The Voice of the Networks

Energy Networks Association

Open Networks Project

Summary of Flexibility Services Workshop (11th April)

Restriction: Public

Introduction

The ENA Open Networks project facilitated a stakeholder workshop on 11th April to help inform the work on Flexibility Services. As part of this workshop, the following two products were covered:

Flexibility Market Principles

As part of our Flexibility Services Workstream this year, we are undertaking work under WS1A P1 Flexibility Market Principles to outline guiding principles for the flexibility marketplace for DSO services – ensuring competition is embedded in the markets as they mature, conflicts of interest are mitigated, and drive whole system value.

The product team identified 6 key themes for the development of these principles which were reviewed with the Open Networks Advisory Group on 7 March 2019. Recognising this is a key area for development, we sought wider stakeholder input to help better inform this work.

DSO Services – Commercial Arrangements

The work within DSO Services – Commercial Arrangements are looking to deliver commonality across service agreements and contracts for network services. Within the initial reviews and gap analysis. A few fundamental questions have been raised which the members of the Open Networks Project are seeking input from the group, to ensure the outputs best reflect the needs of stakeholders.

As part of this event, there was a short session providing an overview of the Product 4 works, which also asked stakeholders for their opinions on the fundamental questions resulting from the product.

Comments from the discussions and breakout sessions were captured, and this paper highlights key questions/observations and how these will be taken forward by the project.

The agenda and material for this workshop can be found here.

Workstream 1A Product 1: Flexibility Market Principles

Workstream 1A Product 1: Flexibility Market Principles	
The groups discussed the following themes; Rights & Obligations, Transparency/Visibility/Privacy, Neutral Market Facilitation, Coordination & Information Exchange, Market Boundaries and Interoperability of Solutions. Much of the discussion was general rather than attempting to formulate specific principles but the feedback will be extremely useful in crafting them going forward. A group of 'Critical Friends' was identified at the session that will be included in the review process for this product. Next steps are to draft an initial document for review by the Workstream and the Open Networks Steering Group before distributing it for wider consultation in July.	
Feedback	**Response**
Rights & Obligations	• The contract should aim to focus Flexibility Provider's efforts towards delivery instead of Penalties – Stakeholders suggested that the claw back mechanism of WPD's contract is a useful approach • Proportionality was a key phrase – scale of obligation should reflect the providers / party's ability to provide the service • Incentivising flexibility (for example ROCs and Renewables) – should there be policy to incentivise • Parties reiterated the point around proportionality • Secondary trading could become more valuable once there is sufficient liquidity • Stakeholders suggested that contracts need to facilitate stackable revenues
Visibility, Transparency, Privacy	• Transparency of decision points of network investment – assumptions, granularity, data, reasons • Long term view / plans required – impact of types of technology etc. • Information should be easily accessible and digestible • What can be published – bid values / prices paid • The absence of any reference to Low Carbon was raised by Ofgem. • As expected, as much information as possible is requested with general view that unless there is legal / policy / commercial sensitivity reasons preventing information being made available then it should be. • Stakeholders raised the issue of transparency providers' characteristics with a focus on the carbon intensiveness of flexible resources. The aim is for information to drive the policy debate. However, they understood that other providers that appear as carbon neutral, e.g. storage facilities (batteries) may actually be using carbon intensive sources to charge (e.g. coal plants overnight) and discharge later during the flexibility window • Stakeholders suggested that they would want to understand more about the DNOs/DSOs decision making process when it relates to assets and service needs • Stakeholders supported the visibility of offers received/accepted, whilst cautioned against any market distortion outcome. A

	suggestion is that high prices may make it easier for DNOs to justify investments • Transparency required on the decision-making process, detail the criteria • Improved forecasting for sites that DSO's are procuring flexibility services for, for example, is the aim only to defer reinforcement for a few years?
Neutral Market Facilitation	• Need to provide some chronology in terms of implementing the principles • There is a conflict between the technical efficient use of resources and equity and liberty in markets. – Which is the goal? We need to determine this before we can tailor the correct principles to guide us. • Neutrality / low carbon / efficiency – these should be the main goals. • There are competitive markets already which are set up in a framework of open governance but regulated by Ofgem. Is that model still applicable, if not what's wrong with it? Not just the BSC. • Information exchange & standards feel more like means than principles. • Separation of DNO/DSO services to reveal prices so you know how they relate to wholesale prices, then the market can start to respond. • Discussed procuring flexibility services simultaneously as network assets & upgrades. Would need to be able to neutrally market off operational activates as well as flexibility services. • DNO's should not be aggregators as the market has demonstrated that it can use AI and perform these activities. • The DNO should be providing data to market platforms where they can procure those services. • There is a potential conflict of interest in way that platforms / markets run – platform needs to be 3rd party. • Don't see a lot of the benefits that flex gives to end users. Should open up to energy markets for whole sale optimisation, community energy and SMEs. DSO's role should be to provide a clear route to flexibility and the market. • Should there be a platform for all DSO/ESO/P2P services, whereby assets can bid into any of them. • Discussed whether there should be a principle that defines how DNO's are to use their assets versus the use of markets for residual services.
Coordination & Information Exchange	• The general view was that TSO–DSO co-ordination and information exchange is essential. TSOs and DSOs should seek to avoid any mutual harmful interference when invoking balancing and/or congestion management actions on a system level. • Solutions should be least overall cost to consumer • Possibility of veto for network operator? • Existing ANM has priority? • **Possible Principle: Transparency -** Information associated with DSOs' and NGESO's use of services should be clear. The market needs to understand the decision-making processes, in terms of (1) what was instructed; and (2) why things weren't instructed. • **Possible Principle: Settlement -** Actions taken for DSO services should have their full costs surfaced, such that: • Cost-recovery can be targeted appropriately

	• Parties' imbalance exposure, resulting from provision of DSO services, can be mitigated • The full costs of decisions can be captured • 'Free' curtailment vs flexibility services income - where should the costs lie? • Important to surface whole costs associated with decisions for ANM, assets etc, where ANM might limit access to cheaper flexibility, requiring more expensive flexibility to be used. • How to reflect such price differentials into decision on whether/what to invest? • Appropriate exposure of DSOs to the costs they incur • **Timescales to support development of flexibility markets:** The potential was discussed for a two-stage approach to principles: Rules-based (near-term); and Price-based (longer-term). • **Access:** Tackling the LIFO issue: What about markets for trading capacity, or position in the LIFO stack? • What to do regarding funding/incentives on DSOs? • **Assessing Liquidity**: Would it be possible to evaluate ANM curtailment volumes to estimate liquidity?
Market Boundaries	• Facilitation of markets where possible. How do these develop? What are the limitations of the current markets? What principles underpin how the effective the markets are? What elements define this? Location, geographic, type of service, price, duration etc? • What defines the market? Europe is looking closer to real-time. • Current products are longer term 1 year+, • Builds space for smaller participation when long term is only option. • Move to smaller time periods/real time might facilitate wider participation • Richer market with more products • **Flexibility has more value due to location and to time boundaries** – rather than energy which can be more ubiquitous. • European standards are looking at real-time pricing for utilisation • Mix of longer-term contracts and shorter-term contracts. • Industry to provide more guidance on a trajectory of flexibility markets. i.e. Current position, medium position, future position • **Drive liquidity through offering a range of products** • Long contracts can fix pricing and distort future pricing, however these can be balance as longer-term contracts are willing to produce investment • **Mixture of economic models can allow for different attitudes to investment** – i.e. shorter-term models vs longer term models. • **Market reference price** – what is the backstop price? This can be used in economic determining assessments. Methodology would need to refer to reinforcement and/or opportunity cost and would likely be locational and time-bound. **Needs to be transparent methodology.** • Static price until constraints/congestion applied and then price differentiates? • How to stimulate markets to get people participating? Very short-term layers? Split the needs up by defining how things will be split up and have a proportion as long term needs and others being shorter term.

	• **Pricing – how to be transparent with this? Cuts both ways**. Should the methodology to determine this price be consistent? Agreed at industry? Black box calculation could be provided to the market. • Minimum requirements for flexibility services. Does this need to be stated. Does this define the markets/boundaries that they can participate in? • Different technologies – how can these can be accommodated? • **Aggregation of services? How can multiple participants be added together to provide a service?** Both aggregators and buyers of this. People are the route to market for these products. Providers who do the aggregation should be targeted. • How does DSO services interact with DSO flexibility services? Conflicting revenue streams so will likely be price driven. • Access to multiple markets might be limited by the constraints, so need to be visible. Stacking revenues should be fine, but we should also allow switching revenue streams between procurers. This will drive prices up and down. • Definitions for where control-led operations are needed versus those conditions when the market can lead. These still need to be commercially defined ahead of usage. • How can DSO manage over or under delivery? Different sizes and chunks of services – need multiple types. These can be added together to create security/certainty. • Whole system costs should be considered between and mechanisms for optimisation and conflict avoidance created. Transfer of costs/benefits across the systems/participants. • Liquidity might not appear in certain pockets so mechanisms need to be in place for these conditions. • Multiple commercial mechanisms to explore ahead of mandated network/system controls. • Mandated services are fine, but they need to be justified.

Interoperability of Solutions	• **Requirement for interoperability across voltage levels** and DSOs/visibility exchanges.
	• The accidental creation of data silos is a real risk, this will result in very expensive data integration.
	• **What are the other examples of standardisation** (e.g. other countries, industries etc.)
	  ○ Linix/IT
	  ○ Catapult paper outlining a definition of interoperability.
	• **Interoperability may be required to link with energy data task force recommendation that all energy assets are registered in a single place**
	  ○ Comes with complications including level of detail is goes to (e.g. by appliance or by domestic).
	  ○ Should you wish to provide flexibility services, it may be a requirement in order to sign up.
	• **Data portability is key** in order to not contractually create data silos. Embed the operability between the different commercial relationships.
	• **Balance of meeting innovation with standardisation** and it is likely required that going above and beyond at the moment in order to future proof data exchanges will be necessary.
	• **Open source APIs will likely be required –**
	  ○ Similar to middleware that Linix can be used an example.
	• **Contract interoperability is important**
	  ○ Essential between different buyers of flexibility (inc. ESO/DSOs). Include with this suppliers and other commitments.

	• Potentially digitalised rule-based contracts in order to reduce barriers of entry into flex markets.

Workstream 1A Product 4: DSO Services – Commercial Arrangements

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This session was run with the whole group participating rather than breaking in to groups. A wider range of participants would have been more valuable as this product relates especially to smaller DER providers and aggregators. • Stakeholders preferred to provide general comments rather than responding to the specific questions presented and it appeared that some comments were made in isolation of the wider contract terms • Contractual responsibilities (e.g. liabilities, insurance, etc) to be proportionate to contract value, esp. for smaller providers. At the same time stakeholders acknowledged that this may facilitate free-riding. • A wider point was made in order to facilitate the parties to undertake risk in a proportionate manner to their size. • Work within P4 and later on needs to avoid stifling innovation (which may hinder the improvement of the contract agreements later) • Stakeholders raised the example of work undertaken in the Netherlands – DNV GL suggested this is being incorporated to the FUSION project • Stakeholders were practically unanimous in that DSOs should avoid bilateral contracts – this has potential implications for several items raised (e.g. Variations as these may be seen as bilateral agreements bypassing the tendering process). • Variations: Stakeholders raised question about the consistency in pricing these (outside of a tender) • ADE is preparing a Code of Conduct which may help drive the behaviours in relation to flexibility