Public

Constraint Management Intertrip Service (CMIS) Scotland: Service Specifications for:

Lot 1: CMIS B2-B5

Lot 2: CMIS B6

Version 1 (Consultation and EOI Stage)

Released April 2026

NESO
National Energy System Operator

Public

Contents

Public

Version Control

Version	Description	Date	Significant Amends Include
V1	Initial publication of the CMIS Scotland Service Specification for consultation with industry. Subject to amends/updates at EOI and ITT stages of the CMIS Scotland tender.	13th April 2026	

Legal Disclaimer

This document has been prepared by National Grid Electricity System Operator (NESO) and is provided voluntarily and without charge. Whilst NESO has taken all reasonable care in preparing this document, no representation or warranty either expressed or implied is made as to the accuracy and completeness of the information that it contains and parties using information within the document should make their own enquiries as to its accuracy and suitability for the purpose for which they use it. NESO shall not be liable for any error or misstatement or opinion on which the recipient of this document relies or seeks to rely other than fraudulent misstatement or fraudulent misrepresentation and does not accept any responsibility for any use which is made of the information or the document or (to the extent permitted by law) for any damages or losses incurred.

Delay, cancellation, and/or suspension of tender events

NESO unconditionally reserves the right to delay, suspend and/or cancel the Tender Event at any point at its sole discretion and without any liability. The tender timelines provided by NESO are subject to change. NESO unconditionally reserves the right to amend the tender timeline at its sole discretion and without any liability.

Purpose of this document and the other Consultation and EOI documents

This document and the other documents that make up the Consultation and EOI have been provided in good faith. The purpose of these documents is to provide the market with information about the tender rules and service requirements. When the Consultation and EOI phase launches, these documents may be updated following feedback from the market and/or to reflect the progression through the tender. Bidders may also receive additional documents and/or information, for example about how their tender submissions will be assessed. This means ITT documents may supersede documents and/or information previously communicated during the Consultation and EOI phase.

Commercial decisions

Any commercial decisions made by bidders to facilitate or support tender submissions are made at the full discretion of the tender participant. NESO shall not be liable for any results of these commercial decisions and does not accept responsibility for any commercial decisions made by participants.

Public

Document Purpose

The purpose of this Service Specification is to provide interested parties and prospective participants with the details of the Constraint Management Intertrip Services in Scotland (hereafter referred to overarchingly as "CMIS Scotland"), including both the commercial aspects and technical requirements for two CMIS services. These services will be detailed individually within this document. 'Lot 1' will outline the new CMIS B2-B5, and 'Lot 2' will outline the CMIS B6 service.

For clarity, this document only applies to the two services being proposed for CMIS Scotland and does not apply to any other CMIS tenders e.g., CMIS EC5-Enduring.

Introduction

National Energy System Operator (NESO) is seeking to reduce network congestion costs and create an electricity system that can operate carbon-free. To support this, CMIS Scotland is seeking to connect Providers that are already connected to or contracted to connect to the transmission or distribution networks in Scotland before October 2029 to a new B2-B5 Operational Tripping Scheme (known as the "B2-B5 OTS"), or the existing B6 Operational Tripping Scheme if not already connected to this. If a network constraint occurs and there is a fault on the monitored circuits, these schemes seek to de-load or disconnect generating assets from the network. They will provide NESO with another tool to manage system constraints that have resulted from the growth in renewable generation, thus maximising the use of existing generators on the network.

For clarity, NESO is seeking Providers north of the B6 boundary for CMIS B6, and north of the B4 boundary for CMIS B2-B5. These boundaries are described within the Electricity Ten Year Statement Link here, and also Section 2.1.

Background

In 2021 NESO tendered for an intertrip service that would create a B6 CMIS. NESO has now successfully awarded two B6 CMIS tenders that are easing congestion across the B6 Anglo-Scottish boundary. An early start B6 CMIS went live in April 2022 and this service has so far saved the consumer over £130m, and prevented the release of 420k tonnes of carbon. NESO has now recommended that a scheme would be beneficial spanning the B2 to B5 boundaries through mid-to-south Scotland, and also to continue with a B6 service.

This Service Specification for the CMIS Scotland services establishes the new service details for expected service delivery by October 2027.

Please note:

- NESO is already operating a CMIS B6 service which is expected to be in place until September 2027. The B6 Service outlined in 'Lot 2' of this document will follow on from the current B6 service.
- The new B2-B5 OTS is anticipated to go-live for CMIS B2-B5 in October 2027. This date is dependent on the Transmission Owners being able to complete the works necessary to monitor relevant circuits to allow the service to go live from this date. It is possible that the circuits that are monitored are delivered in phases rather than all on a single date. NESO will inform contracted Providers as circuits are due to be monitored on the B2-B5 OTS.

Public

LOT 1: CMIS B2-B5

1. Service Outline

1.1. Technical Operation

The Electricity National Control Centre (ENCC) monitors network constraints and ensures that the electricity system is operated in a safe, secure, and economical manner in real time. When a constraint is active, i.e. the expected flow across the constraint circuits exceeds the transfer capability of the circuits, the ENCC can curtail generation to reduce the expected flow by taking actions in the Balancing Mechanism (BM). The objective of CMIS B2-B5 is to provide the ENCC with an additional tool to manage network constraints.

Under the CMIS B2-B5 service, once a constraint occurs the ENCC assesses the constraint and looks to arm the excess volume of generation that exceeds the transfer capability, provided that the armed volume does not exceed the largest permittable loss on the system. Once armed, the User is informed by NESO that they are armed on the B2-B5 OTS. If a fault occurs on any of the circuits monitored by the B2-B5 OTS, the B2-B5 OTS shall issue an intertrip signal which is either:

- a Stability Trip signal to reduce the User MW export to 0MW with a target speed of 200ms from fault inception, which can be delivered by either the opening of the Transmission Owners circuit breaker(s) or the User performing a fast run-back of the generator, or
- a De-Load signal for the User to reduce MW export to 0MW within 10 seconds from fault inception.

Following the fault, the User shall be notified by the ENCC that they have been de-loaded or disconnected. The ENCC then resecures the system by investigating the cause of the intertrip event and taking action to recover the system. During this time, the User shall not change output until further instruction from the ENCC. The User shall be deemed automatically disarmed following the fault, but upon resolving the network fault, the ENCC shall instruct the User to re-synchronise onto the transmission system if needed and resume operation when it is safe to do so. The above process is summarised in Figure 1:

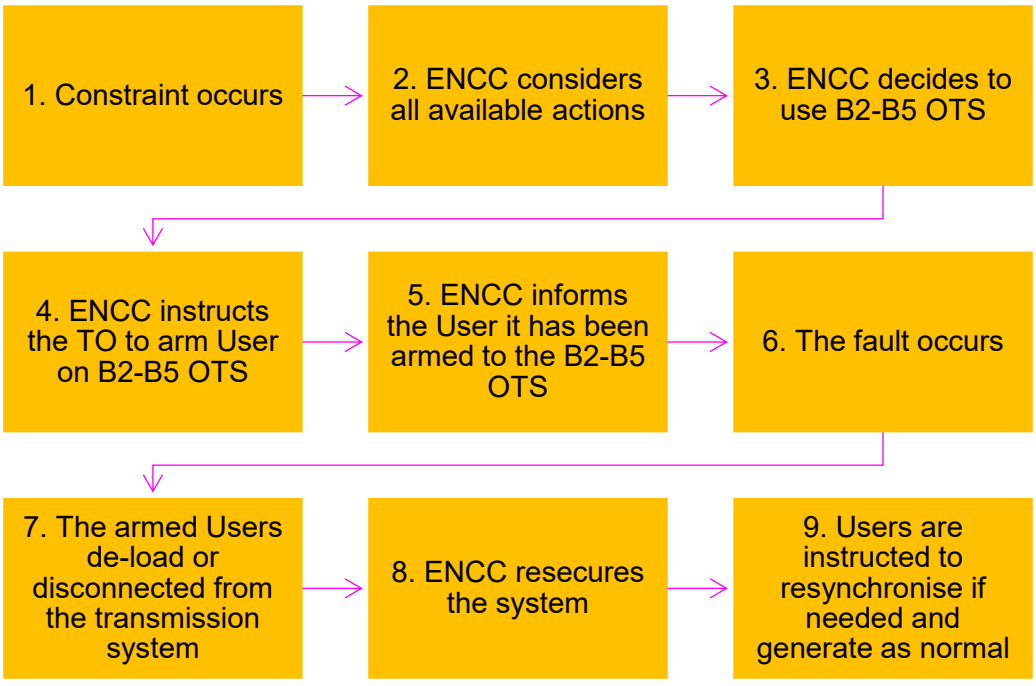

Figure 1: High-level operation of CMIS B2-B5

1.2. Contract Structure

The CMIS B2-B5 tender process requires technically feasible bidders to sign a Fixed Term Framework Agreement. This document sets out the details of the Provider and their asset(s) but does not alone enable NESO to utilise the asset for the service. As per clause 2 of the Framework Agreement, Providers indicate their agreement with the Standard Terms and Conditions when they submit their tender bids.

The Standard Terms and Conditions document outlines the details of the service, such as payment terms and arming process, and will take effect should participants be successful in the ITT process.

The successful bidders will be bound to the Standard Terms and Conditions. The first 'service year' will end on the 30th September 2028, and NESO will notify bidders, with at least 3 months' notice, of the opportunity to propose amended pricing for the following 'service year', which will be 12-month periods starting from 1st October 2028.

Any changes to the Standard Terms and Conditions, from either party, must follow the Change Control Process, as outlined in Schedule 5 of the Standard Terms and Conditions.

1.3. Commercial Information

Expected Service Duration

NESO expects that CMIS B2-B5 may no longer be required once major network reinforcements in the region (under Ofgem's ASTI program) are complete. Therefore, the tender evaluation will only consider the first 3 years of service i.e. from October 2027 until September 2030. NESO will re-examine whether there is a continuing need for CMIS B2-B5 as the contract end date approaches.

This tender will only allow Providers to bid into the service that are already connected to or contracted to connect to the transmission or distribution network in Scotland prior to October 2029 (see details in Section 2). This is to ensure that each User provides at least one full year of service.

The Two Forms of CMIS Revenue

Generators can earn two forms of revenue under the CMIS B2-B5 service, as below:

1. Arming fee (£/MWh): this is the fee that NESO pays when the User is armed until:
    a. the User has been notified that they have been disarmed; or
    b. a fault occurs on the circuits that the B2-B5 OTS was monitoring, and the User is intertripped (either disconnected or de-loaded) as a result; or
    c. the User desynchronises or trips for any reason other than a signal from the B2-B5 OTS.

This payment shall cover the exact duration the User is armed for. The arming fee can be resubmitted monthly during the service delivery period, providing the price resubmitted is less than the price cap submitted during the tender process, or as may be revised following at least 12 months of service delivery. The arming fee is paid on a £/MWh basis and Users shall be paid based on the volume of energy exported for each settlement period while the asset is armed, using metering data provided by Elexon.

Point to note: Where, for any period during which a User who has a Framework Agreement for both CMIS B2-B5 and CMIS B6, and has been Armed for both CMIS B2-B5 and CMIS B6 for an overlapping period of time, then only one Arming Payment shall be payable, this being the higher fee if the fees are different.

2. Intertrip Fee: Stability Tripping Fee or De-Loading Fee

a. Stability Tripping Fee (£/trip): this is the fee that NESO shall pay, as a one-off cost per trip, should a network fault occur when the User is armed for Stability Tripping on the B2-B5 OTS. This payment is intended to cover all costs incurred by the User in being Stability Tripped.

b. De-Loading Fee (£/de-load): this is the fee that NESO shall pay, as a one-off cost per de-load action, should a network fault occur when the User is armed for de-load on the B2-B5 OTS. This payment is intended to cover any and all costs incurred by the User in being de-loaded as per instruction and includes any secondary back-up processes in case the de-load does not work properly within required timeline.

All bidders must submit a Stability Tripping Fee, and a De-Load Tripping Fee.

In the event of a trip, a unit is required to remain at 0MW. If the unit is kept off the network for longer than the first three settlement periods (90 minutes), the control room will issue a Bid Offer Acceptance (BOA) until the unit is ready to reconnect. This will be calculated by the prevailing Physical Notification (PN) and Bid-Offer data for the unit at the time of the de-load or trip. In accordance with industry codes, Users must not amend their Bid-Offer data to seek increased revenues in anticipation of a BOA instruction.

Yearly Fee Resubmission

As the CMIS B2-B5 tender will award a Framework Agreement, successful bidders will be given the opportunity to re-submit their Arming Fee cap and the Intertrip Fees that will apply for each Service Year, starting from October 2028.

However, Users must provide the service for at least 12 months using the Arming Fee Cap and Intertrip Fees that were submitted in the tender. If a User has provided the service for less than 12 months prior to the updated Arming and Intertrip Fees being applied in October, the User will need to wait until the next round of fee resubmissions. For example, a User that provides the service from July 2028 will not be able to update their fees in October 2028 (as they have provided the service for less than 12 months). Instead, they would be able to update their fees for October 2029 (as by this point they have provided the service for more than 12 months). The purpose of this rule is to ensure the fees that are evaluated in this tender are in place for a reasonable period, ensuring the integrity of the evaluation is maintained.

Additional Information

Please note the following:

- There is no availability fee for this service.
- The standard Circuit Breaker trip point for a generating asset for CMIS B2-B5 will be the Transmission Owner's Circuit Breaker. Any proposed deviation from this approach will be assessed on a case-by-case basis. The final decision on the location of the Circuit Breaker will be made by the TO and NESO.
- Any costs that successful bidders incur in supporting the delivery of an intertrip connection between the B2-B5 OTS interface and the User associated assets to make CMIS Scotland available will be at their own expense.

2. Technical Specification

NESO must operate the system to the requirements set out in the Security and Quality of Supply Standards (SQSS). In planning the network in operational timescales, the ENCC operates the system to a secure power transfer limit considering various network faults. If the transfer exceeds this limit, the ENCC must reduce the power flow pre-empting the worst network fault, however unlikely to occur on the system. CMIS B2-B5 is looking to use a commercial intertrip service that will disconnect or de-load the User only at the time of the

fault. This means the ENCC are able to allow more generation to flow through the circuits pre-fault, hence reducing curtailment and potentially reducing network congestion costs for this region significantly.

NESO is inviting wind farms that have a registered Transmission Entry Capacity (TEC) greater than 50MW to express interest in this constraint management service on the basis of the technical requirements for service duration required, and in light of the need to preserve inertia levels on the network. These Providers can bid into the service if they can meet the technical requirements outlined in this Section 2 e.g., transmission/ distribution/offshore connected Users. This section outlines the technical requirements to evaluate eligibility of interested Providers.

2.1. Location

The Providers interested in participating in the CMIS B2-B5 service shall be connected in the flop zones T1 – T6 (see Figure 2 below), as shown on page 6 of Appendix A of the Electricity Ten Year Statement 2024.

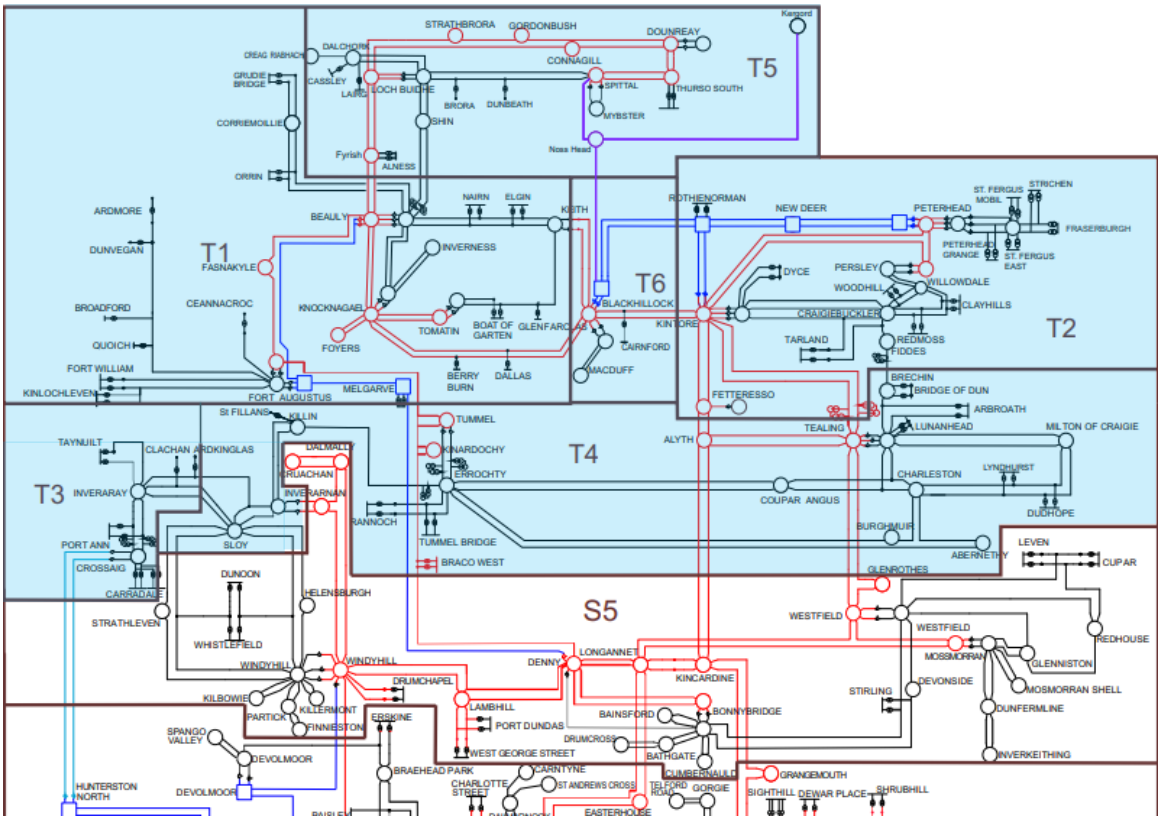

Figure 2: ETYS flop zones

2.2. Availability

1. The User will be deemed available to be armed whenever it is exporting active power onto the onshore transmission system either directly or via offshore transmission networks / distribution networks.
2. Users are expected to exercise good industry practice (e.g., Grid Code) in maintaining their assets, such that when there is a fault on the system, the asset can deal with the impact of being intertripped by the B2-B5 OTS.
3. The User must declare to NESO its unavailability in as prompt a time period as possible for CMIS B2-B5 in the following circumstances (NESO are exploring an IT solution for the declaration process and

aim to inform Users of any amendments to the IT solution for declaring unavailability if and when an updated IT solution is being brought into being):

a. If it is disconnected or desynchronised for whatever reason, or;

b. If it is facing technical issues, rendering it unable to provide the service, or;

c. For the periods that it or any other co-located asset is contracted to provide a Response or Reserve service, or;

d. If it is unable to provide the service due to work associated with extension of additional capacity or installation of co-located assets with different generation technologies. This will be assessed on a case-by-case basis to understand associated impacts on affected assets.

4. User with co-located assets can still participate in the CMIS B2-B5 service when the co-located asset is no longer providing the services and works noted in 2.2.3.c and 2.2.3.d.

    a. Co-located asset – Defined as Consolidated Connection where an additional technology is connected directly to the transmission system behind an existing connection point at the existing (or contracted) connection site.

        i. at an existing or contracted connection site but with a new independent connection point (Parallel Connection).

        ii. Or behind an existing connection point at the existing (or contracted) connection site (Consolidated Connection)

2.3. Instruction to Arm

1. The NESO control room (ENCC) will instruct the relevant Transmission Owner (TO) to arm generator(s) to the tripping schemes with either a ‘Stability Tripping’ or ‘De-Load’ arming command, as the Stability Tripping/De-Load signal itself is sent by the Transmission Owner (TO) using the B2-B5 Operational Tripping Scheme.
2. The ENCC will then use Electronic Dispatch Logging (EDL) Reason Codes to communicate to Users that their generator is armed (with email as a backup option). The codes are ITA when armed for Stability, ITB when armed for de-load, and ITD for when the units are disarmed respectively.
3. The User can be armed at any time that the asset is exporting active power, unless declared as unavailable by the User, during the service term by NESO issuing an “arming instruction” to the TO. During this time, the TO, Offshore Transmission Owner (OFTO) (if needed), Distribution Network Operator (DNO) (if needed), and the User shall be notified of this instruction.
4. NESO would only arm the generation volume up to the largest infeed loss that can be securely taken off the system without leading to instability or large disturbances on the network, NESO shall ensure there is sufficient Reserve and Response in real time for the intertrip actions taken on the system.

2.4. Arming Requirements

1. The TO, OFTO (if needed), DNO (if needed), and the User must comply with the arming of CMIS B2-B5 in accordance with an “arming instruction”.
2. The User acknowledges that the arming of CMIS B2-B5 can be at any point when exporting active power to the onshore transmission network either directly or via offshore transmission networks / distribution networks.
3. The arming period shall be from the point that NESO issues the arming instruction to the relevant TO.
4. The User needs to be available to be armed any time when active power is being exported, without prior notice from the ENCC, because a constraint’s exact starting time and duration is unpredictable (excluding the conditions of Section 2.2.3).

5. CMIS aims to reduce constraint costs caused by taking actions in the Balancing Mechanism (BM). When making arming decisions, NESO needs to understand the real-time output and generation forecast of connected Users by the provision of reliable operational metering and accurate Physical Notification (PN) data. The User shall:
    a. Participate in the BM as per Balancing Codes and be (or will be) registered with the NESO BM system as non-aggregated BM unit(s).
    b. Provide operational metering as per Grid Code CC.6.4.4, CC.6.5.6 and ECC.6.5.6.

2.5. Arming in Practice

1. ENCC – real time constraint management:
    a. It can be uncertain when a constraint will be active because of variable weather and system conditions. NESO's analysis has demonstrated that B2-B5 constraints are most often active when the wind level is high.
    b. The ENCC utilises the User submitted generation profiles (Balancing Mechanism Physical Notifications) and arming price to decide which User to arm. The ENCC arms parties that are expecting to generate during the constraint and are cheaper to be armed than taking curtailment actions.
    c. ENCC will issue an instruction to the relevant TO with the circuits and Users that should be armed to the intertrip. ENCC will then notify the armed Users via EDL with details of the time and BMU(s) that have been armed.

2.6. Disarming

1. NESO will instruct the relevant TO to disarm the intertrip and NESO will then notify the affected Users.
2. The CMIS B2-B5 is also deemed disarmed when either the contracted User is de-loaded, disconnected, or desynchronised for any reason, or has been tripped or de-loaded by the B2-B5 OTS.
3. The disarming will be effective from the point when the User was either de-loaded/ tripped or has been required to be disarmed by NESO.

2.7. Intertrip Requirements

1. The CMIS B2-B5 is set to produce intertrip signals with two types of commands. These will be either;
    a. A Stability Trip signal which will either disconnect the User from the network within a target time of 200ms from fault inception to circuit breaker open, or by the generator performing a run-back to 0MW within a target time of 200ms of fault inception. The active power output from the generating asset shall be 0MW following the event.
    b. A De-Load signal which will instruct the User to reduce its export to 0MW within 10 seconds from fault inception. The signal is issued after a certain time delay (normally 0-150 seconds) following the fault occurrence, allowing auto-reclosing of circuits for transient faults. Please note, depending on network conditions (e.g., with permanent faults), the User may be required to de-load immediately following a fault, without any time delay.[1]
2. When analysing boundary capabilities and constraints, NESO will consider network conditions to determine system needs. NESO will then select either De-Load or Stability Trip when making arming instructions and inform the TO and User. – Please note; the Stability Trip speed must be 200ms from fault inception. If this is not proven to be achievable, then NESO reserves the right to terminate any CMIS contract awarded.

[1] The User may have standard back-up systems that would automatically trip associated circuit breakers after receiving the de-load signal. Please note, if a back-up system is triggered, NESO will only pay the de-load fee.

3. The User shall be required to be able to provide both the Stability Trip, and De-Load (Thermal Trip) service as per section 2.7.1.
4. Following a fault, the User shall maintain the output of their unit at 0MW until notified by the ENCC that they can either re-generate power or can be re-connected and synchronise if needed.
5. Please note, there is no maximum limit on the number of intertrips that CMIS B2-B5 could initiate in a year. However, based on the failure rate of transmission overhead lines and constraint analysis, the likelihood of the intertrip being initiated is statistically low, with an indicative probability of a CMIS intertrip estimated to be once in every 29 years (hence the division of the submitted tripping fee by 29, in section 3.3. Tender Evaluation). NESO does not warrant or guarantee any number of such events.
6. The User shall be aware of the impact and costs of a Stability Trip or De-Load on their asset's health and undertake maintenance work (if needed) to ensure the asset is able to continue delivering the service throughout the contract period.
7. Full system redundancy must be guaranteed by dual communication routes, connections to intertrip initiations, and duplicated circuit breaker trip systems (if applicable). The level of redundancy within the intertrip system shall be such that the initiation of a commercial intertrip is assured in the event of the loss of a single component, e.g., telecommunication route, and circuit breaker trip system (if applicable). The duplicated telecommunication routes and intertrip systems shall ensure:
    a. No single hardware, software, system, communication, interface or power supply failure or depletion of facility shall result in failure to intertrip within the specified time or an incorrect control action.
    b. The minimum separation for the intertrip communication channels shall be agreed between NESO, User, relevant TO, OFTO and DNO (if needed).
8. As Users will not be connected to the B2-B5 OTS at time of Tender Award, a User will be connected to the OTS by the relevant Transmission Owner (TO). Based on the Technical Feasibility Studies conducted following the Expression of Interest stage, the appropriate circuit breaker for tripping will be selected as agreed by the relevant TO and NESO. The relevant Transmission Owner will be responsible for the installation of the cabling between the marshalling cubicle and the chosen circuit breaker to be connected to the B2-B5 OTS.
9. NESO may confirm with the relevant Transmission Owner to determine if the User can be connected to the B2-B5 OTS by September 2029.

2.8. Onshore Generation (applies to transmission and distribution-connected assets)

1. For an onshore User, the preferred approach for a Stability Trip is to trip a transmission circuit breaker (or a User's circuit breaker if agreed by the TO and NESO) connected to a transmission substation busbar. This should provide the targeted tripping speed (i.e., 200ms from fault inception) and dual redundancy. The circuit breaker can also be used as back-up trip if the User fails to De-Load within 10 seconds from receipt of the intertrip signal. Alternatively, the onshore User may also meet the requirements of a Stability Trip by utilising a run-back approach which will reduce export to 0MW within the targeted speed of 200ms from fault inception. If utilising a run-back, a suitable circuit breaker must also be proposed which can be tripped if a User fails to reduce export to 0MW within 200ms.

2.9. Offshore Generation (applies to transmission and distribution-connected assets)

1. If the option of tripping a circuit breaker is utilised (as opposed to the runback option to achieve a Stability Trip), analysis from previous studies has demonstrated that it is more reliable to achieve the targeted Stability Trip time of 200ms from fault inception to opening of circuit breaker, whilst minimising disruption to OFTO reactive assets, by tripping an onshore circuit breaker that would

disconnect a route to the offshore network, e.g. an onshore breaker related to a subsea cable. This may also trip OFTO assets and affect availability of OFTO networks[2]

Please note that subject to the types of constraints in real-time operation (e.g., thermal, voltage or stability), the ENCC would consider actual tripping speeds when deciding which generation units are armed.

2. If the final agreed solution is to connect User's circuit breakers at OFFGEP (Offshore Grid Entry Point) and outside the OFTO boundary, the User can follow standard procedures to reconnect to the relevant OFTO following a trip as long as the User maintains export at 0MW. The User shall wait until being notified by the ENCC that they can re-generate power.
3. The User will need to provide evidence that an agreement has been reached with the relevant OFTO regarding participation in CMIS B2-B5.
4. For an offshore User with no OFTO appointed, the User shall install and maintain duplicated communication routes between the TIP (Transmission Interface Point) and Offshore Grid Entry Point if User circuit breakers are connected to the B2-B5 OTS. If an agreement cannot be reached by the time the tender has closed, the User shall be removed from the CMIS B2-B5 tender process.
5. The User shall install selection facilities to switch the intertrip scheme into service. The User shall also provide required monitoring and control signals to the ENCC control system to allow visibility on the CMIS B2-B5 operation.
6. For an offshore User with more than one exporting circuit connected to an onshore transmission substation, the User can nominate one or more circuits to be evaluated by the CMIS B2-B5 tender. If the User decides not to have all circuits armed at the same time, the User can still connect all circuits and nominate which circuits and associated Balancing Mechanism Unit (BMUs) are available to be armed by CMIS B2-B5 during operation (refer to Section 3.3: Tender Evaluation).

2.10. Additional Points Specific to Distribution-Connected Generation

1. The User will need to provide evidence that an agreement has been reached with the relevant DNO regarding participation in the CMIS B2-B5. If the OTS connection is not connecting to the TO-owned Circuit Breaker, then neither the TO or NESO will be responsible for any additional costs for ensuring connection beyond the point of the TO Circuit Breaker.
2. The CMIS User shall not participate in an Active Network Management (ANM) system, unless a Primacy rule has been implemented by the Distribution Network Operator that accounts for the CMIS intertrip. This is because intertripping a User providing ANM without a Primacy rule could lead to more distributed generation being re-dispatched, reducing the effectiveness to alleviate transmission constraints. If the bidder wishes to participate in both CMIS and ANM, the bidder must provide evidence that this ANM Primacy rule is in place by the Tender submission date, otherwise the bidder will fail the CMIS tender assessment.

2.11. Service Stacking

1. The CMIS B2-B5 service is classed as a Relevant Balancing Service and can be contracted for alongside a Capacity Market contract.
2. The CMIS B2-B5 contract can be held in parallel to a Response or Reserve contract, such as Dynamic Containment, Short-Term Operating Reserve etc., in that an asset can be contracted for these as well as CMIS Scotland but the User must declare itself unavailable for CMIS B2-B5 for the periods it is contracted for a Response and/or Reserve service.

[2] Please refer to the update on the Offshore Transmission Availability Incentive, published by Ofgem on 1st February 2024, which outlines how an OFTO Availability Incentive is not impacted by an activation of an Intertrip by the System Operator

3. The CMIS B2-B5 contract can be held in parallel to a Voltage Network Services Procurement contract, in that an asset can be contracted for these as well as CMIS B2-B5 but the User must declare itself unavailable for CMIS B2-B5 if available for a Voltage service.
4. The CMIS B2-B5 contract can be held in parallel to a Stability Network Services Procurement contract, in that an asset can be contracted for these as well as CMIS B2-B5 but the User must be capable of continuing to provide Stability services post-Intertrip, or alternatively must declare itself unavailable for CMIS B2-B5 if available for a Stability service.
5. For any other current/ future services, these may be stacked and may be able to be delivered alongside the CMIS B2-B5 service, subject to written agreement with NESO in advance of bidding for the relevant service.

2.12. Users Connected to the Same Circuit Breaker

As the OTS may be connected to transmission/ distribution circuit breakers for onshore Users, it is possible that multiple assets could be connected behind a single transmission/ distribution circuit breaker. If there is or will be more than one asset connected behind the same circuit breaker, then:

1. If all relevant Users submitted an EOI and all relevant Users are technically feasible, then all shall be informed of dependencies to ensure any arrangements can be put into place between the dependent Users. The prices requested by NESO will be submitted separately by the Users but shall be assessed as a single asset in the subsequent commercial assessment process (refer to section 3.3. Tender Evaluation). Please note, the dependent Users shall be treated separately from a contractual and settlements perspective but treated as a single asset by NESO in operational timescales.
2. If only one of or some of the assets (i.e., not all assets) connected to or contracted to connect to the relevant circuit breaker submit an EOI and pass the NESO/TO Feasibility Study, in the first instance the non-participant party/ies will be contacted and invited to tender if they have not done so already. Otherwise, the User or Users in question will be informed of the situation and removed from the tender process to prevent tripping off assets not participating in CMIS B2-B5.
3. If between the tender end and contract start, a new party that has not been a participant in the CMIS B2-B5 tender connects behind the same circuit breaker as an awarded party, they will be invited to join for the full contracting period, provided that the total volume behind the circuit breaker does not exceed the largest permittable loss on the system.
    a. The new party will be required to sign the same Terms and Conditions and bid the same or lower commercial prices than the original contracted party for that year's fees.
    b. Adding the new party will not reduce the available channels because the new party will share the same intertrip channel as the original User. However, it would increase the available MW that would be armed and potentially lower the average price per MW on that intertrip channel and therefore may impact the order in which the control room arm parties.
    c. If the new party declines to join or rejects/ fails the requirements of this Service Specification, or the total volume exceeds the largest permittable infeed loss, or the existing party disagrees with another party connecting behind the circuit breaker joining the service, then NESO reserves the right to remove the original party from the service to avoid tripping a non-contracted party.
4. If during the contract period, a new party that has not been a participant in the CMIS B2-B5 tender connects behind the same circuit breaker as an awarded party, they will be invited to join for the remainder of the contracting period provided that the total volume behind the circuit breaker does not exceed the largest permittable loss on the system. The same conditions set out in section 2.12.3 apply.
5. If a User has declared itself as 'unavailable' for any reason mentioned in section 2.2.3 (b - d), then any other Users behind the same circuit breaker will also be considered 'unavailable' to be armed.

2.13. ‘Non-Firm’ Connections

Users that have a ‘Non-Firm’ clause within their Bilateral Connection Agreement (BCA) or users that are required to provide a generator intertrip facility as per Appendix F3 of their BCA (see CUSC CAP076 for more detail) will need to highlight and explain the conditions of any such agreement to NESO as part of their Tender submission. It should be noted that this clause may lower the User’s availability to the CMIS, as the conditions of this clause may take precedence over the CMIS, but it will not necessarily exclude Users from joining the CMIS. The effects of this clause will be discussed with the Provider in greater detail on a case-by-case basis.

Please note, the tender assessment will only utilise the User’s ‘firm’ connection details, unless the User can demonstrate to NESO’s satisfaction that the ‘Non-Firm’ clause in their BCA does not supersede the CMIS.

2.14. Outages for B2-B5 OTS Connections

1. NESO and the relevant Network Owners will in the first instance look to connect new Users without any outages. However, if the relevant Network Owner requires outages, NESO’s Outage Planning Team will work with the User, the OFTO and DNO (where relevant), and the TO to ensure that all parties agree with the outage dates (using both the User’s yearly outage plan and the TO’s Outage Request).
2. The B2-B5 OTS connection must be completed by September 2029, or the contract may be dissolved without contractual penalties to any party. However, the Provider may request an extension to the connection period, which will be considered by NESO on a case-by-case basis.

3. Tender Procedure

This section details the process that NESO shall use to determine which Users to connect to the B2-B5 OTS (if required) for delivery from October 2027

The tender procedure is as follows:

1. Consultation with industry regarding CMIS B2-B5. Opportunity for interested parties to feedback on any aspect of NESO’s proposed service, including Service Specification and contractual templates. Any concerns, questions or complaints should be raised at this stage so that they can be addressed within later stages of the tender. Providers can then submit an Expression of Interest (EOI) for CMIS B2-B5 prior to the deadline for the Consultation & EOI period, which will contain basic qualification questions (e.g., due diligence/ compliance) and high-level technical requirements.
2. NESO and the relevant TO will then conduct NESO/ TO feasibility studies that will check whether the Users pass the basic qualification questions and high-level technical requirements. We may need to discuss these Feasibility Studies with the relevant DNO or OFTO. (*Please note: by submitting an EOI, the User consents to their information being shared with NESO, the relevant TO, Ofgem, and DNO/ OFTO, if appropriate)
3. Next, bidders that pass the NESO/ TO feasibility study will be invited to submit their arming and intertrip fees, and return a signed CMIS B2-B5 Framework Agreement.
    a. As a reminder, the Framework Agreement is an umbrella agreement that sets out the details of the Provider but does not alone enable NESO to utilise the asset for the service.
    b. As per clause 2 of the Framework Agreement, Providers indicate their agreement with the Standard Terms and Conditions when they submit their tender bids.

4. The Providers that have completed the prior step will then have their submission put through a commercial assessment by NESO.

5. Tender outcomes will then be communicated to the participating Users.

Below is the indicative timeline for the tender procedure for CMIS B2-B5:

Stage:	Indicative Start Date:	Indicative End Date:
Consultation on Draft Contract Terms and Service Specification	13/04/2026	22/05/2026
Expression of Interest Period	13/04/2026	05/06/2026
NESO/TO Feasibility Studies	08/06/2026	24/07/2026
Tender Period (for Commercial Submissions & Framework Agreement Signature)	21/09/2026	27/11/2026
Tender Evaluation by NESO	c. Dec 2026	
Providers Notified of Tender Outcome	c. Jan 2027	

3.1. Expression of Interest (EOI) Evaluation

NESO will evaluate the bidder EOI submissions to ensure:

1. That all the necessary data for the NESO/TO feasibility study has been provided.
2. That the bidder passes all due diligence/ compliance questions.
3. That the bidding User is registered (or will be registered for new Users with signed connection offers) with the NESO BM system as non-aggregated BMU unit(s).
4. That the User can be connected to the B2-B5 OTS before October 2029.
5. That the User has accounted for the specification requirements on stacking of relevant services, and to ensure that NESO has all of the required information to be able to agree, in writing, the interactions between the stacked services.
6. That the Provider has noted any current/potential co-located assets and whether the co-located asset's connection configuration will affect the proposed Providers bid (as outlined in Section 2.2.4 of this document, and clause 3.2 of the Terms and Conditions).
7. That all the required information has been provided on any Non-Firm conditions within the Bilateral Connection Agreements.
8. That Users will be available to be armed at any time when exporting active power, without prior notice from the ENCC (excluding the conditions of Section 2.2.3).
9. That the Users can provide operational metering, as per section 2.4.

The relevant Transmission Owner (TO) and NESO will then evaluate in a NESO/ TO Feasibility Study whether the parties that have submitted EOIs meet the minimum technical requirements. These include:

1. For fast tripping, whether the stability trip speed will meet the targeted 200ms This intertrip speed will be assessed and provided by the TO.

2. That there will be a suitable B2-B5 OTS remote intertrip device/ terminal location available for the User to be connected to.

3. Whether another party connected behind the same circuit breaker would be affected by the service (see Section 2.12). If another party is connected behind the same circuit breaker or downstream of the interested User, then the outcome of the NESO/TO Feasibility Study will be a failure if the other party:

    a. Is not in agreement with the conditions of being tripped off post-fault, or;

    b. Failed to provide an EOI submission to NESO during the EOI window; or;

    c. Provided an EOI submission to NESO during the EOI window but subsequently failed the NESO/TO Feasibility Study stage.

4. If the User is connected to any other intertrip schemes that could interact with the B2-B5 OTS and affect the ability to be armed at any time as outlined in Section 2.4.4.

Please note that NESO reserves the right to remove any User from the process at this stage if there is a significant risk to the system (determined at NESO's sole discretion), as per the NESO/TO Feasibility Study results.

The TOs shall provide their results in a report to NESO, and thereafter NESO will communicate whether the User has passed or failed the initial assessment process. Please note, NESO will try to share as much information as possible from the NESO/TO Feasibility Study but may be unable to provide certain details of the assessment, as the information shared with NESO by the TO may be subject to confidentiality or sensitivity restrictions.

3.2. Tender Period

Bidders that pass the EOI stage will be invited to submit their Commercial Submission, and a signed version of the Framework Agreement.

Commercial Submission

The Commercial Submission comprises of the User's Arming Fee cap(s), and Intertripping Fees (Stability Trip and De-Loading Fees).

Please note:

1. The arming fee provided by each User in the tender process shall act as their Arming Fee cap during the first year of the service term but can be decreased by the User during the year to encourage ongoing competition.

2. The De-Load and Stability Trip Fees provided by each User in this process is fixed for the year, meaning it cannot be changed at all during the submitted year.

3. Users will be able to submit new Arming Fee caps and Intertripping Fees on a yearly basis for the subsequent years of service delivery (note section 1.3 – 'Yearly Fee Resubmission').

For successful Users, NESO reserves the right to request that contracts commence early (pre-October 2027) if the TOs deliver the required B2-B5 OTS connections for successful assets before October 2027 (assuming the generator connection works can be completed by the earlier date), or late (post-October 2027) if the TOs are delayed in delivering the new B2-B5 OTS, or are delayed in delivering the required connections for successful assets.

CMIS B2-B5 Framework Agreement

NESO shall require all technically feasible Users to sign the CMIS Scotland Framework Agreement in line with the tender submission, thereby binding the Users to Section 3 ("CMIS Tenders") of the CMIS Scotland Standard Contract Terms for the duration of the CMIS Scotland Framework Agreement. If a User is successful in the CMIS B2-B5 tender process, the User shall be bound by the entirety of the CMIS Scotland Standard Contract Terms.

Further information of the CMIS Scotland Framework Agreement can be found in section 1.2.

3.3. Tender Evaluation

Providers that submit the required tender documentation by the tender deadline will be assessed as per the description below. For clarity, if Providers do not submit the required documentation by the tender deadline, their tender may not be evaluated, and they could be removed from the tender process.

Commercial Assessment Process

NESO has an indicative base requirement to procure at least 2.4GW for the CMIS B2-B5, at the least overall cost to the consumer (subject to the section 'Rationale for the GW Base Requirement' below).

To ensure value for the consumer, NESO, at its sole discretion, reserves the right to request the resubmission of prices prior to contract award from Users involved in the CMIS B2-B5 tender process.

This CMIS will cover the B2, B4 and B5 boundaries. Given that generators from a wide geographical area can bid for this service, we will be utilising an Effectiveness Factor as part of the overall assessment model (below). This Effectiveness Factor will describe how the location of the generating unit determines its contribution to helping alleviate boundary constraints covered by CMIS B2-B5.

Examples of Effectiveness Factors for Flop Zones in B2-B5

Zone	Effectiveness (%)
T1a	82%
T1b	86%
T2	86%
T3	88%
T4a	93%
T4b	81%
T5	100%
T6	96%

*** The above are examples only for illustration purposes for the Consultation / EOI phase. Actual figures will be published in the Invitation to Tender (ITT) phase of this tender process**

This will then form part of the overall commercial assessment model as detailed below to determine the most optimal economical solutions for the service. At the Invitation to Tender (ITT) phase of the CMIS Scotland tender, we will publish a table that provides the detail of the Effectiveness Factors for bidding generators. This is expected to illustrate this detail by as per the ETYS zones (seen in Fig. 5 of ETYS Appendix A) and potentially at a more granular level within specific ETYS zones.

NESO shall determine the most optimal economic Users by demonstrating the forecasted saving for a particular User, and then ranking these User savings in order of highest savings to lowest savings, whilst ensuring that as close to the base requirement is achieved for each of the first three years of service. The User savings are calculated by calculating the forecasted savings accrued during the life of the service This is achieved by calculating the difference between the cost of the Balancing Mechanism if there was no CMIS service versus the remaining Balancing Mechanism cost if there is a CMIS service in place including the particular User. NESO will then look to contract with every bidder that has the highest savings (ranked), up to

the base requirement, for any of the first three years of service (subject to the section 'Rationale for the GW Base Requirement' below).

Rationale for the GW Base Requirement

NESO expects to arm up to a maximum of 1.2GW on the B2-B5 OTS at any given time from the service start date, but reserves the right to arm more if required. This is based on the SQSS (Security and Quality of Supply Standard), and the FRCR (Frequency Risk and Control Report) Policy 2024, which dictates that NESO must secure all BMU-only risks at all times. The current largest infeed BMU loss is 1400MW, but after taking into account factors such as the potential interaction with Vector Shift protection if a transmission fault occurred, then this leads to the NESO expectation for the maximum arming level set out above.

NESO has set an indicative base requirement of 2.4GW to be procured in the CMIS B2-B5 tender, doubling the expected maximum arming volume to facilitate competition, allow for sub-maximal MW export and provide a contingency for NESO during the operation of the service. In the case where a single User is providing a particularly large amount of capacity, NESO reserves the right to procure additional capacity to mitigate the risk of available capacity being less than 1.8GW.

Although 2.4GW is the base requirement, due to nature of the evaluation being across three years, there is the option that more MW could be procured and be available in later years of the service.

NESO, at its sole discretion, can change the indicative base requirement of 2.4GW during the evaluation, for any of the three years, to ensure that NESO gains the best value for the consumer.

The User Savings Calculation – Primary Formula

The Primary Formula for the User Savings is shown below:

Line 1: BM Saving If Generator X in place

$$\text{User Savings}_{\text{Option}}(£) = \text{Redispatch Cost}_{\text{Counterfactual}}(£) - \text{Redispatch Cost}_{\text{Option}}(£)$$

Line 2: BM Saving – Arming/Tripping cost

$$\text{True Savings}_{\text{Option}}(£) = \text{User Savings}_{\text{Option}}(£)$$

$$-\left[\frac{\text{arming fee}(£/\text{MWh}) \times \text{OC} \times \text{HoA}_{\text{Option}}}{\text{Eff.}} + \frac{\text{intertrip fee } (£/\text{trip})}{29}\right]$$

The above Items are:

Item	Explanation
$\frac{1}{29}$[3]	The probability of an intertrip occurring while the generator is armed over 29 years. This is an estimate only and NESO do not warrant or guarantee that any number of trips will occur in any given period.
Arming Fee	The Fee submitted by the bidder in the Commercial Tender.
Effectiveness Factor (Eff.)	This Effectiveness Factor will describe how the location of the generating unit determines its contribution to helping alleviate boundary constraints. This will be achieved by calculating the boundary capability uplift that the given generating unit could deliver based on location, expressed in % terms.
HoA	Refers to the number of hours per year NESO expects to arm the CMIS B2-B5 service User behind an OTS connected circuit breaker. This estimate will come from the NESO economic redispatch model (Plexos), that will also be used to calculate the User Savings Option based on the selected User.
Intertrip Fee	The Fee submitted by the bidder in the Commercial Tender for a single BMU. All bidders must submit both a Stability Trip fee, and a De-Loading fee. An average of the two fees will be utilised for the assessment.
OC	The Offered Capacity of the User (expressed in MW) to be used by CMIS B2-B5, considering the nominated circuits.
Redispatch Cost (Counterfactual)	The forecasted total Balancing Mechanism cost for the life of the service if the given generator was NOT in place to support Constraint Management via this CMIS B2-B5 service. NESO will calculate this in the Tender Evaluation stage.
Redispatch Cost (Option)	The forecasted total Balancing Mechanism cost for the life of the service if the given generator WAS in place to support Constraint Management via this CMIS B2-B5 service. NESO will calculate this in the Tender Evaluation stage.
User Savings (Option)	The forecasted £ saving accrued during the life of the service; this being the difference between the Balancing Mechanism cost if there was no service vs. the remaining Balancing Mechanism cost if there is a CMIS service in place. NESO will calculate this in the Tender Evaluation stage.

The User Offer Calculation - Alternative Formula

[3] This is an estimate based on the proportion of exposed conductor across CMIS B2-B5 monitored circuits and the total amount of exposed conductor on the GB transmission system, while considering the frequency of the type of faults to be monitored by the B2-B5 OTS.

An alternative formula will be used when a User already has an existing agreement, as part of their Bilateral Connection Agreement (BCA), that monitors some or all of the same circuits as CMIS B2-B5.

In this scenario the following formula will be used:

$$\text{True Savings}_{\text{Option}}(£) = \text{User Savings}_{\text{Option}}(£)$$

$$-\left[\frac{\text{arming fee}(£/\text{MWh}) \times \left(\frac{1}{ACC}\right) \times \text{OC} \times \text{HoA}_{\text{Option}}}{\text{Eff.}} + \frac{\text{intertrip fee } (£/\text{trip})}{29}\right]$$

Item	Explanation
Additional Circuit Contribution (ACC)	Calculates the extra value the User would add by joining the CMIS B2-B5. • For example, as part of their BCA a User provides intertrip services to nine out of ten circuits that the CMIS B2-B5 will monitor. In this scenario the OC would be adjusted using an Additional Circuit Contribution of 10% to account for the actual benefit this service would provide to the scheme. Please note, Users that only provide intertrip services under network outage conditions as part of their BCA would be assumed to have an Additional Circuit Contribution of 100%, as the CMIS B2-B5 could be armed when the transmission system is intact. Therefore, the Primary Formula would be applied to these User's bids.

The User Offer Calculation - Commercial Assessment of Nominated BMUs

If the User has multiple BMUs tendered in, but not all are to be armed at any given time, the User has the option to nominate which BMU(s) are available for the Service. In the economic assessment, NESO will use the BMU(s) with the lowest capacity and the BMU(s) with the highest arming fees. This is to consider the uncertainty of which BMU(s) would be made available in real-time for arming.

Alternatively, the Provider is free to submit all BMUs as one unified bid, which would be intertripped as one unit. In this case the standard commercial assessment process will apply.

3.4. Post-Tender – Users that have not been awarded the Service

In future years, NESO may wish to allow new Users to join the service. As a result, NESO reserves the right to undertake a subsequent tender process in the future, if required. The details of which would be released at the time.

For clarity, NESO recommends that any User that will meet the Service Specification requirements by the cut-off date of September 2029 should bid into this tender.

4. Service Outline

4.1. Technical Operation

The Electricity National Control Centre (ENCC) monitors network constraints and ensures that the electricity system is operated in a safe, secure, and economical manner in real time. When a constraint is active, i.e., the expected flow across the constraint circuits exceeds the transfer capability of the circuits, the ENCC can curtail generation to reduce the expected flow by taking actions in the Balancing Mechanism (BM). The objective of CMIS B6 is to provide the ENCC with an additional tool to manage network constraints.

Under the CMIS B6 service, once a constraint occurs the ENCC assesses the constraint and looks to arm the excess volume of generation that exceeds the transfer capability, provided that the armed volume does not exceed the largest permittable loss on the system. Once armed, the User is informed by NESO that they are armed on B6 OTS. If a fault occurs on any of the circuits monitored by the B6 OTS, the B6 OTS shall issue an intertrip signal which is a Stability Trip signal to reduce the User MW export to 0MW with a target speed of 200ms from fault inception, which can be delivered by either the opening of the Transmission Owners circuit breaker(s) or the User performing a run-back of the generator.

Following the fault, the User shall be notified by the ENCC that they have been disconnected. The ENCC then resecures the system by investigating the cause of the intertrip event and taking action to recover the system. During this time, the User shall not change output until further instruction from the ENCC. The User shall be deemed automatically disarmed following the fault, but upon resolving the network fault, the ENCC shall instruct the User to re-synchronise onto the transmission system if needed and resume operation when it is safe to do so. The above process is summarised in Figure 13:

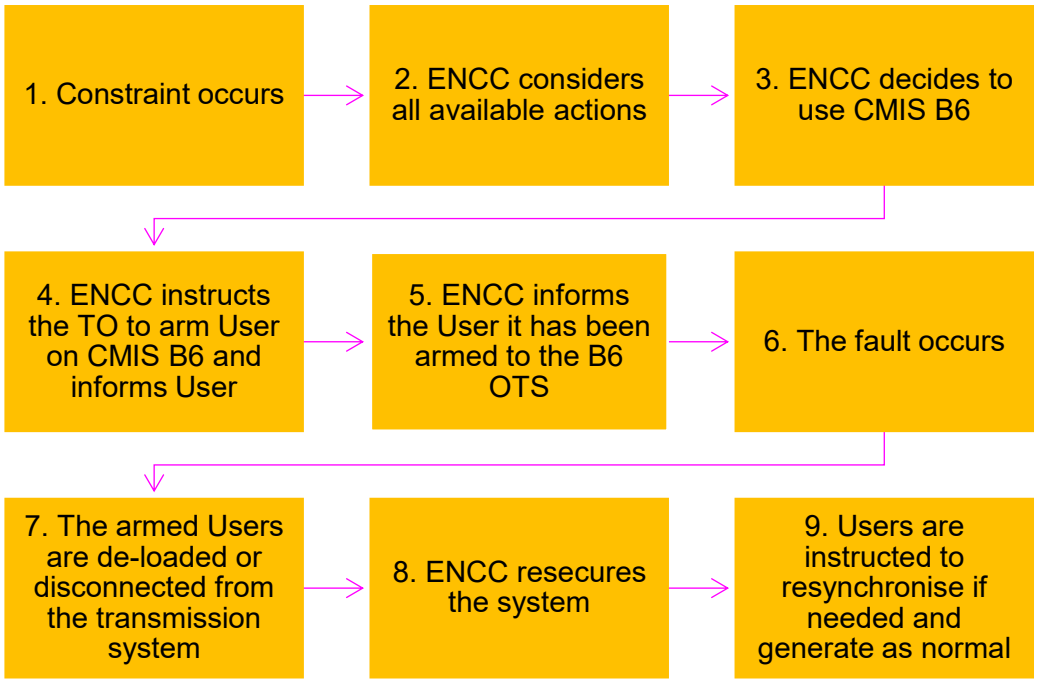

Figure 3: High-level operation of CMIS B6

4.2. Contract Structure

The CMIS B6 tender process requires technically feasible bidders to sign an evergreen Framework Agreement. This document sets out the details of the Provider and their asset(s) but does not alone enable NESO to utilise the asset for the service. As per clause 2 of the Framework Agreement, Providers indicate their agreement with the Standard Terms and Conditions when they submit their tender bids.

The Standard Terms and Conditions document outlines the details of the service, such as payment terms and utilisation, and will take effect should participants be successful in the ITT process.

The successful bidders will be bound to the Standard Terms and Conditions for the first agreed service year. The first 'service year' will end on the 30th September 2028, and NESO will notify bidders, with at least 3 months' notice, of their intention to extend the service for each additional 'service year', which will be 12-month periods starting from 1st October 2028.

Any changes to the Standard Terms and Conditions, from either party, must follow the Change Control Process, as outlined in Schedule 5 of the Standard Terms and Conditions.

4.3. Commercial Information

Expected Service Duration

NESO expects that CMIS B6 may no longer be required once major network reinforcements in the region (under Ofgem's ASTI program) are complete. Therefore, the tender evaluation will only consider the first 3 years of service i.e., from October 2027 until September 2030. NESO will re-examine whether there is a continuing need for CMIS B6 as the contract end date approaches.

This tender will only allow Users to bid into the service that are already connected to or contracted to connect to the transmission or distribution network in Scotland prior to October 2029 (see details in Section 2). This is to ensure that each User provides at least one full year of service.

The Two Forms of CMIS Revenue

Generators can earn two forms of revenue under the CMIS Scotland service, as below:

1. Arming fee (£/MWh): this is the fee that NESO pays when the User is armed until:
    a. the User has been notified that they have been disarmed; or
    b. a fault occurs on the circuits that the B6 OTS was monitoring, and the User is intertripped (disconnected) as a result; or
    c. the User desynchronises or trips for any reason other than a signal from the B6 OTS.

This payment shall cover the exact duration the User is armed for. The arming fee can be resubmitted monthly during the service delivery period, providing the price resubmitted is less than the Arming Fee Cap submitted either during the tender process or as may be revised following at least 12 months of service delivery. The arming fee is paid on a £/MWh basis and Users shall be paid based on the volume of energy exported for each settlement period while the asset is armed, using metering data provided by Elexon.

Point to note: Where, for any period during which a User who has a Framework Agreement for both CMIS B2-B5 and CMIS B6, and has been Armed for both CMIS B2-B5 and CMIS B6 for an overlapping period of time, then only one Arming Payment shall be payable, this being the higher fee if the fees are different.

2. Intertrip Fee:

- Stability Tripping Fee (£/trip): this is the fee that NESO shall pay, as a one-off cost per trip, should a network fault occur when the User is armed for Stability Tripping on the B6 OTS. This payment is intended to cover all costs incurred by the User in being Stability Tripped.

All bidders must submit a Stability Tripping Fee.

In the event of a trip and the unit is kept off the network for longer than the first three settlement periods (90 minutes) the control room will issue a Bid Offer Acceptance (BOA) until the unit is ready to reconnect. This will be calculated by the prevailing Physical Notification (PN) and Bid-Offer data for the unit at the time of the de-load or trip. In accordance with industry codes, Users must not amend their Bid-Offer data to seek increased revenues in anticipation of a BOA instruction.

Yearly Fee Resubmission

As the CMIS B6 tender will award a Framework Agreement, successful bidders will be given the opportunity to re-submit their Arming Fee cap and the Intertrip Fee that will apply for each Service Year, starting from October 2028.

However, Users must provide the service for at least 12 months using the Arming Fee Cap and Intertrip Fee that were submitted in the tender. If a User has provided the service for less than 12 months prior to the updated Arming and Intertrip Fee being applied in October, the User will need to wait until the next round of fee resubmissions. For example, a User that provides the service from July 2028 will not be able to update their fees in October 2028 (as they have provided the service for less than 12 months). Instead, they would be able to update their fees for October 2029 (as by this point they have provided the service for more than 12 months). The purpose of this rule is to ensure the fees that are evaluated in this tender are in place for a reasonable period, ensuring the integrity of the evaluation is maintained.

Additional Information

Please note the following:

- There is no availability fee for this service.
- The standard Circuit Breaker trip point for a generating asset for CMIS B6 will be the Transmission Owner's Circuit Breaker. Any proposed deviation from this approach will be assessed on a case-by-case basis. The final decision on the location of the Circuit Breaker will be made by the TO and NESO.
- Any costs that successful bidders incur in supporting the delivery of an intertrip connection between the B6 OTS interface and the User associated assets to make CMIS B6 available will be at their own expense.

5. Technical Specification

NESO must operate the system to the requirements set out in the Security and Quality of Supply Standards (SQSS). In planning the network in operational timescales, the ENCC operates the system to a secure power transfer limit considering various network faults. If the transfer exceeds this limit, the ENCC must reduce the power flow pre-empting the worst network fault, however unlikely to occur on the system. CMIS B6 is looking to use a commercial intertrip service that will disconnect the User only at the time of the fault. This means the ENCC are able to allow more generation to flow through the circuits pre-fault, hence reducing curtailment and potentially reducing network congestion costs for this region significantly.

NESO is inviting wind farms that have a registered Transmission Entry Capacity (TEC) greater than 50MW to express interest in this constraint management service on the basis of the technical requirements for length of service duration required, and in light of the need to preserve inertia levels on the network. These Providers can bid into the service if they can meet the technical requirements outlined in this Section 2 e.g.,

transmission/ distribution/offshore connected Users. This section outlines the technical requirements to evaluate eligibility of interested Providers.

5.1. Location

The Providers interested in participating in the CMIS B6 service shall be connected in the flop zones S5, S6, T1 – T6 (see Figure 4 below), as shown on page 6 of Appendix A of the Electricity Ten Year Statement (ETYS).

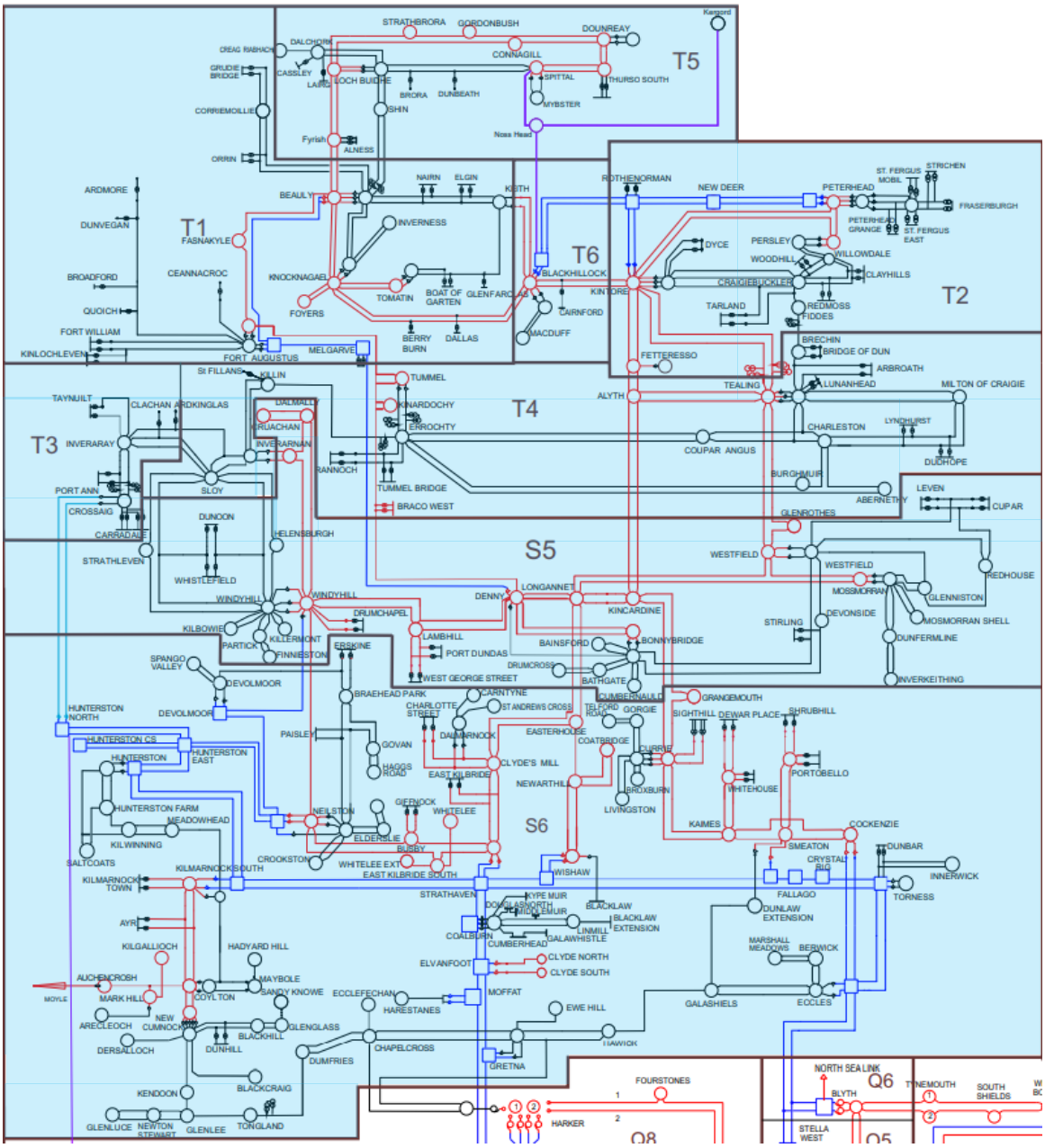

Figure 4: ETYS flop zones

5.2. Availability

1. The User will be deemed available to be armed whenever it is exporting active power onto the onshore transmission system either directly or via offshore transmission networks / distribution networks.
2. Users are expected to exercise good industry practice (e.g., Grid Code) in maintaining their assets, such that when there is a fault on the system, the asset can deal with the impact of being intertripped by the B6 OTS.
3. The User must declare to NESO its unavailability in as prompt a time period as possible for CMIS B6 in the following circumstances (NESO are exploring an IT solution for the declaration process and aim to inform Users of any amendments to the IT solution for declaring unavailability if and when an updated IT solution is being brought into being):
    a. If it is disconnected or desynchronised for whatever reason, or;
    b. If it is facing technical issues, rendering it unable to provide the service, or;
    c. For the periods that it or any other co-located asset is contracted to provide a Response or Reserve service, or;
4. If it is unable to provide the service due to work associated with extension of additional capacity or installation of co-located assets with different generation technologies. This will be assessed on a case-by-case basis to understand associated impacts on affected assets.
5. User with co-located assets can still participate in the CMIS B6 service when the co-located asset is no longer providing the services and works noted in 2.2.3.c and 2.2.3.d.
    a. Co-located asset – Defined as Consolidated Connection where an additional technology is connected directly to the transmission system behind an existing connection point at the existing (or contracted) connection site.
        i. at an existing or contracted connection site but with a new independent connection point (Parallel Connection).
        ii. Or behind an existing connection point at the existing (or contracted) connection site (Consolidated Connection)

5.3. Instruction to Arm

1. The NESO control room (ENCC) will instruct the relevant Transmission Owner (TO) to arm generators to the tripping schemes with a ‘Stability Tripping’ arming command. The Stability Tripping signal itself is sent by the TO using the B6 Operational Tripping Scheme.
2. The ENCC will then use Electronic Dispatch Logging (EDL) Reason Codes to communicate to Users that their generator is armed (with email as a backup option). The codes are ITA and ITD for when the units are armed and disarmed respectively. EDL reason codes are under review, and if any amends are made to this, then Generators will be notified at the appropriate time.
3. The User can be armed at any time that the asset is exporting active power, unless declared as unavailable by the User, during the service term by NESO issuing an “arming instruction” to the TO. During this time, the TO, Offshore Transmission Owner (OFTO) (if needed), Distribution Network Operator (DNO) (if needed), and the User shall be notified of this instruction.

4. NESO would only arm the generation volume up to the largest infeed loss that can be securely taken off the system without leading to instability or large disturbances on the network, NESO shall ensure there is sufficient Reserve and Response in real time for the intertrip actions taken on the system.

5.4. Arming Requirements

1. The TO, OFTO (if needed), DNO (if needed), and the User must comply with the arming of CMIS B6 in accordance with an “arming instruction”.
2. The User acknowledges that the arming of CMIS B6 can be at any point when exporting active power to the onshore transmission network either directly or via offshore transmission networks / distribution networks.
3. The arming period shall be from the point that NESO issues the arming instruction to the relevant TO.
4. The User needs to be available to be armed any time when active power is being exported, without prior notice from the ENCC, because a constraint’s exact starting time and duration is unpredictable (excluding the conditions of Section 2.2.3).
5. CMIS B6 aims to reduce constraint costs caused by taking actions in the Balancing Mechanism (BM). When making arming decisions, NESO needs to understand the real-time output and generation forecast of connected Users by the provision of reliable operational metering and accurate Physical Notification (PN) data. The User shall:
    a. Participate in the BM as per Balancing Codes and be (or will be) registered with the NESO BM system as non-aggregated BM unit(s).
    b. Provide operational metering as per Grid Code CC.6.4.4, CC.6.5.6 and ECC.6.5.6.

5.5. Arming in Practice

1. ENCC – real time constraint management:
    a. It can be uncertain when a constraint will be active because of variable weather and system conditions. NESO’s analysis has demonstrated that B6 constraints are most often active when the wind level is high.
    b. The ENCC utilises the User submitted generation profiles (Balancing Mechanism Physical Notifications) and arming price to decide which User to arm. The ENCC arms parties that are expecting to generate during the constraint and are cheaper to be armed than taking curtailment actions.
    c. ENCC will issue an instruction to the relevant TO with the circuits and Users that should be armed to the intertrip. ENCC will then notify the armed Users via EDL with details of the time and BMU(s) that have been armed.

5.6. Disarming

1. NESO will instruct the relevant TO to disarm the intertrip and NESO will then notify the affected Users.
2. CMIS B6 is also deemed disarmed when either the contracted User is disconnected, or desynchronised for any reason, or has been tripped by the B6 OTS.

3. The disarming will be effective from the point when the User was tripped or has been required to be disarmed by NESO.

5.7. Intertrip Requirements

1. CMIS B6 is set to produce intertrip signals with a single type of command. This will be a Stability Trip signal which will either disconnect the User from the network within a target time of 200ms from fault inception to circuit breaker open, or by the generator performing a run-back to 0MW within a target time of 200ms of fault inception. The active power output from the generating asset shall be 0MW following the event.
2. When analysing boundary capabilities and constraints, NESO will consider network conditions to determine system needs. NESO will then select a Stability Trip when making the arming instruction and inform the TO and User. Please note; the Stability Trip speed must be 200ms from fault inception. If this is not proven to be achievable, then NESO reserves the right to terminate any CMIS contract awarded.
3. Following a fault, the User shall maintain the output of their unit at 0MW until notified by the ENCC that they can either re-generate power or can be re-connected and synchronise if needed.
4. Please note, there is no maximum limit on the number of intertrips that CMIS B6 could initiate in a year. However, based on the failure rate of transmission overhead lines and constraint analysis, the likelihood of the intertrip being initiated is statistically low, with an indicative probability of a CMIS intertrip estimated to be once in every 29 years (hence the division of the submitted tripping fee by 29, in section 6.3. Tender Evaluation). NESO does not warrant or guarantee any number of such events.
5. The User shall be aware of the impact and cost of a Stability Trip on their asset's health and undertake maintenance work (if needed) to ensure the asset is able to continue delivering the service throughout the contract period.
6. Full system redundancy must be guaranteed by dual communication routes, connections to intertrip initiations, and duplicated circuit breaker trip systems (if applicable). The level of redundancy within the intertrip system shall be such that the initiation of a commercial intertrip is assured in the event of the loss of a single component, e.g., telecommunication route, and circuit breaker trip system (if applicable). The duplicated telecommunication routes and intertrip systems shall ensure:
    a. No single hardware, software, system, communication, interface or power supply failure or depletion of facility shall result in failure to intertrip within the specified time or an incorrect control action.
    b. The minimum separation for the intertrip communication channels shall be agreed between NESO, User, relevant TO, OFTO and DNO (if needed).
7. A User not currently connected to the B6 OTS shall install and maintain an intertrip facility to enable the delivery of the intertrip requirements in section 2.7. The relevant Transmission Owner (TO) – will provide the necessary signals at a marshalling cubicle within the connected transmission substation. The relevant Transmission Owner will be responsible for the installation of the cabling between the marshalling cubicle and the chosen circuit breaker (selected by the TO) to be connected to the B6 OTS.
8. NESO may confirm with the relevant Transmission Owner to determine if the User can be connected to the B6 OTS by September 2029.

5.8. Onshore Generation (applies to transmission and distribution-connected assets)

1. For an onshore User, the preferred approach for a Stability Trip is to trip a transmission circuit breaker (or a User's circuit breaker if agreed by the TO and NESO) connected to a transmission

substation busbar. This should provide the targeted tripping speed (i.e., 200ms from fault inception) and dual redundancy. Alternatively, the onshore User may also meet the requirements of a Stability Trip by utilising a run-back approach which will reduce export to 0MW within the targeted speed of 200ms from fault inception. If utilising a run-back, a suitable circuit breaker must also be proposed which can be tripped if a User fails to reduce export to 0MW within 200ms.

5.9. Offshore Generation (applies to transmission and distribution-connected assets)

1. If the option of tripping a circuit breaker is utilised (as opposed to the runback option to achieve a Stability Trip), analysis from previous studies has demonstrated that it is more reliable to achieve the targeted Stability Trip time of 200ms from fault inception to opening of circuit breaker, whilst minimising disruption to OFTO reactive assets, by tripping an onshore circuit breaker that would disconnect a route to the offshore network, e.g. an onshore breaker related to a subsea cable. This may also trip OFTO assets and affect availability of OFTO networks ***Please note*** that subject to the types of constraints in real-time operation (e.g., thermal, voltage or stability), the ENCC would consider actual tripping speeds when deciding which generation units are armed. If the final agreed solution is to connect User's circuit breakers at OFFGEP and outside the OFTO boundary, the User can follow standard procedures to reconnect to the relevant OFTO following a trip as long as the User maintains export at 0MW. The User shall wait until being notified by the ENCC that they can re-generate power.

2. CMIS B6 will, in the first instance, aim to utilise the infrastructure and set up of the existing B6 Operational Tripping Scheme (OTS). If the existing OTS connection affects the Providers' associated OFTO's assets, the Provider will need to provide evidence that an agreement has been reached with the relevant OFTO regarding participation in CMIS B6.

3. For an offshore Provider with no OFTO appointed, the Provider shall install and maintain duplicated communication routes between the TIP and Offshore Grid Entry Point if User circuit breakers are connected to the OTS. If an agreement cannot be reached by the time the tender has closed, the Provider shall be removed from the CMIS B6 tender process.

4. The Provider shall install selection facilities to switch the intertrip scheme into service. The Provider shall also provide required monitoring and control signals to the ENCC control system to allow visibility on the CMIS B6 operation.

5. For an offshore Provider with more than one exporting circuit connected to an onshore transmission substation, the Provider can nominate one or more circuits to be evaluated by the CMIS B6 tender. If the Provider decides not to have all circuits armed at the same time, the Provider can still connect all circuits and nominate which circuits and associated Balancing Mechanism Unit (BMUs) are available to be armed by CMIS B6 during operation (refer to Section 3.3: Tender Evaluation).

5.10. Additional Points Specific to Distribution-Connected Generation

1. CMIS B6 will, in the first instance, aim to utilise the infrastructure and set up of the existing Operational Tripping Scheme (OTS). If the existing OTS connection affects the User's associated DNO's assets, the Provider will need to provide evidence that an agreement has been reached with the relevant DNO regarding participation in the CMIS EC5-Enduring. If the OTS connection is not connecting to the TO-owned Circuit Breaker, then neither the TO or NESO will be responsible for any additional costs for ensuring connection beyond the point of the TO Circuit Breaker.

2. The CMIS Provider shall not participate in an Active Network Management (ANM) system, unless a Primacy rule has been implemented by the Distribution Network Operator that accounts for the CMIS intertrip. This is because intertripping a User providing ANM without a Primacy rule could

lead to more distributed generation being re-dispatched, reducing the effectiveness to alleviate transmission constraints. If the bidder wishes to participate in both CMIS and ANM, the bidder must provide evidence that this ANM Primacy rule is in place by the Tender submission date, otherwise the bidder will fail the CMIS tender assessment.

5.11. Service Stacking

1. The CMIS B6 service is classed as a Relevant Balancing Service and can be contracted for alongside a Capacity Market contract.
2. The CMIS B6 contract can be held in parallel to a Response or Reserve contract, such as Dynamic Containment, Short-Term Operating Reserve etc., in that an asset can be contracted for these as well as CMIS Scotland but the User must declare itself unavailable for CMIS B6 for the periods it is contracted for a Response and/or Reserve service.
3. The CMIS B6 contract can be held in parallel to a Voltage Network Services Procurement contract, in that an asset can be contracted for these as well as CMIS B6 but the User must declare itself unavailable for CMIS B6 if available for a Voltage service.
4. The CMIS B6 contract can be held in parallel to a Stability Network Services Procurement contract, in that an asset can be contracted for these as well as CMIS B6 but the User must be capable of continuing to provide Stability services post-Intertrip, or alternatively must declare itself unavailable for CMIS B6 if available for a Stability service.
5. For any other current/ future services, these may be stacked and may be able to be delivered alongside the CMIS B6 service, subject to written agreement with NESO in advance of bidding for the relevant service.

5.12. Users Connected to the Same Circuit Breaker

As the OTS may be connected to transmission/ distribution circuit breakers for onshore Users, it is possible that multiple assets could be connected behind a single transmission/ distribution circuit breaker. If there is or will be more than one asset connected behind the same circuit breaker, then:

1. If all relevant Providers submitted an EOI and all relevant Users are technically feasible, then all shall be informed of dependencies to ensure any arrangements can be put into place between the dependent Users. The prices requested by NESO will be submitted separately by the Users but shall be assessed as a single asset in the subsequent commercial assessment process (refer to section 3.3. Tender Evaluation). Please note, the dependent Users shall be treated separately from a contractual and settlements perspective but treated as a single asset by NESO in operational timescales.
2. If only one of or some of the assets (i.e., not all assets) connected to or contracted to connect to the relevant circuit breaker submit an EOI and pass the NESO/TO Feasibility Study, in the first instance the non-participant party/ies will be contacted and invited to tender if they have not done so already. Otherwise, the User or Users in question will be informed of the situation and removed from the tender process to prevent tripping off assets not participating in CMIS B6.
3. If between the tender end and contract start, a new party that has not been a participant in the CMIS B6 tender connects behind the same circuit breaker as an awarded party, they will be invited to join for the full contracting period, provided that the total volume behind the circuit breaker does not exceed the largest permittable loss on the system.
    a. The new party will be required to sign the same Terms and Conditions and bid the same or lower commercial prices than the original contracted party for that year's fees.

b. Adding the new party will not reduce the available channels because the new party will share the same intertrip channel as the original User. However, it would increase the available MW that would be armed and potentially lower the average price per MW on that intertrip channel and therefore may impact the order in which the control room arm parties.

c. If the new party declines to join or rejects/ fails the requirements of this Service Specification, or the total volume exceeds the largest permittable infeed loss, or the existing party disagrees with another party connecting behind the circuit breaker joining the service, then NESO reserves the right to remove the original party from the service to avoid tripping a non-contracted party.

4. If during the contract period, a new party that has not been a participant in the CMIS B6 tender connects behind the same circuit breaker as an awarded party, they will be invited to join for the remainder of the contracting period provided that the total volume behind the circuit breaker does not exceed the largest permittable loss on the system. The same conditions set out in section 2.12.3 apply.

5. If a User has declared itself as 'unavailable' for any reason mentioned in section 2.2.3 (b - d), then any other Users behind the same circuit breaker will also be considered 'unavailable' to be armed.

5.13. 'Non-Firm' Connections

Users that have a 'Non-Firm' clause within their Bilateral Connection Agreement (BCA) or users that are required to provide a generator intertrip facility as per Appendix F3 of their BCA (see CUSC CAP076 for more detail) will need to highlight and explain the conditions of any such agreement to NESO as part of their Tender submission. It should be noted that this clause may lower the User's availability to the CMIS, as the conditions of this clause may take precedence over the CMIS, but it will not necessarily exclude Users from joining the CMIS. The effects of this clause will be discussed with the Provider in greater detail on a case-by-case basis.

Please note, the tender assessment will only utilise the User's 'firm' connection details, unless the User can demonstrate to NESO's satisfaction that the 'Non-Firm' clause in their BCA does not supersede the CMIS.

5.14. Outages for OTS Upgrades

1. NESO and the relevant Network Owners will in the first instance look to connect new Users without any outages. However, if the relevant Network Owner requires outages, NESO's Outage Planning Team will work with the User, the OFTO and DNO (where relevant), and the TO to ensure that all parties agree with the outage dates (using both the User's yearly outage plan and the TO's Outage Request).

2. The OTS upgrades must be completed by September 2029, or the contract may be dissolved without contractual penalties to any party. However, the Provider may request an extension to the connection period, which will be considered by NESO on a case-by-case basis.

6. Tender Procedure

This section details the process that NESO shall use to determine which Users to connect to the OTS (if required) for delivery from October 2027

The tender procedure is as follows:

1. Consultation with industry regarding CMIS B6. Opportunity for interested parties to feedback on any aspect of NESO's proposed service, including Service Specification and contractual templates. Any concerns, questions or complaints should be raised at this stage so that they can be addressed within later stages of the tender. Providers can then submit an Expression of Interest (EOI) for CMIS B6, which will contain basic qualification questions (e.g., due diligence/ compliance) and high-level technical requirements.
2. NESO and the relevant TO will then conduct NESO/ TO feasibility studies that will check whether the Users pass the basic qualification questions and high-level technical requirements. We may need to discuss these Feasibility Studies with the relevant DNO or OFTO. (*Please note: by submitting an EOI, the User consents to their information being shared with NESO, the relevant TO, Ofgem, and DNO/ OFTO, if appropriate)
3. Next, bidders that pass the NESO/ TO feasibility study will be invited to submit their arming and intertrip fees, and return a signed CMIS Scotland Framework Agreement.
    a. As a reminder, the Framework Agreement is an umbrella agreement that sets out the details of the Provider and the User but does not alone enable NESO to utilise the asset for the service.
    b. As per clause 2 of the Framework Agreement, Providers indicate their agreement with the Standard Terms and Conditions when they submit their tender bids.
4. The Providers that have completed the prior step will then have their submission put through a commercial assessment by NESO:
5. Tender outcomes will then be communicated to the participating Providers.
6. Below is the indicative timeline for the tender procedure for CMIS Scotland:

Stage:	Indicative Start Date:	Indicative End Date:
Consultation on Draft Contract Terms and Service Specification	13/04/2026	22/05/2026
Expression of Interest Period	13/04/2026	05/06/2026
NESO/TO Feasibility Studies	08/06/2026	24/07/206
Tender Period (for Commercial Submissions & Framework Agreement Signature)	21/09/2026	27/11/2026
Tender Evaluation by NESO	c. Dec 2026	
Providers Notified of Tender Outcome	c. Jan 2027	

6.1. Expression of Interest (EOI) Evaluation

NESO will evaluate the bidder EOI submissions to ensure:

1. That all the necessary data for the NESO/TO feasibility study has been provided.
2. That the bidder passes all due diligence/ compliance questions.
3. That the bidding User is registered (or will be registered for new Users with signed connection offers) with the NESO BM system as non-aggregated BMU unit(s).

4. That the User will be connected to the B6 OTS before October 2029.
5. That the User has accounted for the specification requirements on stacking of relevant services, and to ensure that NESO has all of the required information to be able to agree, in writing, the interactions between the stacked services.
6. That the Provider has noted any current/potential co-located assets and whether the co-located asset's connection configuration will affect the proposed Providers bid (as outlined in Section 5.2.4 of this document, and clause 3.2 of the Terms and Conditions).
7. That all the required information has been provided on any Non-Firm conditions within the Bilateral Connection Agreements.
8. That Users will be available to be armed at any time when exporting active power, without prior notice from the ENCC (excluding the conditions of Section 5.2.3).
9. That the Users can provide operational metering, as per section 5.4.

The relevant Transmission Owner (TO) and NESO will then evaluate in a NESO/ TO Feasibility Study whether the parties that have submitted EOIs meet the minimum technical requirements. These include:

1. For fast tripping, whether the stability trip speed will meet the targeted 200ms This intertrip speed will be assessed and provided by the TO.
2. That there will be a suitable OTS remote intertrip device/ terminal location available for the User to be connected to.
3. Whether another party connected behind the same circuit breaker would be affected by the service (see Section 5.12). If another party is connected behind the same circuit breaker or downstream of the interested User, then the outcome of the NESO/TO Feasibility Study will be a failure if the other party:
    a. Is not in agreement with the conditions of being tripped off post-fault, or;
    b. Failed to provide an EOI submission to NESO during the EOI window; or;
    c. Provided an EOI submission to NESO during the EOI window but subsequently failed the NESO/TO Feasibility Study stage.
4. If the User is connected to any other intertrip schemes that could interact with the OTS and affect the ability to be armed at any time as outlined in Section 5.4.4.

Please note that NESO reserves the right to remove any User from the process at this stage if there is a significant risk to the system (determined at NESO's sole discretion), as per the NESO/TO Feasibility Study results.

The TOs shall provide their results in a report to NESO, and thereafter NESO will communicate whether the User has passed or failed the initial assessment process. Please note, NESO will try to share as much information as possible from the NESO/TO Feasibility Study but may be unable to provide certain details of the assessment, as the information shared with NESO by the TO may be subject to confidentiality or sensitivity restrictions.

6.2. Tender Period

Bidders that pass the EOI stage will be invited to submit their Commercial Submission, and a signed version of the Framework Agreement.

Commercial Submission

The Commercial Submission comprises of the User's Arming Fee cap(s), and an Intertripping Fee.

Please note:

1. The arming fee provided by each User in the tender process shall act as their Arming Fee capduring the first year of the service term but can be decreased by the User during the year to encourage ongoing competition.
2. The Stability Trip Fee provided by each User in this process is fixed for the year, meaning it cannot be changed at all during the submitted year.
3. Users will be able to submit new Arming Fee caps and Intertripping Fees on a yearly basis for the subsequent years of service delivery (note section 4.3 – 'Yearly Fee Resubmission').

For successful Users, NESO reserves the right to request that contracts commence early (pre-October 2027) if the TOs deliver the required OTS connections for successful assets before October 2027 (assuming the generator connection works can be completed by the earlier date), or late (post-October 2027) if the TOs are delayed in delivering the required connections for successful assets not already connected to the B6 OTS.

CMIS B6 Framework Agreement

NESO shall require all technically feasible Users to sign the CMIS Scotland Framework Agreement in line with the tender submission, thereby binding the Users to Section 3 ("CMIS Tenders") of the CMIS Scotland Standard Contract Terms for the duration of the CMIS Scotland Framework Agreement. If a User is successful in the CMIS Scotland tender process, the User shall be bound by the entirety of the CMIS Scotland Standard Contract Terms.

Further information of the CMIS B6 Framework Agreement can be found in section 4.2.

6.3. Tender Evaluation

Providers that submit the required tender documentation by the tender deadline will be assessed as per the description below. For clarity, if Providers do not submit the required documentation by the tender deadline, their tender may not be evaluated, and they could be removed from the tender process.

Commercial Assessment Process

NESO has an indicative base requirement to procure at least 2.4GW for CMIS B6, at the least overall cost to the consumer (subject to the section 'Rationale for the GW Base Requirement' below).

To ensure value for the consumer, NESO, at its sole discretion, reserves the right to request the resubmission of prices prior to contract award from Users involved in the CMIS B6 tender process.

This CMIS will cover the B6 boundary. Given that generators from a wide geographical area can bid for this service, we will be utilising an Effectiveness Factor as part of the overall assessment model (below). This Effectiveness Factor will describe how the location of the generating unit determines its contribution to helping alleviate boundary constraints covered by CMIS B6.

Examples of Effectiveness Factors for Flop Zones in B6

Zone	Effectiveness (%)
T1a	100%
T1b	100%
T2	100%
T3	100%
T4a	100%
T4b	100%
T5	100%
T6	100%
S5	100%
S6	100%

*** The above are examples only for illustration purposes for the Consultation / EOI phase. Actual figures will be published in the Invitation to Tender (ITT) phase of this tender process**

This will then form part of the overall commercial assessment model as detailed below to determine the most optimal economical solutions for the service. At the Invitation to Tender (ITT) phase of the CMIS Scotland tender, we will publish a table that provides the detail of the Effectiveness Factors for bidding generators. This is expected to illustrate this detail as per the ETYS zones (seen in Fig 5 of ETYS Appendix A) and potentially at a more granular level within specific ETYS zones

NESO shall determine the most optimal economic Users by demonstrating the forecasted saving for a particular User, and then ranking these User savings in order of highest savings to lowest savings, whilst ensuring that as close to the base requirement is achieved for each of the first three years of service. The User savings are calculated by calculating the forecasted savings accrued during the life of the service This is achieved by calculating the difference between the cost of the Balancing Mechanism if there was no CMIS service versus the remaining Balancing Mechanism cost if there is a CMIS service in place including the particular User. NESO will then look to contract with every bidder that has the highest savings (ranked), up to the base requirement, for any of the first three years of service (subject to the section 'Rationale for the GW Base Requirement' below).

Rationale for the GW Base Requirement

NESO expects to arm up to a maximum of 1.2GW on the B6 OTS at any given time from the service start date, but reserves the right to arm more if required. This is based on the SQSS (Security and Quality of Supply Standard), and the FRCR (Frequency Risk and Control Report) Policy 2024, which dictates that NESO must secure all BMU only risks at all times. The current largest infeed BMU loss is 1400MW, but after taking into account factors such as the potential interaction with Vector Shift protection if a transmission fault occurred, then this leads to the NESO expectation for the maximum arming level set out above.

NESO has set an indicative base requirement of 2.4GW to be procured in the CMIS B6 tender, doubling the expected maximum arming volume to facilitate competition, allow for sub-maximal MW export and provide a contingency for NESO during the operation of the service. In the case where a single User is providing a particularly large amount of capacity, NESO reserves the right to procure additional capacity to mitigate the risk of available capacity being less than 1.8GW.

Although 2.4GW is the base requirement, due to nature of the evaluation being across three years, there is the potential that more MW will be procured and be available in later years of the service.

NESO, at its sole discretion, can change the indicative base requirement of 2.4GW during the evaluation, for any of the three years, to ensure that NESO gains the best value for the consumer.

The User Offer Calculation – Primary Formula

The Primary Formula for the User Offer is shown below:

Line 1: BM Saving If Generator X in place

$$\text{User Savings}_{\text{Option}}(£) = \text{Redispatch Cost}_{\text{Counterfactual}}(£) - \text{Redispatch Cost}_{\text{Option}}(£)$$

Line 2: BM Saving – Arming/Tripping cost

$$\text{True Savings}_{\text{Option}}(£) = \text{User Savings}_{\text{Option}}(£)$$

$$-\left[\frac{\text{arming fee}(£/\text{MWh}) \times \text{OC} \times \text{HoA}_{\text{Option}}}{\text{Eff.}} + \frac{\text{intertrip fee } (£/\text{trip})}{29}\right]$$

The above Items are:

Item	Explanation
User Savings (Option)	The forecasted £ saving accrued during the life of the service; this being the difference between the Balancing Mechanism cost if there was no service vs. the remaining Balancing Mechanism cost if there is a CMIS service in place. NESO will calculate this in the Tender Evaluation stage.
Redispatch Cost (Counterfactual)	The forecasted total Balancing Mechanism cost for the life of the service if the given generator was NOT in place to support Constraint Management via this CMIS B6 service. NESO will calculate this in the Tender Evaluation stage.
Redispatch Cost (Option)	The forecasted total Balancing Mechanism cost for the life of the service if the given generator WAS in place to support Constraint Management via this CMIS B6 service. NESO will calculate this in the Tender Evaluation stage.
OC	The Offered Capacity of the User (expressed in MW) to be used by CMIS B6, considering the nominated circuits.
HoA	Refers to the number of hours per year NESO expects to arm the CMIS B6 service User behind an OTS connected circuit breaker. This estimate will come from the NESO economic redispatch model (Plexos) that will also be used to calculate the User Savings Option based on the selected User.
Arming Fee	The Fee submitted by the bidder in the Commercial Tender.
Intertrip Fee	The Fee/s submitted by the bidder in the Commercial Tender for a single BMU. All bidders must submit a Stability Trip fee.

$\frac{1}{29}$[4]	The probability of an intertrip occurring while the generator is armed over 29 years. This is an estimate only and NESO do not warrant or guarantee that any number of trips will occur in any given period.
Effectiveness Factor (Eff.)	This Effectiveness Factor will describe how the location of the generating unit determines its contribution to helping alleviate boundary constraints. This will be achieved by calculating the boundary capability uplift that the given generating unit could deliver based on location, expressed in % terms.

The User Offer Calculation - Alternative Formula

An alternative formula will be used when a User already has an existing agreement, as part of their Bilateral Connection Agreement (BCA), that provides the same intertrip service as B6.

In this scenario the following formula will be used:

$$\text{True Savings}_{\text{Option}}(£) = \text{User Savings}_{\text{Option}}(£)$$

$$-\left[\frac{\text{arming fee}(£/\text{MWh}) \times \left(\frac{1}{ACC}\right) \times \text{OC} \times \text{HoA}_{\text{Option}}}{\text{Eff.}} + \frac{\text{intertrip fee } (£/\text{trip})}{29}\right]$$

Item	Explanation
Additional Circuit Contribution (ACC)	Calculates the extra value the User would add by joining the CMIS B2-B5. • For example, as part of their BCA a User provides intertrip services to nine out of ten circuits that the CMIS B2-B5 will monitor. In this scenario the OC would be adjusted using an Additional Circuit Contribution of 10% to account for the actual benefit this service would provide to the scheme. Please note, Users that only provide intertrip services under network outage conditions as part of their BCA would be assumed to have an Additional Circuit Contribution of 100%, as the CMIS B2-B5 could be armed when the transmission system is intact. Therefore, the Primary Formula would be applied to these User's bids.

The User Offer Calculation - Commercial Assessment of Nominated Circuits

If the User has multiple BMUs tendered in, but not all are to be armed at any given time, the User has the option to nominate which BMU(s) are available for the Service. In the economic assessment, NESO will use the BMU(s) with the lowest capacity and the BMU(s) with the highest arming fees. This is to consider the uncertainty of which BMU(s) would be made available in real-time for arming.

[4] This is an estimate based on the proportion of exposed conductor across CMIS B6 monitored circuits and the total amount of exposed conductor on the GB transmission system, while considering the frequency of the type of faults to be monitored by the B6 OTS.

Alternatively, the Provider is free to submit all BMUs as one unified bid, which would be intertripped as one unit. In this case the standard commercial assessment process will apply.

6.4. Post-Tender – Users that have not been awarded the Service

In future years, NESO may wish to allow new Users to join the service. As a result, NESO reserves the right to undertake a subsequent tender process in the future, if required. The details of which would be released at the time.

For clarity, NESO recommends that any User that will meet the Service Specification requirements by the cut-off date of September 2029 should bid into this tender.