

Open Networks
Project
Flexible Connection
(ANM) Stakeholder
Focus Group Response

June 2021

Introduction

The first Open Networks Flexible Connection (ANM) Focus Group Workshop took place on 21st April 2021. Due to the ongoing COVID-19 situation the meeting was held digitally.

The Focus Group has been established as a forum where networks and stakeholders can discuss concerns with Flexible Connections (ANM) and potential solutions. It aims to provide more transparency and a broader understanding of the role ANM plays (within the confines of the current regulatory arrangements) in facilitating the growth of affordable and timely connections whilst enhancing stakeholder engagement and collaboration in the identification of mitigating solutions.

The first workshop focused on three WS1A Products

- P3: Principles to Review Legacy FC(ANM) contracts
- P8: Apportioning Curtailment Risk
- P9: Curtailment Information

The stakeholder feedback received and the response / follow actions are captured in the Product Focus Sessions tables below. If feedback has been missed, or if on reflection you have additional suggestions, please send these through to the [ENA Open Networks](#).

Product Focus Sessions	
WS1A Curtailment Information (P9)	
Feedback	Response
<p>How can we receive improved information on future plans for reinforcements?</p>	<ul style="list-style-type: none"> • A signposting report has been developed for DNOs to identify more clearly longer-term network capacity requirements. This is designed to help customers identify potential areas with network needs. This report will provide a basis for the Network Development Plan (NDP) which is being introduced as a Clean Energy Package (CEP) licence requirement for networks to publish in July 2022. The network companies are developing a Network Capacity Signposting Report to publish in July 2021 as an interim publication to help customers before 2022 and to enable the network companies to trial what might work best for the NDP itself.
<p>Is it possible to indicate whether the DNO has ever tendered for Flexibility Services in the same area as the proposed Flexible Connection (ANM) and the value?</p>	<ul style="list-style-type: none"> • We recommend raising this in your connection discussions with the relevant DNO who may be able to advise whether there have been Tenders for Flexibility Services in the same ANM zone.

	<ul style="list-style-type: none"> We have also taken this question back into the Open Networks Project to understand whether the value could be disclosed and / or whether there are commercial sensitivities to be addressed.
<p>By taking a Flex Connection you are limiting access to other markets.</p>	<ul style="list-style-type: none"> Flexible Connections (ANM) provide an option of connecting faster and at significantly lower cost. Currently it does limit access to ESO Ancillary and Balancing Services It does not necessarily limit access to DNO flexibility services but opportunities may be impacted by the forecast curtailment risk. The developer determines the best commercial route for the asset i.e. whether the upfront connection savings with a Flexible Connection (ANM) will be greater than the value foregone from potential stacking revenues.
<p>A curtailment figure (e.g. 9%) does not help the developer to correlate what that means in practice.</p> <ul style="list-style-type: none"> What is driving the curtailment? What / where triggers it? E.g. if the trigger is solar driven what volumes would trigger it and where are they located? <p>With this type of information, the developer can do its own modelling and make informed decisions about whether a Flexible Connection (ANM) is worth it.</p>	<ul style="list-style-type: none"> WS1A P9 will take this request on board as part of its activity to identify and deliver improvements. The Product Team (P9) has arranged a technical sub-meeting (of the Focus Group) with developers / potential third party providers of curtailment reports to explore further.
<p>Access to stack information; who is ahead of my asset; what technology etc. ?</p>	<ul style="list-style-type: none"> This may be commercially sensitive information and we understand there may also be data protection issues. WS1A P9 will explore this request as part of its activity to identify and deliver improvements
<p>In addition to improved data – customers still want surgeries / contacts the developer can discuss options with. Access to system planners is still a priority even with improved data.</p>	<ul style="list-style-type: none"> Noted and captured in the P9 Curtailment Information report

<p>Standard profiles – can an explanation of the impact of the profiles used on the curtailment be provided so developers can do their own risk assessment / understand the DNOs risk appetite?</p>	<ul style="list-style-type: none"> • WS1A P9 will explore this request as part of its activity to identify and deliver improvements
<p>Using third parties for curtailment assessments: the third party curtailment information providers present advised they don't expect DNOs to release their detailed network assessments but other data and correlation with markets would be useful.</p>	<ul style="list-style-type: none"> • The Product Team (P9) has arranged a technical sub-meeting with potential third party providers of curtailment forecast / reports (and other interested parties) to explore further what is needed for these organisations to improve their curtailment information services to developers.
<p>Experience has shown that there are issues with third party reports as they do not always align with the DNO reports (where they are provided). Based on different assumption etc.</p>	<ul style="list-style-type: none"> • The Product Team (P9) has arranged a technical sub-meeting with potential third party providers of curtailment forecast / reports (and other interested parties) to explore further what is needed for these organisations to improve their curtailment information services to developers.
<p>Not all DNOs provide curtailment reports and / or consistent data.</p>	<ul style="list-style-type: none"> • The Product Team (P9) has arranged a technical sub-meeting with potential third party providers of curtailment forecast / reports (and other interested parties) to explore further what is needed for these organisations to improve their curtailment information services to developers.
<p>Needs to be a better appreciation of how batteries perform and are profiled.</p> <ul style="list-style-type: none"> • Are DNOs making the right assumptions for batteries – they are not necessarily just operating as baseload? • Are asset owners operating batteries along the lines they have said? • How do DNOs treat storage providing reactive intermittent services e.g. frequency response / STOR services? • How do you mitigate the risk of batteries deviating from their business cases? 	<ul style="list-style-type: none"> • WS1A P9 will explore battery storage profiling as part of its activity to identify and deliver improvements. • The Product Team (P9) has arranged a technical sub-meeting with potential third party providers of curtailment forecast / reports (and other interested parties) to explore further.
<p>How would you go about developing battery profiles?</p>	<ul style="list-style-type: none"> • WS1A P9 will explore battery storage profiling as part of its activity to identify and deliver improvements.

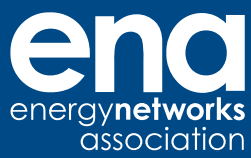
Product updates	
WS2 P8: Apportionment of Curtailment Risk	
Feedback	Response
<p>Consider which (data) risks are down to the DNO and which risks are more generic. E.g. historic weather patterns / models and demand structural changes. Can these be made available so developers can play around with them and gather more information on sensitivities (rather than rely on the DNOs)?</p>	<ul style="list-style-type: none"> • Piggyback Product Team (P9)'s technical sub-meeting with potential third party providers of curtailment forecast / reports (and other interested parties) to explore further what is needed for these organisations to improve their curtailment information services to developers.
<p>If DNOs took a less conservative approach it would enable a more realistic approach and more would connect.</p>	<ul style="list-style-type: none"> • ANM is designed to mitigate risk of network damage and ultimately it will disconnect any asset not following the rules • ANM is an operational system and has gone through rigorous system design. Getting networks wrong in operational timescales (e.g. line overloading – causes sagging) can be dangerous for the public and it is why the DNO approach is conservative – it must fail safe • This drives a tendency to “worst case” assumptions and the “over-forecasting” of curtailment risk. • WS1A P8 will review the conservatism issue to identify whether there are mitigation options as part of its activity to identify and deliver improvements. • WS1A P8 will explore whether the variances and “What-ifs” in the network models are still appropriate and consider what could be shared (securely) with third parties. This will enable third parties to make their own judgement and decisions on the risk of curtailment.
<p>We need to know more about the DNOs’ ability to forecast. Have you considered regulatory incentives on forecasting and a reward / penalty arrangement with consumers?</p>	<ul style="list-style-type: none"> • We know there are weaknesses in the coverage of network monitoring and availability of historical data and this is being addressed via other work for example WS1B P6 “DER Visibility” together with improvements in the modelling approaches. • It should also be noted that analysis for network design studies is necessarily conservative to ensure the integrity of the system and to protect

	<p>against overloading of assets along with the associated public and worker safety issues.</p> <ul style="list-style-type: none"> • There are also considerable unknowns in terms of GB net zero policies and changes in load growth on the networks. • We feel it is premature to have an incentive scheme on forecasting accuracy when there are so many unknowns / sensitivities beyond the DNO control. • Development of incentives in areas within the DNO control could also result in some perverse outcomes (unintended consequences) and would need to be designed carefully to avoid this outcome. E.g. could the DNO be unintentionally incentivised to increase curtailment artificially to deliver on their forecast? Would it encourage DNOs to be more conservative with forecasts to ensure targets are met?
<p>Can you add carbon intensity to the stack – rather than simply LIFO? Ofgem has instructed the ESO to consider factoring in carbon intensity</p>	<ul style="list-style-type: none"> • At present DNOs are not allowed to discriminate on the basis of technology.

Product updates WS1A P3: Principles for Reviewing FC(ANM) Contracts	
Feedback	Response
<p>Aren't most FC(ANM) connections a "one way street". Once engaged you are part of a LIFO stack for curtailment. How is a Mod App / G99 an easy way out if the LIFO stack is already there? How do I get out of that LIFO stack?</p>	<ul style="list-style-type: none"> • Customers can, at any time, request changes to their connection agreement and a formal process already exists. • Customers can re-apply for a "standard" (firm) connection, or they can request changes to the size of their site through the modification request (via G99 Form) process. This enables customers to request a review of their current connection, with a view to obtaining a 'standard' connection. • The customer is required to pay the normal modification fee, in line with standard Assessment and Design charges, and in return the DNO provides the current connection

	<p>options for the site including the revised connection charges for any required reinforcement works to facilitate a 'standard' connection.</p> <ul style="list-style-type: none"> The DNOs also offer Connection Surgeries and/or stakeholder events where such options can be discussed ahead of a formal request. Customers have opportunities to raise concerns about their contracts at these events or by directly contacting their DNO.
<p>Being able to move off a FC(ANM) contract is a positive. If customers are behind a temporary ANM scheme (e.g. due to a Transmission (SGT) limitation) once resolved would everyone be moved off?</p>	<ul style="list-style-type: none"> If the DNO is explicit in the connection contract that the ANM scheme is temporary then we would assume a date/specific reinforcement work would be placed against this, with the ANM scheme being removed at that point in time.
<p>Should information about reinforcements – go to FC(ANM) assets only so they can consider whether they should consider moving from a non-firm to a firm connections contracts or should this information be shared publicly?</p>	<ul style="list-style-type: none"> It was agreed by both the DNOs and the stakeholders that restricting reinforcement information to just Flexible Connection (ANM) asset owners would be discriminatory. Improvements to data sharing were discussed and, in particular, making online services / heatmaps more dynamic / updated more frequently. WS1A P9 will explore this request as part of its activity to identify and deliver improvements to curtailment information provision.
<p>If I am behind a constraint and another customer pays for reinforcement to go firm – will I benefit?</p>	<ul style="list-style-type: none"> Provided that the reinforcement relates directly to your constraint, then it is likely that you will benefit (although this benefit may erode over time as new sites connect). You may have the option of revising your connection to become firm, however, it is likely that you will pay a second-comer charge for the reinforcements.
<p>Won't my original curtailment assessment be inaccurate – the generation background has changed?</p>	<ul style="list-style-type: none"> The original curtailment analysis is carried out at the point of contract acceptance. As new generators connect to the network, the curtailment levels will likely change. You can request updated curtailment analysis, however, DNOs can charge a fee for this.
<p>Process for coming off a FC(ANM) is the G99 - but there are different approaches with the different DNOs?</p>	<ul style="list-style-type: none"> Customers can request a change to their contract status at any time. Customers will have to submit a formal application to move from non-firm to firm. They can also request a change in

	their capacity via a G99 form. Both routes are the same for all DNOs.
Most developers don't own the live asset – it's sold on before it goes live. Purchaser doesn't always know / appreciate the curtailment risk. Should it be much clearer on the contract?	<ul style="list-style-type: none">• Asset owners purchasing from developer need to have adequate due diligence to avoid this scenario.• WS1A P3 will consider whether the Flexible Connection (ANM) contracts should make the curtailment risk more visible.



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