

# Power Responsive Steering Group

## Note of Sixteenth Meeting

4 September 2019, 13:00-17:00 hrs, held at Elexon's offices, 350 Euston Rd, London NW1 3AW.  
This note was prepared by National Grid Electricity System Operator (ESO) and Sustainability First on behalf of the Power Responsive Steering Group.

### 1. Welcome and introductions

Colm Murphy (Head of Electricity Markets Change and Delivery) chaired the meeting, and noted that Cathy McClay is sadly leaving National Grid ESO and therefore her role as chair of the Power Responsive Steering Group. This was the first meeting of Year 5 of the programme, and the first since undertaking Power Responsive as a National Grid ESO business as usual activity. The Power Responsive team will contact steering group members over the next few months, to consider priorities for the programme this year.

### 2. National Grid – DSF and resilience

National Grid ESO gave a brief overview of what happened during the power outages on 9 August, however it was highlighted that National Grid ESO could not say too much whilst investigations were ongoing.

It was noted that system controls did what was expected, but this caused considerable disruption. This raises questions about energy security and consumer tolerance for outages. It was proposed that the next Steering Group meeting in December covers **DSF and System Resilience**.

Steering group members had the opportunity to raise questions, which included:

- Where could the flexibility come from?
- Are there constraints on where it could come from (e.g. distribution system)?
- Why was there not sufficient back up available?

Much of the flexible response is now from non-traditional sources. The event was extremely rare for two major generation sources to disconnect in quick succession. In response to the disconnection of these generators, system measures happened as expected within the Security and Quality of Supply Standards (SQSS). Should we reconsider the SQSS in the context of this incident? Should we be looking at faster access to flexibility?

Power outage enquiries can consume significant time and resources. Hopefully they can expose institutional edges and joins, which need to be considered in the round (such as priority services registers).

### 3. DSF Horizon Scan

BEIS and Ofgem gave policy and regulatory updates. National Grid ESO and Open Networks updates were provided as a [pre-read](#) document.

#### BEIS

Current policy focus is on small scale, domestic level market development. Consultation on smart appliances will be published shortly. On Balancing Services, the ESO is making progress. A more automated dispatch service is something to work on. In June there was a consultation on the categorisation of storage as generation - code modification process is progressing alongside. BEIS is considering the impact of opening access to half-hourly data.

#### Comments from Steering Group members:

Policy uncertainty is impacting DSF investment currently, particularly in relation to the Capacity Market. Some retailers are collecting payments; others aren't so there is a lack of consistency. A roadmap is needed to give clear direction.

The targeting charging review (TCR) is also causing uncertainty. Customers who have installed energy efficiency measures are not achieving the expected savings.

It is extremely difficult to get a strategic overview from BEIS and Ofgem of where the policy and regulatory change is going. Although change is necessary, it is not broken down into visible deliverables. Can we create 'islands of stability' in the context of change? For instance, small but meaningful, achievable, milestones. Stakeholders are finding it difficult to keep track of all the different developments and consultations. A white paper has been developed and BEIS is now waiting for an appropriate time to release it.

## Ofgem

There have been several consultations released this summer:

- [ESO RIIO 2 price control](#). Published a document, which included decisions and consultation questions. Closing date: 25 September.
- [ESO incentive framework](#). Closing date: 9 October
- [RIIO ED2 Open letter](#). Closing date: 15 October.
- [DSO decision paper](#) – ensuring interoperability and market development.
- [TCR short consultation](#) - published 3<sup>rd</sup> September – how to allocate fixed charges to non-domestic customers, sensitivity of benefits case. Final decision will be published in the next two months.
- [Access and forward looking charges](#) – a working paper has now been published (6<sup>th</sup> September) and was to be discussed at the Charging Futures Forum on 19 September. Looking to shortlist options early next year with draft conclusions in the summer.

Ofgem is looking at how to draft an overarching narrative on what changes are happening and when, with a view to signposting what is stopping & starting, and where value for DSF might be transitioning? There is a disconnection between the technology mix in the best interest of consumers, and short-term investment decisions based on merit. How do we ensure new value emerges (from local / regional markets) as value is impacted by policy & regulatory uncertainty? Investment signals are weak, which is leading to a slowing down. Sometimes there is too much focus on economic models, rather than commercial realities.

## 4. Data transparency & market-facing information

In the 3 October 2018 steering group, barriers to demand side participation were identified with three highlighted to be particularly relevant across steering group members: code governance, policy & regulatory uncertainty and data transparency. The meeting on 2 May focused on [unlocking demand-side flexibility \(DSF\) through code reforms](#) considering the current landscape and future ambition. This steering group meeting focused in greater detail one of the key barriers identified: **open data and transparency**.

The discussion was broken into two distinct areas:

- **Open data for DSF participation** – what are the barriers, considerations and concerns to opening industry data. How far can and should 'open data' go?
- **Market-facing information** – how can and should market facing data assist market actors in their business decision-making. What information is required and whose responsibility is it to analyse and interpret this data.

### a. Open data for DSF participation

The discussion focused on how open and transparent data could be made accessible to the energy industry and in particular DSF market participants, with a focus on barriers, governance, technology, legal, and ownership constraints. There have been a number of developments including the Energy Data Taskforce report and the provision of data in National Grid ESO's draft RIIO-2 business plan.

Laura Sandys (Energy Data Taskforce) introduced the areas of focus for the taskforce including: infrastructure visibility, enabling smart, multi-actor system management, opening the system to new markets, optimising procurement, cost reduction, system resilience, and regulatory oversight. To achieve data visibility (not worrying about quality yet), requires infrastructure and asset visibility, operational optimisation, and open markets.

The two key areas of recommendations were **digitalisation: 'filling in the gaps'** (quality, nature of data and skills) and **presumed open: 'maximising the value'** (discoverable, searchable, understandable, secure etc.). The taskforce set out three core principles: data catalogue (delivers an inventory of what data is held & by whom), asset registration strategy (rationalises the registration process across the sector) and digital system map (delivers visibility & operational capabilities – looking at Australian example). Other departments are looking at these principles – so we are working toward a common approach across sectors.

BEIS and Ofgem are joined up and there has been little pushback on the recommendations of the taskforce. We need to make incremental changes. Ofgem is publishing its meta-data and ensuring regulatory documents are consistent in their approach to data. Need a common definition for data best practice. There was the suggestion that the industry should be more proactive, and engage with data experts, as opposed to expecting data experts to engage with the energy sector.

John Ferris (Electron) noted that genesis for the RecorDER project was in a Power Responsive meeting – where there was discussion of the lack of consistent data across markets. RecorDER is working to emulate a system-wide resource register. Considering contract visibility / consistency and the boundaries of open data and commercial data. How data flow through the system automatically, without the need for human intervention (faxes etc.). Building a platform to integrate the data platforms that exist, without them having to send data.

Data is held in siloed databases – some are open, others closed – there is no consistency in terms of access and permissions. There are currently circa 40 places in which industry assets might be registered, with some assets requiring multiple registrations. In Germany they have a central database – where permissions, metadata and data is managed. It may be impossible to bring everything together in one place, centrally controlled and up to date in GB. However, data security is critical. If you are sharing data with a central database you may be liable for breaches due to GDPR (General Data Protection Regulation) guidelines.

It is critical to have common identification for data sources / users linked to a platform. If your identity is established as a user, how do you ensure your data is linked across other data sources, likewise for assets? We are used to an approach where you have a central institution / authority responsible for the data. In a distributed system, each data provider is a node in the network – linking their data to the catalogue to link to other data sets.

As part of the RecorDER project, Baringa has released a report on whether block chain could be applied to an asset register. A Gemserv report suggests a set of core rules for everyone to follow, programmed into smart contracts, to ensure monitoring and enforcement – developing models for a governance structure for shared asset register (industry led rules with specific use cases; hub model with a platform operator taking a central role). Pinsent Mason is a law firm looking at regulations, rules and competition law for the project.

Questions were raised around the scope shared data and included:

- Whether combing data sets to build a more accurate picture could infringe on GDPR.
- Who should own standards around data – BEIS or Ofgem?
- Should engagement be mandatory or voluntary?

The Energy Data Taskforce scope includes the provision of MPAN (Meter Point Administration Numbers) data, which could be covered by GDPR and would require consent. The Taskforce also recommends that data should be presumed open. Industrial and Commercial (I&C) customers expressed concern about the presumption of open data. Some data is commercially sensitive – the release of which is governed by the Competition and Markets Authority (CMA). However, it was explained that businesses could keep commercial data closed. The concept is that data is presumed open and a case is made for some data to remain closed where appropriate.

It was suggested that in regulated parts of the market open data should be mandated. Whilst I&C customers may not be mandated, they may choose to open their data. Perhaps there could be mandating for assets (generation, storage etc.) of a certain size.

Examples of standards implementation from other sectors were provided. The software development community have settled on HTML standards from a bottom up approach and understanding what works and what doesn't. When the process became top down, standards are taking considerably longer to progress. It was suggested that the standards shouldn't be lead by the regulator, but by industry itself. But with concerns from I&C customers relating to 'assumed open' data – some direction may be helpful.

There are areas where we want data and it doesn't exist, or is not accessible. Once we have visibility of the relevant datasets then it will be possible to understand where the gaps are and where system benefits can be leveraged. We also need to consider whether sharing data is detrimental to companies (particularly I&C) by sharing commercially sensitive information with competitors, and how this risk could be mitigated. I&C customers urged that the Taskforce engages with as many different sectors as possible.

Distinguishing sufficiently between historic and live data was raised. Acknowledging that industry is doing this to drive a clearer more coherent system, historical data was seen to justifiably open, yet due higher level of sensitivity, more caution was expressed for real-time data.

It's important to acknowledge that this represents a significant culture change for the industry. However, whilst identifying that there are numerous issues to consider and overcome, what simple achievable actions in the near can start to drive this change in culture required?

## **b. Market-facing information**

Better market-facing information would help improve market-actor understanding of the risks, costs and opportunities of participation in DSF markets. The [Power Responsive Annual Report 2018](#) includes initial metrics for DSF, but what more could the industry provide.

Demand side aggregators suggested that they are happy with STOR tendering data – which offers raw data, quickly, clearly, in an easy to use format, with helpful guidance. In contrast, some Firm Frequency Response reports were said to have different time-stamps, which makes it difficult to process and analyse without manual intervention. Elexon's BMRA (Balancing Mechanism Reporting Agent) high-grade service has also been highlighted as working well.

However, there is not always consistency in where data is being released, with a requirement for greater data field validation. DSF categories are also said to be too vague due to needs to understand load categorisation, for example, when using a portfolio of different assets / units.

The ESO forward plan outlines steps towards the System Operators data transparency strategy, including the [Data Explorer Page](#) (now live). ESO RIIIO 2 ambitions include the implementation of a data platform and data management tools, integration with a digital customer engagement platform, and developing data quality, publishing and governance capabilities.

Western Power Distribution (WPD) outlined the development of its data hub, improving the data with postcode checkers for Constrained Managed Zones (CMZ). The publicly available network flexibility map, displays information on geographic supply, MW peak and length for availability, estimated MWh utilisation, months / days available and raw data downloads. WPD does two-year forecasting and five-year sign posting, providing requirements 18 months ahead of using it.

Baringa provide market information & analysis on a commercial basis, and highlighted that customers will ask 'what is the FFR price and where is it going?' As a result of good access to GB market prices and volumes Baringa are able to provide the appropriate analysis. However, the data provided can be unclear and misleading. Similarly, Balancing Mechanism (BM) reports are seen to be good in terms of detail, but complex for a lay user. Market actors could do better at distilling market information and requirements. The Irish single market is noted to be transparent, as is the German market.

Steering Group members were asked what they considered to be of particular importance in the release/provision of data. Speed of data release and machine readability were two aspects of particular note.

Further questions were asked relating to whose role it should be to interpret the data. The majority felt it should be the role of DSF providers and industry actors to provide the data as clearly as possible. With specialised bodies providing suitable analysis.

It was widely acknowledged that visibility and transparency is required to make competition work better in demand side services. We still need to get the basics right. There is a skills issue in terms of data science expertise within the industry. Demand side providers need to understand what they are doing with the data, and a formal feedback loop on the data may be required to ensure progression and understand how the market is responding to data access.

## **Next Meeting Date**

- 2<sup>nd</sup> December 2019

## Attendees

Name	Company	Sector representation
Colm Murphey	National Grid ESO	Chair
Dinker Bhardwaj	BEIS	Policy & Regulation
Louise van Rensburg	Ofgem	Policy & Regulation
Steven Steer	Ofgem	Policy & Regulation
Neil Morgans	National Grid ESO	Electricity System Operator
Ben Godfrey	Western Power Distribution	Distribution Network Operator
Fiona Navesy	Centrica	Large Supplier
John Prendergast	RES	Renewable Generation
Jo Butlin	EnergyBridge	Consultant
Justin Andrews	Elexon	Electricity Market
Andy Pennick	United Utilities	I&C (industry)
Richard Eaton	Aggregate Industries	I&C (industry)
Chris Webb	BOC	I&C (industry)
Claire Addison	Flexitricity	Aggregator
Wayne Muncaster	GridBeyond	Aggregator
Ian O'Malley	Fluence Energy	Electricity Storage
Laura Sandys	Energy Data Taskforce	Data
Jon Ferris	Electron	Platforms
Tom Harper	Baringa	Market Analysis
Judith Ward	Sustainability First	Secretariat
Clare Dudeney	Sustainability First	Secretariat
Adam Sims	National Grid ESO	Secretariat
Adrian Sellar	National Grid ESO	Secretariat
Calum McCarroll	National Grid ESO	Secretariat