

Feedback on the public consultation regarding the T&C SA following the REX of phase 1 of iCAROS

BOP took notice of the public consultation launched by Elia on 06 March 2025 on “the three modifications of the terms and conditions for the scheduling agent following the return of experience of phase 1 of the iCAROS project”. In this reaction we would like to respond to this consultation and thank Elia for the constructive approach in clarifying and modifying the implementation. We remain available for further collaboration and questions whenever deemed necessary.

Consideration of the $DP_{P_{min}inj/off}$ within the Return to Schedule control

1. On the issue

As indicated in the informal consultation on the REX of iCAROS from February 2025, some wind parks cannot be steered under a P_{min} and other wind parks can be steered under P_{min} , but with jeopardizing their technical lifetime.

Avoiding curtailments of wind parks is not a matter of missing market opportunities, it has a technical impact on the lifetime of the turbines and financial implications for buying energy.

1.1 Some wind parks cannot be steered under P_{min} .

For some wind parks it is not technically possible to steer the wind park below a P_{min} value. If for reasons of grid security the active capacity of these wind parks needs to be limited below the P_{min} , the setpoint has to be reduced to zero. In this case an indivisible shutdown bid is unavoidable, but also comes with some limitations on restart time as well as with a financial impact.

1.2 Some wind parks can be steered under P_{min} but with jeopardizing their technical lifetime.

For other wind parks, it is possible to steer the wind park to a value between zero and P_{min} , but it comes with technical limitations and both a technical and financial impact.

We want to highlight that all curtailments have an impact on the lifetime (and component replacement risk) of the wind turbines and its foundations. Especially the combination of the depth and the frequency of occurrence is important. The deeper and more frequent curtailments occur, the higher the impact on the lifetime. Curtailments below P_{min} automatically induce deeper curtailments. These kind of curtailments needs to be limited to the largest extend possible, but also the ‘variability’ of the curtailment setpoints or number of ‘curtailment cycles’ (towards or below P_{min}) needs to be kept at an absolute minimum. Several short curtailments are more harmful for the wind turbine lifetime than one long curtailment.

Furthermore, if a wind park is not producing due to curtailments, it becomes a consumer of active power and has to purchase energy on the spot market to keep the assets operational. This obviously comes with a financial cost.

2. Right to revise the technical justification and bid price of the DP_P_{min}_{inj/off}

The price of a specific (indivisible) bid needs to reflect the impact on the lifetime of the wind turbines (i.e. also shortened remaining useful lifetime of components) and its foundation. (Academic) research in combination with in-situ tests (of which the results may vary per site given the site specific curtailment characteristics) on this topic is still preliminary, so it should always be possible to revise the technical justification, the bid prices as well as the divisible or indivisible nature of the bid when more refined results become available. Likewise, in case turbine OEM would impose more stringent technical limitations on the P_{min}, this should also be possible to reflect such in a revised bid regime.

3. Impact on return to schedule (RTS)

Concerning the impact on return to schedule (RTS), Elia proposes to consider the P_{min} in the RTS control. This means that, if the last valid schedule provided to Elia has values below P_{min} and a downward RTS is requested, the Technical Unit is expected to return to its P_{min} for the relevant quarter hours. This rule will be applied for all types of Technical Facilities”

BOP agrees that in the context of return to schedule, the wind parks are to return to P_{min} (instead of the value below P_{min}) in case the last valid schedule provided to Elia has values below P_{min}. We therefore welcome the proposed modifications to the T&C SA related to this topic.

This agreement is not to be interpreted as BOP agreeing with the general concept of return to schedule. As indicated in previous consultations¹ and reactions, BOP expects a more elaborated justification of the need for RTS, based on an extensive data analysis with objective criteria, and demands it use to be of last resort only and with full remuneration for renewable (or weather dependent) energy producers in accordance with the EU Electricity Regulation.

¹ For example the BOP feedback on the public consultation on the “T&C OPA, T&C SA, and the rules for coordination and congestion management in the framework of iCAROS phase 1 and the planning of iCAROS phase 2” of 25 August 2023