ESO

# Code Administrator Meeting Summary

## Meeting name: GC0154 – Interconnector ramping Workgroup Meeting 10

**Date:** 22/03/2023

## Contact Details

Chair: Jessica Rivalland, National Grid ESO Jessica.Rivalland@nationalgrideso.com
Proposer: Louise Trodden, National Grid ESO Louise.Trodden@nationalgrideso.com

## Key areas of discussion

The Workgroup discussions are summarised according to agenda items:

## Workgroup Objective and Action Review

The Chair introduced the Workgroup objectives and outcomes intended for the meeting.

## CBA Update

The Baringa representatives walked the Workgroup through some slides on the Interconnector (IC) Ramping CBA. The aim was to provide an update on the CBA status, advise on themes that are emerging, and to gain the Workgroup feedback. Main highlights were:

- The Baringa representative explained that there are a mix of impacts: monetized, quantified, and non-quantified (qualitative). The aim of the framework is to bring all impacts together and aid the understanding of the overall cost and benefits of each option, in order to conclude what the recommended option is.
- The Baringa representative advised that with regards to implementation costs (the ESO and industry costs for implementing the alternative options), that cover both setup and ongoing operational costs, Baringa don't see any material difference for the two options assessed so far (100 MW and 50 MW per minute ramp rate). He also advised that for other options it could be different and asked the Workgroup for feedback on the potential costs of implementation.
- When explaining the non-quantified impacts, like security of supply, the Baringa representative asked for the Workgroup view in terms of other impacts Baringa might not be capturing or are being captured in the non-quantified area that should be quantified and how to integrate them into the quantified analyses.

The Baringa representative advised the implementation in the PLEXOS modelling is assuming that the Interconnector capacity connecting at the GB is the same in all options, recognising that maybe there is an impact on Interconnector value from changing the ramp rates and if is sufficiently large, can influence investment, advising that this will be captured qualitatively, not within the PLEXOS modelling but as a separate line item.

- Workgroup member questioned the meaning of IC connection to GB markets being the same and asked the Baringa representatives to share a high-level input model to Plexus model so the Workgroup can review – Baringa representative agreed to share once the work is completed as they are still waiting on the agreement with the ESO regarding the approach methodology, to which Workgroup advised that at that stage might be too late for the Workgroup to have any input. It was agreed by the Baringa representative to take this offline and see how soon this can be shared.

- Workgroup member pointed that when reducing ramping to 50MW per minute the biggest concern will be to complete in compliance with the ramping window and if this is passed into the adjacent period is a serious risk and could increase the imbalance costs, assuming a 15-minute granularity how does Baringa handles this as it can potentially be a significant cost. The Baringa representative advised that they decided to keep demand flat as the markets operate on an hourly basis and only change those inputs granularity for purposes of the IC ramping.

- Another Workgroup member asked if the forecast scenarios could be shared and the possibility of including staggered ramping for the different Interconnectors and that if this would affect the results. The Baringa representative advised the markets are still solving on an hourly basis, so they feed hourly information into the model, keeping it flat within the hour. Workgroup member advised that the ICs are ramping at a staggered manner, and he would like to see a forecast for that, this was challenged by the ESO advising that what is seen is that the ICs move together on the hour and staggered ramping is not seen. The Baringa representative advised that they could look into the historic picture and do a comparison of the outputs to the PLEXOS modelling, adding this into the analyses to provide validation.

- ESO Workgroup SME asked the Workgroup if the current imbalance costs can be shared so they can be considered and compared to the new imbalance costs.

- When looking into the impact on flows GB-FR, a Workgroup member pointed out that when looking into the ramping changes at 1600 hours, in the new model it happens in 1700MW not at 1630 so therefore is not a 15-minute window but an hour. Assuming is going down to 50MW per minute that will be 1 hour imbalance which could be significant. The Baringa representative advised that the model is capturing the isolated impacts to the ramping rate changes and in terms of capturing the value of going over to different periods is not demonstrated here, Baringa advised they will consider this.

- A Workgroup member questioned the 15 minutes interval period and asked if Baringa is assuming the ICs are ramping every 15 minutes, as in the current market they change over every hour. Baringa advised that by leaving a 15-minute granularity in the model it gives snapshots every 15 minutes of what the ICs are doing, doesn't mean they ramp every 15 minutes. Workgroup member asked that whether Baringa can change the model to reflect

the current market and if they can quantify the difference, assuming 15 minutes may not work. The Baringa representative agreed to take this away and consider.

- Workgroup member asked Baringa for the combined stats across ICs.

- Workgroup member queried Baringa if the EU markets have been assessed and considered in the CBA. The Baringa Representative advised that the CBA is completed in a full European basis and impacts are assessed at the national level. Those are quantified and will give a view of the impacts across Europe or in the particular markets.

- When asked about sharing the information, Baringa are aware of the time constraints and are prepared to continue, however the final timeline needs to be considered between Baringa and the ESO. They are trying to make the CBA more collaborative, and they are in discussions with the ESO to try work out what is a reasonable amount of time. Workgroup member advised that if the assumptions, methodology and approach could be shared. Proposer agreed to share those with the Workgroup.

## Deep Dive on IC proposed options

Workgroup member shared with the Workgroup the ICs proposed options for TSO ramp management (original option 1a), in order to give a more detailed view on what the requirements are for ICs with the aim to aid Baringa in the CBA. Main points of consideration were:

- ESO Workgroup SME advised that they tried to get ramp rate services across all of the ICs and it can't be done as it is a TSO restriction, and that is where the blocker has been in the past. He also advised that with regards to the early TSO communication, the earliest it can be done is half an hour before the ramp starts, so unsure if it gives enough time to change the ramp rates. Advising that it is not impossible, however it does need to be realistic.

- ESO Workgroup SME stated that the response market is being  response market is being reviewed in other workstreams, and it is all changing and will change in the future. He also advised that the Workgroup need to be careful so as not to confuse it with the specific problem of ramping on the hour, as the ESO can't increase the response permanently just to cover ICs ramping on the hour as this will increase the costs for the GB consumers. Workgroup member highlighted that the ramping rate change service is being used as a complementary service, to which the ESO Workgroup SME explained that this is because they don't have it on all the ICs. The Workgroup member stated they are proposing to use it on all the ICs, the ESO Workgroup SME advised that they have tried to do so but the TSOs are unable to facilitate this. Workgroup member suggested to have a joint discussion with the TSOs on this.

- The second option (which was original option 3a) the workgroup wanted to include was linked to response and reserve. The Baringa representative advised that on the topic of the response market service, the CBA will be about identifying the benefit to the consumer with regards to the service, and that they would be happy to consider how this could be added to the cost model. He explained that considerations will be needed on identifying the periods and occurrences where the service would be used, considering using the 100 MV

per minute to get the flows and with the help of the Workgroup consider the costs for that. Advising they can write a methodology approach for option 1A.

- Baringa representative explained that the issue with option 3 is the lack of details and that they will be trying to create a market for the IC ramp rates and putting a value to that, just by looking into the response market. A Workgroup member advised that is important to understand what the costs could be for this. He stated that in terms of the ESO and what they are doing for the methodology, is looking into the volume of actions ESO takes to manage ramping periods as the costs of energy between now and 2030 will radically change. Workgroup member question the fact of Baringa not looking at the cost just at the volume, and the relevance of this. The Baringa representative clarified they are looking at the volume of actions and the associated costs, but when they apply that to a 2030 model, they use the costs that are relevant for that time, he also advised that the methodology will be shared with the Workgroup and will help clarify this point.
- The proposer suggestion was that we could consider the Dynamic option (original option 2a) which the ESO had presented in a previous meeting. Baringa advised that this would be possible to model. This could be seen as a ramp management tool and also open up the available ramping to IC who wanted to use the additional ramping capacity. This would be set with a base rate and then the additional capacity would be made available at day ahead stage.

## Proposer update on outputs

The Proposer gave an update to the Workgroup on the current outputs, main highlights were:

- The Proposer asked the Workgroup to reflect on the discussions that took place today and if any Workgroup member have any thoughts on the third option around methodology, to revert feedback by the end of this week, so it can be shared with Baringa.

- Proposer will collect the feedback on the TSO engagement and on the IOP meetings that already took place regarding this topic and share with the Workgroup.

- Proposer advised that after Easter there is a ENTSOE Workgroup meeting that ESO is hoping to attend in person to bring this topic to the table and share the Workgroup views. ESO couldn't attend before due to post Brexit relationships within Europe, but the Proposer is hoping that this can be done now. Proposer will circulate the outcome of that meeting (if ESO is able to attend) with the Workgroup.

## Next Steps & AOB

- The Proposer will discuss the timeline with Baringa and inform the Workgroup.
- The Chair will circulate the modelling, the methodology and the approach requested by the Workgroup

## Actions

| Action number | Workgroup Raised | Owner | Action | Due by | Status |
|---|---|---|---|---|---|
| 6 | WG9 | LT | To link in with KVH to explain feedback responses | ASAP | Open |
| 7 | WG9 | ESO reps | ESO will produce a slide to show the forum dates with details and to circulate. | ASAP | Open |
| 8 | WG9 | BM & AC | Will provide a basis of discussion a list the services and "intrinsic ramping" and how the market constraints could accommodate to further workgroup discussion | ASAP | Open |
| 9 | WG9 | JR | To issue out an email with the poll with options for WG to complete | 24/02/23 | Closed |
| 10 | WG9 | ESO & Interconnectors | A separate discussion with ESO and interconnectors to be set up prior to the next workgroup. | ASAP | Closed |
| 11 | WG10 | ICs | To share with the Workgroup the current imbalance costs | ASAP | Open |

## Attendees

| Name | Initial | Company | Role |
|---|---|---|---|
| Jessica Rivalland | JR | National Grid ESO | Chair |
| Catia Gomes | CG | National Grid ESO | Technical Secretary |
| Louise Trodden | LT | National Grid ESO | Proposer |
| Andre Canelhas | AC | GridLink Interconnector | Workgroup Member |
| Daniel Newby | DN | Ofgem | Authority Representative |
| James Hill | JH | Ofgem | Authority Representative |
| Kick Vanhouten | KVH | BritNed | Workgroup Member |
| Lijia Qiu | LQ | Nationalgrid Ventures | Workgroup Member |
| Ilias Varsos | LV | Eleclinks | Observer |

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|---|---|---|---|
| Meerav Shah | MS | Baringa | CBA Consultant |
| Ronan Jamieson | RJ | Baringa | CBA Consultant |
| Vera Stam | VS | BritNed | Workgroup Member Alternate |
| Adrian Palmer | AP | Baringa | CBA Consultant |
| Alex Townsed | AT | Baringa | CBA Consultant |
| Josh Layall | JL | Baringa | CBA Consultant |
| Munti Nguyen | MN | NEMO Link | Workgroup Member Alternate |
| Kevin Lee | KL | Alpha Energy Consulting | Workgroup Member |
| Scott Field | SF | NeuConnect | Workgroup Member |
| Tatiana Vaskovskaya | TV | Baringa | CBA Consultant N |
| Simon Williams | SW | National Grid ESO | ESO Workgroup SME |