreign resources) (1 respondent); e) the proposed determination of the revenue considered for sharing would be analogous to congestion rents generated by interconnectors across various timeframes, so this would be a well-established and understood principle (1 respondent); 	
Seven respondents commented on the use of revenues arising through the allocation of the entry capacity. The majority of them were of the view that earmarking all the revenues for the objectives listed in Article 19 might not be entirely justified and that instead, a share of revenues might be used by the CM operator for uses linked to the CM itself, e.g. to reduce the CM costs or improve its functioning (5 respondents).	ACER notes that pursuant to Article 26(9) of the Electricity Regulation, all revenues from the allocation of entry capacity shall be used for the purposes set out in Article 19(2) of the Electricity Regulation. As such, the use of these revenues goes beyond the scope of these technical specifications.
Two respondents supported the view that all the revenues from the allocation of the entry capacity should be used pursuant to Article 19, in particular to alleviate those transmission bottlenecks that provide the revenue in the first place (1 respondent) or to guarantee the actual availability of the allocated capacity including firmness compensation (1 respondent).	
One responded was of the view that revenues from the entry capacity should be allocated between TSOs and foreign capacity considering the scarcity of transmission capacities between the Member States.	



Respondents' views	ACER's response
Four respondents questioned the reciprocity clause in Article 26(9) of the Electricity Regulation, i.e. the non-application of the revenue sharing methodology to Member States without CMs or with CMs closed to cross-border participation. In their view, Article 26(9) might:	ACER considers that Article 26(9) of the Electricity Regulation determines the scope of application of the revenue-sharing methodology.
 a) penalise the grid users of the Member States with no CMs; b) not provide sufficient incentives/remuneration for the TSOs of these Member States to facilitate participation of their capacity providers in the neighbouring CM; c) be against competition law as it might treat Member States with no CMs as Member States with CMs closed to cross-border participation; d) incentivise Member States without CMs to introduce them; e) contradict the European project. Two respondents explicitly agreed with the reciprocity clause. 	
Five respondents considered that the regulatory authorities might be better placed to define the revenue sharing methodology. Also, two of those respondents noted that the regulatory authorities are better placed to assess whether, and to what extent, there is a real equivalence between foreign and domestic resources (and allocate revenues accordingly).	See ACER's response on p. 17. Regarding technical equivalence, see section 6.5.1.4 of the Decision.



of	Energy Regulators	
	Respondents' views	ACER's response

Part 3: Common rules for the carrying out of availability checks

3.1 Do you agree with the proposed common rules for the carrying out of availability checks? If not, please explain which elements of the proposed rules should be changed or otherwise improved.

Four respondents broadly supported the proposed rules, while two respondents were explicitly against them, and one of them suggested introducing foreign capacity de-rating to verify capacity commitments.

ACER considers that the calculation of specific de-rating capacity factors for foreign capacity providers is beyond the scope of the technical specifications.

Regarding technical equivalence, see section 6.5.1.4 of the Decision.

Seven respondents highlighted the need to apply the **principle of non-discrimination** to availability checks of foreign capacity providers, i.e. to apply availability checks that would be as close as possible to the ones that are applicable to domestic capacity. Some respondents were concerned how these checks can be performed in a non-discriminatory manner if the processes differ across the Member States.

In that respect, two respondents noted that Article 26 of the Electricity Regulation requires a common set of rules across CMs for the determination of availability checks. In their view, the proposed technical specifications might not provide for a consistent, harmonised approach at the European level. One of them noted that an inconsistent approach to availability checks might lead to different levels of considered availability volumes and might thus invalidate the proposed definition of non-availability volume set out in Article 23 of the proposed technical specifications.

Two respondents suggested deleting "if possible" in Article 16(2) of the proposed technical specifications.

ACER considers that availability checks of foreign capacity providers for a given CM shall be based, as much as possible, on the availability check rules of this CM, and shall be equivalent as much as possible to the domestic CMUs participating in a given CM. In ACER's view, this approach is consistent with the principle of non-discrimination without unduly limiting or otherwise affecting the existing or future CM designs. The principle of non-discrimination is reflected in Article 12 of Annex I.

Regarding harmonisation of CM designs, see ACER's response to point (g) on p. 12.



Respondents' views	ACER's response
Regarding internal congestions and the presumption of availability of foreign capacity in Article 18(5)(b) of the proposed technical specifications, two respondents were concerned that this might incentivise the surge of national grid constraints (in particular in the actual occurrence of simultaneous scarcity situations). In order to avoid such risk, they suggested defining remedial actions to maximise the availability of interconnectors and foreign capacity, post-check analysis of the unavailability of foreign capacity or other equivalent measures. They also suggested considering potential liability of the TSOs in case of non-delivery of contracted capacity in neighbouring Member States due to insufficient congestion management, including post-check analysis with eventual penalties or compensation costs. Two respondents noted the potential impact of internal congestions on the ability of a foreign resource to contribute to a CM. One of them suggested that the foreign TSO carrying out the availability checks take into account relevant grid constraint inside its own control area, which should be added to the basic de-rating capacity factor based on resource availability and incorporated in the availability check methodologies referred to in Article 16(2)(c) of the proposed technical specifications.	ACER considers that cross-zonal capacity calculation (and maximisation) is beyond the scope of the methodology, pursuant to Article 26(4) of the Electricity Regulation. Furthermore, TSOs are responsible for managing network congestion pursuant to Article 16 of the Electricity Regulation.
Two respondents suggested introducing availability checks for interconnectors. If interconnectors receive financial rewards for addressing scarcity concerns they should be incentivised to ensure their assets are available at times of system stress, and therefore should be subject to the same availability checks as foreign capacity.	See above for ACER's response to the previous comment.



Respondents' views	ACER's response
Three respondents considered it important that availability checks do not affect the level of system security, supporting the explicit clause in Article 18(2) of the proposed technical specifications.	This requirement is set out in Article 12 of Annex I.
One respondent noted that availability checks should be pragmatic and done in the framework of existing cooperation of the concerned TSOs. The respondent suggested requiring from foreign capacity providers to offer their capacity on the local energy markets, which might allow an easier availability check of the concerned capacities (noting that in some cases – such as demand side response – it might not be possible, and more elaborated checks might be required).	ACER considers that requiring the capacity to be offered on the local energy market may contradict local CM design, e.g. for strategic reserves. ACER considers that availability check rules should as much as possible be equivalent for domestic and foreign capacity providers.
 Other concerns related to: a) not enough details provided, making it impossible to provide any meaningful assessment (1 respondent); b) strong focus on generators, noting that it should be made clear that the rules also apply to demand side response (1 respondent); c) replacing "delivery period" with "reference period" in Article 16(2)(a) of the proposed technical specifications (1 respondent); d) adding information about reference periods in Article 17(2) of the proposed technical specifications (1 respondent); e) adding reference to interferences in the different market timeframes to Article 18(2) of the proposed technical specifications (1 respondent); f) clarifying that the two situations listed in Article 18(5) of the proposed technical specifications are exclusive (1 respondent); 	Regarding point (a), ACER notes that Article 21(3) of the Electricity Regulation allows different types of CMs (under certain conditions). As a result, to avoid undue market distortions (between domestic and foreign capacity providers) in line with Article 22(1)(b) of the Electricity Regulation, these technical specifications provide a high-level framework for cross-border participation. Regarding point (b), ACER notes that Article 22(1)(h) of the Electricity Regulation requires that CMs are open to participation of all resources that are capable of providing the required technical performance, including energy storage and demand side management. ACER considers that these technical specifications are technology-neutral and in line with the above requirement. Regarding points (c) and (d), ACER replaced 'delivery period' with 'reference period' in Article 16(2)(a) of the proposed technical specifications, and added information about reference periods in Article 17(2). The changes are reflected in Article 12(3)(a) and Article 13(2) of Annex I.



Respondents' views	ACER's response
	Regarding point (e), Article 12(5) of Annex I specifies that the foreign TSO should endeavour to minimise the impact of availability checks on the markets considered for availability checks.
	Regarding point (f), ACER clarified Article 15(2) of Annex I.
	Regarding point (g), Article 15(3) of Annex I acknowledges that different monitoring approaches are possible.



Respondents' views	ACER's response
Part 4: Common rules for determining when a non-availability	payment is due
4.1 Do you agree with the proposed common rules for determine which elements of the proposed rules should be changed or other.	ing when a non-availability payment is due? If not, please explain erwise improved.
17 respondents commented on the proposed common rules for determining when a non-availability payment is due, with six respondents generally supporting the proposed rules and/or their objective.	N/A
Seven respondents highlighted the need to apply the same rules to foreign and domestic capacity providers in light of the principle of non-discrimination. One respondent suggested deleting "as possible" from Article 21(2) of the proposed technical specifications to ensure equal treatment.	ACER considers that for a given CM, domestic and foreign capacity providers should be subject to equivalent, as much as possible, rules on non-availability payments. In ACER's view, this approach is consistent with the principle of non-discrimination without unduly limiting or otherwise affecting the existing or future CM designs. The principle of non-discrimination regarding the application of non-availability payments is reflected in Article 17 of Annex I.
A number of respondents commented on Article 20(3) of the proposed technical specifications, which states: "when availability commitments are overlapping, the capacity provider has to provide a capacity equal to the sum of availability commitments he has".	ACER has deleted Article 20(3) of the proposed technical specifications, and has introduced Article 17, paragraphs (1) and (3) of Annex I. This amendment aligns the technical specifications with Article 26(6) of the Electricity Regulation, which describes provisions related to participation in more than one CM.
Seven respondents generally supported the principle to ensure that capacity providers are incentivised/able to meet the sum of capacity commitments undertaken, and for which they are remunerated.	In particular, Article 26(5) of the Electricity regulation does not prevent capacity providers from offering the same capacity in more than one CMs, but Article 26(6) requires that capacity providers unable to fulfil multiple commitments shall be subject to multiple non-availability payments.
	ACER considers that the calculation of specific de-rating capacity factors for foreign capacity providers is beyond the scope of the technical specifications.



Respondents' views	ACER's response
Four respondents suggested amending Article 20(3) to clarify that the intent of the clause is that penalties for non-delivery should reflect simultaneous stress in both markets but that parties are still free to bid into each market without restriction. These respondents noted that such an approach would be in line with the intention of the Electricity Regulation, and would avoid overcapacity and increased costs for European consumers. One respondent noted that neither the proposed technical	
specifications, nor the Electricity Regulation, is clear about whether the same capacity may be offered to multiple capacity markets for the same delivery period, and noted that such a possibility (even with the prospect of facing multiple non-availability payments) might undermine confidence in the capacity offering.	
Finally, one respondent noted that multiple commitments of available capacity should be handled "ex-ante" in the CM rules, via the introduction of an appropriate de-rating capacity factor for foreign capacities (see point 6.1 below). Addressing the issue expost, in view of the respondent, might endanger security of supply.	
Three respondents were of the view that also TSOs should be subject to non-availability payments in case the cross-border capacity they offer on the energy market during reference periods is lower than the entry capacity that has been allocated for cross-border participation. According to these respondents, this approach might provide an incentive to the TSOs to carefully estimate the MEC.	ACER considers that cross-zonal capacity calculation (and maximisation) is beyond the scope of the methodology, pursuant to Article 26(4) of the Electricity Regulation. TSOs are responsible for managing network congestion pursuant to Article 16 of the Electricity Regulation. Furthermore, pursuant to Article 26(13) of the Electricity Regulation, regulatory authorities (not TSOs) shall ensure effective cross-border participation in CMs.



Respondents' views	ACER's response
On a related note, two respondents suggested appropriate incentives and/or obligations on TSOs to guarantee transmission capacity and balancing through dispatching or, more broadly, where effective cross-border participation depends on them.	
Three respondents noted that the proposed rules do not address the situation where a capacity provider is located in an energy-only market and is (over)committing its capacity in foreign CMs. As explained by one of the respondents, the energy delivered by this available capacity might nevertheless be fully absorbed by the "energy-only zone" (i.e. no actual contribution to the foreign capacity markets) while the proposed formula might nevertheless lead to an absence of non-availability volume for the foreign capacity markets (i.e. no penalty). According to the respondents, this might create a distortion between capacity contract holders depending on whether they are located in an energy-only market zone or not. One respondent suggested addressing this risk by introducing an appropriate de-rating capacity factor reflecting the ability to deliver the same level of service on the other side of the border.	ACER considers that only CM commitments should be considered when assessing when a non-availability payment is due. "Availability" for the energy-only market should not reduce the availability for CMs. ACER considers that the calculation of specific de-rating capacity factors for foreign capacity providers is beyond the scope of the technical specifications.
Two respondents agreed that planned unavailability should not be penalised if agreed upon with the TSOs.	ACER considers that foreign and domestic capacity providers should be subject, as much as possible, to equivalent rules regarding calculation of non-availability payment (including exemptions). This is specified in Article 17(2) of Annex I.
Two respondents suggested applying stop-loss limits to non-availability payments on a monthly/yearly basis to incentivise capacity providers to fulfil their availability commitments over the full obligation period.	See ACER's response to the previous comments above, also applicable to stop-loss limits.



Respondents' views	ACER's response
Two respondents pleaded for reasonable penalties, noting that the escalation of penalties proposed in Article 24(4) of the proposed technical specifications might lead to excessive risks for capacity providers and hamper participation in the CMs.	See ACER's response to the previous comments above, also applicable to the escalation of penalties.
One respondent noted the lack of rules on contract termination fees and on how to apportion penalties across borders if penalty rates are different (1 respondent);	See ACER's response to the previous comments above, also applicable to the rules on contract termination fees.
Other comments related to: a) amending and clarifying Article 23(5) of the proposed technical specifications (in the rules as well as the explanatory note) (1 respondent); b) linking Article 23(6) of the proposed technical specifications to Article 27 of the Electricity Regulation, with no retroactive application for already contracted capacities (1 respondent); c) removing inconsistency between Article 24(2) and Article 18(5)(b) of the proposed technical specifications (1 respondent); d) ensuring that where a capacity provider consists of an aggregation of geographically separate providers, that authorities can verify that constituent parts are not allocated repeatedly into separate CMs (1 respondent);	Regarding point (a), ACER deleted Article 23(5) of the proposed technical specifications because ACER considers that the delivery period of a CM should accurately reflect the residual resource adequacy concern that a Member State intends to address. Regarding point (b), ACER deleted Article 23(6) of the proposed technical specifications, as Article 4(4) of Annex I requires ENTSO-E to review all the elements of the technical specifications (including the calculation of non-availability volumes) after their first application. With respect to existing contracts, Article 22(5) of the Electricity Regulation confirms that commitments or contracts concluded by 31 December 2019 shall not be affected by the implementation of Chapter 4 of the Electricity Regulation. Regarding point (c), ACER removed the inconsistency (see Article 15(2) of Annex I). Regarding point (d), ACER notes that Article 26(3) of Annex I restricts simultaneous participation in CMs for aggregated CMUs, when the foreign TSO is unable to assess individually the performance of each separate provider.



Respondents' views	ACER's response		
Part 5: Terms of the operation of the ENTSO-E registry	·		
5.1 Do you agree with the proposed terms of the operation of the proposed terms should be changed or otherwise improved.	the ENTSO-E registry? If not, please explain which elements of		
Eleven respondents commented on the proposed terms of the operation of the ENTSO-E registry, with three respondents explicitly supporting the proposed terms. One of them stressed that the registry should enable the check of simultaneous participations in several CMs and the associated non-availability payment calculation by sharing all the data needed for this purpose.	Pursuant to Article 26(10) of the Electricity Regulation, ACER considers that the primary goal of the registry is to collect information about eligible capacity providers. Assessing non-availability payments may rely on other sources of information.		
Seven respondents suggested considering the interaction between the ENTSO-E registry and other databases (e.g. REMIT, national capacity registries) to avoid multiple submissions of the same data to different databases (e.g. double reporting obligations). The respondents were concerned that this might increase workload and the risk of inconsistent data. In particular, two respondents stressed that the local TSOs should be able to collect and transfer to the registry all the information necessary for the effective participation in a given CM and not only the general information presented in Article 27(2) of the proposed technical specifications. This would avoid having to deal with multiple technical solutions and multiple submissions of the same data, limiting the interface for data exchange of the capacity provider to the IT systems of the local TSO. According to the respondents, more detail should be provided on the development of the required interfaces by the ENTSO-E, along with an implementation timeline.	ACER considers that Article 22 of Annex I specifies an appropriate data scope to enable effective cross-border participation in CMs (in particular concerning eligibility, which is the primary goal of the registry). ACER considers that, when implementing the registry, ENTSO-E (and TSOs) may investigate automated data interfaces and transfers to limit the data collection burden and to ensure consistency among the various databases. ACER introduced requirements to ensure an appropriate data interface, in Article 21(6) and Article (7) of Annex I. As specified in Article 4 of Annex I, the implementation timeline for the registry is specified in Article 26(15) of the Electricity Regulation.		



Respondents' views	ACER's response
Two respondents commented on the practical implementation of the Registry, noting that cost-efficiency and user-friendliness should be taken into account in the process.	ACER added new requirements in Article 21, paragraphs (6) and (7) of Annex I, specifying that the registry shall at least be accessible in English and that ENTSO-E should endeavour to ensure user-friendly access and data submission. In ACER's view, these requirements ensure effective access to the registry for all European capacity providers, while not presenting an excessive administrative and financial burden for ENTSO-E.
Other comments related to: a) including data of the capacity provider in Article 27 of the proposed technical specifications (beyond the data related to the CMU) (1 respondent); b) adding: "after notification of the capacity provider concerned, without prejudice of Article 28(10)" in Article 27(4) of the proposed technical specifications (1 respondent); c) clarifying that interconnectors are also listed in the Registry and that they are able to participate in the secondary market, i.e. to trade their obligations with other interconnectors on the same bidding zone border (1 respondent);	Regarding point (a), ACER amended Article 27 of the proposed technical specifications to require that the registry includes data related to capacity providers as well as CMs, on top of data related to CMUs. The relevant amendments are reflected in Article 22 of Annex I. Regarding point (b), ACER amended Article 27(4) of the proposed technical specifications to clarify the responsibilities with respect to data accuracy and data updates. The relevant aspects are specified in Article 24 of Annex I. Regarding point (c), ACER notes that the registry is set up for the purpose of registering eligible capacity providers, as specified in Article 26(10)(a) of the Electricity Regulation, and as such shall at least include information related to capacity providers (without obligation to include information related to interconnectors).



Respondents' views	ACER's response
Part 6: Common rules for identifying capacity eligible to partic	cipate in the capacity mechanism
6.1 Do you agree with the proposed common rules for identifying not, please explain which elements of the proposed rules should	ing capacity eligible to participate in the capacity mechanism? If d be changed or otherwise improved.
Thirteen respondents commented on the proposed eligibility rules, with two respondents explicitly supporting the proposed technical specifications.	N/A
Seven respondents highlighted the need to apply eligibility criteria for foreign capacity providers that would be as close as possible (or identical) to the ones that are applicable to domestic capacity providers. This also refers to de-rating of different types of assets (per technology and country) by including their expected contribution to reliability of the Member State applying the CM (if applied for domestic resources). As noted by some respondents, this would ensure non-discrimination and a level-playing field between foreign and domestic capacity providers, and ensure that the regulatory authority of the Member State applying the CM control the criteria that a capacity provider must meet to provide capacity to its system.	Article 26(1) of Annex I specifies that eligibility criteria for foreign capacity providers shall reflect the technical requirements for participating in a given CM, based on the list provided by the CM operator. In a given CM, these technical requirements shall be equivalent, as far as possible, for domestic and foreign capacity providers participating. In ACER's view, this approach ensures a level-playing field between domestic and foreign capacity providers without unduly limiting or otherwise affecting the existing or future CM designs. ACER notes that de-rating of assets is determined in the rules of each CM and is beyond the scope of these technical specifications.
One respondent was of the view that eligibility should entail appropriate de-rating capacity factors per technology class for foreign capacity reflecting their expected contribution to the export margin during system stress. In the respondent's view, this approach would be technology-neutral and would be analogous to the treatment of local intermittent RES generation (de-rated based on their effective/expected contribution to adequacy in the country). Otherwise foreign capacity would be remunerated for a service that it cannot offer in practice, as stated by the respondent.	ACER considers that the calculation of specific de-rating capacity factors for foreign capacity providers is beyond the scope of the technical specifications.



Respondents' views	ACER's response
Four respondents commented on the proposed treatment of aggregated units (Article 29(6) and Article 29(7) of the proposed technical specifications). Three of them noted that the proposed rules should not prevent capacities, which are contracted in CMs requiring participation in aggregated form, from participating in foreign CMs requiring a unit-based participation.	ACER notes that restrictions on simultaneous participation in multiple CMs for aggregated CMUs should apply only if the foreign TSO is unable to assess the technical performance (related to eligibility) and/or availability of a given individual unit within an aggregated CMU. This is reflected in Article 26(3) of Annex I.
One respondent noted that the proposed rules should not affect national arrangements to participate in the electricity markets (energy, balancing and/or ancillary services).	ACER considers that the rules governing the energy, balancing and ancillary services markets are beyond the scope of these technical specifications.
There was support for the definition of "Capacity Market Unit" in Article 2(c) of the proposed technical specifications.	
Other comments related to: a) adding "without undue delay" in Article 30 of the proposed technical specifications (1 respondent); b) regarding data listed in Article 31(1), requiring EIC to the capacity provider too and data like technology type and fuel should refer to Regulation 543/2013 and reuse as much as possible the information available in the Transparency Platform (1 respondent); c) specifying who should be responsible for regularly verifying the data of eligible capacity mechanism units, in Article 31(5)	Regarding point (a), Article 27(8) of Annex I requires that the foreign TSO's actions related to the registration process (including notifications and updates) are performed in a timely manner and without unjustified delay. Point (b) refers to technical implementation aspects that are beyond
	the scope of these technical requirements. ACER expects that these aspects will be further specified by ENTSO-E.
	Regarding point (c), ACER considers that the foreign TSO is responsible for the verification of the data of eligible CMUs. This aspect is clarified in Article 27(6) of Annex I.
of the proposed technical specifications (1 respondent); d) specifying "new foreign capacity contracts" in Article 31(6) of the proposed technical specifications (1 respondent);	Regarding point (d), ACER deleted Article 31(6) of the proposed technical specifications, noting that the legal consequences of a
e) including eligibility rules for transmission infrastructure (1 respondent);	CMU losing its 'eligibility' status may be CM-specific, and therefore it is more appropriate to stipulate them in the relevant CM contracts, rather than in the common rules for identifying eligible capacity.



Respondents' views	ACER's response
	Regarding point (e), ACER notes that eligibility rules for transmission infrastructure are outside the scope of the common rules for identifying capacity providers eligible to participate in CMs, pursuant to Article 26(10)(f) of the Electricity Regulation.



ACER's response

Part 7: General provisions and other comments

7.1 Do you agree with the general provisions of the ENTSO-E proposed technical specifications (Title 1)? If not, please specify which provisions should be changed or otherwise improved, and explain why.

potential costs incurred by the foreign TSO when performing the tasks listed in Article 26(10) of the Electricity Regulation (Article 3 of the proposed technical specifications).

Four respondents supported the proposed approach in Article 3. In particular, three of them considered it crucial in enabling successful implementation of cross-border participation as it would ensure equal treatment of costs related to the CM (i.e. all costs would be recovered by the associated cost recovery mechanism). One respondent agreed with the proposed principle that these costs should not be borne by the foreign TSO (or foreign consumers) and noted that the foreign TSO should effectively act as a "subcontractor" to the CM operator.

Two respondents expressed concerns with regard to the proposed approach in Article 3. One of them considered that cost coverage might be out of the scope of the proposed technical specifications, inconsistent with the Clean Energy Package and might lead to an inefficient operation of the CMs (as the principle of costefficiency would not be observed). The other respondent was of the view that it should be up to the relevant regulatory authorities to agree on cost coverage, and that Article 3 should apply only as a last resort where the regulatory authorities are unable to reach an agreement.

One respondent noted that a lack of agreement on costs between the neighbouring TSOs should not be a barrier to swift

Seven respondents commented on the proposed treatment of the ACER deleted Article 3 of the proposed technical specifications. In ACER's view, this matter is beyond the scope of the technical specifications, considering the mandate of the regulatory authorities to ensure an effective organisation of cross-border participation, pursuant to Article 26(13) of the Electricity Regulation. However, ACER acknowledges the concerns expressed by the stakeholders that a lack of agreement between the relevant TSOs and/or their regulatory authorities on cost-sharing might be a barrier to timely implementation of cross-border participation. ACER intends to follow this aspect closely and may consider a separate recommendation on the matter, if appropriate.



Respondents' views	ACER's response
implementation of cross-border participation and suggested to devise a dispute settlement mechanism administered by ACER in case there is no collaboration/agreement between the TSOs.	
Ten respondents provided comments on the implementation period set out in Article 4 of the proposed technical specifications. Eight of them suggested defining a clear(er) entry-into-force for the proposed technical specifications, with some respondents proposing a timeline of 2-3 years following the approval, and one respondent recognising that different elements of the technical specifications may require different implementation timelines. Five respondents were critical of Article 4 in that it does not provide sufficient visibility on the timeline and/or seems to redefine the timelines provided in the Electricity Regulation and/or Member States' commitments as part of the State aid approval processes, aiming to delay the implementation. One of these respondents considered it unnecessary to wait for the full implementation of the economic viability assessment within the ERAA before calculating the MEC for the first time (second paragraph of Article 4), and that this calculation can be performed as soon as ERAA is implemented, even though not entirely. The respondents also suggested: a) a pragmatic approach to implementation, using the frameworks and obligations already implemented (e.g. REMIT) or the data already collected by the neighbouring TSOs to limit administrative burden (1 respondent); b) covering the implementation in ACER's Market Monitoring Report (1 respondent);	ACER amended the proposed implementation aspects. In general, ACER acknowledges that the full implementation of these technical specifications relies on the adaptation of the relevant regulatory frameworks. This is reflected in Article 4(1) of Annex I. However, ACER agrees that different elements of these specifications might require different implementation timelines, notwithstanding the legal deadline envisaged for the registry of eligible capacities. For example, implementation of Title 2 depends on the establishment of RCCs and the availability of ERAA results. Article 4 of Annex I, paragraph (2) and (3), reflects this aspect. ACER also agrees that full implementation of the economic viability assessment is not necessary for the implementation of Title 2. Given that Article 6(4)(b) of Annex I allows for a calibration of resource adequacy studies, RCCs or TSOs are able to mitigate the impact of a simplified economic viability assessment on the calculation of the MEC. Regarding point (a), ACER considers that detailed implementation aspects and interactions with other existing frameworks are beyond the scope of these technical specifications. Certain aspects will require further detailed arrangements by way of bilateral agreements between the relevant TSOs and/or CM operators, taking national particularities into account. See ACER's response on data interfaces on p. 31. Regarding point (b), ACER considers that ACER's monitoring of the performance of Member States in the area of security of supply goes beyond the scope of these technical specifications.



Respondents' views	ACER's response
c) removing Article 1(j) of the proposed technical specifications which, in view of the respondent, might be unclear, inconsistent with the Electricity Regulation and might leave the door open for ENTSO-E to delay implementation of cross-border participation (1 respondent);	Regarding point (c), ACER removed Article 1(j) of the proposed technical specifications. Implementation aspects are addressed in Article 4 of Annex I.
One respondent explicitly supported all implementation conditions listed in Article 4, seeing them as essential for effective functioning of cross-border participation (in particular the readiness of legal, regulatory and contractual frameworks).	
A number of respondents provided comments on the definitions set out in Article 2 of the proposed technical specifications. In particular, it was noted that:	ACER updated the list of definitions to align with the amended technical specifications, where appropriate.
a) 'availability' (letter (a)) does not explain (in point b) what capacities this could refer to or in what situations a capacity contracted in a CM may not participate in the market (1 respondent);	
b) 'capacity mechanism contract' (letter (e)) should refer to the delivery period instead of reference period to align with the definitions of 'activation' and 'non-availability volume'(1 respondent);	
c) 'scarcity' and 'system stress' (letter (u)) should be clearly defined, e.g. with reference to the security of supply standards of Member States (2 respondents); for comments on the scope of 'system stress', see Part 1, section 1.1, p. 6);	
d) 'scarce asset' (letter (w)) should include also internal transmission capacity or electric resources (1 respondent);	
e) 'curtailment sharing rule' (letter (cc)) is unclear, e.g. with regard to curtailment ratios between bidding zones (2 respondents);	



Respondents' views	ACER's response	
Three respondents commented on Article 1(i) of the proposed technical specifications covering cross-border participation in a CM based on reliability options , noting that: a) they agree with the provision (1 respondent); b) these types of CMs should, to the highest extent possible, be standardised (1 respondent); or c) it is not clear why the payback obligation cannot apply to foreign capacity (and defining the reference price as the equivalent market price in the bidding zone where the foreign capacity is located) (1 respondent).	Recognising the specificities of reliability options, ACER notes that the application of Title 3 may in this case be subject to further conditions in order to ensure the provision of appropriate incentives to the involved stakeholders. This is specified in Article 3 of Annex I.	
One respondent noted that Article 1(h) of the proposed technical specifications on DSO involvement is unclear and appears to be prospective. The respondent suggested elaborating on the nature of DSO involvement.	ACER acknowledges that a TSO-DSO collaboration may be possible, and that a transition period may be foreseen during which only TSOs address the tasks mentioned in these technical specifications. This is reflected in Recital (6) of Annex I. ACER intends to follow closely the DSO involvement in cross-border participation in CMs.	
7.2 Do you have any other comments on ENTSO-E's proposed technical specifications that ACER should take into account in its assessment?		
Seven respondents touched upon the high-level principles / objectives of cross-border participation. Five respondents noted that the proposed solutions should neither jeopardise security of supply objectives nor result in higher capacity procurement costs. In that respect, three respondents considered that in order to ensure security of supply in a cost-effective way , the proposed technical specifications should entail simple solutions and avoid excessive administrative and financial burden for the TSOs and market participants.	ACER notes that the proposed technical specifications observe the objectives and market principles set out in the Electricity Regulation. Recital 11 of Annex I details how these technical specifications contribute to the objectives set out in Article 1 of the Electricity Regulation and how they comply with the principles of the electricity market operation pursuant to Article 3 of the Electricity Regulation. Regarding comments on effective and technology-neutral cross-border participation, ACER notes that the regulatory authorities have to ensure an effective and non-discriminatory organisation of	



Res	pond	ents'	views	

One respondent stressed the need to ensure **effective and technology-neutral** direct participation of foreign assets, (generation, demand-response, storage) with appropriate **incentives and/or obligations on TSOs**, where this effective participation depends on them.

Four respondents stressed there should be **equivalence between foreign capacity and domestic capacity**. According to one respondent, this means that the application of the same criteria, processes and obligations.

Six respondents provided views on the implementation of the technical specifications via TSO cooperation and bilateral agreements.

Out of them, three respondents considered that such agreements are key for successful implementation of the proposed technical specifications, and should remain technical documents and take into account the specificities of the respective Member States. Two other respondents were of the view that the proposed technical specifications leave too much detail for bilateral agreements between the TSOs, without providing sufficient incentives for the TSOs to cooperate and enter into such agreements. Therefore, they suggested putting an obligation on the TSOs to set up such bilateral agreements within a prescribed timeline (e.g. 12 months before the deadline set out in Article 26(2) of the Electricity Regulation). In addition, given the likelihood of prolonged unavailability of bilateral agreements between TSOs, one of those respondents suggested to develop transitional rules for (direct) interconnector participation, as otherwise it would be left to national frameworks. Another respondent suggested applying the MEC methodology also in case of direct participation of interconnectors, to ensure harmonisation.

ACER's response

cross-border participation pursuant to Article 26(13) of the Electricity Regulation.

Regarding technology-neutrality, see ACER's response to point (b) on p. 25.

Regarding technical equivalence, see section 6.5.1.4 of the Decision.

ACER considers that detailed implementation arrangements at the regional and national level, including bilateral agreements between the relevant TSOs, are beyond the scope of these technical specifications.

Pursuant to Article 26(13) of the Electricity Regulation, regulatory authorities shall ensure that cross-border participation in CMs is organised in an effective and non-discriminatory manner. ACER expects to follow certain aspects of these technical specifications and may assist the regulatory authorities in sharing good practices and issuing recommendations if required.

Regarding the comment on transitional rules for interconnectors, ACER notes that these technical specifications are intended for direct cross-border participation of capacity providers. However, certain elements of this framework may also govern the participation of interconnectors, where this is appropriate and applicable. ACER notes in Recital (8) of Annex I that a harmonised approach to cross-border participation (for both direct capacity providers' and interconnectors' participation) should be encouraged where appropriate, to support a smooth transition to direct cross-border participation.



Respondents' views	ACER's response
One respondent saw the need for a regional approach in devising solutions and suggested that the regulatory authority of the Member State with a CM should establish a working group involving all the regulatory authorities where foreign capacity is eligible for participation in the CM. This would ensure the application of the same principles across the interfaces of all interconnected systems, even though the details of the solution might differ because of different market configurations in the markets of foreign capacity. In relation to national implementation, one respondent saw risks	ACER considers that cross-border participation in CMs should ensure a level-playing field among domestic and foreign capacity providers, and should avoid creating undue market distortions, in line with Article 22(1)(b) of the Electricity Regulation.
in potential variable costs disparity between domestic and foreign capacity providers (differences in overheads and variable costs), and suggested to considers this risk and any unintended distortions made to a CM in the absence of equivalent variable costs between domestic and foreign capacity.	
Four respondents considered that the proposed technical specifications should also apply to capacity providers located in interconnected third countries as long as they can provide a comparable contribution to security of supply. One of them sought clarity over future arrangements of cross-border participation of capacity providers located in the GB market.	These technical specifications apply to cross-border participation in CMs between EU Member States. They may also apply to third countries under the conditions set out in Article 43 of Regulation (EU) 2019/942.6
Four respondents noted that the proposed technical specifications lack a clear dispute settlement procedure – either between the TSOs or between a TSO and a market participant – regarding the	ACER considers that dispute settlement falls within the competence of the relevant regulatory authorities, which shall ensure that cross-border participation in CMs is organised in an effective and non-discriminatory manner (pursuant to Article

⁶ Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators, OJ L 158, 14.6.2019, p. 22.



Respondents' views	ACER's response
processes put in place. In particular, the following areas were potentially contentious for the respondents: a) availability checks and non-availability payments (4 respondents); b) eligibility / admission to the registry (2 respondents); c) revenue sharing (2 respondents); Reference was made to the EBGL methodologies in that respect.	26(13) of the Electricity Regulation). As noted in Recital (7) of Annex I, dispute settlement may be subject to further bilateral arrangements, where deemed appropriate by the relevant regulatory authorities.
Two respondents were of the view that the proposed technical specifications should apply to and/or explicitly cover strategic reserves in order to ensure a level playing field for foreign capacities also in that case. One of them proposed to specify implementation schemes for cross-border participation in strategic reserves in ENTSO-E's explanatory document (including how to determine the import volume that a Member State with strategic reserves should consider when assessing the needs for domestic capacity).	ACER notes that Article 3 of Annex I clarifies that these technical specifications apply to CMs open to direct cross-border participation, pursuant to Article 26(1) of the Electricity Regulation. As such, these technical specifications apply to strategic reserves if these reserves are open to cross-border participation. However, determining whether it is technically feasible to open strategic reserves to cross-border participation or specifying implementation schemes in that respect goes beyond the scope of these technical specifications.
Two respondents commented on HVDC interconnectors with one noting that the proposed technical specifications might fail to recognise their unique contribution. HVDC interconnectors could be controlled and would not be affected by system constraints/loop flows (as AC grids) and they could still deliver the requested energy through a market-led response in case a capacity provider in the neighbouring market fails to meet its commitments.	ACER considers that the impact of HVDC lines on MEC is reflected through the ERAA results. Pursuant to Article 26(4) of the Electricity Regulation, cross-border participation in CMs shall not affect cross-zonal schedules.
One respondent sought clarification whether a foreign capacity provider with CMU in country B participating in the CM of country A has the right to access the secondary market of the CM and can trade with capacity contracts in force for the same Delivery Period (or a portion of it), being located in country A, B or even a country C where a foreign capacity provider is also	ACER notes that secondary trade of CM contracts is beyond the scope of these technical specifications.



Respondents' views	ACER's response
participating in the CM of country A. While acknowledging that this goes beyond the scope of the proposed technical specifications, the respondent noted that allowing this would guarantee equal opportunities of capacity providers in a specific CM.	
Two respondents noted that the proposed technical specifications lack sufficient detail to ensure consistent interpretation and implementation. One respondent suggested proofreading, noting that some references to Article numbers might be incorrect (e.g. Article 17(2) of the proposed technical specifications) and that some words might be missing (e.g. Article 31(4) of the proposed technical specifications) making the sentences difficult to understand.	ACER introduced considerable editorial amendments to improve clarity, conciseness, consistency and readability of the proposed technical specifications, while preserving the intended meaning of the content. These amendments are briefly summarised in section 6.2.5 of the Decision.