

Curtailment Information Implementation Plan

Open Networks WS1A Product 9

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Related documents

Reference 1

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Introduction

About ENA

Energy Networks Association (ENA) represents the owners and operators of licences for the transmission and/or distribution of energy in the UK and Ireland. Our members control and maintain the critical national infrastructure that delivers these vital services into customers' homes and businesses.

ENA's overriding goals are to promote UK and Ireland energy networks ensuring our networks are the safest, most reliable, most efficient and sustainable in the world. We influence decision-makers on issues that are important to our members. These include:

- (i) Regulation and the wider representation in UK, Ireland, and the rest of Europe
- (ii) Cost-efficient engineering services and related businesses for the benefit of members
- (iii) Safety, health and environment across the gas and electricity industries
- (iv) The development and deployment of smart technology
- (v) Innovation strategy, reporting and collaboration in GB

As the voice of the energy networks sector, ENA acts as a strategic focus and channel of communication for the industry. We promote interests and good standing of the industry and provide a forum of discussion among company members.

Our members and associates

Membership of Energy Networks Association is open to all owners and operators of energy networks in the UK.

- Companies which operate smaller networks or are licence holders in the islands around the UK and Ireland can be associates of ENA too. This gives them access to the expertise and knowledge available through ENA.
- Companies and organisations with an interest in the UK transmission and distribution market are now able to directly benefit from the work of ENA through associate status.

Open Networks Project

The Open Networks (ON) project is a major collaboration between ENA members and their stakeholders that will transform the way that both local Distribution Networks and National Transmission Networks will operate and work for customers. Launched in January 2017, ENA's Open Networks project has started to lay the foundations of a smart energy grid in the UK.

Background to WS1A Flexible Connection (ANM) Products

The objective of Open Networks project Workstream 1A (Flexibility Services) in 2021 is to continue to define and develop transparency and standardised approaches across DNOs in their procurement of flexibility services, as well as delivering consistency with the ESO. It will continue to design changes to enable and encourage new markets and platforms for flexibility (e.g. peer-to-peer trading). WS1A Product 9 is one of three products within Workstream 1A that is looking to address industry concerns on Flexible Connections (FC) and Active Network Management (ANM) and their interaction with Flexibility Services.

The interaction between ANM and Flexibility Services was identified early in 2020 as a key priority and this was confirmed in discussion with BEIS and Ofgem and by stakeholders in the Advisory Group, bilateral engagements and their responses to the Flexibility consultation. As a result of this feedback, three products were identified within WS1A which seek to address key areas of concern for stakeholders as shown in Table 1 WS1A FC (ANM) products.

WS1A Product	Description
P3	Principles to Review Legacy ANM Contracts
P8	Apportioning Curtailment Risk
P9	Curtailment Information

Table 1 WS1A FC (ANM) products

WS1A Product 9 – Curtailment Information

Background

Stakeholder feedback suggested the availability of improved curtailment information that is more granular, accurate and frequently provided would improve opportunities in flexible services and revenue stacking for assets with Flexible Connections. It can also create additional services for Flexibility Service Providers (FSP) who can replace the curtailment needs with flexibility products.

The focus of WS1A Product 9 – Curtailment Information was to work with stakeholders to develop a strategy for improving the availability of curtailment information with a phased delivery of improved curtailment information throughout the remainder of ED1.

Product Deliverables

The deliverables of WS1A Product 9 in 2021 are shown in Table 2, with links to reports published by this product team in 2021:

Ref	Product Element	Activities	Deliverable	Timeline
A	Agree a curtailment information strategy with stakeholders	Workshop/consultation with stakeholders to agree approach and principles to improving curtailment information	Report (see below) which captures principles of improving curtailment information and delivery approach to end ED1	May 21
B	Determine stakeholder curtailment data needs to end ED1	- Stakeholder workshops to discuss needs (building on questionnaire results) - DNO workshops to identify options for delivery	Report: Principles and Key Requirements to Improve the Provision of Curtailment Information for Stakeholders that captures output from Ref A and Ref B and stakeholders' key requirements, e.g. data sets, frequency, and granularity of information	May 21
C	Capture current curtailment information availability	Update ENA ONP "DNO provision of constraint information" Dec 18 report	Revised ENA ONP "DNO provision of constraint information" Dec 18 report .	Mar 21
D	Compare current curtailment provision with stakeholder needs identified in B	Complete gap analysis and working with stakeholders agree priorities for a delivery plan	Gap analysis of future needs with current curtailment information and priorities identified	Jul 21
E	Develop prioritised plan to address gaps	Review potential solutions/options with delivery timeframes in ED1	Delivery plan approved and milestones in 2022 PID	Dec 21

Table 2 WS1A P9 Deliverables

Stakeholder Engagement

A two-staged approach was taken to capture stakeholder feedback on improving curtailment information.

(i) Stakeholder Questionnaire

The purpose of the stakeholder questionnaire was to capture as much feedback as possible from a broad range of stakeholders. The questionnaire was also used as an opportunity to identify stakeholder interest to participate in a Focus Group.

(ii) Focus Group

The Open Networks Flexible Connection (ANM) Focus Group was designed to cover all three Flexible Connection (ANM) products: P3, P8 and P9 (as described in Table 1 WS1A FC (ANM) products).

The aim of the Flexible Connection (ANM) Focus Group was to collaborate throughout the delivery of Flexible Connection (ANM) product outputs and agree mitigating solutions, focusing on the areas that provide the most impact for stakeholders. It also provided an opportunity to improve stakeholder knowledge of the role of ANM technology to enhance engagement and collaboration in the identification of mitigating solutions; and to ensure a broader understanding of the role ANM plays (within the confines of the current regulatory arrangements) in facilitating the growth of affordable connections and avoiding delays.

Both in the questionnaire and during Focus Group workshops, feedback on curtailment information needs were sought and captured in line with the various stages of the Flexible Connection journey, i.e. from before making an application through to being operational. This approach was taken as it was understood the information needs of stakeholders can vary according to the stage of connection journey. The various stages of the Flexible Connection journey, on which feedback on information needs were sought, on are shown in Figure 1



Figure 1 Stages of a Flexible Connection journey

Purpose of this Report

This report outlines the implementation plan for Improved Provision of Curtailment Information during the remainder of the ED1 price control period; as set out in WS1A Product 9 Ref E Product Element, Table 2

This implementation plan has been developed based on the set of requirements captured from stakeholders, primarily through the use of a Focus Group, for improving the provision of curtailment information across the entire Flexible Connection journey, from pre-application, application and offer, through to operational. These requirements are covered in detail in the ONP WS1A Product 9 May 2021 Deliverable: [Principles and Key Requirements to Improve the Provision of Curtailment Information for Stakeholders](#).

The primary objective for this implementation plan is to focus on improvements which can be delivered ahead of ED2, i.e. between January 2022 and March 2023. The plan contains best estimate timescales for each requirement; however it should be noted that for a few specific requirements some DNOs are committing to delivery within ED2 timescales. Where there are variances in timescales anticipated for individual DNOs these are shown in Appendix A.

During the activity of this Product Group it was identified that some specific information requirements overlap or duplicate with ongoing work in other ENA or industry working groups. These specific requirements are highlighted separately in this report and where appropriate have been referred to the working groups best placed to deliver these, avoiding duplication of effort. The implementation plan will continue to monitor these groups.

The product group would like to thank all stakeholders and particularly the members of the Focus Group for providing the necessary feedback to help draft this implementation plan and welcomes any feedback that will help the product group further refine the plan before implementation commences in January 2022.

Implementation Plan for Improving Curtailment Information

Figure 2 below outlines the implementation plan from January 2022 through to the start of ED2. The detail of the plan will be reflected in the Project Initiation Document for the 2022 ENA Open Networks WS1A programme.

ON WS1A P9 Curtailment Information Implementation Plan			2022												2023			ED2 →
Connection Journey Stage	Stakeholder requirement	Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Pre-application information	More regular updates of constraint information on heat maps	Agree consistent regular timeframe for updating constraint information on heat maps	█	█														
		Implement			█													
	Access to standard technology profiles	Publish existing standard technology profiles (where applicable)	█	█														
		Establish best practice principles for producing standard profiles			█	█	█	█										
Indicative curtailment estimates based on technology & location on heat maps	Agree consistent methodology								█	█	█	█	█	█				
	Implement														█	█	█	
Flexible Connection Offer Information	Access to LIFO stack characteristics	Confirm detailed requirements with stakeholders		█														
		Agree consistent approach			█	█	█											
		Implement					█	█										
	Curtailment reports to provide consistent level of granularity across DNO's	Comparison of existing reports				█	█											
Agree consistent report template and granularity								█	█	█								
Guidance document explaining curtailment assessment assumptions and how ANM systems works	Roll-out											█	█	█				
	Prepare guidance document	█	█	█														
Operational Information	Access to historical ANM actions / curtailment	Approve and Publish				█	█											
		Agree consistent methodology				█	█	█	█	█								
Access to historical (HH) power flow data at constraint locations	Implement											█	█	█				
	Agree consistent methodology							█	█	█	█	█	█	█				
		Implement													█	█	█	
		Agree consistent methodology																

Figure 2 Implementation plan to improve curtailment information to end of ED1

The implementation plan contains best estimate timescales for each requirement, however it should be noted, for a few requirements, some DNOs are committing to delivery within ED2 timescales, based on the specific need/use cases. Similarly, some of the requirements that were captured are not applicable to all DNOs, depending on the type and maturity of the ANM system that is implemented.

Each of the curtailment information requirements identified in Table 2 are set out in more detail in Appendix A with any anticipated variances in timescales, identified by individual DNOs.

Exceptions / Referrals

For transparency, the following items were captured as requirements from stakeholders during the engagement process but are not being incorporated into the implementation plan for the reasons outlined below.

Connection Journey Stage	Stakeholder Requirement	Action
Pre-application	Consistency in LTDS submissions	Refer requirement to Ofgem's LTDS reform working group
Pre-application	Reinforcement costs on heat maps	Review requirement in 2022 in line with outcome of Ofgem's Access & Forward-Looking Charges SCR
Pre-application	More regular updates of ECR	Covered by the recent DCUSA mandate for all DNOs to update ECR by 10 th working day of each month
Operational information	Access to historical outage/maintenance information	Refer requirement to WS1B Product 7
Operational information	Online portal which provides reasons behind curtailment actions	All DNOs plan to have implemented an online portal with this functionality in ED2
Operational information	Near-time curtailment forecasting	All DNOs plan to have implemented an online portal with this functionality in ED2

Implementation and Project Management

Implementation of this plan in 2022 will be the responsibility of WS1A Product 8 and it will be required to meet the governance processes provided through the ENA Open Networks Programme. This Product plans to continue to engage stakeholders, as required, through the Flexible Connection (ANM) Focus Group and will also monitor any curtailment information requirements referred to other working groups.

Appendix A

A.1 Pre-Application Information

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Information on active constraints (distribution and transmission) on heat maps	DNOs to publish constraint information to (distribution and transmission) updates on heat maps in agreed best practice timescales	ENW	Q2 2022
		SPEN	
		SSEN	
		UKPN	
		WPD	
		NPg	

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Access to generation and battery storage profiles	DNOs to publish generation and battery storage standard profiles	ENW	ED2
		SPEN	Q2 2022
		SSEN	
		UKPN	
		WPD	
		NPg	

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Indicative curtailment estimates based on technology and location	DNOs include curtailment estimates on heat maps using common methodology	ENW	ED2
		SPEN	ED2
		SSEN	Q1 2023
		UKPN	Q1 2023
		WPD	Q1 2023
		NPg	ED2

All DNOs commit to agreeing a common methodology for publishing indicative curtailment estimates on heatmaps in 2022; delivery in 2023 or ED2 timescales is dependent on IT and resource constraints.

A.2 Flexible Connection Offer Information

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Access to LIFO stack characteristics (MW, Type, etc.)	DNOs to establish best practice for access to LIFO stack characteristics	ENW	n/a
		SPEN	Q3 2022
		SSEN	
		UKPN	
		WPD	
		NPg	

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Curtailment reports to provide consistent level of granularity across DNO's	DNOs to agree common template for curtailment reports with consistent level of granularity in curtailment estimates	ENW	ED2
		SPEN	Q4 2022
		SSEN	
		UKPN	
		WPD	
		NPg	

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
More transparency on the DNO assumptions used in curtailment assessments and how ANM systems work	DNOs to publish guidance document on standard assumptions used in curtailment assessments and technical detail on how ANM systems work	ENW	Q3 2022
		SPEN	
		SSEN	
		UKPN	
		WPD	
		NPg	

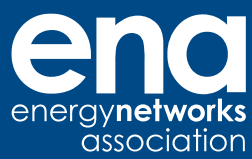
A.3 Operational Information

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Access to data which shows historical ANM actions / curtailment	DNOs to agree a set of aggregated ANM actions/curtailment to publish in consistent format	ENW	ED2
		SPEN	Q4 2022 TBC
		SSEN	
		UKPN	
		WPD	
		NPg	

Stakeholder Requirement	Proposal	DNO	Indicative Timescale
Access to historical half-hourly (HH) power flow data at constraint locations	DNOs to make available (HH) power flow data at constraint locations*	ENW	ED2
		SPEN	Q1 2023
		SSEN	
		UKPN	
		WPD	
		NPg	

* At present, only power flow data which does not expose individual customer's operating profiles can be released.

It is noted that ENWL have yet to implement an ANM system and do not operate ANM schemes but do offer connections with curtailment clauses and these were deemed to be broadly equivalent and included in the study. As ENWL plans to roll out their ANM scheme fully in ED2, their delivery timescales reflect this.



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