

EWEA response on the ERGEG Draft Framework Guidelines on Capacity Allocation and Congestion Management for Electricity

EWEA response on the **ERGEG** consultation on draft Framework Guidelines on capacity allocation and congestion management

The creation of a more integrated European electricity market is of utmost importance for the wind energy sector. For an efficient integration of wind energy into the European electricity network, transmission capacity is essential, but this factor alone is not sufficient. Together with an adequate physical infrastructure, integrated electricity markets and rules are required that lead to an efficient allocation of these transmission lines that takes into account generation from variable and decentralised generation sources, such as wind power.

EWEA sees this draft framework guideline on capacity allocation and congestion management (FG CACM) as playing a major role in the path towards a single electricity market as well as provide adequate guidance to ENTSO-E when developing the subsequent network codes on electricity market design.

EWEA welcomes the timely uptake of this FG CACM before the official establishment of ACER and hereby provides its view on this matter, as the deployment of renewables, particularly wind power, and the integration of European electricity markets are mutual drivers. This response aims to provide EWEA's views on selected questions for consultation where deemed relevant for the wind industry, in particular on general issues and on intraday allocation.

General Issues

1. Are there any additional issues and / or objectives that should be addressed in the Capacity Allocation and Congestion Management IIA and FG?

EWEA believes that the topics addressed in the FG CACM will contribute to overcoming the lack of coordinated congestion management between control areas. It sets out clear and objective principles for the development of network codes and by the same token the generic objectives should give ENTSO-E enough latitude when deliberating the subsequent codes in this area.

In the problem definition of the IIA it is wrongly stated that renewable electricity is unpredictable. The reverse is the case. Sophisticated forecast tools using combined predictions and aggregating wind power over large interconnected areas and dispersed sites continuously helps to bring down the wind power forecast error to manageable levels in the time frames relevant for system operation (4-24 hours ahead). The cost-benefit ratio of applying such centralised forecast systems is very high, because of the high reduction in operational costs of power generation corresponding to reduction in uncertainty, and by the same token leaving the operational security of the networks uncompromised.

The IIA section on the problem definition rightly mentions that "intraday solutions to reflect the changes of variable generation closer to the real time are needed". In this context, the operational savings should be mentioned that can be achieved with the

uptake of liquid intraday markets. The TradeWind established that allowing for intraday rescheduling of cross-border exchange will lead to savings in system costs in the range of $\pounds 1-2$ billion per year as compared to a situation where cross-border exchange must be scheduled a day ahead¹. This should be taken into account also when looking at question 7 in the consultation document (Which costs and benefits do you see from introducing the proposed framework for CACM?)

Furthermore, there is no consistent use of the terms "intermittent" and "variable" generation in the ERGEG documents. EWEA recommends using the qualifier "variable" when referring to wind power generation, rather than "intermittent". Such terminology is misleading, because on a power system level, intermittent means starting and stopping at irregular intervals, which wind power does not do. Wind is a technology of variable output. Both electricity supply and demand are variable. The issue, therefore, is not the variability per se, but how to predict, manage and ameliorate variability and what tools can be utilised to improve efficiency. Wind power is variable in output but the variability can be predicted to a great extent. This is not to say that variability has no effect on system operation.

As a side note, EWEA was not a member of the ERGEG Ad-hoc Advisory Group (AHAG) as incorrectly stated in the IIA on page 5.

2. Is the vision of the enduring EU-wide target model transparently established in the IIA and FG and well suited to address all the issues and objectives of the CACM?

In order to provide further transparency and insight it would be useful if the EU-wide target model would be described more in detail in Annex 4 of the IIA, e.g. with flow-charts for each time frame of the electricity markets, as done in the presentations at the Florence Forum.

3. Should any of the timeframes (forward, day-ahead, intraday) be addressed in more detail?

EWEA agrees with the level of detail proposed for the timeframes as this should give ENTSO-E sufficient guidance with regards to the objectives, as well as enough latitude with regards to the actual content when developing the subsequent network codes. Regarding the intraday timeframe, EWEA recommends being more explicit on the point on gate closure times (item 4.3): Instead of embedding the demand on adequate gate closures within the context of implicit continuous trading, gate closure times as close to real time and a possible harmonisation of those, should be stated in a separate bullet point as a goal in itself.

4. In general, is the definition of interim steps in the framework guideline appropriate?

It is not clear to which interim steps this question is referring to as there is no mention of any interim steps in the draft FG. The point could be clarified.

¹ Page 12, Trade Wind Study ; <u>http://www.trade-</u>

wind.eu/fileadmin/documents/publications/Final_Report.pdf

5. Is the characterisation of force majeure sufficient? Should there be separate definitions for DC and AC interconnectors?

No opinion

6. Do you agree with the definition of firmness for explicit and implicitly allocated capacity as set out in the framework guideline? How prescriptive should the framework guideline be with regard to the firmness of capacity?

No opinion

7. Which costs and benefits do you see from introducing the proposed framework for Capacity Allocation and Congestion Management? Please provide qualitative and if applicable also quantitative evidence.

The TradeWind project was the first EU-level study to explore what benefits a European grid with better interconnections and an improved power market design could have on the integration of the large amounts of wind power foreseen in the timeframes to 2020 and 2030. As already indicated in the answer to question 1, the proposed FG for CACM, especially with regards to Objective 4 "to design efficient Intraday Market Capacity Allocation" is particularly important to provide substantial benefits by enabling functioning cross-border intraday markets. Allowing for intra-day rescheduling of cross-border exchange will lead to savings in systems costs in the range of \leq 1-2 billion per year as compared to a situation where cross-border exchange must be scheduled a day ahead².

In addition the TradeWind project found proof that reducing the demand for reserves by accepting wind power forecasts up to three hours before delivery would yield a reduction in system costs of \in 260 million per year, which again substantiates the case for gate-closure times as close to real time as possible throughout Europe. This cost reduction assumes a perfect market and would be much larger in current market conditions³.

Section 1.1: Capacity calculation

8. Is flow based allocation, as set out in the framework guideline, the appropriate target model? How should less meshed systems be accommodated?

EWEA agrees with the assessment in the IIA and the draft FG that flow based allocation should be the standard method for capacity calculation. ERGEG rightly states that this method is more suited to ensure optimal use of transmission network capacity in contrast to the ATC method as it allows a more optimal calculation of the load flow and thus utilisation of the network. ATC methods in less meshed systems should be only applied after careful evaluation if there are any adverse impacts on neighbouring networks.

² Chapter 7 "Assessment of electricity market design for high wind penetrations", Trade Wind Study ; <u>http://www.trade-wind.eu/fileadmin/documents/publications/Final_Report.pdf</u>

³ Ibid.

Questions 9 to 11

No opinion

Section 1.2. to 3

No opinion

Section 4: Intraday allocation

17. Are there any further issues to be addressed in relation to the target model and the elaborated approach for the intraday allocation?

As indicated in the response to question 3, the objective to achieve gate-closure times as close to real time as possible should be stated as a separate item in this section.

18. Does the intraday target model provide sufficient trading flexibility close to real time to accommodate intermittent generation?

The uptake of functioning and liquid intra-day markets is crucial for the efficient integration of large amounts of wind energy and for cost-efficient system operation in general. The application of intra-day wind power forecasting for low reserve requirements should be ensured.

EWEA agrees that harmonised capacity calculation methodologies in terms of implicit auctions and continuous implicit trading as stated in the IIA will help provide the maximum possible capacities to a wider European market for the intraday time horizon and respecting TSOs security standards at the same time.

Importantly, the deployment of tools for probabilistic planning and operation, including load and generation modelling and short term forecasting of wind power, as well as constantly improving methodes on congestion management and markets design should be mentioned as objectives in this section. This should trigger adequate recommendations in the development of the according network code with regards to technical and regulatory solutions for the implementation of the cross-border intraday electricity markets. These recommendations should be conceived as a toolset favouring renewable energy penetration, and by the same token recognising the specific features of wind power which do not fit easily in current electricity market frameworks. Valuable input on the development of these tools should be provided by the market model under development in the FP7 project OPTIMATE⁴.

⁴ See : <u>www.optimate-platform.eu</u>

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The European Wind Energy Association (EWEA) is the voice of the wind industry, actively promoting the utilisation of wind power in Europe and worldwide. Over 650 members from nearly 60 countries, including manufacturers, developers, research institutes, associations, electricity providers, finance organisations and consultants, make EWEA the world's largest wind energy network.