

Open Networks Project Advisory Group

Thursday 2nd September 2021



Thank you for joining this Open Networks Project Advisory Group session.

- This webinar will commence at **09:30am**.
- If you are unable to play the audio through your device, you can **dial in by calling +44 20 3855 5885 and using access code 84717243#**
- All microphones have been set to mute to avoid background noise.
- Please ask questions or make comments **via the chat function** throughout the meeting.
- Please be aware this meeting will be recorded for ENA record keeping purposes. You may wish to keep your camera off in light of this.
- If you would like to receive information about the Open Networks Project or have any feedback you would like to submit, please get in touch with us at opennetworks@energynetworks.org.
- We would welcome you all to please take a moment to visit **www.slido.com** so you can take part in our Q&A's later in the meeting. The event code is **#ONAG**

Agenda

Breakout Session A

WS1B P5 – Network Development Process

- Do you find network capacity in its current form and frequency useful?
- Does the proposed format for Network Development Plans meet your requirements as users?

Breakout Session B

WS1B P9 – Coordination Register

- Do you agree with the product team’s approach in capturing the key information within the register?
- Please share how you would utilise the information in this register?
- Do you have thoughts on how we can improve further?

Item	Start	End	Time	Description
1	09:30	09:35	5	Welcome / Introductions
2	09:35	09:50	15	Progress updates
3	09:50	09:55	5	Communications Activity
Product Updates				
4	09:55	10:10	15	WS1A P4 – Standard Agreement V2 Major updates and upcoming consultation
5	10:10	10:25	15	WS1A P9 - Curtailment information Progress update and signposting focus group
6	10:25	10:40	15	WS1A P1 – Common Evaluation Methodology Progress update and changes being considered
7	10:40	10:55	15	WS4 P4 - Investment Planning Progress update and next steps
8	10:55	11:05	10	Break
Breakout Sessions				
9	11:05	11:35	30	Breakout Session 1 <i>Both sessions A and B will take place in parallel.</i>
10	11:35	12:05	30	Breakout Session 2 <i>Both sessions A and B will take place in parallel.</i>
11	12:05	12:15	10	Breakout Session feedback and additional thoughts
12	12:15	12:20	5	Slido Q&A's Wrap Up

Advisory Group Terms of Reference

The Advisory Group is essential to our project to:

- Ensure stakeholders are aware and taking the Project into account;
- Request input from stakeholders to improve the quality of our products;
- Increase awareness about project risks & issues, ask for views on risks & issues and collaboratively resolve where appropriate.

We will provide input to:

- Steering Group on project scope, progress, risks & issues;
- Workstreams with deliverable comments/feedback.

We will seek to send information in advance of meetings to ensure that views can be sought by trade associations in advance. Our objective is to encourage open feedback from you all across all of our work.

Thank you for the continued input.

Progress updates

Farina Farrier

(ENA Head of Open Networks project)

Progress Updates

Published key consultations for industry feedback

- [Flexibility Consultation](#) (closing 24 Sep)
- [Updated version of the Standard Agreement including ESO alignment*](#) (closing 22 Oct)

Kicked off development of proposals for Open Governance

- Developed initial [proposal for Open Networks Challenge Group](#) and tested it with the Advisory Group.

Kicked off identification of high-level scope for 2022

- Bringing scope development forward this year based on feedback to date.
- Consulting on it earlier to give stakeholder the opportunity to shape and provide early input.

Flexibility & Distribution System Operator developments

- [WS1A P7 Interim report setting out next steps for developing baselining methodologies and tool](#)
- [WS1A P5 Plan for development of primacy rules](#)
- [WS3 P2 Updated Potential conflicts of Interest & Unintended Consequences register](#)

T D Coordination developments

- [WS1B P6 Operational Distributed Energy Resource Visibility Use Cases and Volumes](#)
- [WS1B P7 Identification of Operational Data to be shared](#)
- [WS1B P5 Network Development Plan Form of Statement report*](#) and publication of capacity signposting reports

Key upcoming publications (Sep-Oct)

Sep

Oct



WS3 P1
Distribution System Operator Roadmap Q3 update

WS3 P2
Conflicts of Interest & Unintended Consequences register internal review

WS1B P6
Functional specifications for DER visibility & monitoring use cases

WS1B P7
Implementation plan for sharing identified Operational data

Call for participation in Open Networks Challenge Group

Consultation on high level scope for 2022

WS1B P9
Development of Forum of Statement for coordination register

WS2 P1
Launch of updated Embedded Capacity Register (>1MW) to include improvements

WS4 P1
Whole system Cost Benefit Analysis – list of potential topic for further development

WS4 P4*
Design for new Local Authority investment planning service

2022 Scope update

- Working with workstreams to identify potential areas of work that we will consult on at the end of this month.
- Stakeholder feedback and Challenge Group input will be used to further develop, shape and finalise the plan for Q1 2022.

Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1 2022
Design Governance Arrangements & Define Scope			Setup ON Challenge Group		Kick-off		Finalise PID
Develop governance approach		Develop processes & TOR		Call to Industry & Scope consultation	Review nominations & feedback on scope	Kick off ON Challenge Group	
Define high level scope for 2022					Finalise representation & notify	ON Challenge Group to input into 2022 PID.	
					Draft & finalise PID with input from Challenge Group		

2022 Scope update

- **Smart Systems & Flexibility Plan is a key input and will inform prioritisation.**
- **WS1A - Flexibility**
 - Development of a common framework for flexibility and standardisation, driven by Smart Systems and Flexibility Plan actions.
 - Continue to be a high priority area of work in the project.
- **WS1B – T D data exchange and planning**
 - Further development work to share Distributed Energy Resource and operational data based on 2021 recommendations.
 - Continued work on coordination for Future Energy Scenario & Central Scenario and support licence condition reporting for Network Development Plans and Whole System coordination register.
- **WS2 – Customer Connections & Information Provision**
 - Further Embedded Capacity Register development with the Data and Digitalisation Steering Group
 - Supporting Queue Management and interactivity implementation. Monitoring Access Significant Code Review developments and supporting as needed.
- **WS3 – DSO Transition**
 - Continued overarching role to monitor, review and inform DSO policy developments, including DSO Roadmap update and ownership of Conflicts of Interest & Unintended Consequences register.
- **WS4 – Whole Energy Systems**
 - Key role to support Local Area Energy Planning.
 - Continued development and implementation of whole system optioneering service, development of Whole System CBA.

Communications Activity

Emily Jones

(ENA Open Networks Communications
Project Lead)

Product Updates

WS1A P4 - Common Contract V2

Andy Rice (NG-ESO)

Standard Contract - Version 2 - Summary Points

Summary

- Version 2 Final Draft has been completed.
- Order of arrangement of schedules and annexes also complete.
- Consultation launched on 27th August.
- Additional requirement for the ESO to run a consultation in compliance with Article 18 of the Electricity Balancing Guidelines (EBGL).

WS1 P4 Members in 2021

Company	Primary Representative
SSEN-D	Alex Howison – Gemma Lampert
NG (SO)	Andrew Rice - P4 Lead, Abisola Dapo-Akinpelu
NIEN	Bradley Cormac
NPG	Joe Horgan, John Leighton
SPEN-D	Wendy Mantle
ENWL	Lois Clark
UKPN	Sam Do, Helen Hassan & Rebecca Slattery
WPD	Helen Sawdon

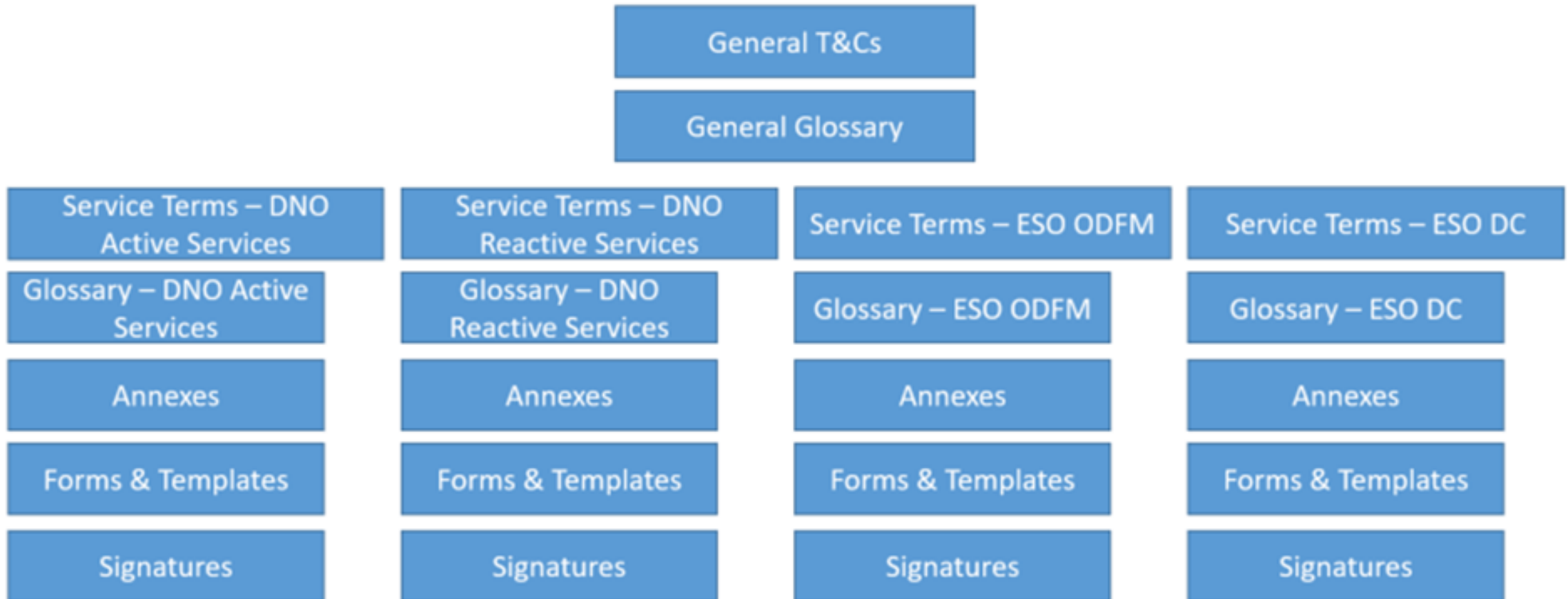
Key changes/points

The P4 Team has concluded Version 2 of the Standard Agreement (General Terms and Conditions) and the Final version has been published for industry consultation.

Key changes from the initial Version 1.2 are highlighted below:

- **Agile Framework Structure**
 - Version 2 of the Common Contract adopts a framework structure, which allows contracts to be awarded, ranging from day ahead contracts to bilateral agreements.
- **Service Based Schedules:**
 - Information regarding how each service is to be procured or provided is contained in service specific schedules.
 - This structure makes it easier for the providers to follow what is required per service and enables any service/contractual documents to be isolated in the event of industry consultation (please see diagram on the next page)

Key changes/points



Key changes/points

Liabilities and Indemnities:

- There is a general cap on liabilities in the Standard Agreement General Terms and Conditions.
- This is recognised under the Agreement as DNO/ESO (Distribution Network Operator/Electricity System Operator) specific. The Transmission Limit is applicable to claims in respect of providers connected to the ESO whilst the Distribution Limit applies to claims related to providers connected to the DNOs.
- Other indemnities and liabilities will sit in the service-based schedules, as this will enable the DNO and ESO take a more bespoke approach to liabilities

Confidentiality:

- The P4 team agreed on the need to simplify the confidentiality provisions and make it less restrictive/ stringent.
- The clause has been modified to retain the simplicity in version 1.2 whilst also allowing the sharing/ publication of relevant data to enable greater industry transparency.

Key changes/points - Continued

Dispute Resolution

- The P4 team agreed on the need for a layered approach to dispute resolution, with disputing parties having access to a range of dispute resolution mechanisms

These including

- Good faith negotiations
- Mediation,
- Arbitration
- and Expert Determination.

Consultation communications

Consultation

- We are aiming to get responses from across the industry. To enable this, we will be engaging providers through industry webinars, publications, forums and associations.
- Standard Agreement Consultation launched on 27th August.
- Standard Agreement consultation open until 22nd October.
- [Public webinar](#) to be held on 22nd September between 14:00 – 15:30.

WS1A P9 - Curtailment information

Harriet Walsh (UKPN)

Overview and Objectives

Workstream 1A Flexibility Services Product 9 is working with stakeholders to identify the principles and key data requirements to deliver improvements in the provision of curtailment information between now and the end of ED1.

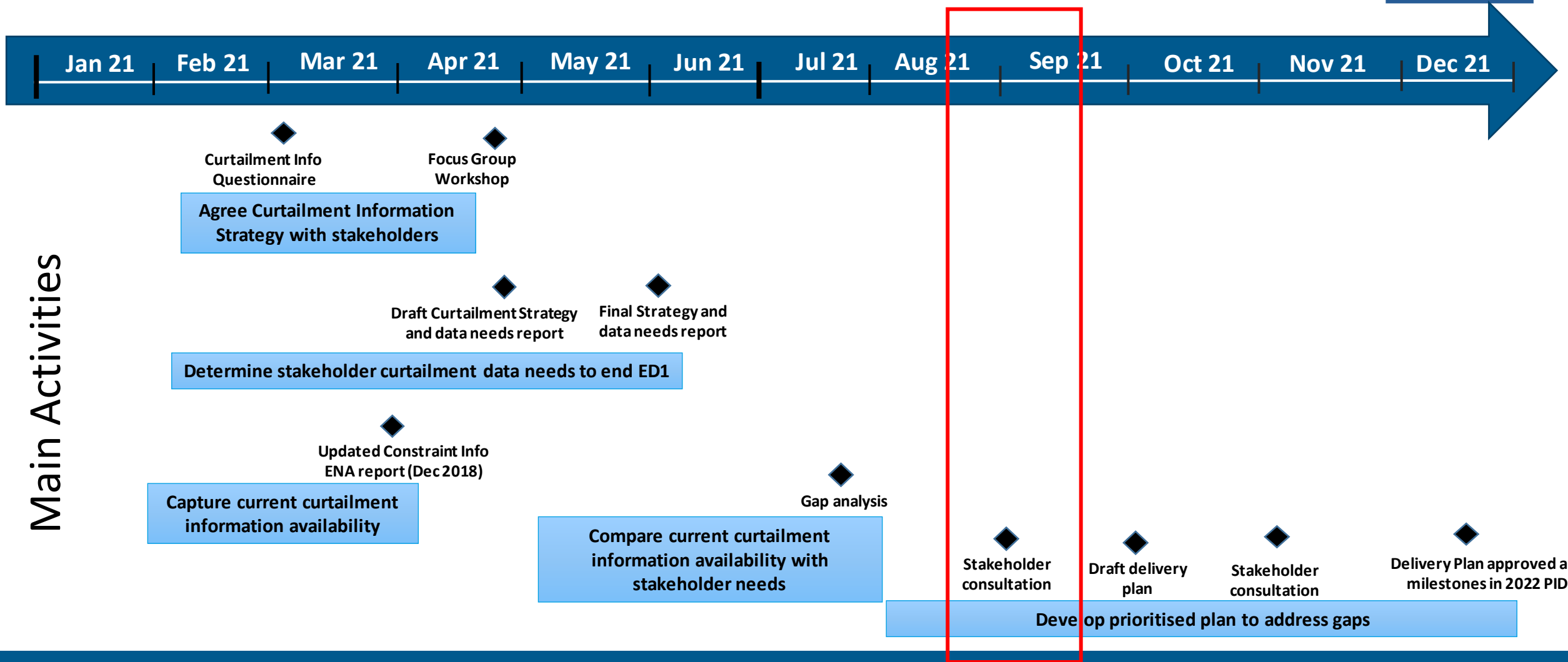
Product benefits:

- Increase opportunities for both firm and non-firm assets to provide / stack flexibility services, ultimately reducing system costs for the end consumer
- Facilitate liquid flexibility markets, whilst accommodating the anticipated growth in low carbon asset connections, to support GB's transition
- Promotes best practice approaches across DNO's
- Improves viability of flexible connection product to stakeholders

Scope

- a) Review existing DNO approaches to providing curtailment information
- b) Gather stakeholder feedback on priorities and key data requirements for improving curtailment information.
- c) Complete gap analysis comparing existing DNO curtailment information availability vs stakeholder feedback on priorities and data needs
- d) Work with stakeholders to develop prioritised implementation plan for delivering improvements between now and the end of ED1

WS1A Product 9 Curtailment Information 2021 Plan



Outcomes to Date

Based on stakeholder feedback via questionnaire and workshops, the following principles and data needs have been identified as priorities for stakeholders:

Priorities for improving curtailment information:

- Transparency on the nature of constraints, modelling assumptions and commercial alternatives
- Enhanced granularity and accuracy of network data
- Access to historical half-hourly power flow data from network loads and generators
- More regular updates of heat map data
- Consistent information provision across DNOs
- Faster response times from DNOs for information requests
- Enhanced availability and accessibility of actual curtailment events, e.g. through an online portal

Detailed priorities and data needs are captured in this [report](#)

Stakeholder Feedback:

- The Product Group will meet with the Focus Group on **13th September** to validate the DNO gap analysis and agree priorities with stakeholders

Implementation Plan:

- Based on stakeholder feedback, the Product Group will draft an implementation plan for improving curtailment information to the end of ED1
- Stakeholder feedback will be sought on the draft implementation plan and any further feedback will be incorporated to the final plan to be published by 31st December with delivery to begin in 2022

Open Data/Data Sharing:

- To be able to meet some of the stakeholder data needs that have been identified will involve making data available that has historically been identified as commercially sensitive
- This Product Group will seek further clarification on the feasibility of DNOs making this data available to stakeholders, taking into consideration other work that is being done in this space, e.g. Ofgem's Energy Data Taskforce recommendations

Impact of Ofgem's minded-to position on Access SCR on P9 work:

- The Product Group has considered Ofgem's minded-to position on Access Significant Code Review (SCR) and it's impact on P9 work.
- The Product Group does not believe that the outcome of the Access SCR decision should not have a major impact on P9 work, as the timescales for delivering the P9 implementation plan are short term; to the end of ED1 and the Product Group believes that the overall benefit of improving access to network data remains irrespective of the outcome of the Access SCR decision.

WS1A P1 – Common Evaluation Methodology and Tool

Simon Brooke (ENWL)

Contents

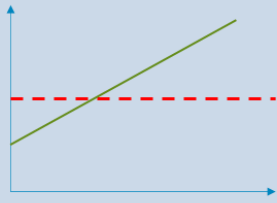
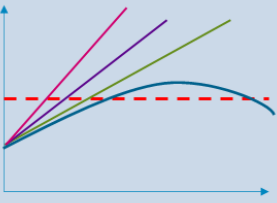
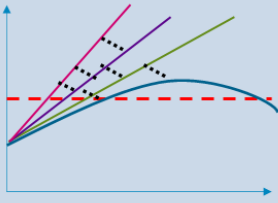
1. **Common Evaluation Methodology (CEM) 2021 workplan**
2. **Scope of CEM update**
3. **CEM update: Plan**
4. **Carbon impacts: areas for enhancement and decisions made**
5. **Option value: progress and open questions**

Ongoing development of the Common Evaluation Methodology and Tool in 2021

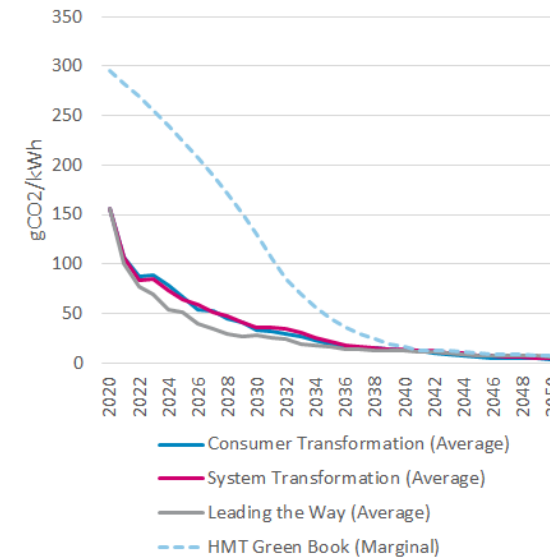
- Due to the lack of support for a User Forum the Product team started work on 12 July 2021 supported by Baringa
- Product team expanded to include ESO, NIE, ESB and an iDNO rep
- Two areas of development work in 2021:
 - Option value for flexibility
 - Carbon impact assessment
- Product team agreed to meet weekly and tackle the developments in parallel
- Several issues raised in discussion on acceptance of proposals and so revised stakeholder engagement and proposed consultation

Scope of CEM update

- ▶ Open Networks project agreed that the Common Evaluation Methodology (CEM) tool should have two updates:
 - ▶ **Option Value:** Improving the way in which flexibility's optionality is modelled, acted upon, and communicated
 - ▶ **Carbon impacts:** Provide additional functionality to model the volumes of CO₂ emissions driven by a given strategy

'Old world'	CEM1	CEM2?
		
<ul style="list-style-type: none"> • Single 'best view' load growth scenario • Flex can defer reinforcement, but unlikely to avoid it under most central views 	<ul style="list-style-type: none"> • Multiple load growth scenarios, including typically a 'best view' • Visibility of range of flex values • Ability to consider uncertainty through probability weighting and/or Least Worst Regret 	<ul style="list-style-type: none"> • Retain scenario approach • Create additional pseudo-scenarios by allowing stepping between scenarios • Will require probabilities and/or weightings • Need to test the impact, and understand how to interpret

Average and marginal grid intensity*



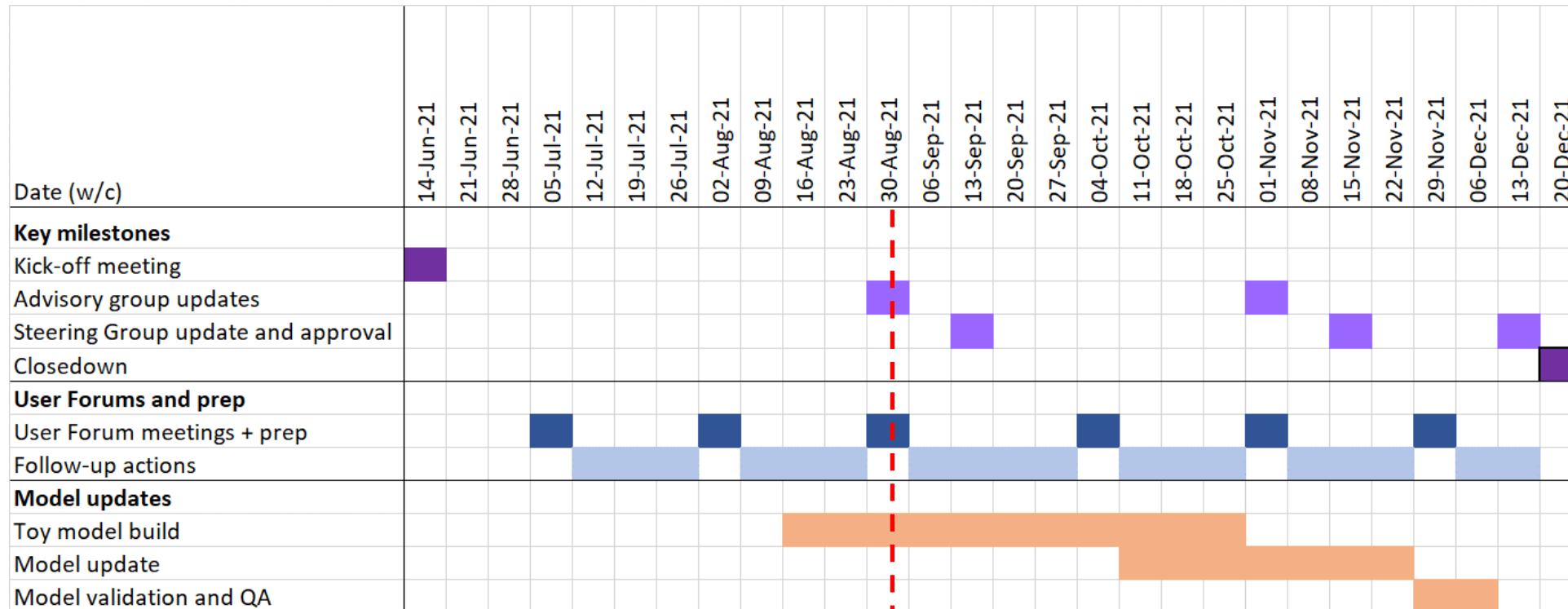
* FES scenarios exclude -ve emissions from BECCS. Only net-zero consistent scenarios shown.

CEM Update: Plan



Original plan assumed User Forums instead of weekly Working Group sessions

- ▶ The focus has been on agreeing conceptually what the CEM should do on Optionality and Carbon Impacts
- ▶ Mini models have been built to facilitate these discussions
- ▶ We are now moving into the phase of updating the CEM tool itself, starting with Carbon Impacts



Carbon impacts: areas for enhancement



- ▲ The CEM tool currently allows the user to input the *relative carbon impact* of each strategy under each scenario, as well as the *per-unit value* or cost associated with that carbon impact.
- ▲ However, it does not help the user to evaluate the volumetric carbon impact from within the tool itself
- ▲ Three areas were identified where the model could be enhanced to allow the user to estimate GHG emissions impacts within the model:
 1. **Losses tool:** Possibility of enhancing the tool and integrate into the CEM
 2. **Embedded carbon:** Accounting for the carbon embedded in equipment
 3. **Load shifting and grid carbon intensity:**
 - a) How/whether to account for differences in grid carbon intensity by scenario
 - b) How to represent load shifting and relate to grid carbon intensity over time

▲ **Losses tool**

- It has been agreed that the existing Losses tool is fit for purpose (based on the Line Loss Factors methodology)
- It is recognised that there may be an impact at Transmission but it is not appropriate to attempt to model this at this stage
- It has been decided not to integrate the tool into the CEM itself

▲ **Embedded carbon**

- It has been agreed to use an existing ENWL calculator of embedded carbon emissions
- Values are potentially out of date, so need to be updated and/or validated
- Currently being integrated into the CEM tool

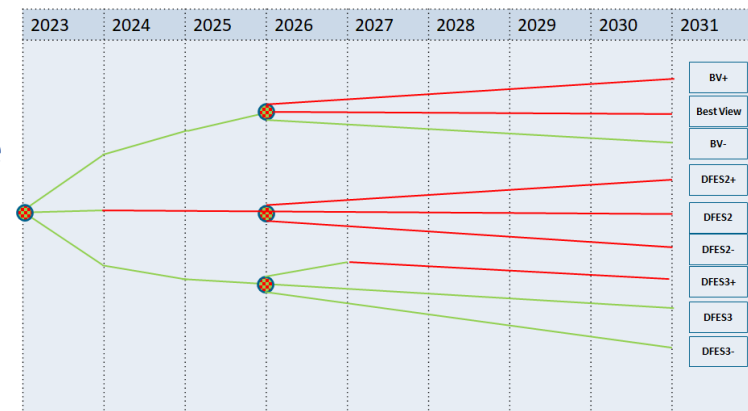
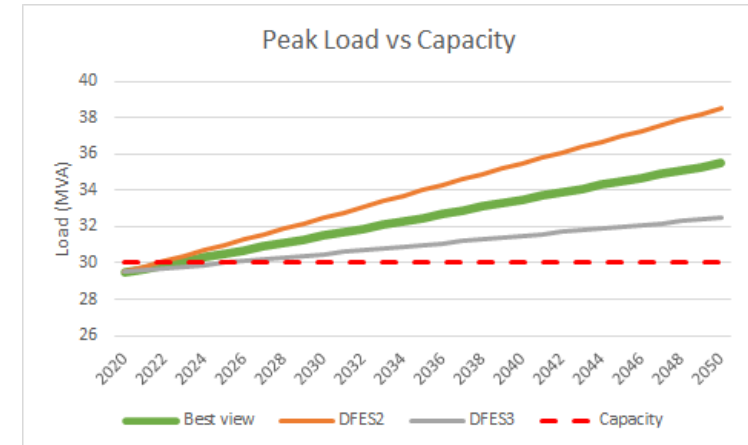
▲ **Grid carbon intensity**

- Decision to use marginal grid carbon intensity for the basis of calculating savings
- Decision not to distinguish grid carbon intensity between scenarios
 - Allows the use of the HMT Green Book marginal intensities
 - Allows the use of non-Future Energy Scenarios without additional effort
- Decision to use average grid carbon intensity as the “turn-up” intensity when modelling load shifting (although this may be revised if the data allow)

▲ ***These CEM model updates are currently being implemented, and will be reviewed shortly***

Option value: progress and open questions

- ▲ Work to date has explored different ways of modelling Option Value within the CEM
- ▲ Questions addressed to date
 - To what extent is **option value already modelled** in the CEM (via the use of multiple scenarios)?
 - Can flexibility option value be modelled as a **decision tree**, and what form should this take?
 - Does modelling additional scenario branches (i.e. decision tree) **increase the value of flexibility**?
- ▲ Unresolved questions
 - Does this increased value come from the branches, or from the increased volatility that adding branches induces?
 - How would a branched structure be modelled in practice within the CEM?
 - How would a branched structure be parameterised by the used (e.g. future probabilities)?
 - What, therefore, is the most appropriate way of enhancing the CEM tool to reflect the option value of flexibility?
- ▲ ***Next step is to have a session to review findings to date with a broader set of experts***



Modelling approach	NPV
Single scenario (no forward look)	£25k
Single scenario (with forward look)	£44k
Three scenarios	£68k
Three scenarios with additional branch	£91k

WS4 P4 - Investment Planning

Stuart Easterbrook (Cadent)

Regen Local Authority Engagement Recap

- Regen have completed the engagement exercise and had feedback from 119 Local Authorities (LAs) made up for 210 individual responses:
 - 14 interviews with key LAs
 - 76 Councils involved on Webinar
 - 58 via the Online Survey
- Recommend a hybrid approach based on Coordinated Service option (strengthened by Online survey responses)



Additional Online Surveys

▶ There is value in providing a whole system service regen transforming energy

80% of those responding to the consultation saw value in a 'whole system' joint optioneering service.

"Would be good to not have to have that discussion separately, a coordinated platform between Council and network providers covering the area would be good."

"Probably don't need significant electricity and gas investment in the same place and so it would be best for all stakeholders to coordinate. Can see the point in what is being proposed."

"We know that we have network constraints across our district, and particularly affecting growth in our principal town. A whole system approach would be welcome to help address this issue in a holistic and consistent way."

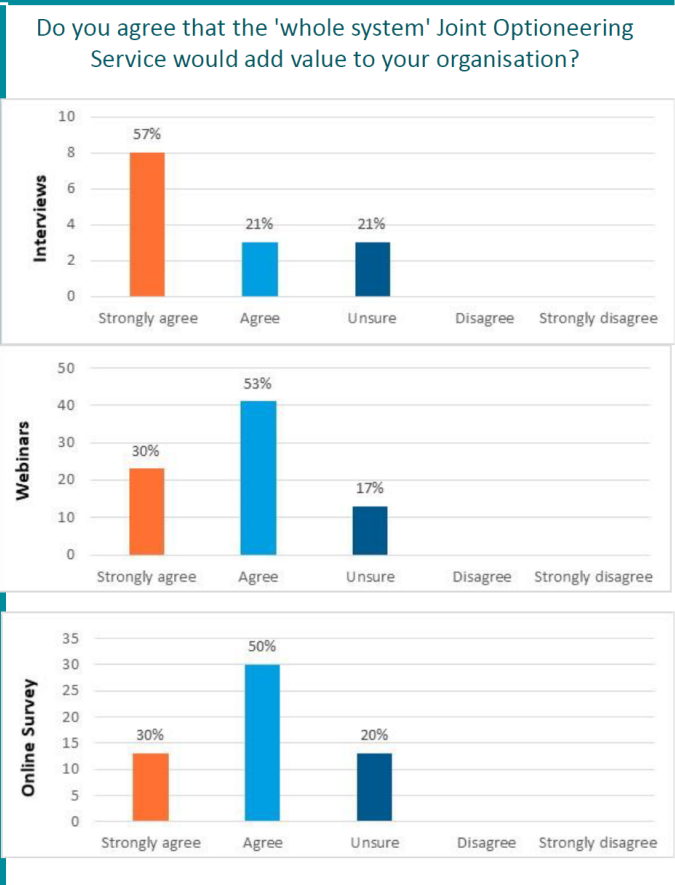
There was support for the service in the webinar and online survey; however, unlike the interviews, the numbers who 'Agree' were higher than 'Strongly Agree', reflecting some reservations.

A significant minority, 3/14 of the interviewees, and 20% overall respondents were unsure about the benefits.

"If you are paying for this - potentially not independent advice - then unsure of the benefit. I'm trying to think of a situation when it might be worth it."

"Also not sure that it is too difficult to speak to two companies and what value that is therefore going to be having. The two aren't connected as a service offering."

"Not sure what value we would get beyond what our DNO could tell us."



Additional Online Surveys

Preference for Integrated Joint Regional Planning regen transforming energy

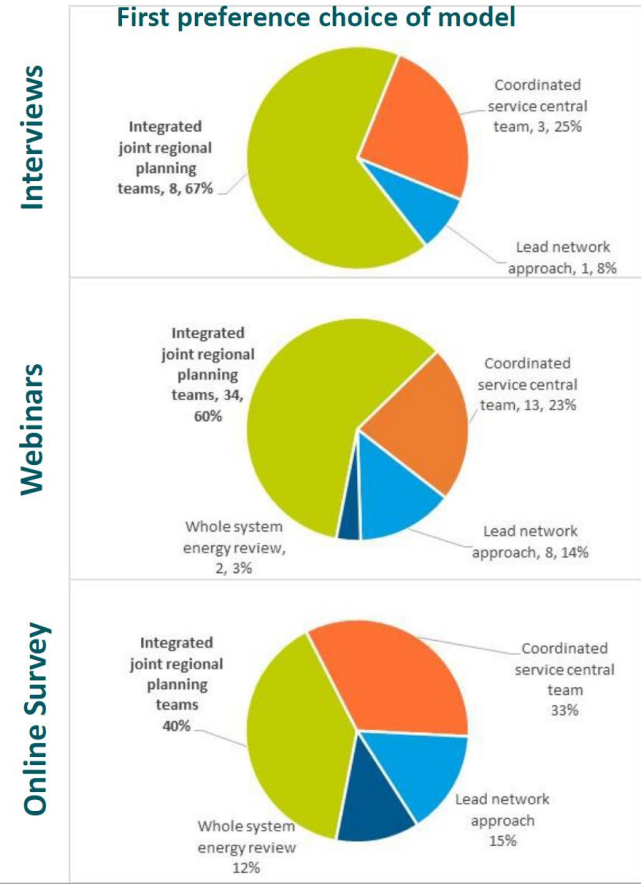
54% of those responding in the consultation preferred the Integrated Joint Regional Planning Team. Many mentioned perceived independence as the key benefit.

“Immediate reaction would be to support the regional one because of the degree of independence from the networks. It would be a team charged with being integrated and looking only at the best option for the request and that gives a warmer feeling.”

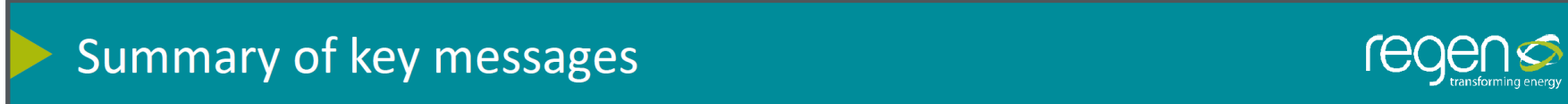

“Looking at the four options believe the fourth - regional bodies - is the best because it provides some independence and neutrality.”

However, there were also concerns about the regional teams including:

- **Losing relationships and competence within networks.** *“Downsides of having external team. The secondees could lose knowledge of network.”*
- **There are difficulties in defining geographies.** *“What do you mean by a region? - the detail needs to be ironed out and the different geographies may cause a problem.”*
- **There are other bodies already doing this.** *“As a combined authority, we are already doing regional joint planning working together with networks and other stakeholders.” “At present the GLA feel they have the knowledge in house to facilitate that.”*
- **Concerns about deliverability and complexity.** *“I have concerns about the complexity of joint regional planning.”*
- **Questions on sharing learning effectively.** *“How will learning be shared across the areas?”*



Key Messages unchanged in the Final Report

 	
The value in the service	<ul style="list-style-type: none"> • There is value in developing a whole system service for local stakeholders. • Service should offer ‘impartiality’, potentially working at arm’s length from network interests. • Transparency in the whole system methodology is needed, particularly how it will consider solutions for decarbonising heat outside of gas or electric options, e.g. heat networks. • Local authority capacity is likely to determine success of the service. Capacity building and resource for local authorities should be a core part of the service offering.
Feedback on the process	<ul style="list-style-type: none"> • There would be demand for both a high-level service as well as project specific advice. • The service should look to provide appropriate support at different scales. • Process and methodology should involve feedback and iterations to refine both local authority needs and network responses. • Recognise local authority issues with DNO investment and regulatory constraints and clarify how the service might help unlock this – along with regulatory changes. • There needs to be clarity on how the service relates to LAEPs where they exist and how the service may operate in areas who have yet to develop clear strategic direction on decarbonisation.
On delivery model	<ul style="list-style-type: none"> • Clear preference for Joint Regional Planning Teams with Coordinated Service as consistent second choice. • Clear preference for a single point of contact. • Setting up central teams or service should be collaborative. • Lead Network Approach was preferred by some local authorities. • Funding the service solely via users/local authorities could be difficult given public sector resource. Other funding models should be explored. • The majority of consultees were keen to see a solution implemented quickly and see that evolve over time.

Recommendations unchanged in the Final Report

▶ Regen recommendations



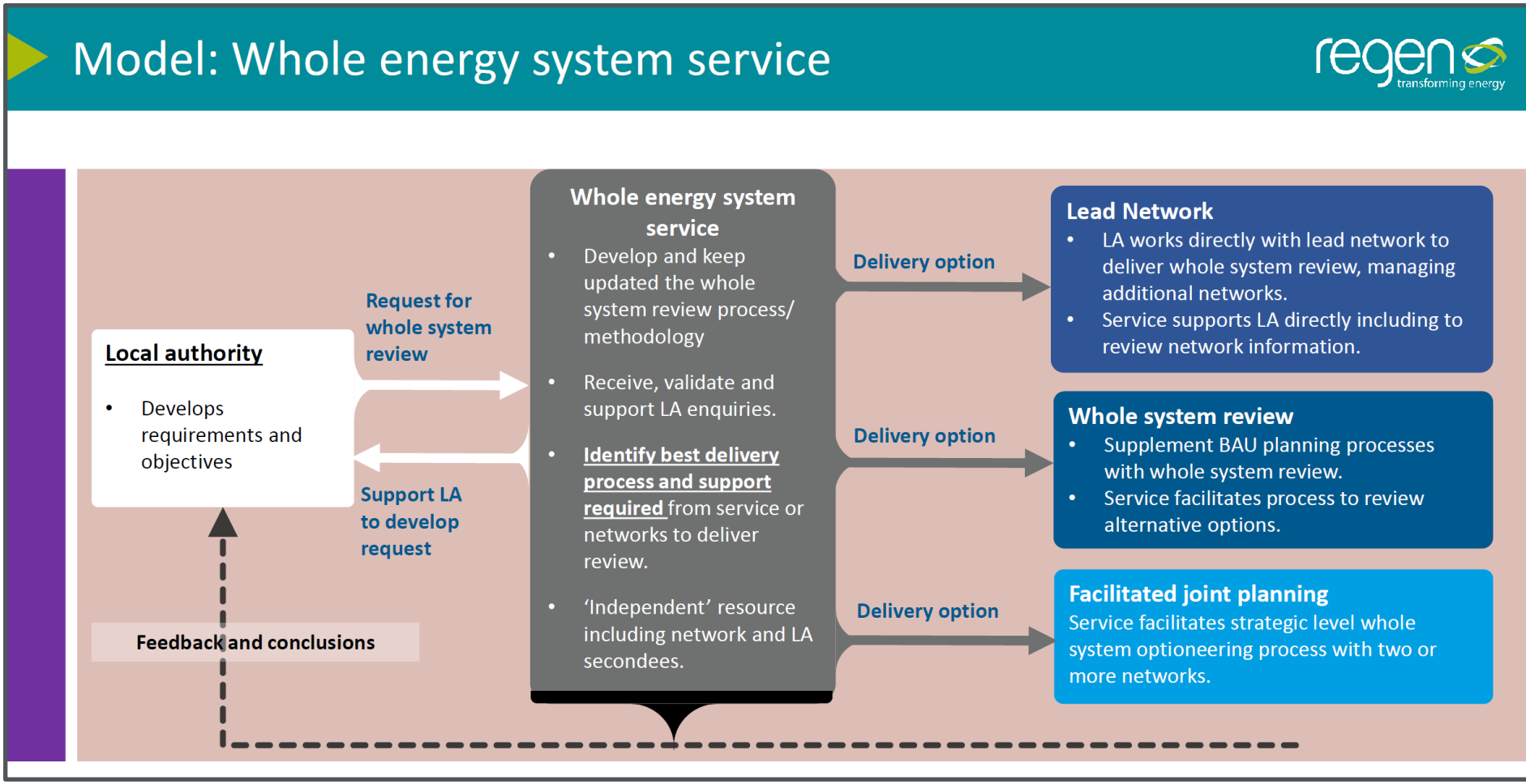
There is value for local stakeholders in providing a whole system service and the consultation responses set out some clear requirements for development of the service including:

- **Building a collaborative solution.** Important to recognise that the service meets network needs for local support and engagement as well as local authority requirements. *“Whatever we do needs to be a team sport. We need income collaboration on both sides.”*
- **Support capacity building in local authorities.** The service needs to recognise and respond to the lack of capacity and knowledge in many local authorities. *“There is clearly a need to support local authorities and help them explore some of the issues and solutions – a governance, process and capacity gap that could be filled through this.”*
- **Impartiality is key.** The content, methodology and approach is more important than the delivery structure. There needs to be transparency in development and use of any whole system methodology, particularly on heat pathways.

Regen's recommendations were developed in response to the key messages from the consultation and preferences expressed by stakeholders.

Further work will be required to assess the practicality and resource required from the perspective of the networks.

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Reflections

- **Strong support for a new service, and to do something quickly that can then evolve if necessary**
 - A clear and targeted scope would help faster initial roll out?
- **Wide range in knowledge of regulated energy infrastructure**
 - We deliver energy infrastructure - need to demonstrate how this process helps unlock network investments
 - Consistent and coherent processes will help?
- **Lot of discussion and feedback was towards strategic local area energy planning rather than the local specific requirements the Product was originally developed to address**
 - More work required to communicate what the outputs from the service could look like
 - Need to set out where issues will be addressed in other products – or out of scope for the networks
- **Impartiality was a regular theme, although whether this is better or worse with a joint approach was not clearly articulated**
 - Linkage to request for clear methodology to give confidence, rather than structure of the service
- **Resource and capability constraints for all parties**
 - 3rd party service provider, contracted to the networks, could address resourcing and impartiality, and could be scalable for Local Area Energy Plans (LAEPs).
 - Strong push back on LA's paying; but funding, fairness and controls will be required

Agreed Next Steps

Define Outputs

Case studies and examples to clearly set out what the service would produce, and how it interacts with LAs and Developers

Define Benefits

Set out expected tangible benefits to unlock regulatory investment

Address LAEP and out of scope

Energy Infrastructure is in scope. Need to show how other concerns are being dealt with, and also confirm what is not in our gift and why.

Impartiality

Use Regen recommendation with contracting out to address impartiality and resource constraints

Service provided against clear published methodology

**Consultation on our conclusions
Output – Scope – Benefits - Structure**

Revised Timetable

Two streams of work to be taken forward in parallel over the next 3 months to inform Autumn Go/No-Go:

Consult on Conclusions	Outline design for new hybrid service	Recommendation paper to Steering Groups
<ul style="list-style-type: none"> • Draft consultation conclusions report • Draft accompanying short survey • Produce Podcast to support the consultation • Assess responses and make final conclusions 	<ul style="list-style-type: none"> • How would new service operate • Resource requirements • Funding • Governance • Methodologies and processes • Timetable and phasing • 2 half day workshops • All Networks active input will be critical 	<ul style="list-style-type: none"> • Based on the outputs from the consultation and the outline design • Go/No Go Decision for SGs including What/How/When/£ etc
July-October	July-October	October-November



10 Minute Break

Returning at 11:05

Breakout Sessions

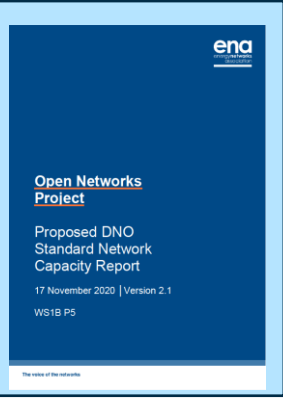
WS1B P6 – DER Visibility and monitoring

Garreth Freeman (ENWL)

Meeting objective...

- Present WS1B P5's proposals for the Network Development Plan (NDP) Form of Statement (FoS)
- NDP FoS will be developed based on agreed proposals

Background



BEIS issue draft licence conditions for GB implementation of the EU Clean Energy Package

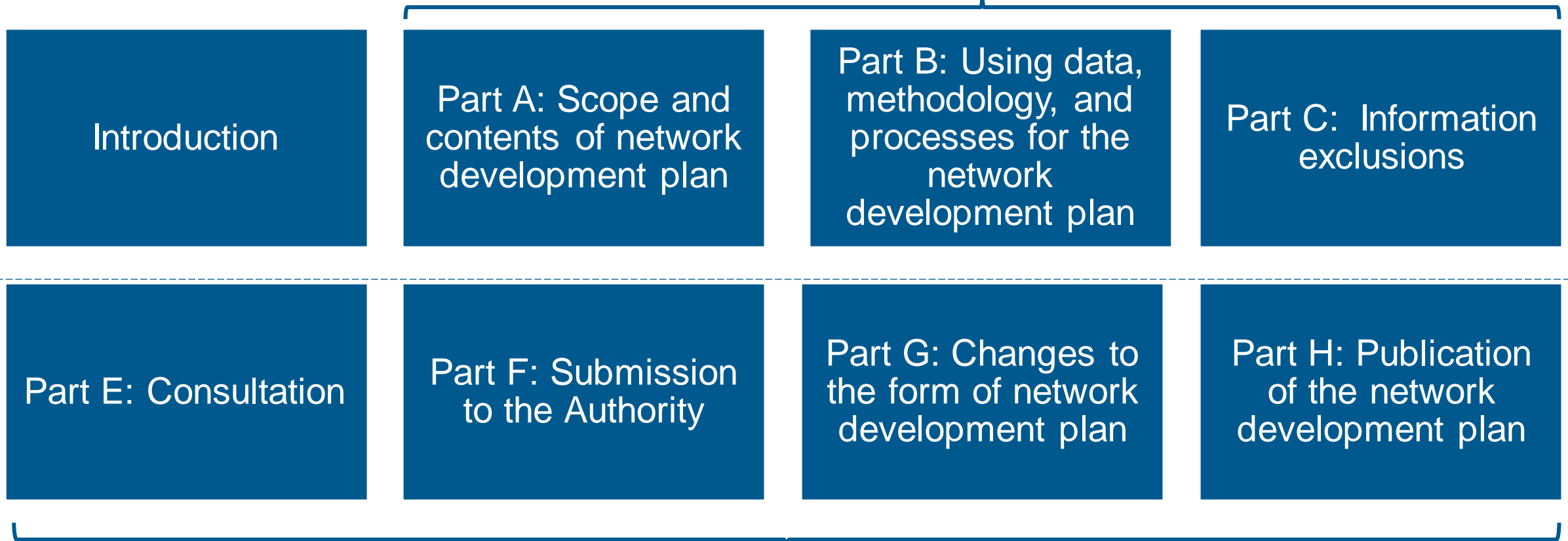
New licence conditions effective

NDP = Licence Condition 25B

DNO	Link
ENWL	https://www.enwl.co.uk/get-connected/network-information/dfes/
SSEN	Network Capacity Information (ssen.co.uk)
WPD	https://www.westernpower.co.uk/smarter-networks/network-strategy/network-headroom-report
NPG	https://www.northernpowergrid.com/network-data
SPEN	www.spenergynetworks.co.uk/NCHR
UKPN	https://www.ukpowernetworks.co.uk/Network-Headroom-Report

Network Development Plan – Licence Condition 25B

Form of Statement



Process

The NDP FoS comprises 3 parts

Parts of the network
most suited to new
connections

Parts of the network
where reinforcement
required

Parts of the network
where flex required

Whole system
information
exchange

1) Network headroom reporting

New infrastructure

Flex services

2) Network development reporting

Methodology for
preparing the network
development plan

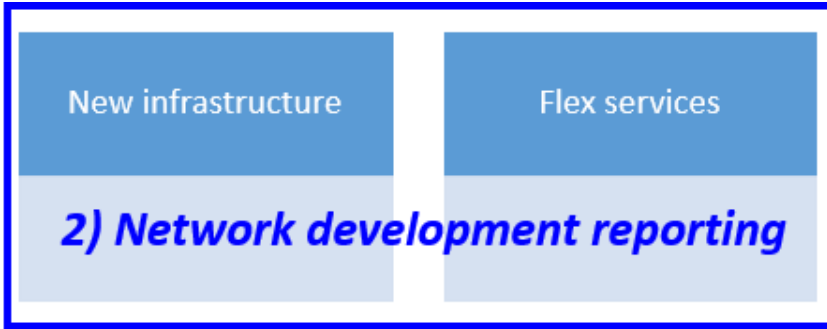
Assumptions

3) Methodology

NDP FoS – Network Headroom Reporting

Scope of Network Headroom Reporting	Deliverable
Date range	Every year to be covered individually between 1-10 years
	After the 10th year, this requirement moves to every five years up to 2050 aligning with DFES timescales;
Scenarios	Four DFES scenarios, plus a 'best view' scenario where different;
Network capacities and assessment methodology	Demand and generation capacities in terms of spare margin in MW per year per scenario
	This will reflect approved network developments in delivery including asset-based enhancements
	Information to be considerate of thermal loading and fault level constraints as a minimum
Coverage	Capacity information to be provided for all BSP and primary substations down to and including the primary secondary voltage, typically HV (11kV or 6.6kV)
Format and publication	The format of the network capacity reporting part of the NDP will be tabular in nature with the respective DNOs to add interactivity to the workbook if required. A short guidance document shall be included to explain the scope of the data workbook, define each data element and give user instructions.
	Annual update
Information sources	Network parameters underlying the capacity reports shall be based on the latest Long Term Development Statement (LTDS)
	Existing and future network demand and generation shall be based on the latest DFES (Distribution Future Energy Scenarios)

Network Development Reporting



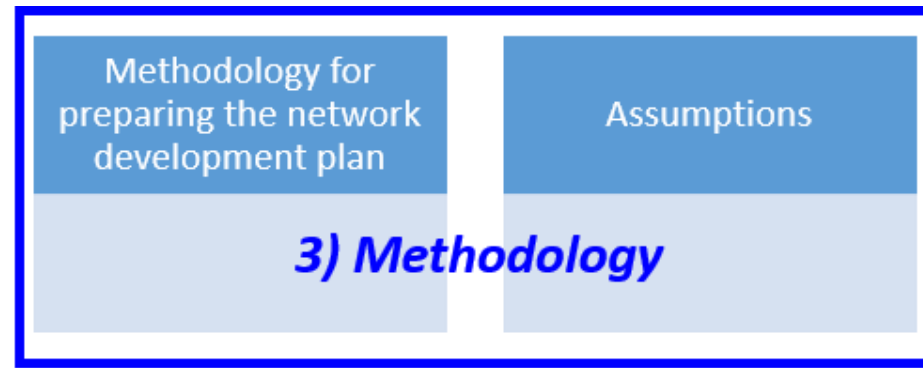
Scope

List of high level plans for network interventions and flexible service requirements:

- For years 1 – 10
- Location of the intervention, covering whole network down to primary substation HV bars
- Development requirements for flexibility services and new infrastructure (table below)
- Justification for the need for network developments
- Where it resides on the delivery lifecycle (signposting, approved plan, in delivery etc.)

Flexibility services	New infrastructure
<ul style="list-style-type: none"> ○ Magnitude; ○ Year of intervention, likely duration i.e. number of years in the future; ○ Nature of requirement / flexibility product; 	<ul style="list-style-type: none"> ○ Timing and high level scope of intervention; construction duration (start & finish) ○ Details of connectivity; link to the LTDS? ○ Asset quantities approx. circuit lengths, no. txs etc ○ Equipment ratings.

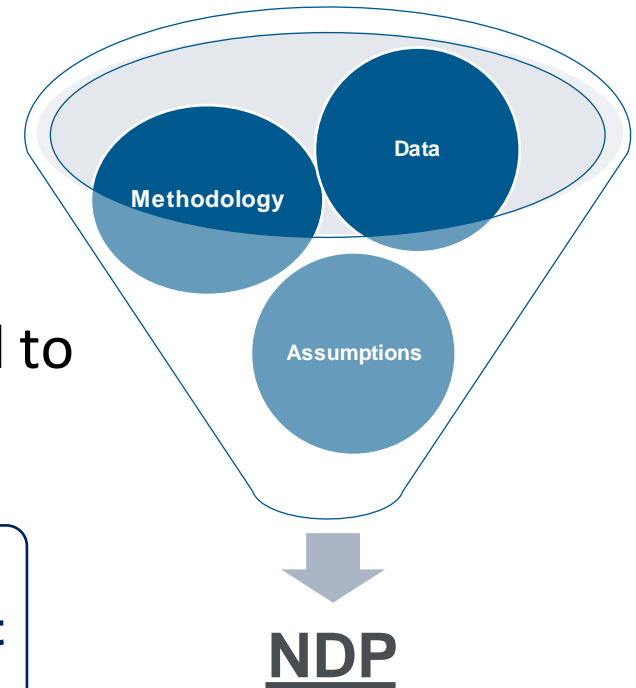
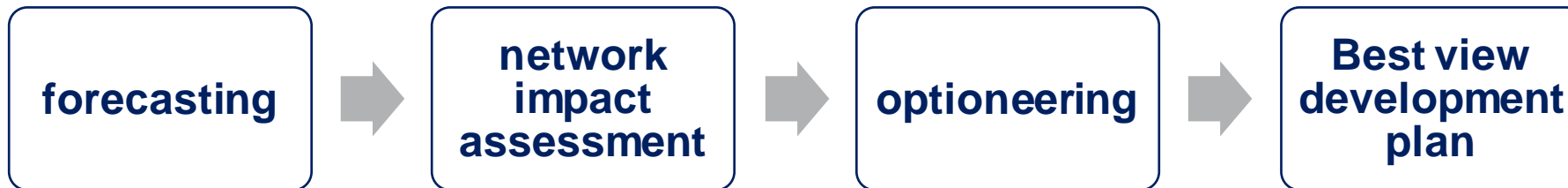
Methodology Reporting



Scope

The license agreement states that we have to be transparent

- Methodology document to cover the end to end process
- Sufficient detail to provide stakeholders with sufficient detail to understand sensitivities and extrapolate NDP results



NDP FoS – Other sections in the report

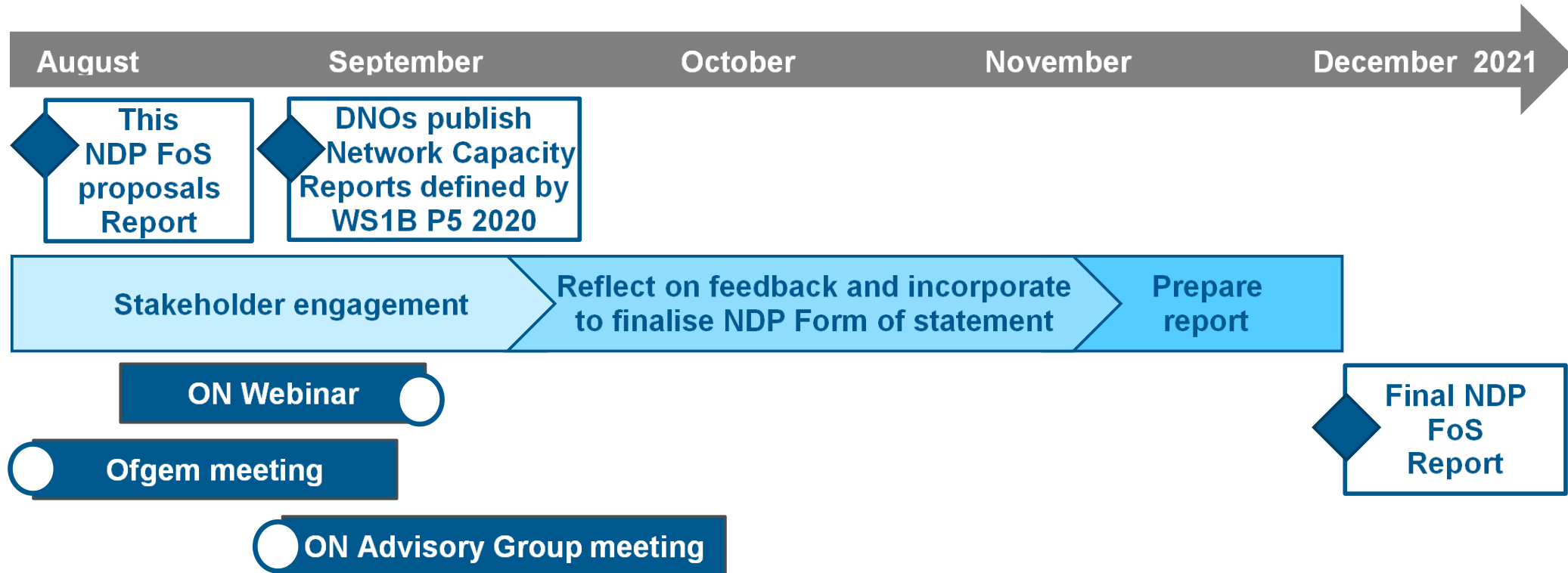
- **Governance**

- Governance of the NDP FoS is required to ensure consistency in future DNO reports
- The NDP FoS should be enhanced and modified going forward to reflect stakeholder feedback and adjusted to meet their new requirements.
- Governance through the ENA is a preferable allowing for agile updates whilst involving all DNOs through a working group.
- Consideration should be given to defining the NDP FoS in an ER
 - Including it under the governance of the Distribution Code Review Panel by listing it in an Annex or instead making it an ENA guidance document which continues to be owned and kept under reviewed as an Open Networks project product

- **Feedforward**

- Learnings relevant to the Long Term Development Statement (LTDS) review
- Distribution network capacity in relation to existing Transmission Operator (TO network) capacity reports

NDP FoS – Next Steps



WS1B P5 – Questions – NHR

Q1: Is there value in of reporting network capacity to 2050?

Q2: Are there advantages in reporting network capacity for multiple scenarios?

Q3: Is it useful to update the NHR annually in accordance with the DFES?

Q4: Is there enough clarity and awareness of how the various capacity reporting work together?

Q5: What are your views on an excel format and the future implementation in Common Information Model (CIM)?

WS1B P5 – Questions – NDP

Q1: Does the proposed reporting of larger scale interventions (primary and above) meet your requirements for long term visibility of network and development planning?

Q2: Is it clear how this part of the NDP fits in with embedded capacity register/LTDS/flexibility service tenders etc?

Q3: Does it provide adequate instruction/detail of proposed interventions?

WS1B P5 – Questions – Methodology

Q1: What do you want out of the proposed Methodology part of the NDP?

Q2: Can variances in DNO approaches due to software and data availability be accommodated if well explained in the methodology?

WS1B P5 – Questions – General

Q1: Do you see any further opportunities for the detailed scope of the NDP?

Thank You!

Please contact

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Or

Gill Gillian.Williamson@ENWL.co.uk

for more information or to share further thoughts

WS1B P9 – Coordination Register

Priya Bhagavathy (SSEN)

License Condition

New Standard License Conditions D17 and 7A seek to enforce Whole System Collaboration between electricity transmission owners, transmission licensees and electricity distributors.

- The purpose of the Coordination Register is for the Electricity Distributors and transmission owners to clearly and transparently demonstrate the process each has undertaken to coordinate and cooperate with other electricity network licensees, and to consider proposals from systems users which seek to advance the efficient and economical operation of its network.
- This will allow other electricity network licensees and users to understand what opportunities have been identified and learn from them, advancing the industry's understanding of the possibilities across a broad range of scenarios.
- The Coordination Register should be evidence based, and detail active and completed actions, rather than forthcoming actions.

Coordination register - Purpose

- **the Electricity Distributors and transmission owners** to clearly and transparently demonstrate the **process** each has undertaken to coordinate and cooperate with other electricity network licensees
- **the Electricity Distributors and transmission owners** to consider **proposals** from systems users which seek to advance the efficient and economical operation of its network
- allow other electricity network licensees and users to understand what opportunities have been identified and learn from them, advancing the industry's understanding of the possibilities across a broad range of scenarios.

Proposed timeline

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	20th May Steering Group (SG) - Go/no go Decision	SG to nominate resources (Before 11th June) Product Team formed (End of Jun)	Workshop (s) Agreed scope for register	Workshops (s) WS1B Update	2nd Sept Advisory Group input	Deliver FoS 5th Oct WS1B final review 21st Oct Steering Group approval	Workshops	
	Identify requirements		Finalise scope	Develop FoS				

Footnote example

Coordination register – Information required

- all relevant **coordination and cooperation activities** completed with other electricity network licensees, including data sharing.
- any **actions or processes** that have been implemented (or are being implemented) as a result of coordination and cooperation activities.
- a concise and clear summary of actions or processes not deemed to be apt for implementation, including the reason(s) for that decision.
- all proposals received during a relevant period from system users to advance the efficient and economical operation of Electricity Distributors' and/or transmission owners' networks.
- any **system user proposals** that have been implemented (or are being implemented). As well as a concise and clear summary of proposals not deemed to be apt for implementation, including the reason(s) for that decision.

Coordination register - activities

all relevant **coordination and cooperation activities** completed with other electricity network licensees

Column	Description
Identifiers	Unique id for each row, licensee, collaborating other licensees and stakeholders
Description of the activity	Details of the activity (could be an activity from a project or an activity that is used in multiple projects). Only activities that improve the economy and efficient of the whole electricity system is to be considered. Register is of activities in progress or completed not planned
Timeline	Date of initiation, status, updates
Relevance	Details of why it is relevant to whole system.
Data	Description of any data that was shared. Include the format of the data, if applicable, and highlight any data that cannot be widely shared due to commercial sensitivity. Links to the data not the project/activity
Impacts (on whole system and on licensee)	A brief description, mainly along the lines of positive, neutral or negative
Next stage (including justification)	What is the recommended next stage? Positively, this activity would result in actions/processes that will then move on to the 'actions from coordination' sheet. If it is not taken forward, add justification.

Coordination register – actions or processes

- any **actions or processes** that have been implemented (or are being implemented) as a result of coordination and cooperation activities.

Column	Description
Identifiers	Unique id for each row, licensee, collaborating other licensees and stakeholders
Description of the activity	Details of the activity (could be an activity from a project or an activity that is used in multiple projects). Only activities that improve the economy and efficient of the whole electricity system is to be considered. Register is of activities in progress or completed not planned
Timeline	Date of initiation, status
Reference of the activity or user suggestion which resulted in this action/process	Reference to the activity in the register that resulted in this action/process (not to be confused with internal order or project numbers)

Coordination register – user suggestions

all proposals received during a relevant period from **system users** to advance the efficient and economical operation of the whole system

Column	Description
Identifiers	Unique id for each row, licensee, collaborating other licensees and stakeholders
User category	domestic customer; customer commercial; Group of domestic customers; Group of commercial customers; local authority; combined authority; other infrastructure networks; generators; aggregators etc.
Suggestion date	Date
Suggestion	Details of the suggestion. Only those suggestions that improve the economy and efficiency of the whole system is to be considered, suggestions benefitting just one user is not to be included.
Relevance to whole system	Details of the relevance to whole system
Description of the action taken on the suggestion and justification	Action taken based on the suggestion and the justification for the action. Could even be decision to not take forward.
Next stage (including justification)	What is the recommended next stage? Positively, this activity would result in actions/processes that will then move on to the 'actions from coordination' sheet. If it is not taken forward, add justification.

Questions

- Do you agree with the product team's approach in capturing the key information within the register?
- Please share how you would utilise the information in this register?
- Would you prefer single register running over multiple years or a new register for every year?
- Do you have thoughts on how we can improve further?

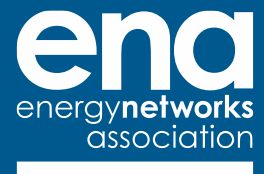
Breakout Session feedback Breakout Session Product Leads

End of session Slido Q&As

Emily Jones (ENA)

Wrap up

Sotiris Georgiopoulos
(Steering Group Chair – UKPN)



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