

GC0117 – Workgroup Meeting 13



Agenda

Time	Agenda item	Presenter
09:00 – 09:10	Timeline review and Workgroup Objective	RR
09:10 – 09:30	Action Log review	RR
09:30 – 11:00	ESO actions update and questions from Workgroup on alternatives raised	AJ
11:00 – 11:15	Break	
11:15 – 12:00	Workgroup consultation specific questions	All
12:00 – 12:30	Alternative vote	WG
12:30 – 13:00	Agree next steps and confirmation of next WG date	RR

Updated Timeline for GC0117

Milestone	Date	Milestone	Date
Workgroup Meeting 11	18 March 2022 - completed	Workgroup report presented to Panel	29 September 2022
Workgroup Meeting 12 – to detail out all WG alternates	27 April 2022	Code Administrator Consultation (1 month)	14 October – 14 November 2022
Workgroup Meeting 13 – refine legal text and compile WG consultations questions	24 May 2022	Draft Final Modification Report (DFMR) issued to Panel	16 November 2022
Workgroup Meeting 14 – finalise WG consultation document	23 June 2022	Panel undertake DFMR recommendation vote	24 November 2022
Workgroup Consultation	7 July – 29 July 2022	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	30 November 2022
Workgroup Meeting 15 – review of WG consultation responses	16 August 2022	Final Modification Report issued to Ofgem	7 December 2022
Workgroup Meeting 16 (WG Vote)	15 September 2022	Implementation Date	TBC
Workgroup report issued to Panel	21 September 2022		

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Antony Johnson – National Grid ESO
24 May 2022

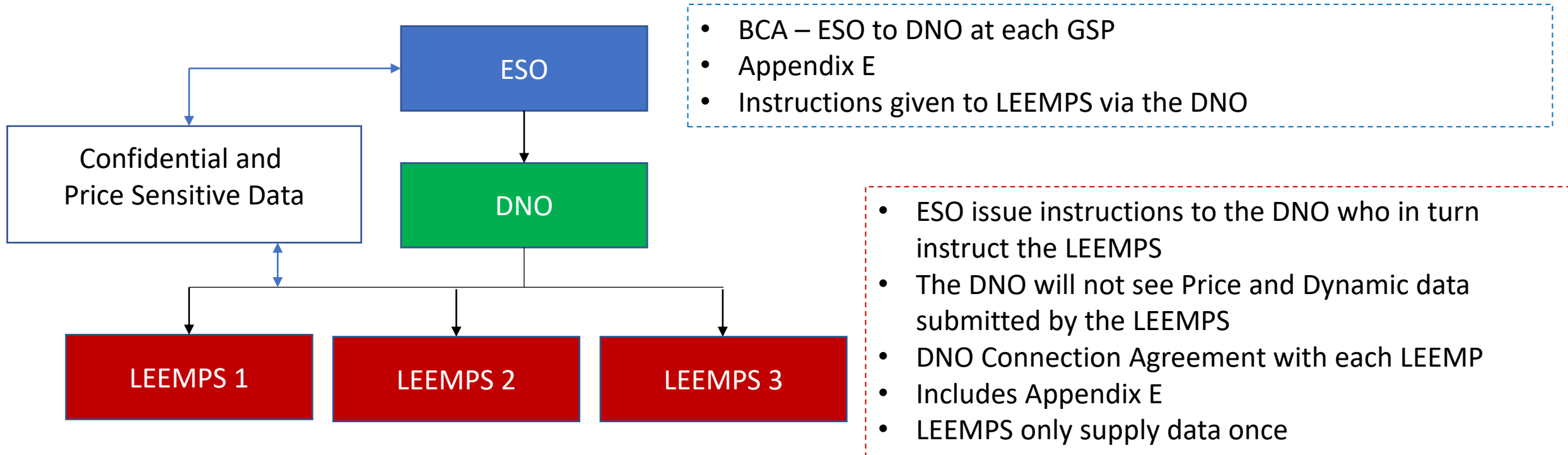
AJ - Summary of Actions

- WAGM 3 – LEEMPS Plus Features including requirements for dynamic data and Bilateral Agreements
- WAGM 4 - Regional Development Programme – Features
- Registered Capacity

LEEMPS Plus - Features

- Adopts similar approach with obligations placed in the Distribution Code requiring LEEMPS to satisfy specific obligations in the Grid Code
- Medium Power Stations set to 10 – 100MW
- The LEEMPS Plus approach would extend the obligations on LEEMPS to be within the framework of the BM
- BELLA's are limited in their functionality so the opportunity has been taken to treat LEEMPS Plus stations in the same way as BM Units with instructions issued by the ESO to the DNO and then to the Generator.
- There would need to be a relationship between the ESO and LEEMPS in respect of participation in the BM – particularly in relation to commercially sensitive data.
- The LEEMPS would satisfy all its requirements through the DNO (via the DNO connection agreement and D Code) which the DNO would then pass onto the ESO as applicable. This builds on the Open Networks work
- Instructions from the ESO to the LEEMPS would be via the DNO other than in respect of Confidential Data
- Separate communications channels would be required to submit price and availability data to the ESO directly from the LEEMPS

LEEMPS Plus



Dynamic Data – LEEMPS Plus

BC1.A.1.5

Dynamic Parameters

The **Dynamic Parameters** comprise:

- Up to three Run-Up Rate(s) and up to three Run-Down Rate(s), expressed in MW/minute and associated Run-Up Elbow(s) and Run-Down Elbow(s), expressed in MW for output and the same for input. It should be noted that Run-Up Rate(s) are applicable to a MW figure becoming more positive;
- Notice to Deviate from Zero (NDZ) output or input, being the notification time required for a **BM Unit** to start importing or exporting energy, from a zero **Physical Notification** level as a result of a **Bid-Offer Acceptance**, expressed in minutes;
- Notice to Deliver Offers (NTO) and Notice to Deliver Bids (NTB), expressed in minutes, indicating the notification time required for a **BM Unit** to start delivering Offers and Bids respectively from the time that the **Bid-Offer Acceptance** is issued. In the case of a **BM Unit** comprising a **Genset**, NTO and NTB will be set to a maximum period of two minutes;
- Minimum Zero Time (MZT), being either the minimum time that a **BM Unit** which has been exporting must operate at zero or be importing, before returning to exporting or the minimum time that a **BM Unit** which has been importing must operate at zero or be exporting before returning to importing, as a result of a **Bid-Offer Acceptance**, expressed in minutes;
- Minimum Non-Zero Time (MNZT), expressed in minutes, being the minimum time that a **BM Unit** can operate at a non-zero level as a result of a **Bid-Offer Acceptance**;
- Stable Export Limit (SEL) expressed in MW at the **Grid Entry Point** or **Grid Supply Point** or **GSP Group**, as appropriate, being the minimum value at which the **BM Unit** can, under stable conditions, export to the **National Electricity Transmission System**;
- Stable Import Limit (SIL) expressed in MW at the **Grid Entry Point** or **Grid Supply Point** or **GSP Group**, as appropriate, being the minimum value at which the **BM Unit** can, under stable conditions, import from the **National Electricity Transmission System**;
- Maximum Delivery Volume (MDV), expressed in MWh, being the maximum number of MWh of Offer (or Bid if MDV is negative) that a particular **BM Unit** may deliver within the associated Maximum Delivery Period (MDP), expressed in minutes, being the maximum period over which the MDV applies.
- Last Time to Cancel Synchronisation, expressed in minutes with an upper limit of 60 minutes, being the notification time required to cancel a **BM Unit's** transition from operation at zero. This parameter is only applicable where the transition arises either from a **Physical Notification** or, in the case where the **Physical Notification** is zero, a **Bid-Offer Acceptance**. There can be up to three Last Time to Cancel Synchronisation(s) each applicable for a range of values of Notice to Deviate from Zero.

- Run Up Rates
- Notice to Deviate from Zero
- Notice to Deliver Offers and Notice to Deliver Bids
- Minimum Zero Time
- Minimum Non-Zero Time
- Stable Export Limit
- Stable Import Limit
- Maximum Delivery Volume
- Last Time to Cancel Synchronisation

Bilateral Agreement – LEEMPS

- For LEEMPS, obligations exist in the Distribution Code which bind a LEEMPS to a obligations in the Grid Code (PC3.3 and CC/ECC3.3).
- The ESO places obligations on the Network Operator (through the Grid Code PC3.3 and CC/ECC3.3) and through the Network Operators Bilateral Agreement (Appendix E) so the LEEMPS can meet the site specific requirements required from the ESO.

CC.3.3.3 *In the case of **Embedded Medium Power Stations** not subject to a **Bilateral Agreement** and **Embedded DC Converter Stations** not subject to a **Bilateral Agreement** the requirements in:*

CC.6.1.6

CC.6.3.8

CC.6.3.12

CC.6.3.15

CC.6.3.16

*that would otherwise have been specified in a **Bilateral Agreement** will be notified to the relevant **Network Operator** in writing in accordance with the provisions of the **CUSC** and the **Network Operator** must ensure such requirements are performed and discharged by the **GB Generator** or the **DC Converter Station** owner.*

- An example of such an agreement (Appendix E) is attached – Pages 183 – 194
- <https://www.nationalgrideso.com/electricity-transmission/document/33976/download>

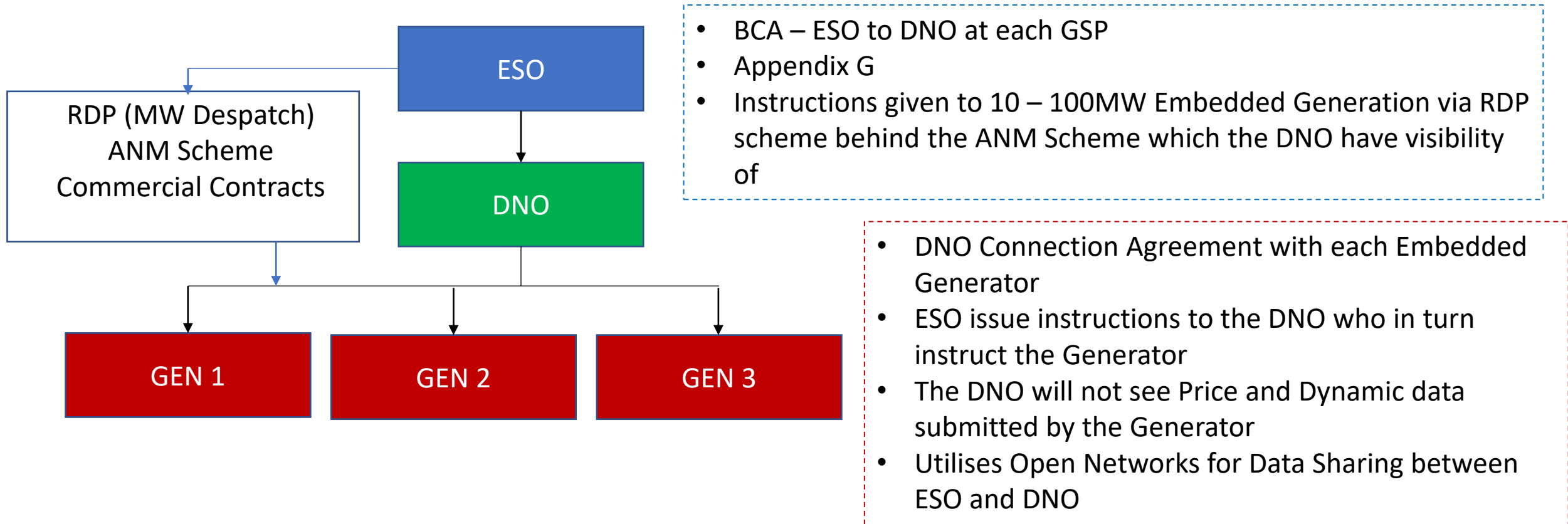
Bilateral Agreement – LEEMPS Plus

- For LEEMPS Plus the arrangements would be similar to LEEMPS with the need for an additional agreement between the ESO and LEEMPS station but only in respect of submission of confidential data
- The Agreement with between the ESO and DNO would need be updated so Network Operators have the appropriate data logging facilities so they can instruct LEEMPS Stations via the ESO
- The requirements for a LEEMPS Plus agreement does need some work but would be a cut down version of that used for Virtual Lead Parties with a Network Operator Interface.
- It is likely that as a new type of agreement is required a CUSC modification would be required

Option 5 – Regional Development Programme

- As per Option 3 with a BM and Ancillary Services wrapper around it using a Regional Development Programme
- Obligations are placed on the DNO to ensure each Embedded Generator sign up to the Regional Development Platform which sits behind the Active Network Management Scheme.
- This approach has been trialled in the South West and uses the Appendix G process
- It applies the same Power Station thresholds in England and Wales to Scotland but requires the DNO to implement a Regional Development Programme in respect of each Grid Supply Point
- Builds on the Open Networks Work
- Further information to be provided on the mechanics of how this solution works
- Generators in respect of Small and Medium Power Stations would still have the option of applying for a BEGA should they wish to do so

Option 5 Regional Development Programme



Registered Capacity

- Currently under development but one option going forward is to clearly define the requirement for new plant going forward
- Draft Legal Text prepared – see attached
- Further discussion is required within the ESO but an early view from the workgroup on this proposal would be useful for discussion