

Minutes of Meeting Task Force MOG 2 10/01/2023

List of participants

Name	First name	Company/association
Bertrand	Gilles	CREG
Bronckart	Olivier	Elia
Buedts	Nico	Jan De Nul
Carnière	Hugo	Belgian Offshore Plateform
Chafaqi	Laila	Luminus
Chaouachi	Aymen	Elia
Claes	Jan	Siemens Gamesa
Cornelis	Natalie	CREG
Debacker	Béatrice	Engie
De Clerck	Tom	Eneco
Desmaré	Francois	Luminus
De Winter	Christophe	Otary
Genêt	Benjamin	Elia
Gunnar	Wathé	Deme group
Hahati	Bilal	Elia
Harlem	Steven	Luminus
Hendrix	Stijn	Parkwind
Kormoss	Aymeric	Virya Energy
Laleman	Ruben	Engie
Libert	Brice	CREG
Moerman	Diederik	SPF Economie
Mortier	Jo	RWE
Rietjens	Damien	Elia
Robaye	Helene	Electrabel
Robbelein	Jo	SPF Economie
Saïdi Mazarou	Nordine	Ocean Winds
Schyvens	Tim	Elia
Steensels	Marc	Otary
Van Campenhout	Steve	Elia
Van der Biest	Piet	Siemens Energy
Van Huffel	Margot	Otary



Vergote	Viktor	Luminus
Verhlest	Clara	CREG
Verrydt	Eric	BASF Antwerpen
Verwilghen	Davy	Elia
Vissers	Maurice	Eneco
Vleeschouwers	Stefaan	Hitachi Energy
Vosse	Bertrand	Elia
Watthé	Gunnar	DEME Group

Agenda of the Task Force MOG 2

Session 1: 13:00 – 16:00 (chaired by Benjamin Genêt)

1. **Presentation by the Cabinet – update planning tender OWF MOG 2**
2. **Stakeholders interactions**
 - a) General overview results call for feedback and process
 - b) Feedback on exchanges around forced oscillations
3. **Introduction on technical challenges for AC & DC coupling MOG 2**
4. **Balancing – MOG 2 system integration study**
 - a) Impact of MOG 2 on reserve dimensioning
 - b) Impact of MOG 2 on mitigation measures for storms and ramps

Session 2 – workshop: 16:00 – 17:00 (chaired by Benjamin Genêt)

5. **Market design MOG 2 and OBZ process**

The meeting is chaired by Benjamin Genêt, new chairman of the Task Force MOG 2 from January 2023 following an internal Elia re-organisation. All agenda items were supported by presentations prepared by Elia. The slides serve as background for these minutes and can be found on the Elia website under <https://www.elia.be/en/users-group/workshop>

Field Code Changed



Minutes of Meeting

Benjamin Genêt (Elia) welcomes all physical and virtual participants to this Task Force MOG 2. He introduces the agenda and the main objectives of today.

Presentation by the Cabinet

The Cabinet (Lieve Jorens) presents the updated planning of the MOG 2 tenders for the offshore wind farms in the Princess Elizabeth Zone. The delay for the MOG 2 tender is mainly justified by the delay of the permitting process for Ventilus. Based on this update, the publication of all tender documents is now aimed for the last quarter of 2024 at the latest.

Luminus (Viktor Vergnote) asks if a pre-qualification phase is foreseen prior the tender MOG 2. The Cabinet (Lieve Jorens) answers that currently no pre-qualification phase is foreseen.

Engie (Beatrice De Backer) asks what is the timing foreseen for the two other phases of the tender (phase 2 and 3). The Cabinet (Lieve Jorens) answers that some uncertainties remain if the phase 2 and 3 will be organized in one or two separate tenders.

The Cabinet (Lieve Jorens) concludes that the information and planning presented in this session are available on the FPS Economy website:
<https://economie.fgov.be/en/themes/energy/belgian-offshore-wind-energy>

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Stakeholders interactions

a) General overview results call for feedback and process

Elia (Bilal Hahati) presents an overview of the main reactions received from the call of feedback from the 14th of October 2022 to the 31th of October 2022 on Offshore Binding Zone aspects presented during the different ad-hoc workshops MOG 2 organized by Elia. The reactions received were mainly oriented on four main topics: grid design, market design, balancing and support mechanisms for offshore wind farms. The questions/remarks received on grid design and market design are covered in this Task Force MOG 2 and the remaining other questions/remarks will be presented in two other ad-hoc workshops organized the 6th of February (for follow-up on open questions related to market design) and the 17th of March (for balancing design questions).

b) Feedback on exchanges around forced oscillations

Elia (Fortunato Villella) presents a status update on forced oscillation presented in the last Task Force MOG 2 organized the 24th of June. In this last Task Force, the topic of forced oscillation phenomena was presented to highlight the impact of this local phenomena at the European system level.



Elia (Fortunato Villella) informs about the request from BOP and CREG to investigate onshore options and perform a Cost-Benefit Analysis between onshore and offshore solutions on forced oscillation.

Elia (Fortunato Villella) presents the two parallel tracks foreseen to define the requirements to mitigate the forced oscillation phenomena:

1. BE track: application to the European Transition Funds (ETF) for a research project on this topic (start date September 2023);
2. EU track: use ENTSO-E proposal in the framework of the network code update to ACER.

BOP (Hugo Canière) asks what is the duration of the project foreseen in the BE track. Elia (Fortunato Villella) answers that the project is foreseen to start in September 2023 for a duration of around 1 year.

Febeliec (Peter Claes) asks about the impact of the BE track initiative on Elia tariff. Elia (Fortunato Villella) answers that feedback on the outcomes of these tracks will be provided on time.

CREG (Clara Verhelst) asks if the results of this ETF study would be available before the tendering specifications. Elia (Fortunato Villella) answers that an opportunity window to making the timing compatible is possible but needs to be discussed with the different partners in the preparation of the project. Elia (Fortunato Villella) insists on the fact that this project remain essentially a research project and at this time no onshore solutions exist worldwide. In addition, the goal is to work on both BE and EU track to maximize the chance to identify a reliable and fair solution in the framework of the MOG 2 tenders.

Introduction on technical challenges for AC & DC coupling MOG 2

Elia (Bertrand Vosse) presents the current planned grid design for MOG 2 in the framework of the Federal Development Plan and the key uncertainties on the maturity of the DC circuit breaker to allow meshing of DC grid and the '1 node' (DC and AC offshore coupled) vs '2 nodes' (DC and AC decoupled) operation.

BOP (Hugo Canière) asks why the '2 nodes' configuration is used in the Federal Development Plan. Elia (Bertrand Vosse) answers that some uncertainties remain on the feasibility of the '1 node' and the technical challenges are explained in the next part of the presentation.

Otary (Margot Van Huffel) asks when the feasibility of '1 node' or '2 nodes' will be known and especially in relation to the tender planning of MOG 2. Elia (Bertrand Vosse) refers to information provided in the second part of the presentation on introduction of technical challenges of AC and DC coupling of MOG 2 where the feasibility of the '1 node' might be known around 2026 (detailed design study from manufacturers). Before this period, the only information that can potentially be obtained is about a non-feasibility of the '1 node'.



Febeliec (Peter Claes) mentions that the investments and choices described in the Federal Development Plan will have an impact on the share of the welfare between Belgium and other countries, meanwhile the cost of the MOG 2 project will be paid by the Belgian grid users. Febeliec (Peter Claes) asks how this share of welfare will be considered in the financing part of the project. Elia (Bertrand Vosse) answers that the Federal Development Plan is developed to validate the needs for new infrastructures and doesn't validate how its costs will be shared. This aspect is part of specific discussion taking place project per project and involving the concerned authorities in the different countries.

Elia (Olivier Bronckart) presents the introduction related on technical challenges of AC and DC coupling for MOG 2 from a network stability perspective.

BOP (Hugo Carnière) mentions the needs to have the clarity on '1 node' or '2 nodes' reference for the tender of MOG 2.

RWE (Jo Mortier) asks if the missing flow and missing money for offshore wind farm due to the connection of Nautilus in the energy island was well taken into account in the business case assessment and if the another grid design would be preferable. Elia (Benjamin Genêt) answers that the connection of Nautilus with a hybrid configuration is not directly linked on the technical challenge of the 1 node and 2 nodes and refers to the Federal Development Plan in this respect.

Parkwind (Stijn Hendrix) asks if the grid forming capability to increase the system strength is expected to be provided by offshore wind farm. Elia (Olivier Bronckart) answers that this capability is expected more from the HVDC converter than the offshore wind farm at this stage.

Balancing – MOG 2 system integration study

Elia (Kristof De Vos) introduces the context of the MOG 2 system integration study, the different packages of the scope (projections of offshore generation profiles, impact on Elia's reserve needs, impact on mitigation measures for storms and ramps, LFC block configuration) and the overall planning.

Luminus (Steven Harlem) asks clarification on assumptions used for market design in the MOG 2 system integration study. Stakeholders express moreover the need to have more in depth discussions on the balancing and market design topics which are each time presented separately, while these are strongly interrelated. Elia (Kristof De Vos) highlights the complexity of the balancing topics (reserves, mitigation measures, offshore bidding zones) and share the need, in order to manage the complexity of this topic, to look first at the different aspects separately. The conclusions of the analyses and discussions will be integrated at one point in time, which will ultimately be done in a public consultation. Elia also recognizes that there are still open questions and justify the needs to involve the stakeholders in an early stage of the analysis.

Elia (Kristof De Vos) closes the introduction part with an overview of the planning [Elia presented the reserve projections in a specific WG Balancing workshop on 15/02/2023,



the balancing implications of offshore bidding zones in a specific TF MOG 2 workshop on 17/03/2023, and the mitigation measure in the TF MOG 2 of 24/03/2023.

CREG (Gilles Bertrand) mentions that regularly the ATC can be quite small for several borders in intraday for balancing in Belgium and asks how the situation with no export capability will be tackled. Elia (Kristof De Vos) answers that the case will be investigated by Elia and further discussed in one of the next meetings.