

RECOMMENDATION No 1/2023
OF THE SPECIALISED COMMITTEE ON ENERGY
ESTABLISHED BY ARTICLE 8(1)(I) OF THE TRADE AND COOPERATION
AGREEMENT BETWEEN THE EUROPEAN UNION
AND THE EUROPEAN ATOMIC ENERGY COMMUNITY, OF THE ONE PART,
AND THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND,
OF THE OTHER PART

of 7 February 2023

**to each Party concerning their requests to transmission system operators for electricity
in view of preparing technical procedures for the efficient use of electricity interconnectors**

THE SPECIALISED COMMITTEE ON ENERGY,

Having regard to the Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland of the other part (the ‘Trade and Cooperation Agreement’), and in particular Article 311(1) and (2), Article 312(1), Article 317(2) and (3) and Annex 29 thereof,

Whereas:

- (1) Pursuant to Article 8(4), point (a), of the Trade and Cooperation Agreement, the Specialised Committee on Energy (the ‘Specialised Committee’) has the power to monitor and review the implementation and ensure the proper functioning of the Trade and Cooperation Agreement in its area of competence. Pursuant to Article 8(4), point (c), it has the power to adopt decisions and recommendations in respect of all matters where the Trade and Cooperation Agreement so provides or for which the Partnership Council has delegated its powers to that Specialised Committee pursuant to Article 7(4), point (f). Pursuant to Article 329(3) of the Trade and Cooperation Agreement, it shall make recommendations as necessary to ensure the effective implementation of the Chapters of Title VIII of the Trade and Cooperation Agreement for which it is responsible.
- (2) With the aim of ensuring the efficient use of electricity interconnectors and reducing barriers to trade between the Parties, Article 311(1) of the Trade and Cooperation

Agreement sets commitments *inter alia* with regard to capacity allocation, congestion management and capacity calculation for electricity interconnectors, as well as the development of arrangements to deliver robust and efficient outcomes for all relevant timeframes.

- (3) On 22 January 2021, the Directorate-General for Energy of the European Commission and the Department for Business, Energy and Industrial Strategy of the United Kingdom Government each issued a preliminary recommendation (the ‘preliminary recommendation’) to their respective transmission system operators for electricity (‘TSOs’) requesting them to jointly start preparing technical procedures for the efficient use of electricity interconnectors in advance of the commencement of work by the Specialised Committee. Given that the Specialised Committee started its operations in the course of 2021, that preliminary recommendation, as provided by the Parties to the TSOs, needs to be confirmed by the Specialised Committee as a Recommendation to the Parties.
- (4) Concerning capacity calculation and allocation for the day-ahead timeframe the preliminary recommendation requested TSOs to prepare a day-ahead target model based on the concept of ‘Multi-region loose volume coupling’ in accordance with Article 312(1), Article 317(2) and (3) and Annex 29 to the Trade and Cooperation Agreement.
- (5) As regards capacity calculation and allocation for timeframes other than the day ahead timeframe, the preliminary recommendation invited the TSOs of the Parties to jointly prepare a proposal for a timeline for developing the draft technical procedures. It continues to be useful as a point of reference and guidance for further work on these matters while the priority is given to electricity trading at the day ahead timeframe.
- (6) While the timeline set out in Annex 29 as referred to in the preliminary recommendation has not been met, the Specialised Committee should nevertheless discharge its obligations under Article 312(1) and Article 317(2) of the Trade and Cooperation Agreement.
- (7) The TSOs and regulatory authorities of the Parties have already undertaken work with reference to the preliminary recommendation. In the light of progress achieved to date by the TSOs, further information is required regarding the cost-benefit analysis and the outline proposals of technical procedures in order for the Specialised Committee to be able to discharge its obligations under Article 312(1) and Article 317(2) of the Trade and Cooperation Agreement.

(8) Each Party therefore should request its TSOs to provide this further information,

HAS ADOPTED THIS RECOMMENDATION:

- (1) The preliminary recommendation issued on 22 January 2021 by the Directorate-General for Energy of the European Commission and the Department for Business, Energy and Industrial Strategy of the United Kingdom Government to, respectively, TSOs for electricity of the Union and of the United Kingdom requesting them to start preparing technical procedures on the efficient use of electricity interconnectors, as set out in Annex I to this Recommendation, is hereby confirmed as a Recommendation of the Specialised Committee on Energy to the Parties.
- (2) The Specialised Committee recommends that each Party requests its respective TSOs for electricity to provide the additional information as set out in Annex II to this Recommendation within five months of the date of request made by each Party.

Done at Brussels and London, 7 February 2023

For the Specialised Committee

The co-Chairs

F. ERMACORA

P. KOVACS

M. SKRINAR

Annex I to Recommendation No. 1/2023

Preliminary recommendations of the Directorate-General for Energy of the European Commission and of the Department for Business, Energy and Industrial Strategy of the United Kingdom Government to, respectively, the Union and the United Kingdom transmission system operators of 22 January 2021 concerning the development of technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors under the EU-United Kingdom Trade and Cooperation Agreement

Annex I-A

Preliminary recommendation of the Directorate-General for Energy of the European Commission to EU transmission system operators for electricity of 22 January 2021 concerning the development of technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors under the EU-United Kingdom Trade and Cooperation Agreement



EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR ENERGY

[sender]

Brussels, 22 January 2021

[addressee at ENTSO-E]

Subject: Developing draft technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors following the Trade and Cooperation Agreement

Dear [addressee],

As you will be aware, a Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part, (“the Agreement”) was signed on 30 December 2020 and provisionally applied by the Parties from 1 January 2021.

Under Article ENER.19 of the Agreement, the Union and the UK must ensure that their transmission system operators cooperate to develop technical procedures on a series of areas, including the use of interconnectors, if so recommended by the Specialised Committee on Energy. During the negotiations, it was agreed between the Union and the UK that it is appropriate that certain of these technical procedures are developed now, and in advance of the commencement of the work of the Specialised Committee on Energy. ENTSO-E is therefore requested to develop draft technical procedures for calculating and allocating transmission capacities to ensure efficient trade over

electricity interconnectors. Once operational the Specialised Committee on Energy will follow all work related to the development of the technical procedures.

The draft technical procedures should address capacity calculation and capacity allocation on all relevant timeframes.

This request aims to give effect to aspects of Articles ENER.13, ENER.14 and ENER.19 of the Agreement in relation to efficient use of electricity interconnection, and should be understood in that context. In particular, the technical procedures should not involve or imply participation by United Kingdom transmission system operators in Union procedures for capacity allocation and congestion management.

ENTSO-E should develop these technical procedures in cooperation with UK transmission system operators for electricity in the context of the cooperation established in the Memorandum of Understanding established to give effect to aspects of Article ENER.19 of the Agreement.

More detail on what should be included in the draft technical procedures is set out in Annex 2 (capacity calculation), Annex 3 (capacity allocation) and Annex 4.

Specifically, concerning capacity calculation and allocation for the day-ahead timeframe, we request the preparation of a Day Ahead Target model based on the concept of “Multi-region loose volume coupling” that is in accordance with Article ENER.14, ENER.19 and Annex ENER-4 of the Agreement; in accordance with those provisions, this should begin as a matter of priority. Annex ENER-4 to the Agreement is replicated at Annex 4 to this letter.

Part 2 of Annex ENER-4 to the Agreement sets out a timeline for the development of the technical procedures for the day-ahead timeframe. The dates set out below are based on this timeline, which in accordance with Article FINPROV.11.3 of the Agreement, we have calculated from 1 January 2021, being the date of provisional application of the Agreement.

To support the development of the Day Ahead Target model, and in line with Annex ENER-4, we request that an outline of the proposals and a cost benefit analysis to assess the added value of the Target model are completed by 1 April 2021. The outline proposals and cost benefit analysis should be developed in accordance with Annex 5 of this letter.

We request that draft technical procedures are submitted to the Agency for the Cooperation of Energy Regulators (the Agency) for their opinion. Prior to this, we request ENTSO-E to carry out appropriate consultation with market parties on the draft technical procedures. Following receipt of the opinion,

we request you submit it together with the draft technical procedures to the Specialised Committee on Energy in sufficient time to enable them to be implemented by 1 April 2022.

Concerning capacity calculation and allocation for timeframes other than the day ahead timeframe, we invite ENTSO-E to propose a timeline for developing the draft technical procedures.

I am copying this letter to my counterpart at the the Department for Business, Energy and Industrial Strategy, who is sending an equivalent letter to UK TSOs for electricity, a copy of which is included as Annex 1 to this letter.

Yours sincerely,

[signature sender]

Copy

The Department for Business, Energy and Industrial Strategy

Annex 1

Letter from the [sender] at the Department for Business, Energy and Industrial Strategy to UK TSOs for electricity

Annex 2 Capacity calculation

The draft technical procedures should set out terms, conditions and methodologies for the allocation of interconnection capacity which can subsequently be made available to the market.

This capacity should be calculated in a coordinated manner across electricity interconnectors.

Capacities should be maximized across electricity interconnectors. This requirement should:

- take account of TSOs' obligations to comply with safety standards of secure network operation;
- respect the bidding-zone borders within the EU and UK established under the relevant domestic frameworks;

- allow EU TSOs to comply with the requirement to provide at least 70% of their capacities on bidding-zone borders within the EU as set out in Article 16(8) of Regulation (EU) 2019/943;
- provide for non-discrimination between transmission system operators in the Union and the United Kingdom in the calculation of capacity;
- be supported by a coordinated process for remedial actions across electricity interconnectors, including redispatching and counter-trading;
- be supported by a cost-sharing arrangement between the Parties' TSOs related to redispatching and counter-trading.

As far as technically possible, the Parties' TSOs shall net the capacity requirements of any power flows in opposite directions over electricity interconnectors in order to use the interconnectors to their maximum capacity.

In relation to capacity calculation, TSOs should publish at least:

- annually: information on the long-term evolution of the transmission infrastructure and its impact on cross-border transmission capacity;
- monthly: month- and year-ahead forecasts of the transmission capacity available to the market, taking into account all relevant information available to the TSO at the time of the forecast calculation (for example, impact of summer and winter seasons on the capacity of lines, maintenance of the network, availability of production units, etc.);
- weekly: week-ahead forecasts of the transmission capacity available to the market, taking into account all relevant information available to the TSOs at the time of calculation of the forecast, such as the weather forecast, planned network maintenance work, availability of production units, etc.;
- daily: day-ahead and intra-day transmission capacity available to the market for each market time unit, taking into account all netted day-ahead nominations, day-ahead production schedules, demand forecasts and planned network maintenance work;
- total capacity already allocated, by market time unit, and all relevant conditions under which that capacity may be used (for example, auction clearing price, obligations on how to use the capacity, etc.), so as to identify any remaining capacity;

- allocated capacity as soon as possible after each allocation, as well as an indication of prices paid
- total capacity used, by market time unit, immediately after nomination
- as closely as possible to real time: aggregated realised commercial and physical flows, by market time unit, including a description of the effects of any corrective actions taken by the TSOs (such as curtailment) for solving network or system problems
- relevant information to assess whether electricity interconnector capacity has been calculated and allocated in a manner consistent with the EU-UK Agreement

Annex 3 Capacity allocation

The draft technical procedures should set out terms, conditions and methodologies for the allocation of interconnection capacity to the market for the following timeframes:

- Forward;
- Day ahead;
- Intraday.

For each timeframe the methodology should:

- provide for coordinated auctions for all electricity interconnectors;
- include rules for nomination, curtailment, firmness, remuneration, transfer and return of acquired transmission capacities as well as for fall-back procedures and compensation in case of curtailment
- include rules for distributing congestion income
- prohibit transmission system operators to charge reserve prices where no congestion occurs on the electricity interconnectors, unless an exemption applies.

Annex 4 - Day ahead Target model: “Multi-region loose volume coupling”

Part 1

1. The new procedure for the allocation of capacity on electricity interconnectors at the day-ahead market timeframe shall be based on the concept of “Multi-region loose volume

coupling”. The overall objective of the new procedure shall be to maximise the benefits of trade. As the first step in developing the new procedure, the Parties shall ensure that transmission system operators prepare outline proposals and a cost-benefit analysis.

2. Multi-region loose volume coupling shall involve the development of a market coupling function to determine the net energy positions (implicit allocation) between:
 - (a) bidding zones established in accordance with Regulation (EU) 2019/943, which are directly connected to the United Kingdom by an electricity interconnector; and
 - (b) the United Kingdom.
3. The net energy positions over electricity interconnectors shall be calculated via an implicit allocation process by applying a specific algorithm to:
 - (a) commercial bids and offers for the day-ahead market timeframe from the bidding zones established in accordance with Regulation (EU) 2019/943 which are directly connected to the United Kingdom by an electricity interconnector;
 - (b) commercial bids and offers for the day-ahead market timeframe from relevant day-ahead markets in the United Kingdom;
 - (c) network capacity data and system capabilities determined in accordance with the procedures agreed between transmission system operators; and
 - (d) data on expected commercial flows of electricity interconnections between bidding zones connected to the United Kingdom and other bidding zones in the Union, as determined by Union transmission system operators using robust methodologies.

This process shall be compatible with the specific characteristics of direct current electricity interconnectors, including losses and ramping requirements.

4. The market coupling function shall:
 - (a) produce results sufficiently in advance of the operation of the Parties’ respective day-ahead markets (for the Union this is single day-ahead coupling established in accordance with

Commission Regulation (EU) 2015/1222¹) in order that such results may be used as inputs into the processes which determine the results in those markets;

- (b) produce results which are reliable and repeatable;
 - (c) be a specific process to link the distinct and separate day-ahead markets in the Union and the United Kingdom; in particular, this means that the specific algorithm shall be distinct and separate from that used in single day-ahead coupling established in accordance with Regulation (EU) 2015/1222 and, in respect of commercial bids and offers of the Union, only have access to those from bidding zones which are directly connected to the United Kingdom by an electricity interconnector.
5. The calculated net energy positions shall be published following validation and verification. If the market coupling function is unable either to operate or to produce a result, electricity interconnector capacity shall be allocated by a fall-back process, and market participants shall be notified that the fall-back process will apply.
6. The costs of developing and implementing the technical procedures shall be equally shared between the relevant United Kingdom transmission system operators or other entities, on the one side, and relevant Union transmission system operators or other entities, on the other side, unless the Specialised Committee on Energy decides otherwise.

Part 2

The timeline for the implementation of this Annex shall be from the entry into force of this Agreement, as follows:

- (a) within 3 months – cost benefit analysis and outline of proposals for technical procedures;
- (b) within 10 months – proposal for technical procedures;
- (c) within 15 months – entry into operation of technical procedures.

Annex 5: Requirements of the outline proposals and cost benefit analysis

¹ Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (OJ EU L 197, 25.7.2015, p. 24).

As set out in Part 1 of Annex ENER – 4 of the Agreement, the first stage of development of the new day-ahead arrangements is to develop outline proposals and a cost-benefit analysis.

The outline proposals should:

- set out the high-level design of the multi-region loose volume coupling solution;
- identify the roles and responsibilities of industry parties;
- contain an implementation plan;
- highlight any implementation risks or issues, with proposals on how to resolve those; and;
- assess the impact of differences between the carbon pricing regimes of the parties on flows over interconnectors.

The cost benefit analysis should take account of the objective of the arrangements to maximise the benefits of trade which means that, within the constraints referred to in Annex ENER-4 of the Agreement, the trading arrangements:

- should be as efficient as possible, and;
- should, under normal circumstances, result in flows across electricity interconnectors being consistent with the prices in the Parties’ day-ahead markets.

Annex I-B

Preliminary recommendation of the Department for Business, Energy and Industrial Strategy of the United Kingdom Government to the United Kingdom transmission system operator for electricity of 22 January 2021 concerning the development of technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors under the EU-United Kingdom Trade and Cooperation Agreement



Department for
Business, Energy
& Industrial Strategy

[sender at the Department for Business,
Energy & Industrial Strategy]

[addressee at the UK TSO for
electricity]

Friday, 22 January 2021

Dear [addressee],

Developing draft technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors following the EU-UK Trade and Cooperation Agreement

As you will be aware, a Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part, (“the Agreement”) was signed on 30 December 2020 and provisionally applied by the Parties from 1 January 2021. Under Article ENER.19 of the Agreement,

the Union and the UK must ensure that their transmission system operators cooperate to develop technical procedures on a series of areas, including the use of interconnectors, if so recommended by the Specialised Committee on Energy. During the negotiations, it was agreed between the Union and the UK that it is appropriate that certain of these technical procedures are developed now, and in advance of the commencement of the work of the Specialised Committee on Energy. UK TSOs for electricity are therefore requested to develop draft technical procedures for calculating and allocating transmission capacities to ensure efficient trade over electricity interconnectors. Once operational the Specialised Committee on Energy will follow all work related to the development of the technical procedures.

The draft technical procedures should address capacity calculation and capacity allocation on all relevant timeframes.

This request aims to give effect to aspects of Articles ENER.13, ENER.14 and ENER.19 of the Agreement in relation to efficient use of electricity interconnection, and should be understood in that context. In particular, the technical procedures should not involve or imply participation by United Kingdom transmission system operators in Union procedures for capacity allocation and congestion management.

UK TSOs for electricity should develop these technical procedures in cooperation with ENTSO-E in the context of the cooperation established in the Memorandum of Understanding established to give effect to aspects of Article ENER.19 of the Agreement.

More detail on what should be included in the draft technical procedures is set out in Annex 2 (capacity calculation), Annex 3 (capacity allocation) and Annex 4.

Specifically, concerning capacity calculation and allocation for the day-ahead timeframe, we request the preparation of a Day Ahead Target model based on the concept of “Multi-region loose volume coupling” that is in accordance with Article ENER.14, ENER.19 and Annex ENER-4 of the Agreement; in accordance with those provisions, this should begin as a matter of priority. Annex ENER—4 to the Agreement is replicated at Annex 4 to this letter.

Part 2 of Annex ENER-4 to the Agreement sets out a timeline for the development of the technical procedures for the day-ahead timeframe. The dates set out below are based on this timeline, which in accordance with Article FINPROV.11.3 of the Agreement, we have calculated from 1 January 2021, being the date of provisional application of the Agreement.

To support the development of the Day Ahead Target model, and in line with Annex ENER-4, we request that an outline of the proposals and a cost benefit analysis to assess the added value of the Target model are completed by 1 April 2021. The outline proposals and cost benefit analysis should be developed in accordance with Annex 5 of this letter.

We request that draft technical procedures are submitted to the UK regulatory authorities for their opinion. Prior to this, we request the UK TSOs for electricity to carry out appropriate consultation with market parties on the draft technical procedures. Following receipt of the opinion, we request you submit it together with the draft technical procedures to the Specialised Committee on Energy in sufficient time to enable them to be implemented by 1 April 2022.

Concerning capacity calculation and allocation for timeframes other than the day ahead timeframe, we invite UK TSOs for electricity to propose to the Specialised Committee on Energy a timeline for developing the draft technical procedures.

I am copying this letter to my counterpart at the Directorate General for Energy of European Commission, who is sending an equivalent letter to ENTSO-E, a copy of which is included as Annex 1 to this letter.

Yours sincerely,

[signature sender]

Copy

Directorate General for Energy of the European Commission

Annex 1

Letter from Directorate General for Energy of European Commission to ENTSO-E

Annex 2 Capacity calculation

The draft technical procedures should set out terms, conditions and methodologies for the allocation of interconnection capacity which can subsequently be made available to the market.

This capacity should be calculated in a coordinated manner across electricity interconnectors.

Capacities should be maximized across electricity interconnectors. This requirement should:

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- allow EU TSOs to comply with the requirement to provide at least 70% of their capacities on bidding-zone borders within the EU as set out in Article 16(8) of Regulation (EU) 2019/943;
- provide for non-discrimination between transmission system operators in the Union and the United Kingdom in the calculation of capacity;
- be supported by a coordinated process for remedial actions across electricity interconnectors, including redispatching and counter-trading;
- be supported by a cost-sharing arrangement between the Parties' TSOs related to redispatching and counter-trading;

As far as technically possible, the Parties' TSOs shall net the capacity requirements of any power flows in opposite directions over electricity interconnectors in order to use the interconnectors to their maximum capacity.

In relation to capacity calculation, TSOs should publish at least:

- annually: information on the long-term evolution of the transmission infrastructure and its impact on cross-border transmission capacity;
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- weekly: week-ahead forecasts of the transmission capacity available to the market, taking into account all relevant information available to the TSOs at the time of calculation of the forecast, such as the weather forecast, planned network maintenance work, availability of production units, etc.;
- daily: day-ahead and intra-day transmission capacity available to the market for each market time unit, taking into account all netted day-ahead nominations, day-ahead production schedules, demand forecasts and planned network maintenance work;
- total capacity already allocated, by market time unit, and all relevant conditions under which that capacity may be used (for example, auction clearing price, obligations on how to use the capacity, etc.), so as to identify any remaining capacity;
- allocated capacity as soon as possible after each allocation, as well as an indication of prices paid
- total capacity used, by market time unit, immediately after nomination;
- as closely as possible to real time: aggregated realised commercial and physical flows, by market time unit, including a description of the effects of any corrective actions taken by the TSOs (such as curtailment) for solving network or system problems;
- relevant information to assess whether electricity interconnector capacity has been calculated and allocated in a manner consistent with the EU-UK Agreement.

Annex 3 Capacity allocation

The draft technical procedures should set out terms, conditions and methodologies for the allocation of interconnection capacity to the market for the following timeframes:

- Forward;
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- Intraday.

For each timeframe the methodology should:

- provide for coordinated auctions for all electricity interconnectors;

- include rules for nomination, curtailment, firmness, remuneration, transfer and return of acquired transmission capacities as well as for fall-back procedures and compensation in case of curtailment – include rules for distributing congestion income
- prohibit TSOs to charge reserve prices where no congestion occurs on the electricity interconnectors, unless an exemption applies.

Annex 4 - Day ahead Target model: “Multi-region loose volume coupling”

Part 1

1. The new procedure for the allocation of capacity on electricity interconnectors at the day-ahead market timeframe shall be based on the concept of “Multi-region loose volume coupling”. The overall objective of the new procedure shall be to maximise the benefits of trade. As the first step in developing the new procedure, the Parties shall ensure that transmission system operators prepare outline proposals and a cost-benefit analysis.
2. Multi-region loose volume coupling shall involve the development of a market coupling function to determine the net energy positions (implicit allocation) between:
 - (a) bidding zones established in accordance with Regulation (EU) 2019/943, which are directly connected to the United Kingdom by an electricity interconnector; and
 - (b) the United Kingdom.
3. The net energy positions over electricity interconnectors shall be calculated via an implicit allocation process by applying a specific algorithm to:
 - (a) commercial bids and offers for the day-ahead market timeframe from the bidding zones established in accordance with Regulation (EU) 2019/943 which are directly connected to the United Kingdom by an electricity interconnector;
 - (b) commercial bids and offers for the day-ahead market timeframe from relevant day-ahead markets in the United Kingdom;
 - (c) network capacity data and system capabilities determined in accordance with the procedures agreed between transmission system operators; and

- (d) data on expected commercial flows of electricity interconnections between bidding zones connected to the United Kingdom and other bidding zones in the Union, as determined by Union transmission system operators using robust methodologies.

This process shall be compatible with the specific characteristics of direct current electricity interconnectors, including losses and ramping requirements.

4. The market coupling function shall:

- (a) produce results sufficiently in advance of the operation of the Parties' respective day-ahead markets (for the Union this is single day-ahead coupling established in accordance with Commission Regulation (EU) 2015/1222¹) in order that such results may be used as inputs into the processes which determine the results in those markets;
- (b) produce results which are reliable and repeatable;
- (c) be a specific process to link the distinct and separate day-ahead markets in the Union and the United Kingdom; in particular, this means that the specific algorithm shall be distinct and separate from that used in single day-ahead coupling established in accordance with Regulation (EU) 2015/1222 and, in respect of commercial bids and offers of the Union, only have access to those from bidding zones which are directly connected to the United Kingdom by an electricity interconnector.

5. The calculated net energy positions shall be published following validation and verification. If the market coupling function is unable either to operate or to produce a result, electricity interconnector capacity shall be allocated by a fall-back process, and market participants shall be notified that the fall-back process will apply.

6. The costs of developing and implementing the technical procedures shall be equally shared between the relevant United Kingdom transmission system operators or other entities, on the one side, and relevant Union transmission system operators or other entities, on the other side, unless the Specialised Committee on Energy decides otherwise.

Part 2

¹ Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (OJ EU L 197, 25.7.2015, p. 24).

The timeline for the implementation of this Annex shall be from the entry into force of this Agreement, as follows:

- (a) within 3 months – cost benefit analysis and outline of proposals for technical procedures;
- (b) within 10 months – proposal for technical procedures;
- (c) within 15 months – entry into operation of technical procedures.

Annex 5: Requirements of the outline proposals and cost benefit analysis

As set out in Part 1 of Annex ENER – 4 of the Agreement, the first stage of development of the new day-ahead arrangements is to develop outline proposals and a cost-benefit analysis.

The outline proposals should:

- set out the high-level design of the multi-region loose volume coupling solution;
- identify the roles and responsibilities of industry parties;
- contain an implementation plan;
- highlight any implementation risks or issues, with proposals on how to resolve those; and
- assess the impact of differences between the carbon pricing regimes of the parties on flows over interconnectors.

The cost benefit analysis should take account of the objective of the arrangements to maximise the benefits of trade which means that, within the constraints referred to in Annex ENER-4 of the Agreement, the trading arrangements:

- should be as efficient as possible, and;
- should, under normal circumstances, result in flows across electricity interconnectors being consistent with the prices in the Parties’ day-ahead markets.

Annex II

Draft letter of the Directorate-General for Energy of the European Commission and of the Department for Business, Energy and Industrial Strategy of the United Kingdom Government to their respective transmission system operators for electricity requesting to provide additional information in view of preparing technical procedures for capacity allocation and congestion management at the day ahead timeframe under the EU-United Kingdom Trade and Cooperation Agreement

[address transmission system operator for electricity EU or UK]

[date]

Subject: Request for additional information in view of preparing technical procedures for capacity allocation and congestion management at the day ahead timeframe under the EU- United Kingdom Trade and Cooperation Agreement

Dear [placeholder: addressee],

Thank you for your work to date progressing the implementation of the Energy Title of the Trade and Cooperation Agreement and in particular the publication of the cost-benefit analysis and outline proposal supported by the opinion of [placeholder: UK national regulators [or] ACER] in April 2021.

Further to the meeting of the Specialised Committee on Energy on 30 March 2022 and its Recommendation [placeholder: No. X/202x] made on [placeholder: date], [placeholder: the Department for Business, Energy, and Industrial Strategy of the United Kingdom Government [or] the Directorate General for Energy of the European Commission] request that you provide answers to the questions set out in the annex to this letter within 5 months of receiving this letter, while closely involving relevant parties (e.g. power exchanges, nominated electricity market operators, clearing houses) in the analysis to assess the practical feasibility of the scenarios.

The [placeholder: transmission system operator [or] ENTSO-E, facilitating the work of the EU transmission system operators,] should furthermore request an informal opinion of the [placeholder: UK national energy regulators [or] ACER] on this additional information and submit it together with the answers to the questions set out in the annex.

The questions in the Annex relate to the preparation of the technical procedures for capacity allocation and congestion management at the day ahead timeframe. Any information you may need to obtain from third parties should be processed solely for the purpose of responding to those questions and its confidentiality should be protected from disclosure if so requested by the third party. The [placeholder: the Department for Business, Energy, and Industrial Strategy of the United Kingdom Government [or] the Directorate General for Energy of the European Commission] will ensure that any information received in response to this letter is also used for this sole purpose. It will treat as confidential any information identified as confidential or commercially sensitive and will hold it and protect it from disclosure, in accordance with the applicable laws and regulations, unless a specific permission of its rights holder has been obtained for making it available.

In advance, I wish to thank you for your additional effort on this subject.

[signature]

Cc: [sender at Directorate General for Energy of the European Commission or, as appropriate,
at Department for Business, Energy and Industrial Strategy of the United Kingdom Government]

Annex

Context: The following questions relate to the options set out by the UK and EU transmission system operators in the cost-benefit analysis published April 2021. Note that point 3 of Annex 29 of the Trade and Cooperation Agreement requires the net energy positions over electricity interconnectors to be calculated via an implicit allocation process by applying a specific algorithm including commercial bids and offers for the day-ahead market timeframe from relevant day-ahead markets in the United Kingdom. The UK and EU transmission system operators' cost-benefit analysis identified that a single GB price is highly desirable for the efficient implementation of Multi-region loose volume coupling (MRLVC) in all MRLVC design options. In September 2021, BEIS opened a consultation to seek views on the current arrangements for trading electricity on power exchanges in the Great Britain wholesale electricity market and our proposals to support efficient cross-border trading. In particular, BEIS set out a high-level approach for the coupling of specific daily day-ahead auctions, which would be used as the 'relevant day-ahead markets' for the purposes of Annex 29 to the Trade and Cooperation Agreement, with the aim of seeking stakeholder views on whether to implement

this, and if so how to do so in practice. This consultation closed in November 2021, and the UK Government will publish a response in due course.

1. With respect to the Preliminary Order Book option identified by transmission system operators:
 - (a) What proportion of orders for Single Day-Ahead Coupling (SDAC) are typically submitted during the final 15 minutes before the Gate Closure Time (GCT), within what range does that proportion typically vary, and are there specific drivers for when market participants submit their orders and could these drivers change as a result of implementing the Preliminary Order Book Option?
 - (b) To what extent would the proportion of orders submitted during the final 15 minutes before the SDAC GCT impact on the interconnector flows being consistent with the prices in the Parties' day-ahead markets?
 - (c) Would this option fully mitigate or still face any of the timing issues identified with the Common Order Book Options? Any operational impacts and risks should be fully explained and substantiated.
 - (d) Do the requirements of Article 305 (Prohibition of market abuse on wholesale electricity and gas market) of the Trade and Cooperation Agreement provide sufficient mitigation of the risks of market manipulation identified as arising under the Preliminary Order book option? Any residual risks of market manipulation should be fully explained and justified.
 - (e) Are there further actions, requirements, or obligations, including of regulatory authorities or market participants, transmissions system operators, or market operators, that could be established to provide further mitigations to the risk of market manipulation identified with the Preliminary Order Book option? Any residual risks of market manipulation should be fully explained and justified.
2. With respect to the Common Order Book options identified by transmission system operators:
 - (a) What are the full range of options that could allow for the MRLVC MCO calculation processes to be run between SDAC GCT at 12:00 CET and publication of SDAC results at 13:00 CET, including any options that allow for the MRLVC MCO calculation processes to be run in parallel with aspects of SDAC?

What are the advantages/disadvantages between these options, including:

- (1) the potential impacts on the operation of SDAC and fallback processes, (i.e., risks of decoupling of SDAC);
- (2) the impact on transmission system operators, market operators, and market participants

Any operational impacts and risks should be fully explained and substantiated.

- (b) For other additional common order book options identified by TSOs in the cost benefit analysis (a change in timing of SDAC GCT and/or the publication of SDAC results), what are the advantages/ disadvantages between these options, including:

- (1) the impact on the processes before (e.g., capacity calculation) and after SDAC (e.g. intraday/ balancing markets);
- (2) the impact on transmission system operators, market operators and the impact on market participants of any increased time between SDAC GCT and SDAC results.

Any operational impacts and risks should be fully explained and substantiated.

3. With respect to both the Preliminary and Common Order Book options:

- (a) What are the different processes required for performing the MRLVC MCO calculation, and what is the range of time that would be required for each of those processes? Any range in potential timeframe should be fully explained and substantiated.

- (b) Please provide an outline proposal for the Bordering Bidding Zone (BBZ) Methodology for establishing an accurate and robust forecast. In setting this out, please include;

- (1) the key issues, principles, and parameters (including input data, outputs, and the use of outputs in MRLVC) that need to be addressed and established by the BBZ Methodology, and;
- (2) a timescale within which this methodology could be established and made operational.
- (3) a preliminary qualitative assessment of how the proposed BBZ methodology in conjunction with MRLVC is expected to perform, compared to the results of the allocation of capacity through explicit auctions to deliver more efficient trading

arrangements, and, in particular, under what conditions the proposed methodology in conjunction with MRLVC outperforms explicit auctions.

(c) Implementation

- (1) What are the detailed steps required to implement all aspects of both Preliminary and Common Order Book options, including processes to test and verify the performance of MRLVC before full operation, roles and responsibilities of transmission system operators, market operators, and market participants, how could these aspects be implemented in the shortest possible time, and how could the structure and content of the technical procedures best support efficient implementation?
- (2) Please provide a realistic timeline for implementation for each option (such a timeline should take into account current and established future developments and include all the necessary steps such as stakeholder consultations, implementation of new IT systems for MRLVC MCO, testing phases, governance processes, etc.).
- (3) What are the anticipated direct costs of implementing and operating MRLVC for the different roles and functions necessary for MRLVC?