Public

Constraints Collaboration Project webinar – 5 November 2025

Q&A pack

The following questions were submitted by stakeholders collaborating with NESO on Wednesday, 5th November, as part of NESO's latest quarterly update on the ongoing Constraints Collaboration Project.

List of Abbreviation

BESS – Battery Energy Storage System

BFS – Boundary Flow Smoothing

BM – Balancing Mechanism

BMUs – Balancing Mechanism Units

CBA – Cost Benefit Analysis

CCP – Constraints Collaboration Project

CM – Capacity Market

CMM – Constraints Management Market

CMIS – Constraint Management Intertrip Scheme

DESNZ – Department for Energy Security and Net Zero

DfC – Demand for Constraints

DFS – Demand Flexibility Service

EOI – Expression of Interest

FCLs – Final Consumption Levies

LCM – Local Constraint Market

MW – Megawatt

NESO – National Energy System Operator

REMA – Review of Electricity Market Arrangements

RESP – Regional Energy Strategic Plan

RNP – Reformed National pricing

WM – Wholesale Market

Questions	Answers
Boundary flow smoothing - How can you quantify the financial benefit of reducing excess power flow spikes and how can you use that in your cost benefit?	We don't yet have an approach to quantify the benefit of reducing power flow spikes. We'll need to work closely with the control room to see whether there is an accurate way to quantify and provide an update at the next event.
Boundary flow smoothing - How does NESO envisage boundary flow smoothing will then be implemented / delivered?	As part of the current innovation project stage, we are assessing the feasibility of the concept. Implementation and service design will be considered in a following project stage if the concept is shown to be potentially viable. We have recorded stakeholder feedback on service design that can be used in following stages.
Boundary flow smoothing - Regarding smoothing technologies, batteries are mentioned as a promising technology. Which types of batteries were studied and considered a good fit for this purpose?	This is in particular Lithium Ion BESS as these are the types of BESS deployed on the network. All the stakeholders we spoke to use and operate Lithium-ion BESS.
Boundary flow smoothing - In regard to the asset archetype component in BfS, can we have some clarification around the considerations on GB asset availability?	The criteria assessment for asset availability can be summarised as: Green - there are pre-existing assets or they close to commissioning. Amber - assets in development with connection Red - assets not yet widely available This is mainly due to the fact that the CCP is intended to focus on initiatives that may be able to bring savings in the relatively short term – however, any service would be technology agnostic – i.e. anything that could meet the service requirements should this develop further could participate.

	We also want to highlight that this was an initial qualitative assessment, and the key evaluation will be the comparison of asset capabilities against service requirements.
CCP programme - Can you speak to the remainder of the 23 proposals made for CCP? With the alarming reforecast of near-future constraint, will you reconsider prioritising any of these?	We are currently continuing our focus on our three main projects as highlighted today. In the meantime, following the REMA decision DESNZ are considering improvements that may include constraint management measures as part of the RNP programme - DESNZ plans to publish as an update in the end of the year / early next year. NESO also aims to publish a call for input on balancing reforms around the same time and welcome stakeholder input. We also have RESP and other programmes under developing to signal future constraint management approaches. We strongly encourage market inputs to help us consider evidence-based justification of clear system need or review of our earlier benefits and assessments. We would then look to revisit proposals and future tendering of current projects and we will certainly engage with industry.
CCP programme - Will there be any additional information on how this work is being used to support the Reformed National Pricing conversation?	We are working with DESNZ and Ofgem on Reformed National Pricing (RNP), and DESNZ are considering improvements to constraint management measures as part of the RNP programme.
CCP programme - Can you provide the updated timelines for CCP please. I note from the Market Delivery Plan Oct update that there are significant delays ~6 months for both Intertrip and DfC.	Thank you for reviewing the Market Delivery Plan update. We acknowledge there was also a minor delay in updating the Market Delivery Plan, it should have been updated in September. We'd like to clarify that there are no delays on DfC. The timelines remain on track as per the current plan. The delivery plan for CMIS Scotland is still on track to be in place for mid-late 2027. We recognise some preparatory work has required more time than expected. This includes ongoing discussions with the Scottish Transmission Owners to ensure appropriate solution as well as instigating further analysis & modelling of Intertrips to understand the optimal requirements for the service.
Constraint costs - There is still a large gap between the projected constraints costs over the next period, £4-8bn compared to the projected consumer savings of £0.4-1.2bn - question is whether this	In our 2025 Annual Balancing Costs Report, we identify four key areas where action is needed to minimise balancing costs: network build, market reform, connections and flexibility. The report sets out where NESO has control or influence over driving relevant initiatives, and how we are working to accelerate delivery.

is as good as it can get? what work is being done to implement the kind of changes that will have the kind of impactful benefit to consumers that is talked about	
Constraint information - Is there a separate workstream in NESO on improving constraint information and not relying on day ahead as that will ensure better utilisation and greater clarity to industry on trade-offs/value. It's more about getting after day ahead, within day ideally	We work on managing constraints from much longer than day ahead but currently publish information on expected day-ahead flows as that is using the most up to date info, on for example, wind forecasts which can greatly influence if constraints are active or not. You can find the Day Ahead Constraint Flows and Limits here. We also publish outturn constraint cost data here.
Constraints Management Market - What is the status, output and findings of the CMM project works?	We have communicated in our December CCP webinar that we are not progressing with the short-term Constraints Management Market. We already have LCM which is our day-ahead CMM and Demand Flexibility Service (DFS) is opening to more demand and non-BM flexibility. We are actively working on developing this service to maximise the value it delivers. We believe that using the LCM and the DFS future potential as existing platforms already integrated into our control room and familiar to the market is the best approach to develop a short-term constraints market for non-BMUs. We see similar risks in the long-term CMM and have communicated that in our December CCP webinar. You can find the record in our website.
Constraints Management Market - Given the Government decision as part of REMA (now RNP) was to retain national pricing (and work on incremental reforms to reduce balancing costs), are the Constraint Management Markets (CMMs) proposals now back in scope?	We have conducted CBA before CMM we decided not to progress with CMM – our position on CMM remains the same. The first CBA was conducted by Baringa in July 2024 and then it was followed by an in-depth evidence case analysis by NESO. In summary, we foresee the risks associated with introducing additional CMMs outweigh the proposed benefits - you can find the findings in our December CCP webinar. Following the Government decision on REMA, DESNZ are considering improvements to constraint management measures as part of the

Nothing, I don't think a CBA was conducted before they were removed from scope. The CBA showed positive results but was not taken forward.	RNP programme and they're planning to publish an update on their work by the end of the year.
Demand for constraints - Are you able to share current thinking around what the allocation criteria and process for DfC will be?	The details on allocation criteria and process are still being worked on – we are not able to share the detailed yet but please do keep an eye on this space. Our desired launch date for Demand for Constraints is still 2026 to achieve maximum impact and then we will undertake a regular review to assess the level of demand procured via the service and the system need to determine if additional tenders needed to alleviate constraints. However, the timeline is not something we can guarantee at the moment due to various dependencies.
Demand for constraints - In terms of DfC, can NESO confirm if they are considering T-1 contracts?	Same as above.
Demand for constraints - DfC is eligible to stack with wholesale, will the participant remain exempt from the non-commodity costs/FCLs, as is applicable in DfC?	We recognise that policy costs remain a significant area of uncertainty for certain projects. We have actively advised DESNZ to highlight FCL as barrier to flexibility including demand turn up - see FCLs under Barrier B8, published as part of our NESO Routes to Market review. We acknowledge the importance of revenue stacking to your business case and the ability to participate in wholesale market alongside Demand for Constraints will be essential. NESO priority remains achieving the lowest overall cost for the bill payer across all market actions when developing a new contractual mechanism or market design. Until further direction is provided, NESO does not hold the remit to differentially reimburse policy costs - The approach to policy cost recovery is set by government.
Demand for constraints - Please can you clarify which ancillary markets will be eligible to be stacked with DfC? The recent slide on this was very useful, but taking DFS	We will look to enable all stacking wherever it confidently delivers the responses required e.g. at boundaries to uphold system security. As a point of clarification on DFS: at the present time DFS is focusing on positive margin actions (demand turn-down and generation turn-up). LCM focuses on constraint relief (demand turn-up and generation turn-down).

as an example, it is eligible to be stacked with CM, WM and LCM - would that apply in the same way to DfC?	These differences mean careful coordination is required to avoid conflicting dispatch signals. Looking ahead we still want to enable stacking wherever possible, and we expect any constraint market will need firm delivery in a given settlement period, to ensure consumer value and to help secure the system at a constraint requirement.
Demand for constraints - We have clients interested in offering this demand for constraint services. do you want to hear from them on their views on contract structure?	Yes, we would like to hear from you and engage before we launch the tendering and consultation. You can contact us on our email here: .box.market.dev@neso.energy
Demand for constraints - We saw a preferred technology list for boundary smoothing. Is there a similar one for DfC?	The details on eligibility are still being finalised. We are not able to share them yet, but we remain committed to providing greater clarity in the coming months.
Demand for constraints - For DfC, what activation frequency (events per month) and typical duration should participants model — and is there any indicative or historical utilisation data you can share?	We understand it is difficult to forecast due to various reasons, for example wind condition, system, topology outages and demand etc. We are currently undertaking the power system modelling to clarify the requirement in different boundaries. We understand this is important for participants to model to understand the technical and financial feasibility as well. We shall communicate this further once we have a better view on this. If you are interested in the historic data about constraints, you can find the information on NESO website as a reference and indicative data.
Intertrip - For power modelling and power system studies, are/will data from the grid reform be taken into account? As the future projects might impact the networks and boundaries. If so, how did you draw an assumption to model the network?	We are currently using Transmission Owner data submissions to model future snapshots of the system topography. We are also looking at incorporating significant system build-out and outage plans in this where available. Due to the significant network build-out over the coming years, it is challenging to model accurate time-phased fixed snapshots of the network, we will make assumptions on the topography based on the best information available to us.

Intertrip - There appears to be no discussion on intertrip and interaction with storage projects and lessons learnt from that with storage and arming on export only	From the previous conversation we understand BESS is technically available to accommodate the protection signal and capable to respond. We're examining a number of interactions within the arming and tripping schemes that need to be fully resolved. It is important all assets are armed so that the CMIS service can operate effectively and meets the constraint requirement. These discussions are currently ongoing, and we aim to include an update in our next webinar.
Intertrip - Did you conclude if there was value in fast ramping (i.e in < 1second) rather than tripping?	In regard to the planned CMIS in Scotland (outlined in the presentation), no conclusions have yet been reached in regard to tripping or ramping requirements. This will be communicated to interested parties as part of the launch of the Consultation & EOI phase of CMIS Scotland in early 2026.