

BMU Registration Guide | Oct 2023

national**gridESO**

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1. Introduction

Overview

This document is a guide to the process of registering Balancing Mechanism Units (BMUs) with National Grid ESO (NGESO). This guide is intended both for parties who are entering the market for the first time and for those who already have BMUs registered with ELEXON but now wish to or are required to register such BMUs with NGESO. In summary, NGESO will register BMUs with an FPN flag selected as 'yes'.

The BMU registration process with NGESO is a separate process to the ELEXON registration process.

ELEXON and NGESO can be contacted at:

ELEXON: <u>bscservicedesk@cgi.com</u> - telephone 0370 010 6950

NGESO: telephone 0800-085-4806

Although this document deals specifically with BMU registration, references are also provided where possible giving additional information on related registration steps.

Main points to note

Each Party that has responsibility for Exports and/or Imports onto the Transmission System must ensure that the Plant and/or Apparatus which gives rise to those Exports and/or Imports are comprised in registered BM Units. The Central Registration Agent (CRA) administers this registration process for ELEXON. Section K of the Balancing and Settlement Code (BSC) defines this obligation, and the BMU registration process is detailed in the Balancing and Settlement Code Procedure (BSCP) 15, "BM Unit Registration". The BSC and the associated BSCPs can be found on the ELEXON website www.elexon.co.uk, under BSC and Related Documents.

In addition to the requirement to register with ELEXON, there is an obligation in some instances for parties to register their BMUs with NGESO, in its role as Electricity System Operator (ESO). The Grid Code obliges parties to register depending on type and size criteria with NGESO. Parties may also choose to register smaller BMUs in order to participate actively in the Balancing Mechanism. Interconnector Users are required to register BMUs, regardless of capacity, in pairs (Import & Export expressed as Demand & Generation BMUs).

Once a BMU is registered with NGESO, the Lead Party must submit Physical Notifications (PNs) for that BMU. The PNs for a BMU are the expected levels of Export or Import, as at the Transmission System Boundary, for that BMU. This is done using a communication system known as EDT (Electronic Data Transfer). Participants may also wish to be active in the Balancing Mechanism, for which a separate system known as EDL (Electronic Dispatch Logging) will be required. These two systems are distinct and separate from any links between the party's system and those of ELEXON or its Agents.

The detailed process of BMU registration is given in BSCP15, "BM Unit Registration", a subsidiary document to the BSC. This guide does not aim to summarise BSCP15, but to indicate the steps that parties will need to take to complete the registration process with NGESO.

Any interested party is advised to contact NGESO and ELEXON on their respective helpdesks. Those whose BMUs are already registered with ELEXON should be aware that they will still have to contact ELEXON to register the change in FPN status of their BMUs from No to Yes.

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Routes to the Balancing Mechanism

Traditional Route to the BM

The traditional route requires signing a NGESO Connection Agreement. These take the form of: Bilateral Embedded Generation Agreement (BEGA), Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLA), Bilateral Connection Agreement (BCA). BCAs are required for new connections to the National Electricity Transmission System (NETS). Embedded generators can enter either a BEGA or a BELLA.

The Connections Team are responsible for taking parties through the connection process to go live within the BM. Please visit the Connections Team website for some more information.

transmissionconnections@nationalgrideso.com

Through this process parties will be required to accede to the Connections and Use of System Code (CUSC), through NGESO and the Balancing and Settlement Code (BSC) through ELEXON.

Supplier Route to BM Access

The supplier route requires a party to be a registered supplier with ELEXON who will issue 14 supplier base BMU's. Parties cannot use these BMU's to actively participate in the balancing mechanism. Parties will be required to register Additional BMUs to actively participate. Under this route aggregation is permitted but is limited within Grid Supply Point Groups (Distribution Network Owner areas).

Commercial Operations/Account Managers can share the agreement required to actively participate with Additional Supplier BMU's. This includes an appendix outlining the various technical and Grid Code requirements.

Through this process parties will be required to accede to the Connections Use of System Code (CUSC), through NGESO and the Balancing and Settlement Code (BSC) through ELEXON.

Wider Access to the Balancing Mechanism

<u>Wider access</u> aims to make the Balancing Mechanism market more accessible to non-traditional providers and aggregators.

- Improved route for submission of data at an aggregated level;
- Introducing the concept of a Virtual Lead Party (VLP) who will be able to register BMUs as small as 1MW and
- Enhancing interface between NGESO and market participants so data submission is more efficient and cost-effective for smaller and aggregated units.

More information about Wider Access to the BM is available on the Balancing Mechanism Wider Access page of the NGESO website. To discuss opportunities offered by Wider Access and the API, please contact NGESO via your account manager or email Commercial.Operation@nationalgrideso.com. Alternatively, view the WA API Overview document https://www.nationalgrideso.com/document/179746/download on the NGESO website.

Virtual Lead Party (VLP)

This route was developed for TERRE (Trans-European Replacement Reserve Exchange), so is the newest route to market and has a different registration process for those wishing to participate in the BM. Please visit this webpage to understand more about TERRE. NG are also using this route to deliver Wider Access. This route requires registration as a VLP through NGESOs new online registration system. Parties will register Secondary BMUs with both NGESO and ELEXON. Through this process, you will also be required to accede to the Connections Use of System Code (CUSC) through the NGESO Connections Team



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(transmissionconnections@nationalgrideso.com) and the Balancing and Settlement Code (BSC) through ELEXON.

Route	Contract	Relevant NGESO team
Traditional	Connection Agreement. Registered as a Primary Balancing Mechanism Unit (BMU).	Connections Team transmissionconnections@nationalgrideso.com
Supplier	Registered Supplier and Additional Supplier BMUs created.	Commercial Operation (Account Manager) – commercial.operation@nationalgrideso.com
Virtual Lead Party	Registered and completed through our new electronic portal. Parties sign a VLP agreement and units register as secondary BMU's.	Commercial Operation commercial operation@nationalgrideso.com

System Requirements

There are number of system requirements before a unit can become active in the BM, to ensure they can communicate with the Electricity National Control Centre (ENCC). These systems are:

- Electronic Dispatch Logging (EDL)
- Electronic Data Transfer (EDT)
 - or WA API (Wider Access Application Programming Interface Combined EDL/EDT functionality)
- Control or System Telephony
- Operational Metering data provision

Please see Section 3 and 4 for further information on EDT, EDL and Control Telephony

Control Communications

Electronic Data Transfer (EDT) and Electronic Dispatch Logging (EDL) are 2 systems which are used for control communications. EDT allows the BMU to submit technical and commercial parameters about the unit and EDL allows the ENCC to send instructions to the BMU.

To ensure the appropriate communications systems are in place parties can:

- Utilise an existing connection that your business already has.
- Utilise another company's connection with their agreement.
- Engage with NGESO's IS team on a new WA API (Application Protocol Interface) system. This team may
 be contacted at box.wideraccessapi@nationalgrideso.com. Please see the Wider Access webpage for
 further information.

Operational Metering

Active BMU's are required to supply operational metering data on the volumes they deliver, with variations depending on the type of generating technology. NGESO have developed a new cloud-based operational metering solution capable of providing a low-cost, high-volume, future-proof product which meets the needs of NGESO and new participants.

Parties can access a high-level document of the new Operational Metering Submission API on the Wider Access webpage. Following this, parties will be granted access to a secure platform for further technical details as they are ready to develop a solution and progress to testing. Please contact box.SmallBMUOpsMeter-ESO@nationalgrid.com

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Associated Requirements

CUSC

All users of the National Grid Transmission System must accede to the Connection and Use of System Code (CUSC). Further information about CUSC may be found on the NGESO website at https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc Connections Team within NGESO offers information and assistance to new customers and may be contacted directly on box.transmissionconnections@nationalgrideso.com alternatively, the cusc.team@nationalgrideso.com can help.

eGAMA

eGAMA (Electricity Generation Availability and Margin Analysis) is NGESO'S system for receiving submissions of generator availability.

All BCAs must submit capacity availability to eGAMA – i.e., Directly connected to the Transmission Grid System (including NGET, SPT and SHET)

If embedded connected, this will depend on the size in MWs if in the following criteria:

- >= 10MW in North Scotland SHET
- >= 30MW in South Scotland SPT
- >= 100MW in England and Wales NGET
- All physical interconnectors (not the Interconnector BMU pairs)
- All OFTO connected windfarms

For further details on your OC2 eligibility to submit availability to eGAMA or to request access to eGAMA please reference this URL: https://www.nationalgrideso.com/industry-information/balancing-services/egama

For any queries regarding eGAMA please contact box.modellingandinsight@nationalgrideso.com.

Interconnector BMUs

Companies wishing to trade across the England-France Interconnector or the Moyle, BritNed, EWIC, NEMO IFA2 and NS Link and Viking Interconnectors must be registered with ELEXON as an Interconnector User. Each Interconnector User will register two BMUs, one for demand and one for generation (being respectively export from and import to the GB Transmission System).

Users of the Interconnectors to other countries must fulfil a number of other criteria with the relevant interconnector owner and the transmission system operator at the remote end of the link, including the signing on to the Access Rules. These Access arrangements are outside the scope of this document, but interested parties are advised to contact the interconnector owner for more information

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IFA/IFA2 - ifa.customerenquiries@nationalgrid.com

BritNed - customer.enquiries@britned.com

Nemolink - customer.service@nemolink.co.uk

EWIC - eastwestinterconnector@eirgrid.com

Moyle - info@mutual-energy.com

Eleclink- team.eleclink@eleclink.co.uk

North Sea Link - Box.NSL.Operations@nationalgrid.com

Viking Link - viking.customerenquiries@nationalgrid.com

EDT/EDL/API/Control Telephony Communications

Consideration must be given to the timescales required for the installation and testing of communication links if they are required.

NGESO now offers two options for dynamic exchange of data – Electronic Data Transfer (EDT) and Dispatch & Logging (EDL) – for the purpose of accessing the BM:

- Connections of new private circuits using NGESO's telecommunications network provider via traditional, fixed-line technology
- Connection to the WA API infrastructure using web services and internet-based connectivity.

All new small BM participants can connect directly to the new the WA API infrastructure. However, they may also opt to use an intermediate hosting service, provided by a preferred commercial vendor.

Please note that thresholds (MW) apply to BMUs for permitted use of the WA API, which can be found in the Communications Standards https://www.nationalgrideso.com/document/33331/download document on the NGESO website.

If using a traditional fixed-line solution, please note that it may take up to 6 months to install and complete. The NGESO registration form must be returned to NGESO a minimum of 6 months in advance of the anticipated connection date if such communications are required.

It is worth noting for BMUs which the participant has indicated will be BM Active that both EDT and EDL (and Control Telephony, if required) must be fully functional before the BMU can connect to the National Grid transmission system.

Please Refer to Sections 3 and 4 for further information.

Data Upload

After NGESO registration, there is a subsequent data upload process, if applicable, to upload the BMU to the NGESO BM Dispatch System.

The timescales to complete this step should also be factored in when completing the registration form. This part of the process requires a minimum 2-month lead time, prior to an anticipated future data upload date. If new EDT/EDL/CT is required as a part of the registration, the 6-month lead time detailed above will include time for this step to be completed. Please see (Section 5).

Without a requirement for any new EDT/EDL/CT, the NGESO registration form must be returned at least 2 months in advance of the anticipated connection date, in order to meet any data upload deadlines as outlined above.

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Please note that the registration of the BM unit is not the only pre-requisite for the data upload into NGESO systems. Metering data for the unit must also be received by NGESO systems before the upload of the BMU can be included.

Please refer to Section 5 for further information.

EIC Codes

This is a separate step to NGESO Registration. The BMU/s being registered will also require EIC code/s. Please refer to Section 6 of this guide for information.

ELEXON registration in parallel with NGESO registration

Registration with ELEXON is separate process to registration with NGESO.

Parties should aim to start ELEXON registration processes either prior to, and/or in parallel with, NGESO registration. You will require the BMU ID first from NGESO (see Section 2).

New entrants to the market must accede to the BSC Framework Agreement before BMU registration can be completed. This is done through ELEXON, who will advise on the process.

ELEXON appoints a Central Registration Agent (CRA) to administer the registration process, and it is to the CRA that the relevant BSCP15 forms are submitted. The CRA will then pass the information to NGESO.

Please consult www.elexon.co.uk for guidance on the BSCP documents detailed below. They are mentioned here for awareness only. ELEXON will advise regarding the process and what is required.

BSCP25

For Transmission Connected BMUs, this BSCP relates to Registration of Transmission System Boundary Points, Grid Supply Points, GSP Groups and Distribution Systems Connection Points.

BSCP20

When BMUs are being registered, there is an associated registration process for registering metering systems for generation and demand BMUs (those not registered with the Supplier Meter Registration Service), demand BMUs directly connected to the NGC transmission system, and metering systems directly associated with system connection points.

Although this registration process is a BSC obligation, NGESO is heavily reliant on the use of such metering information. Metering data for any metering systems that are registered through BSCP20 are forwarded to NGESO through the Central Data Collection Agent I012 daily report. This data helps populate Network Demand data in order that cost-effective planning of the transmission system is facilitated.

BSCP15 4.1 Registration of Primary BM Unit for a CVA Metering System

Please refer to www.elexon.co.uk for detailed guidance.

You should aim to register with ELEXON in parallel to the NGESO registration. ELEXON guidance states you should register with them at least 30 working days, prior to the Effective From Date (EFD).

ELEXON will send the BSCP15 4.1 form to NGESO for approval of the Effective From Date (EFD) for the BMU. NGESO will require the EFD with FPN flag of 'yes'.

If parties are registering Supplier Additional BM Units they will need to use this form to register with ELEXON.



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BSCP15 4.14 Registration of Secondary BM Unit

Please refer to www.elexon.co.uk for detailed guidance.

Only a Virtual Lead Party can register Secondary BM Units. For information on Virtual Lead Parties you can also refer to:

https://www.nationalgrideso.com/codes/european-network-codes/meetings/introduction-virtual-lead-party

For all enquiries and support on Virtual Lead Parties and Secondary BMUs with NGESO please contact Commercial.Operation@nationalgrideso.com or your Customer Account Manager.

Other BSCP15 Sections of relevance once a BMU is registered with NGESO.

The following may be relevant whilst a BMU is registered with NGESO. Please refer to www.elexon.co.uk for detailed guidance if required. NGESO can only action the associated changes once the ELEXON paperwork is received.

BSCP15 4.2 De-Registration of Primary BM Unit

Until ELEXON send this form to NGESO, we are unable to deregister the BMU from their systems.

BSCP15 4.4 Mid-Season Changes of Positive and Negative Primary BM Unit Metered Volume Estimates

Until ELEXON send NGESO this document, NGESO are unable to amend the registered figure (MW) held in their systems for the BMU. If data submissions are higher than the maximum validation limit (the registered MW value) for the BMU in NGESO systems, please approach ELEXON.

BSCP15 4.11 Change of CVA Primary BM Unit Lead Party (CoPBLP)

Until ELEXON send this form to NGESO, NGESO are unable to change the lead party of the Primary BMU in their systems. Currently this does not apply to Virtual Lead Parties and Secondary BMUs. The BSC doesn't envisage the lead party of a Secondary BMU will change, just the sites within them.

BSCP15 4.15 De-Registration of Secondary BM Unit

Until ELEXON send NGESO this, NGESO are unable to deregister the BMU from their systems.

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2. Registration Process

Obtain the NGESO Registration Form

For parties registering primary BMUs via the compliance or supplier route to market you will obtain the NGESO Registration form from BMU.registration@nationalgrideso.com. These forms are not contained within BSCP15 but are provided by NGESO on request.

The NGESO BMU Registration team will create the BMU ID and issue it the party together with the NGESO Registration form.

You will need the BMU ID provided by NG for your ELEXON registration (See Section 1). The NGESO BMU ID is used by ELEXON, and the associated Settlement ID(s) are normally based on the unit name.

The NGESO registration form should be obtained 6 months in advance of your anticipated connection date. This is to allow time for installation of new communication systems – EDT, EDL, Control Telephony - if required (Please refer to Sections 3 and 4).

If no new EDT/EDL/Control Telephony is required, then at least 2 months should be factored in for the lead times for data upload to NGESO systems (See Section 5).

Virtual Lead parties registering secondary BM units will create their own registration data in the NGESO registration system and will not be required to complete a separate NG registration form. The resulting unit ID will be automatically allocated by the system; you will need this ID to complete the ELEXON BSCP15 4.14 form required to register your BMU to be active in the Balancing Mechanism.

To discuss this route to market please contact Commercial.Operation@nationalgrideso.com, The same timescales apply if the VLP participant intends to use fixed line communications.

In all events - the NGESO Registration forms should be returned to NGESO at least thirty working days prior to the ELEXON 'Effective From Date' requested by the Market Participant.

Interconnector BMU registrations – if applicable you should also contact the additional relevant parties (Section 1 Associated Requirements) regarding your registration.

Additional Supplier BMUs/Aggregated BMUs

If parties are requesting registration forms for aggregated BMUs, please be aware that there is a required naming convention for these BMUs. These BMU IDs will be prefixed AG-, followed by the appropriate GSP area code and company name.

When requesting a BMU ID and you are aware that there may be future aggregation, please make this known from the outset so that appropriate BMU IDs can be assigned to you. This discussion should take place with your account manager prior to engaging with the BM Registration team.

Complete and return the NGESO Registration form

Each form should be signed by an authorised signatory relating to the Lead Party, or the Trading Party and the Trading Agent. The signatories should be someone authorised to deal with technical issues relating to data submissions.

The fields in the NGESO Registration form should be completed as per the table below. Not all fields will apply to every registration.

Please return the completed form to BMU.registration@nationalgrideso.com.

Field	Input	
Lead Party		
Lead Party Name	The Company or owner who is registering the BM unit	
Organisation ID (ELEXON Party ID)	Allocated to the party registering the BMU by ELEXON	
Contract Type (BCA/BEGA/BELLA)	If registering via the Compliance process, otherwise N/A	
Registered Company Number	The Companies House number of the party registering the BM unit.	
Lead Party Address	Address of the Company or owner who is registering the BM unit	
Contact Name	Name of the contact for the Company or owner who is registering the BM unit, and is authorised to act on their behalf	
Contact E-mail	Email address of the Contact Name above	
Contact Telephone No.	Telephone number of the Contact Name above	
BSC Signatory	If you are a new entrant to the market you must accede to the BSC Framework Agreement before registration with National Grid can be completed. Please contact ELEXON to do so. Answer YES.	
Trading Agent		
Trading Agent 9 Character Code	For Interconnectors, this field is already completed. Please	
Trading Agent Address	leave blank as National Grid will complete this field. The Trading Agent is the agent that submits BMU data via EDT to	
	National Grid. The BMU is unable to participate in the Balancing Mechanism without doing so. The Trading Agent can be the Lead Party or any Trading Agent acting on their behalf.	
Contact Name	Contact name for the Trading Agent	
Contact E-Mail	Contact e-mail for the Trading Agent	
Contact Telephone No	Contact phone number for the Trading Agent	
Trading Point		
Trading Point Address	The physical location (address) which houses the hardware that will send EDT submissions for the BMU to National Grid. The Trading Point location is not that of a hosted provider (if using hosted solution). Please note if registering an Interconnector this section has already been completed and no input is required.	
Managers Name, Contact E- mail, Tel No.	Complete accordingly for the Trading Point. Note — another company can be nominated to act as Trading Agent on behalf of the registering party	
Operational Trading Point Tel No.	Telephone number of the Trading Point	
Operational Trading Point Fax No.	Fax number of the Trading Point	
Contact Name	Contact Name for the Trading Point	

Field	Input
Contact E-mail	Contact E-mail for the Trading Point
Contact Telephone No	Contact phone number for the Trading Point
EDT System Provider	A list of approved EDT system providers may be obtained on the National Grid website www.nationalgrid.com/uk
Control Point	
Control Point Address	The physical location of the EDL (Electronic Data Logging) system or the address from which the Generator is controlled. This is also the location at which the National Grid Electricity Control Centre can contact you.
	The Control Point location is your own location, not that of a hosted provider (if using hosted solution).
Managers Name. Contact E- Mail, Tel No	Complete accordingly for the Control Point
Operational Control Point Tel No	The 24x7 manned phone number that National Grid Electricity Control Centre can use to contact you in real time. This must not be a phone number allocated to an individual
Operational Control Point Fax No.	The fax number that National Grid Electricity Control Centre will use to contact you in real time. Must not be a number for an individual. This must be a 24/7 manned number
EDL System Provider	If new required, a list of EDL providers is available on the National Grid website — www.nationalgrid.com/uk
Control Telephony installed?*	Is the unit equal to or greater than 50MW? If yes provide the control telephony number which the NGESO will use to contact your control room operative. This number should be contactable 24 x 7.
System Telephony installed?	Is the unit less than 50MW?
	This must be a dedicated PSTN telephone line installed solely for the purpose of communications with the NGESO. This number must be contactable 24x7 dependent upon unit size.
*If not the Operational Control Point Number noted above	The manned number which will accept telephone instructions for the unit. This number must be contactable 24x7
Location of Manned telephone number	
Joint System Incident	
Joint System Incident Tel No.	The number to be used in Joint System Incidents between yourself and National Grid, and should be manned 24/7
OFTO	
OFTO Control Point Address	The address of the OFTO Control Point
Managers Name, Contact E- Mail, Tel No	Complete accordingly for the OFTO Control Point

Field	Input
Joint System Incident Tel No.	The number to be used in Joint System Incidents between yourself and National Grid, and should be manned 24/7
BM Unit Details	
NG BMU ID Code (Asset ID)	This will be provided for you via contact with the National Grid BMU Registration team bmu.registration@nationalgrideso.com .
	Leave blank for the National Grid BMU Registration team to complete
Asset Location (Postcode)	The postcode of the asset (if a single site) or the location of the asset contributing the largest MW if aggregated)
FPN Flag	State YES or NO. Will the BMU use EDT communications? Please note bid/offer data will not be permitted to be submitted for the unit if NO is selected
EDL/BM Active Flag (will the BMU use EDL?)	State YES or NO if the BMU will be using EDL and be active in the Balancing Mechanism. Please note bid/offer data will not be permitted to be submitted for the unit if NO is selected
WA API or Fixed-line EDL (will the BMU use EDL or the WA API?)	Tick the relevant section. Please note that connection-criteria exists for use of the API, which can be found in the Communications Standards document
ВМИ Туре	State whether the BM unit is a Generator GEN, Demand unit
	DEM, External Pool Member EPM (Interconnector), Pump Storage PST, Site, or Additional Supplier.
EELPS Type (Scotland only)	State whether the BM unit is a Generator GEN, Demand unit DEM, External Pool Member EPM (Interconnector), Pump Storage PST, Site or Additional
BMRS Fuel Type	Please select from one of the choices listed. If the fuel type is not listed, please add. The fuel type chosen will relate to the data flow to the electricity market for the unit.
NG Validation Limit	State the maximum MW figure you wish to register for each unit. This is the figure you require the maximum PN to be. This should be expressed as a whole number. If integers are noted they will be rounded down. Please bear in mind you will not be able to submit Physical Notification data submissions above the registered capacity of the unit. For Interconnector BMUs there will be two boxes to complete. One for the Generation unit and one for Demand.
Geo Location	The Latitude and Longitude of the asset (if a single site) or the location of the asset contributing the largest MW if aggregated)
GSP (Grid Supply Point for the Asset)	The infeed (or direct connection) point to the relevant Transmission Owner's System. E.g., Bolney 400kV
Distribution Network Operator	The relevant Distribution Network Owner, into who's system the BMU is connecting into. E.g. Western Power Distribution - WPD
DNO Connection Point	The infeed (or direct connection) to the relevant Distribution Network Owner's System. E.g. Brighton 33kV

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Field	Input
Settlement ID (ELEXON ID)	Obtain this from ELEXON when you register with them, and state here if known

Who can sign the NGESO Registration form?

In all events where the NGESO Registration form requires completion, please refer to the guidelines below.

The Lead Party must be signatory for:

- New NG registrations
- COPBLP Change of Primary BM Unit Lead Party
- Changes for BM Active field

It is acceptable for the Trading Agent to sign if:

- Change of Generating Capacity/Demand Capacity
- Change of Trading Agent informed to us (CoTA)

The Control Point or Lead Party can sign for:

Change of Control Point/Control Point address changes

NGESO process Registration form

Upon receipt of the completed NGESO Registration form and the associated BSCP15 4.1/4.14 form, the BMU Registration team will begin the registration process. The team require 30 working days for this part of the process.

Prior to/during this time your Elexon registration (Section1) can be progressing.

If the unit is to be BM active parties should send the forms to NGESO in the timescales advised in Section 5, in order to meet the target data upload date required.

EDT/EDL/WA API/Control Telephony requirement

NGESO will review the information the participant provides on the NGESO registration form in relation to Control Point and Trading Point/Trading Agent. Although the BMU details alone can be registered much sooner, the lead times to install new EDT/EDL/Control Telephony, if required, will take longer to complete.

If new EDT/EDL/Control Telephony is required, NGESO IT teams will liaise with you regarding your requirement.

Past experience has shown that participants can take up to 6 months or more to install and test the required fixed line communication links with NGESO. This is likely to increase the lead time for BMU registration (with Elexon) beyond the minimum 30 working days laid down in BSCP15, a factor that interested parties should keep in mind with their Elexon registration. This is because the Elexon BMU registration process requires NGESO to approve the Effective From Date, however NGESO can only do so once the required communication links are ready.

See Section 3 and 4 for further information on EDT, EDL and Control Telephony including information on the new Wider Access Application Programming Interface (WA API) which the National Grid Electricity System Operator (NGESO) has in put place, to enable access to the GB Balancing Mechanism for small generating units.

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ELEXON send NGESO the completed BSCP15 documentation

The Effective From Date (EFD) is the date the BMU is registered in the CRA (Central Registration Agent) systems and determines the actual time and date that the BM Unit will be recognised in the Settlement System. Please contact ELEXON for more information regarding EFDs.

BSCP15 refers to the TCCD (Transmission Company Commissioning Date). This is the date from which the BMU is first traded through NGESO systems. In the case of a BMU that is also being registered with ELEXON for the first time, it should correspond to the EFD of the BMU.

Upon ELEXON registration completion, ELEXON will send NGESO the BSCP15 forms for approval of the Effective From Date (EFD).

Following receipt of this, NGESO must then issue an acceptance or an objection statement to ELEXON within 5 working days.

Acceptance or rejection of the EFD by NGESO

NGESO can only approve this EFD if the Trading Agent for the BMU has working EDT communications.

Once NGESO accept this date, the unit is entered into NGESO systems, and data will be published to the market for the BMU. Data submissions relating to periods from the TCCD onwards may be made, in line with the Data Validation, Consistency & Defaulting Rules6

Acceptance or rejection of the EFD by NGESO if the unit was previously not registered with ELEXON

The BMU may have been registered with NGESO, but had not registered with ELEXON previously.

If parties wish to register with ELEXON, they will later send the completed paperwork to NGESO for approval of the EFD. If it is also your intention to become BM Active, please consider data upload timelines in Section 5 and information on page 19-20.

3. Trading Agent – EDT considerations

EDT – Electronic Data Transfer

It is a requirement of the Grid Code that any BMU registered with NGESO must submit an accurate indication of its intended MW position, in the form of a Physical Notification (PN). This is achieved by means of an EDT link, (an ISDN or leased line with associated hardware and software). The link is paid for and is the responsibility of the Lead Party. It is used for the submission of dynamic data and parameters, for example, MEL/MIL (Maximum Export Limit / Maximum Import Limit) data and, as required, day-ahead dynamic data and BOD (Bid Offer Data).

A list of EDT suppliers with software type tested can be provided by NGESO on request.

Participants make EDT submissions to the NGESO systems using an account and password provided by NGESO. Each user (called a Trading Agent) is identified by a unique nine-letter code.

It is possible for a participant to operate more than one Trading Agent; conversely, a participant may choose to have a third-party act as their Trading Agent and submit data on their behalf, thus avoiding the need for EDT installation.

Each Trading Agent must have identified contact personnel for the receipt of passwords and to agree any password changes. The physical location from which EDT files are submitted is called a Trading Point.

It should be noted that once you elect to use EDT for a Trading Agent, PN submissions may only be made using EDT; other forms of communication, including facsimile, email and telephone submissions, are not permitted.

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If no new EDT is required, at least 2 months should still be factored in for lead times for data upload to NGESO systems (See Section 5).

Complete and return the NGESO Registration form

Once the NGESO BMU Registration team receive the completed signed registration form, the Trading Agent and Trading Point for the BMU can be identified.

If it is identified that new EDT is required for the Trading Point location, then the BMU Registration team will create the unique nine-letter Trading Agent code.

EDT is the responsibility of the 3rd party generation company/trader. Our NGESO IT team can advise you. Please refer to A Guide to EDT, EDL and CT with National Grid.

Network Access Tests and BPITs Testing

New EDT systems must undergo Network Access Tests (NATs) and Business Process Interface Tests (BPITs) before they may be used for data submission. NGESO is only responsible for carrying out the tests at the NGESO end and the generator and their suppliers conduct the tests from their locations and are responsible for any costs incurred there.

Completion of new EDT

Upon completion of the NGESO testing, a Qualification certificate is issued to the participant. Completion can take up to 6 months.

The BMU Registration team will be in touch to complete processes such as issuing the password and requesting authorised password changers.

Prior to your connection date/completion you may also be requested to send a 0 PN to test the EDT.

Change of Trading Agent

At any point in time, each BMU within the NGESO systems is assigned to a particular Trading Agent.

A Change of Trading Agent (CoTA) - often associated with a CoPBLP - changes the BMU assignment in relation to data, at an agreed date and time.

A CoTA is agreed between the party and NGESO. It does not involve ELEXON or the CRA. NGESO require 10 working days' notice if the "new" Trading Agent already exists and is qualified and tested.

Since all Trading Agents must have completed Qualification, if the CoTA is to a new Trading Agent requiring new EDT, the lead time will depend upon the time taken for the new Trading Agent to complete qualification. The effective from date for the change of Trading Agent can only be agreed by NGESO once new EDT is completed/known to be complete by then.

How to request a Change of Trading Agent

An updated copy of the NGESO registration form is required for NGESO to ascertain and effect the changes required. The Trading Party can sign. Please contact BMU.registration@nationalgrideso.com to obtain a form.

Change of Lead Party (CoPBLP) -Trading Agent considerations

If a BMU is transferred from one Lead Party to another, the process is known as a Change of Primary BMU Lead Party, or CoPBLP. This is covered under BSCP15/4.11. The CoPBLP process needs to be undertaken



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with ELEXON. NGESO will also require an updated copy of the NGESO registration form to be completed for the BMUs in question, to ascertain the changes required.

Timescales

The CoPBLP is subject to 5 working days' notice with ELEXON. However, the time for NGESO to effect the change will depend upon the Trading Agent and Control Point requirements. It may be possible for a CoPBLP to be implemented by NGESO in 5 working days if there is no Change of Trading Agent.

If a change of Trading Agent is involved:

- If the new Trading Agent has existing certified EDT with NGESO (already in use) then 5 working days
- If new EDT is required, 6-months lead time will apply

As a starting point an updated NGESO registration form should be returned to BMU.registration@nationalgrideso.com so that requirements can be discussed and associated timescales identified.

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4. Control Point – EDL Considerations

EDL – Electronic Dispatch Logging

Any BMU (exceptions apply for Interconnector BMUs) may be designated to be Active in the Balancing Mechanism. This means that Bid and Offer volumes and prices may be offered to NGESO, as System Operator, to be used in balancing generation and demand on the Transmission System. The Bid Offer Data is submitted via EDT, but a separate communications system, EDL, is used by NGESO to relay Bid Offer Acceptances to the Control Points of such BMUs, over a permanent link. The EDL communications line is funded by NGESO.

NGESO also allows the EDL link to be used by participants to submit short-term changes to MEL/MIL data and for real-time dynamic parameter submissions.

If no new EDL/Control Telephony is required, at least 2 months should still be factored in for lead times for data upload to NGESO systems (See Section 5).

Exemption

If you elect for the BMU not to be BM Active, there is no requirement for the Control Point to have EDL. The generator will not be allowed to submit Bid/Offer data (via EDL) unless they participate in the Balancing Mechanism.

We do still require the Control Point information to be provided in full on the NGESO registration form.

Control Telephony

If fixed line EDL is being installed, Control Telephony will also be installed by default. Control Telephony also requires a 6-month lead time to install. As we progress our Wider Access work we will review the options regarding control telephony for smaller BMU's.

If a unit has no EDL, System Telephony is the usual recommendation for BMUs under 50MW. For System Telephony, just a dedicated PSTN line is required. This would be funded by the market participant.

Complete and return the NGESO Registration form

Once the NGESO BMU Registration team receive the completed signed registration form, the Control Point for the BMU can be identified.

If new EDL is required, our IT teams will contact you to discuss and progress the EDL installation with you.

The same applies with Control Telephony – if it is identified that Control Telephony is required the NGESO IT team will be in touch to progress.

Please refer to A Guide to EDT, EDL and CT with NGESO.

Network Access Tests and BPITs Testing

New EDL systems must undergo Network Access Tests (NATs) and Business Process Interface Tests (BPITs) before they may be used for data submission. NGESO is only responsible for carrying out the tests at the NGESO end and the generator and their suppliers conduct the tests from their locations and are responsible for any costs incurred there.

Completion of new EDL

Upon completion of the NGESO testing a Qualification certificate is issued to the participant. Completion can take 6 months or more.

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After EDL completion, and data upload of the BMU to our systems, one of the final steps would be for your Control Point to configure the EDL at your end and send a 'Path' for the BMU. For any queries regarding this please contact BMU.registration@nationalgrideso.com.

Change of Control Point

Each BMU within the NGESO systems is controlled via a particular Control Point.

Since all Control Points must have completed Qualification, if the change is to a new Control Point requiring new EDL/CT, the lead time will depend upon the time taken for the new Control Point to complete qualification. NGESO can only agree the date for the new Control Point to take effect once new EDL/CT is completed/known to be complete by then.

When the change of Control Point does occur, you will notice a brief interruption to the EDL communication to us (few minutes).

If the change involves a move to an existing functional and tested control point such changes are co-ordinated by NGs IT team and generally take place on an agreed date each month. Please contact BMU.registration@nationalgrideso.com who will put you in touch with the IT team to arrange timing.

When can the Control Point change occur?

A change of Control Point may be requested for an agreed date. Considerations for the agreed date for a control point change (some may apply to a control point move) include:

- Whether EDL is complete?
- Whether CT is complete?
- If EDL/CT is complete/present, when the next NGESO data upload occurs (Section 5), or as above on a
 mutually agreed date dependent on availability of NGESO IT teams (may also depend on operational
 circumstances on the planned date)
- The date must always be a weekday and will usually take place between 10:00 and 11:00

If the Control Point move involves a change to the EDL software being used, the NATS and BPITS testing process must be performed again against the new software and confirmed satisfactory.

How to request a Change of Control Point

An updated copy of the NG registration form is required for NGESO to ascertain and effect the changes required. The Control Point or Lead Party can sign.

Please contact BMU.registration@nationalgrideso.com to obtain a form.

BM Active change and associated Control Point change

BM Active

In some cases, a party may not have registered with ELEXON under BSCP15, but with NGESO only, depending on the connection agreement, e.g. BELLA agreements. If later the party wishes to participate in the Balancing Mechanism and undertake the BSCP15 process with ELEXON, the ELEXON timescales will still apply.

How to request a Change to become BM Active

An updated copy of the NGESO registration form is required for NGESO to ascertain and effect the changes required. The Lead Party can sign.

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Please contact BMU.registration@nationalgrideso.com to obtain a form. Please allow a minimum 2-month lead time.

The updated form should indicate that the BMU now wishes to become BM Active. A Control Point with an EDL connection is a requirement for this (whereas this was previously optional).

When can the Change to become BM Active occur?

Regardless of EDL requirement, NGESO require a minimum of 2 months' notice for such changes. This is to allow time for the data upload for the change (See Section 5). The NGESO registration form must be returned with this minimum timescale.

It may be a compliance requirement of the BMU's contract to have EDL. In the cases of BELLAs moving to BEGAs these must have an Operational Notification and satisfy the technical requirements of their BEGA Appendix F (EDT/EDL/CT) etc.

Change of Lead Party (CoPBLP) — Control Point considerations

If a (Primary) BMU is transferred from one Lead Party to another, the process is known as a Change of Primary BMU Lead Party, or CoPBLP. This is covered under BSCP15/4.11. The CoPBLP process needs to be undertaken with ELEXON. NGESO will also require an updated copy of the NGESO registration form to be completed for the BMUs in question, to ascertain the changes required.

Timescales

The CoPBLP is subject to 5 working days' notice with ELEXON. However, the time for NGESO to effect the change will depend upon the Control Point requirements. It may be possible for a CoPBLP to be implemented by NGESO in 5 working days, if there is no Change of Control Point.

If a change of Control Point is involved:

- If the new Control Point has existing certified EDL with NGESO (already in use) then 5 working days
- If new EDL is required, 6-months lead time will apply.
- If Control Telephony changes are involved 2 months' lead time may apply

As a starting point an updated NGESO registration form should be returned to BMU.registration@nationalgrideso.com so that requirements can be discussed and associated timescales identified.

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5. Data Upload to NGESO Systems

Following on from registration, the BMU is uploaded to the NGESO BM Dispatch system. Please note Interconnector BMUs, Supplier Demand BMUs, and Supplier Base BMUs do not require this.

These data uploads are known as 'SORT Static Configuration Updates', which occur on a two-monthly cycle.

Key points to note for data updates

Dates are planned with a 2-month gap between the last update and the next occurrence. However, the actual date of the last data upload will determine the next date.

Dates can be revised nearer real time, depending on:

- Other system outages (including late notice emergency system outages)
- On the day, Control Room and system conditions may stop the data upload going ahead

Changes to become BM Active can only occur during a data update. If requesting to become BM Active when previously not, either 6 or 2-month lead times will apply depending on EDT/EDL/CT requirements.

Regularity of Updates

Please consult the table in Appendix A for current planned Data Upload dates.

The cut-off dates listed denote when the NGESO registration team must be in receipt of the fully completed NG registration form (if relevant) and also be in receipt of the Elexon BSCP15 4.1 form (primary BM units) or the BSCP15 4.14 form (secondary units) and have agreed the EFD requested by the market participant and Elexon). BPITS tests if required should also be complete and operational metering must also be in place and signed off by NG prior to the cut-off date for each upload. Control or system telephony should also be place.

<u>BMU.registration@nationalgrideso.com</u> can be contacted for confirmation of next available dates if you have any concerns regarding meeting timescales.

These dates are dependent upon operating conditions on the day and are subject to change.

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Appendix A – BM Systems Upload Dates

BM Systems Upload Dates

Month	Cut-off date	Implementation	Back Up-Date
January	10/01/2024	31/01/2024	07/02/2024
March	28/02/2024	20/03/2024	04/04/2024
May	24/04/2024	15/05/2024	22/05/2024
July	26/06/2024	17/07/2024	24/07/2024
September	04/09/2024	25/09/2024	02/10/2024
November	30/10/2024	20/11/2024	27/11/2024

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Appendix B - EIC Codes

All BMUs registering with NGESO will require EIC codes (Energy Identification Codes).

The Energy Identification Coding scheme (EIC) provides a unique identification of the market participants and other entities active within the Energy Internal European Market (IEM). It is widely used in the Electronic Document Interchange (EDI).

The EIC is only a code scheme and it is not a right or authorisation to trade energy. NGESO are the electricity Local Issuing Office (LIO) for Great Britain and are authorised to issue EIC Codes.

How to obtain the EIC code

Please visit https://www.nationalgrideso.com/balancing-services/lio-eic-codes for information on EIC codes and application forms to apply for EIC codes.

The EIC codes you will require will be W (unit) and/or X (party).

Please contact Box.lio@nationalgrideso.com for all EIC related enquiries.

How does the EIC code impact my NGESO Registration?

The EIC code application is separate to the NGESO registration process. You do not need to wait for registration to complete before applying for an EIC code/s. Whilst progressing your registration with NGESO you should separately contact Box.lio@nationalgrideso.com to commence your EIC application.

You should aim to obtain your EIC code/s in advance as they will ultimately be included in ELEXON generation reports (B1610).

Further information ENTSO-F

For detailed information regarding EIC codes please visit the ENTSO-E webpage https://www.entsoe.eu/data/energy-identification-codes-eic/

NGESO submit all issued EIC codes to the ENTSO-E CIO (Central Issuing office) for their approval. ENTSO-E approved EIC codes can be found here: https://www.entsoe.eu/data/energy-identification-codes-eic/eic-approved-codes/

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Appendix C - References

- 1. The Balancing and Settlement Code (BSC) contains the rules and governance for trading in the Balancing Mechanism and Imbalance Settlement process. All licensed electricity companies are obliged to be a party to the BSC; other parties may choose to do so. ELEXON is the Balancing and Settlement Code Company (BSCCo) defined in and created by the BSC. The BSC and the associated Balancing and Settlement Code Procedures (BSCPs) can be found on the ELEXON website www.elexon.co.uk, under BSC and Related Documents.
- 2. National Grid and users of its Transmission System are required to comply with the Grid Code. The Grid Code covers all material technical aspects relating to connections to and the operation and use of the Transmission System or, in as far as relevant to the operation and use of the Transmission System, the operation of the electric lines and electrical plant connected to it or to a distribution system. The Grid Code also specifies data which system users are obliged to provide to National Grid for use in planning and operation of the Transmission System, including demand forecasts, availability of generating sets and intended dates of overhaul of large generating sets. The Grid Code may be found on the National Grid website at: https://www.nationalgrideso.com/codes/grid-code
- 3. A number of documents are made available on the NGESO website relating to EDT and EDL are all found under: https://www.nationalgrideso.com/codes/grid-code/electrical-standards-documents-including-specifications-electronic-data.
- 4. The \detail rules for gaining access to and use of the England-France Interconnector, including the participation requirements, the tender process and the auction process. The IFA User Agreement is the agreement between users and the joint owners of the England-France Interconnector giving effect to the IFA Access Rules. Please see website for further details: http://ifa1interconnector.com/news/updated-access-rules-notice-of-go-live-1-jan-2018/
- 5. The Connection and Use of System Code (CUSC) is the legal document which forms the basis of the contractual framework for connection to, and use of, National Grid's high voltage transmission system. Holders of a generation, distribution or supply license are required to be a party to the CUSC Framework Agreement and comply with the CUSC. Information about the CUSC and the associated charges may be found on the National Grid website under https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc
- 6. The **Data Validation, Consistency & Defaulting Rules** is a Grid Code Associated document, which defines the rules for data validation and consistency checking which will be applied to Balancing Mechanism data received from Trading Agents and Control Points. It also covers defaulting rules to be applied in the absence of expected data. This document may be found on the National Grid website, under: https://www.nationalgrideso.com/document/34066/download

