

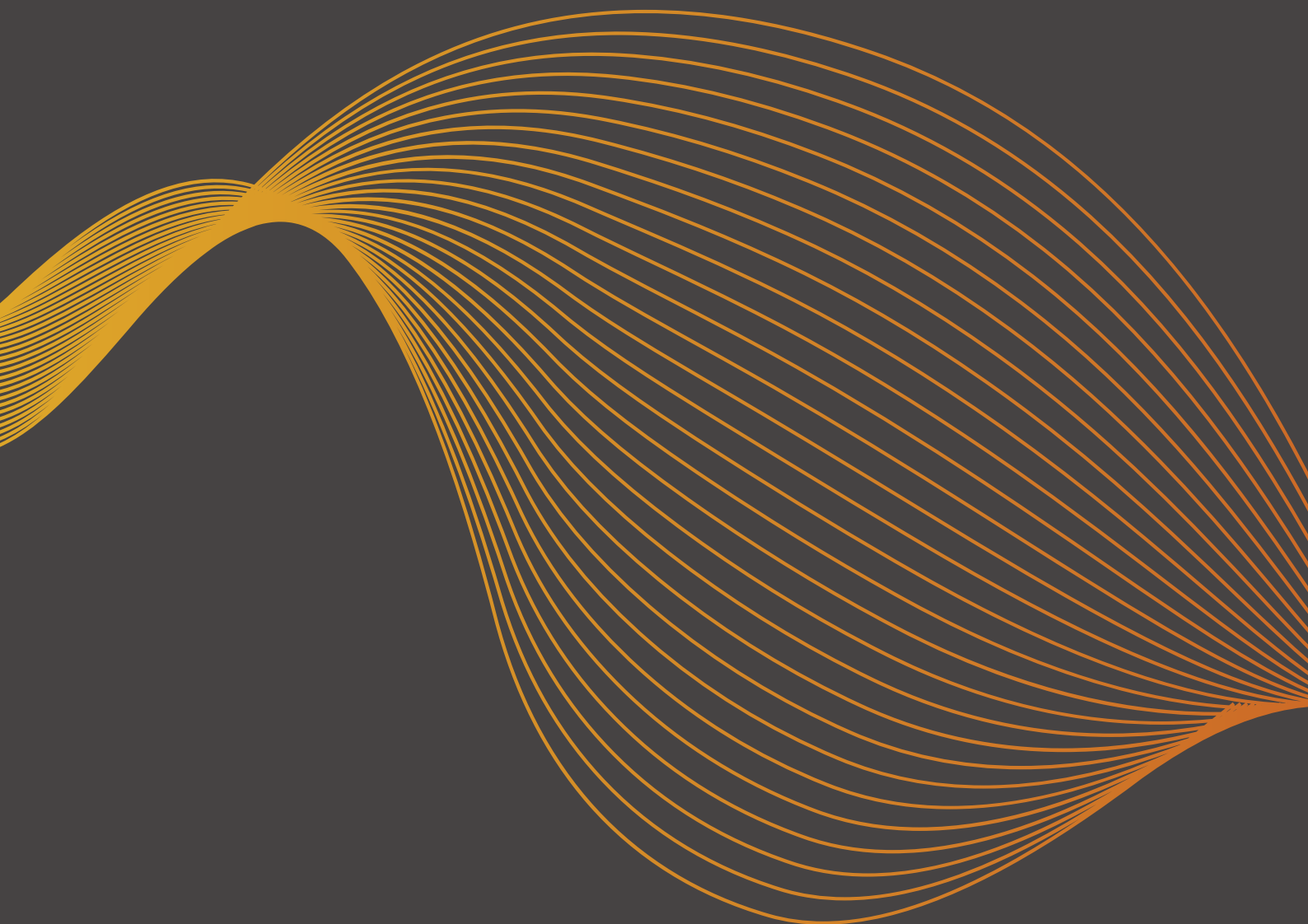
Distributed ReStart



Distribution Restoration future
commercial structure and industry
codes recommendations

Appendix 1 Stakeholder Engagement

Procurement and Compliance workstream
20 December 2021





This appendix explains the stakeholder engagement supporting the Refine stage developments in 2021. Specific stakeholder engagement information to support the final recommendations is highlighted within the respective sections in the main report.

DER stakeholder engagement webinar and bi-lateral meetings

Once the draft end-to-end procurement process was completed together with the developments on the functional requirements and rules of play, DER stakeholders were invited to join us in a webinar for an overview of these areas, with a view to organise bi-lateral meetings afterwards in order to gather more feedback to update the P&C workstream designs.

The stakeholder webinar was held on 21 May 2021, and 35 attendees joined on the day, representing 28 different organisations ranging from battery storage, wind, hydro and innovation companies.

Below is a summary of the topic areas that were presented together with the numbers of DER parties interested.

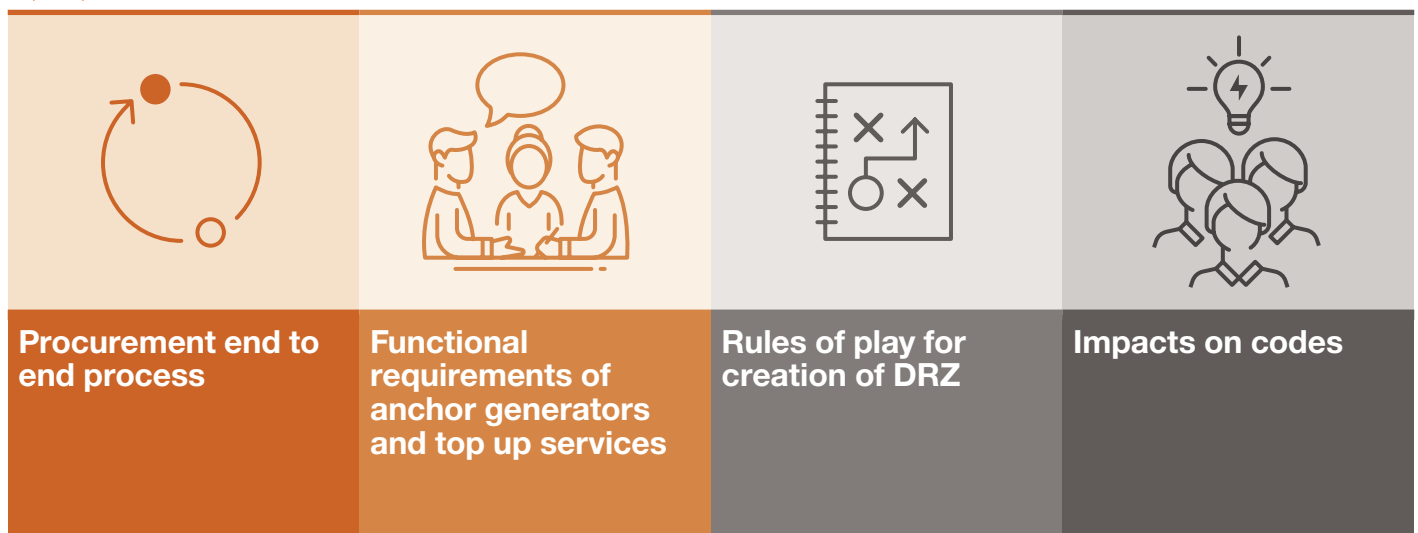
During the event, around 20 questions were asked which were themed around eligibility from different DER providers, length of the process timescales, how funding of costs might work and how the relationship between NGENSO–DNO–DER is expected to work.

The calibre of questions and comments shared on the day clearly indicated a deep interest from the DER community that they wished to be a part of this new emerging market and wanted the process to work for them. There was no negative push-back on any of the designs, just a need for more detail, so that the DER stakeholders could figure out what this might mean for their future investments. It was a positive result given that the procurement designs were still being refined.

Questions and answers from the event including the slide pack were shared with the interested parties afterwards. Copies of all the material shared is saved on **NGESO's website**;¹ scroll to the bottom, select 'Webinars and workshops' and it's the first event listed.

After the webinar, the call to action was an invitation to arrange bi-lateral sessions with keen potential participants of this restoration service. 10 DER representatives came forward.

Figure 1:
Topics presented to DER stakeholders



55 DER representatives registered, 35 attended, 20 questions asked, 28 organisations, positive engagement



A summary of the main comments shared through the meetings are below, together with the actions taken:

Table 1:
Summary of DER stakeholder feedback and actions

Design aspect	DER stakeholder feedback	Action taken
<p>Overall procurement process</p>	<ul style="list-style-type: none"> • Timescales do not feel sufficient for implementing new assets. • The 2-month expression of interest timescales are too tight. • Timescales for providing the detailed feasibility studies are not enough across anchor generator and even for some of the top-up services. • The feasibility studies could be more complex than traditional providers due to multiple network scenarios. There will be a need to identify who will be involved in the DRZ solution beforehand, which could mean the process is longer than for transmission connected tenders. • The process flow is logical. 	<ul style="list-style-type: none"> • Timescales suggested are based on the traditional ESR procurement process; however, further updates can be undertaken once the process is tried in a live tender round. For now, the timeframes will remain as proposed. • Top-up service process has been better aligned with that of the anchor generator, for more parity. • Potential participants can review the Embedded Capacity Register to assess potential other DERs, within a region, who may be able to form a feasible DRZ.
<p>Functional requirements and rules of play in a DRZ</p>	<ul style="list-style-type: none"> • For certain asset types like batteries, the performance time to fulfil the service might be problematic unless partnered with another asset. • Cost of resilient communication equipment matters, and therefore early clarity regarding using existing DNO kit or new resources is important. • 90 per cent availability might be difficult for assets with single units versus multiple units. • 8-hour time to connect might be hard depending on certain assets such as steam generators as boilers need to be switched on. • As an Original Equipment Manufacturer (OEM) there was more interest in finding out about the procurement of the automated communications system – DRZ-C. • Clarity requested about assets registered at Grid Supply Point (GSP) level, how the ‘zones’ will be defined and how will DRZ feasibility across GSPs might be established. • Is the block load capability too low for this service design? 	<ul style="list-style-type: none"> • Until the PET workstream concludes, the functional requirements as stated in this report will not change. The stakeholder feedback, however, has been cross-examined, and therefore the technical teams are fully aware of the issues that some DER participants feel are a challenge to their participation in this service. • More information about the zones being targeted for Distribution Restoration will be clarified during the regional strategy phase and communicated as part of the tender round accordingly.

Design aspect	DER stakeholder feedback	Action taken
<p>Contracting and cost of service</p>	<ul style="list-style-type: none"> Flexibility is key; doesn't matter if NGENSO or DNO lead the procurement. Preference of liaising directly with NGENSO. DNO's don't have 'skin in the game', so there is no incentive for them to be 'quick'. Lead procurement party preferred as NGENSO who have most visibility and know the process like a well-trodden path. Not particularly inclined who should be the lead procurement party, so long as there is transparency and fairness in the process. Lead procurement party as DSO not DNO, for accountability and understanding of local network. Length of contract – 5 years is fine but would prefer if it was a longer commitment. With flexibility. Suggested to not have a fixed contract but built-in flexibility for changes as the wider economy/market shifts due to regulatory or other changes (net zero drivers). More transparency in costs required, show what can be recovered and what needs to be built into their pricing. Makes sense to have a payment process on availability instead of utilisation. Are there enough incentives in this process for potential DER providers? Businesses will have to make decisions to invest in bidding for a DRZ contract where their success or otherwise is not entirely in their hands. Want a better idea of what revenues might be forthcoming, taking account of the reliance on other DERs in the DRZ. Some funding towards initial feasibility studies at EOI should be considered – this will incentivise DERs. 	<ul style="list-style-type: none"> As part of the final recommendation for who leads this procurement process, it is NGENSO with full collaboration with the relevant DNO. In future, this process should be reviewed and evolved to DSO if that is the direction from Industry. Length of contract to remain as 5 years; this is to supplement the traditional ESR process timescales and permit new participants into the service as the tenders are rolled out. Clarity around what costs are associated with this service were shared as part of the Test Procurement Event.
<p>Code changes</p>	<ul style="list-style-type: none"> Make sure customer interest is represented in DCUSA and G99. In G99, need a fourth category that sets restoration investments separate from BAU as there are knock-on effects to how generators are assessed in terms of compliance. Mentioned issues with 'long-term parallel plant'. 	<p>The code change proposals are explained within Section 12 and 13. G99 has been updated to relax some requirements when in a Black Start situation.</p>

Following the DER stakeholder engagement, the P&C workstream presented to the Distributed ReStart Stakeholder Advisory Panel on 10 June on the outputs above. The panel agreed that more engagement was required at DNO level before coming to a decision on who should lead the procurement process. This was on the premise that even though NGENSO might have a GB-wide view and experience of this process, the DNOs would know their patch better. They also mentioned the risk that each DNO might do this process differently and therefore it is important that whoever leads conducts a consistent and transparent process across different regions for the sake of fairness for the DER providers.

Test Procurement Event and bi-lateral feedback sessions

Following on from the DER stakeholder engagement, the P&C workstream strongly felt the need to provide more assurances on the proposed process through 'as close to

a live event' as possible. This was done through the Test Procurement Event organised as below:

- Launch webinar to kick off the process was on 28 July, attended by 13 potential participants.
- Test Event commenced 2 August.
- Mid-point webinar held on 18 August; 3 potential participants joined in this short support session.
- Test Event deadline 6 September; 5 mock bids were received for assessment.
- Bi-lateral post event meetings – various dates in September, three of the bidders were able to meet to discuss lessons learned. Two chose to comment by email only.

Section 11 in the main report discusses the purpose and planning of this mock event including the key takeaways from the stakeholder engagement. The feedback against key topics is summarised in the table on the following pages.

Table 2:
Summary of feedback from the Test Procurement Event

Services bid for	About the event	Procurement process	Functional requirements	Commercials	Contracting
AG & TUS – Fast MW, frequency control & Energy MWh.	8/10 Very positive feedback on clarity of instructions, process and documents.	Align timescales for top-up services and anchor generator especially on the submission of commercials.	Resilience of Supply/Service Delivery being ≥ 72 hours definitely rules out certain generation technologies.	Lack of payment for initial/early study may be barrier to participation. Points of confusion: why an availability fee would be £/SP, when the service would be needed 24/7/365. What benefit is the measurement of availability at settlement period resolution and what is the measurement of? Unsure what 'potential commissioning assessment' means, in relation to an availability fee which will become payable when the service is live.	5-year period is good. NGESO to lead and pay the services.
AG & TUS – Fast MW & Inertia with new built plant.	The requirements were quite clear. The pricing was much less clear.	Unclear how the top-up services capabilities can be approved in less time than the anchor generator initial/early study? Enabling works timescales too short. Add a section with details about study methods.	The Block Load Pick Up value for the Typical Total DRZ Minimum is too low. Need knowledge of who else is in the DRZ mix.	The commercial submission spreadsheet was confusing. It wasn't clear whether to include total investment or £/SP.	It might be adequate but the shorter it is, the less attractive the opportunity is. Preferable for AG with capital investments to have an optional longer duration that could be negotiated.
All TUS except inertia.		Question on communications requirement for up to 5 hours. Space constraints on site and provision of environmental permits.	Block loading – Is more than 2 MW required?	DER will need to factor in extra supplier contracts for extra fuel and resources for manual interventions on the day.	
TUS – Fast MW control, Frequency control, Reactive control and Energy MWh with a 50 MW/h battery.	Insightful.	With asset used being a battery, the service bid in for restoration is dependent on State of Energy (SOE). Therefore, either able to bid in for full capacity and the SOE is managed with an anchor generator, or some capacity is withheld with bid for less capacity, but this may work out pricier as they cannot achieve full discharge for other services provided.	Clarity required on how communication between lead agent and DER will work, and how will DER inform their engineer as they need manual intervention on the site as it is at the moment?	Not sure how the cost of resources required on the day (of the event) will work?	
AG with 50 MW Battery Energy Storage system connected to 33 Kv transmission connection (To be constructed).			Project is transmission connected (due to location); it is 33 kV, but steps up directly into 275 kV – does this affect bidding criteria? Are grid-forming inverters required to be an anchor generator? If so, this has a cost uplift. Additional investments will be needed for an on-site diesel generator, to charge the battery, in order to meet resilience of supply requirements.		

As a result of comments, the following actions were considered:

- Ensuring MVA ratings can be consistently measured between different asset types, for example batteries versus diesel-powered generators.
- Removing self-start as a capability title and changing to anchor capable as a title, as well as, splitting out Fast MW control into increase and decrease in the assessment criteria.
- Reducing the typical minimum DRZ requirement on Energy MWh, expressed as the average power output that can be reliably maintained over a period of 120 hours, to 25 MW from 50 MW for the purpose of the mock tender assessment.
- Adding time to connect as a requirement for the top-up service's functional requirements as well.
- Aligning AG and TUS processes and timelines in the proposed procurement process so that the studies and assessment period are more consistent.
- Clarifying that a top-up service provider can expect to be energised from the network before delivering services and the DRZ can be planned to deliver the energy required. Requiring a TUS provider to have stored energy goes against the separation of services.

Playing back the feedback from this Test Procurement Event and the previous DER stakeholder engagement to Ofgem and BEIS, on two of the key aspects – who leads the procurement process and how funding and settlements might work in this process in their opinion – it made sense for the NGENSO to continue and lead the procurement process for the DER providers. Their reasons were centred around the fact that the licence obligation was firmly with the NGENSO, and that the remuneration process using BSUoS worked well. On the question about the costs incurred by DNOs as part of this new process, their collective opinion was that the DNOs should be able to claim for those through their own network price control.

Materials shared as part of the Test Procurement Event can be accessed from: nationalgrideso.com/future-energy/projects/distributed-restart/events-and-webinars

Scroll mid-way down this webpage for all the information.

DNO engagement

Focused DNO engagement has been key to help co-create the key aspects in agreement with the enhanced role forged for them in this procurement process.

Previously, for DNO engagement, the P&C workstream had presented at the ENA Open Networks Flexibility Services Workstream 1A in 2020. It made sense to coordinate with existing representatives within NGENSO, to get another opportunity to target the same representatives in WS1A and furthermore the NGENSO's Whole Electricity System Joint Forum, which has a more strategic level attendance.

P&C workstream presented to the group on 17 August, and furthermore set up bi-lateral meetings with **SSEN**², **SPEN**³, **WPD**⁴, **ENWL**⁵, **UKPN**⁶ and **NPG**⁷ to discuss their thoughts on the key areas.

Engagement was felt to be positive and constructive. Given the DNOs are busy finalising their ED2 Business Plans, there were a lot of questions around how this could work in BAU, especially as each DNO will have a unique circumstance to deal with. There was a fair amount of anxiety not to be blind-sided by unplanned costs associated with Distribution Restoration services; however, P&C workstream were able to engage on all of this with Ofgem and BEIS to gain some lines to take for this innovation project's recommendations.

Ofgem offered a practical solution in that, when the time is right for implementation of this service into BAU for the relevant DNOs, they seek advice from Ofgem on a one-to-one basis so as to agree the format by which to continue – especially from a funding point of view for the DNOs.

Ofgem have repeatedly said that DNOs have the mechanisms to claim for any new costs incurred outside of their business plans, and especially for those related to initiatives that support the GB net zero ambitions. The BEIS representative echoed the same point and added that the Secretary of State has sanctioned this need; therefore aspects such as how costs are recuperated through the different price controls should not become a blocker to progress. Between them, they could not see any reasons DNOs should disapprove of the proposals.

A summary of the DNO feedback and actions considered as a result is displayed in the table below.

Table 3:
Summary of feedback received from DNOs and the actions considered

Key topic areas	DNOs feedback summarised	Actions considered
DNO role in the proposed procurement process	<ul style="list-style-type: none"> • Nothing on the process steps challenged. • How will the ‘zones’ be defined? • What are the incentives for the DNOs to remain involved? 	<ul style="list-style-type: none"> • Clarify more about the Distribution Restoration Zone (DRZ) being at GSP level. • Clearly highlight why this initiative is paramount for the GB net zero ambitions and the roles that all parties must play to get there.
Functional requirements	<ul style="list-style-type: none"> • Need more understanding about what kind of DNO network upgrades might be required. • More clarity required on data exchange systems and resilient communications requirements. 	<ul style="list-style-type: none"> • Summarise and signpost clearly in the P&C final report where these requirements are all captured in the separate PET and OST reports.
Procurement lead	<ul style="list-style-type: none"> • Mixed views on the reasons; however, mostly comfortable with the NGESO leading interim. • Consideration required on DSO role and where the obligations sit (now and in the future). 	<ul style="list-style-type: none"> • In the final recommendations, caveat the major changes that are upcoming and propose an interim and a more enduring suggestion.
Settlement & funding	<ul style="list-style-type: none"> • Makes sense for whoever leads the procurement to settle the contracting costs. • How will DNOs recover any costs to their network upgrades? 	<ul style="list-style-type: none"> • Engage further with Ofgem, to understand their views on the options and what mechanisms will support this process.
Contracting options	<ul style="list-style-type: none"> • No firm views; however, try to maintain open, transparent and simple arrangements between all the parties. 	<ul style="list-style-type: none"> • Use the Open Networks Standard Agreement as the boiler plate that underpins the future contract.
Codes	<ul style="list-style-type: none"> • Majority felt it was onerous to require all DER participants to be CUSC parties. 	<ul style="list-style-type: none"> • Design two versions of the contract to make provision for DERs who are not CUSC parties.