ElectraLink Ltd.

3rd Floor
Northumberland Hous
303-306 High Holborn
London WC1V 7JZ

ElectraLink 2020 Spring Webinar Series: Flexr: Unlocking the challenge of data to enable a smarter, more flexible energy system — Webinar Report

For information

Report by: Marketing and Engagement Team

Date: 17-06-2020

Introduction

Every year, ElectraLink hosts two Engagement Day events, one in Spring and one in Autumn, and invites stakeholders from across the UK energy market to participate in a lively discussion on the most pressing topics and challenges facing the industry.

Due to the severity of the global coronavirus outbreak, we transformed our usual Spring Engagement Day into a Spring Webinar Series aimed at providing a platform for continued discussion between energy-sector professionals on challenges and opportunities affecting energy market participants in Britain today.

The energy sector is at the centre of the climate change debate, with increasing attention being placed on strengthening the sector's response to building a climate-resilient pathway through innovation. The series discusses how the energy market can use data and regulation as well as new technological solutions to make the marketplace more efficient, open and competitive for the benefit of businesses and consumers, and help the industry meet the net-zero challenge in time.

ElectraLink's second Spring Series webinar, which included a live Q&A Panel, was hosted on 20th May. In total, 159 individuals from the energy and utilities sectors attended the session, and this report summarises this online event.

About the webinar

On 23rd April, ElectraLink issued a Call for Responses to a consultation on Flexr – the new energy data sharing and standardisation service being developed by us in response to industry need, and in partnership with the GB Distribution Network Operators (DNOs). To build on this, on 20th May, we hosted a webinar to introduce this new service and allow industry colleagues to pose questions to a panel of experts directly involved in Flexr's development.

Our DSO Lead, Gill Nowell, opened the session with an overview of ElectraLink, highlighting our role and importance in supporting the evolution of the GB energy market over the years. Gill spoke on how this role evolved beyond the delivery against our licence conditions to the provision of an independent, secure, and low-cost service to transfer data between energy market participants, otherwise known as the Data Transfer Service (DTS). ElectraLink's experience in procuring and managing these services on behalf of the DNOs, places the company in a unique position to support the increase in competition and growth of innovative business models. Three key elements enable us to do this:

1. We understand the technologies,
2. We understand the data and the data governance, and
3. We understand how both the incumbents and the innovators work and what they will need in terms of access, cadence, and security.

Gill went on to provide some examples of how ElectraLink has immersed itself in the development and delivery of data-driven innovation projects. These include:

- Working with DNOs on improving the viability of demand on their networks,
- Re-procuring the DTS,
- Launching the Energy Market Data Hub (EMDH) – ElectraLink's innovation platform with an extensive catalogue of data solutions for over 300 energy market participants, and
- Providing data to Ofgem, the ESO, and others to support reporting and forecasting functions.

Webinar co-presenter, Marc Bartlett, Head of DSO Transformation at ElectraLink, then went on to describe Flexr, its development plan, and what it will enable. Marc explained that ElectraLink is taking note of the direction being provided by Ofgem, BEIS, and the Energy Data Taskforce, to share data and deliver greater flexibility to market participants and new entrants in a coordinated way. As the electricity industry continues its move towards becoming part of a decarbonised, interlinked "whole" energy system, the provision of transparent data between all market-participants is increasingly important.

Flexr is being developed to meet this market need. It is a DNO data provision and standardisation service that will connect to the data held by all six DNOs and their Distributed Energy Resources (DER) customers. Flexr will be able to share large volumes of data in near real-time (where applicable), facilitating a joined-up operation across multiple platforms and systems. With Flexr, market participants will be able to discover, and access triaged information about DNO resources, DERs, and flexibility market participants.

Marc then presented Flexr's development programme roadmap through to 2021, pointing to the planned delivery of a "minimum viable product" (MVP). The first section of the MVP, delivered in 2020, will comprise of:

- A DER Register which will be populated from the ElectraLink's dataset of 13,720 DER and DG customers (with more added each day) and from data sourced from DER providers.
- A Portal, which will be the controlled access-point to the DNO and DER data registers for third parties. The Portal will also enable flexibility service providers to register their assets.
- Integration with a pathfinder DNO, which will surface network data on the Open Portal and will evidence the impact of network data access on the acceleration of the flexibility market.

To build on this, we plan to make available in the first quarter of 2021, DNO data from a "pathfinder DNO" and DER data from our DTS dataset. The DER data will build on the SWRR and learnings from other innovation projects.

Finally, Marc talked about the benefits of Flexr, highlighting that this service will:

- Address the challenge of making data more open while maintaining high levels of data security, which is something that ElectraLink has a proven track record of achieving.
- Bring efficiencies to the unbundled electricity system by breaking down potential data silos as well as standardising and simplifying data exchange between parties.
- Provide an improved service to both the DNO customers and their stakeholders.

This was followed by a Q&A Panel Session, chaired by Stuart Lacey, ElectraLink's Chief Executive Officer. The panel included the webinar presenters, Gill and Marc, who were joined by Dan Hopkinson, Director of Data and Transformation, and James McDonagh, Enterprise Architecture Consultant, both also from ElectraLink. On the panel, representing the DNOs, was Jim Cardwell, Head of Policy Development at Northern Powergrid.

The next section includes several questions posed by webinar attendees to panellists on the topic. These were submitted before and during the event. It also includes the panel's responses to the questions we were unable to answer at the webinar due to time constraints.

Panel questions and answers

Questions	Answers
Why ElectraLink? Doesn't it put you at an unfair competitive advantage?	There are several reasons why ElectraLink is well-positioned to do this. As touched upon in the presentation, we have been collecting DTS data since 2012 with the permission of DTS users.

	This means that since 2012, every single transaction in the electricity market, that has been collected, is currently being analysed and provided as a set of analytic services back to the energy market. This was achieved, with the DTS User Group, by successfully overcoming not only technical challenges related to data collection but also governance issues. In addition to having this dataset, we are also experienced in making this data available. As mentioned before, we provide a number of services to the industry, some as standalone reports, and the majority now via an API interface. This is a technology that we are very comfortable with and on which we will be basing the Flexr solution. The third element as to why ElectraLink is doing this is because we are owned by the DNOs. We fulfil a function for them, which is to provide a collective, low-cost service to facilitate innovation and competition. This is what the DTS does and has been doing for 20 years. Over time, it has created a highly competitive and innovative retail energy market. The role that we are contemplating for Flexr, and that we will be proving via the MVP Program this year, is similar in providing network data to the energy market to allow innovation and competition to take place. We are not considering competing as a platform in this market. We are merely a facilitator. The governance around this is yet to be defined. However, the service will likely be provided under governance, both in terms of its scope and how much it costs.
How does Flexr fit with existing DNO open data platforms and the Open Networks project?	It is important to recognise that since the publication of the Energy Data Task Force principles and recommendations, we have all been very busy determining what we can do to drive the agenda forward. From a DNO perspective, Flexr will help take forward this agenda with other current initiatives. If we take a look at some industry projects such as the Open Networks Project's System-Wide Resource Register, which is spreadsheet-based and is available on individual DNO websites, most of the DER customers included in this Register have an export capacity of 1MW and above, and this information is updated on a monthly basis. Flexr will really help accelerate and take this much further as the service will establish a standardised interface that is much more up-to-date with current times, accessible and available to industry participants, rather than a set of spreadsheets which was never intended as a final destination.

	The other initiatives going on are through the ENA and the Open Networks Project. The linkage with Flexr lies in the ethos, its idea to be very open to stakeholder interest via the Beta Group mentioned in the presentation. The idea is to be inclusive and open in terms of the development of this solution.
Will there be an opportunity for stakeholders to be actively involved in the development of Flexr?	Yes. There will be what we are calling a Beta Group, which will be comprised of a collection of prospective users of the Flexr Services that will test the product for usability and functionality. Beta Group members will report on what works and what doesn't work as Flexr is developed. The Beta group will work and be in operation throughout the development and operation of the Flexr solution from MVP discovery through to switching-off the services. It will live as long as Flexr does. By recruiting users to participate in the Beta Group, we aim to build trust in Flexr within the industry. Being a part of the Beta Group provides users with a sense of ownership of the Flexr success. User feedback will be a key sounding board for the product team.
How does ElectraLink get around any GDPR considerations with regards to access to personal data under Flexr?	To be clear, we must adhere to GDPR considerations. This is a non-negotiable element of sharing data and of being the facilitator of data-sharing. Those GDPR considerations relate to personal data, but a number of the data items that we are looking to share would not fall under that category. However, we do need to apply data triage as if everything did. We got a great deal of experience in doing that already. As mentioned, we have the DTS dataset, which has been extracted from the DTS service and contains over eight years of very granular level data relating to processes in the retail market. Using DER data, which will form part of the Flexr initiative, as an example, we know that this data is created from settlement process data from across the UK. When we provide this data, we can do so in the form of aggregated and anonymised through to granular MPAN data. The provision under GDPR is that there must be appropriate triage for the use of that data. For instance, if it is a case of spotting trends and high-level analysis or high-level planning, that data can be aggregated. This then removes individual MPAN data and any GDPR considerations. It can then also be anonymized. However, if there is either direct consent to the use of that data, by either the customer or the user of that data, or a legitimate purpose, then it can be provided at a far more granular level. This is one of the key-value elements of Flexr. Flexr will deal with the triaged elements that are described in the output of the Energy Data Taskforce, and it will ensure that appropriate data is provided, for an appropriate reason to appropriate parties. Thus, Flexr will deal with GDPR considerations in its inherent design.

How will Flexr be governed/funded?	The question of governance is yet to be resolved. As mentioned earlier, there are many options, including the DTS User Group under the DTSA. Also, DCUSA has a code that could manage it. For the MVP purpose, we do not need governance to be in place. This means we will be launching the MVP while those governance discussions are ongoing. In terms of funding, this will be discussed along with the governance arrangements over the next few months. We are engaging very closely with our DNO shareholders and other stakeholders to understand the best way to do that.
Will, the Portal, be 'Open Source', provide access to 'Open Data' (available to all at no cost) or something else? Will the data be available via an API?	In terms of availability and access to the data, there are two pathways in which data can be accessed. The first and immediate pathway that we are going to deliver in the MVP section up until the end of 2020 will be through a Portal. A user will be able to access, interrogate, and search data not only based on the type of data but also geospatially. They will be able to report and gain valuable insights through that Portal. We are also planning to deliver through APIs for 2021. However, as highlighted in the presentation, Flexr is a very agile programme. Hence, we will be guided by our Beta User Group. Becoming involved in this group allows you to influence our roadmap at a granular level as we go through to the delivery of the Flexr programme. In terms of the Open Source, we are delivering a Portal, which needs to be secure. We need to ensure access to that data is compliant with regulations etc. We have not considered the code being made available in an open-source such as GIT, but that is something that will need to be considered in more detail as we go through the discovery phase at the start of the MVP section of the programme delivery. MVP services will be available without charge. As for costs going forward, we are faced with the choice of the user paying or, if we can demonstrate a clear consumer business case, we can include it within the regulated costs of the DNOs. The consumer-based business case is something the MVP is designed to uncover, and therefore, we are very keen for innovators to come into the market to use this data and to show how consumers can benefit.
Please can you talk about the relationship between this Flexr consultation and the NPG 2020 NIC Flexr submission? The NIC submission seems to be straying into areas competitive flexibility market platforms should deliver.	Northern Powergrid has submitted a screening bid for the Network Innovation Competition (NIC) operated by Ofgem. Although related to, it is separate from Flexr. The NIC bid is one of the options for the future of the energy market that the DNOs are exploring. While Flexr is about establishing a working prototype function with at least one DNO and a more limited dataset, really pushing, in an agile

	way, to get it working and for market participants to see what it can do, the NIC bid is about looking at what's next. Part of the vision for Flexr is thinking about this being a standardised way into DNO data. It also involves this being an expanded dataset and a way to access data beyond the DNOs world as there are other energy market actors and available data. What has been set out in this webinar are the proposed first steps for Flexr's MVP. However, beyond these, there is a range of options that DNOs are exploring within the NIC "basket". It is to be explored with the DNOs, members of the industry and the community, customer representatives, and other competitive market actors.
Do you have a published stakeholder engagement strategy?	We do not have published a stakeholder engagement strategy at this time. As Flexr moves towards and beyond the minimum viable product and engages with the Beta User Group, this is something that will be looked at in terms of making it publicly available.
How do you think Flexr will differ from other flexibility platforms in the market such as Piclo?	As highlighted in the presentation, Flexr is an enabler for data, an access point, and a way for platforms like Piclo's to access data to add value. We are not creating a service to compete, but one that facilitates market innovation. A service for innovators, platform providers, aggregators, and others to simplify the way they access the data they need to create value. In sum, Flexr is trying to enable Piclo and other parties to operate.
What will be the requirements for an SME to access the data?	The data will be presumed open but triaged according to industry requirements, which we will implement through Flexr's governance. An SME would register on the Flexr Portal, and likely give proof of identity. They would have access to the data available to that category of organisation, as defined by the governance.
Will you charge for access to the data? Who is paying for this, and will there be charges to use it?	The mechanism by which the operational costs of Flexr are recovered is still under discussion through the Open Networks Project and Ofgem's Overarching Working Group (OAWG). We are looking at options to recover costs either wholly through a cost recovery system (i.e., through the DNOs) or by supplementing the socialised cost by charging certain customers directly for high-value data. We are keen that charges do not result in barriers to potential users of the system.
Who is deciding who is "appropriate" to see the data?	The data will be presumed open but triaged according to industry requirements, which we will implement through Flexr's governance. We assume that there will be a consultation on data triage, but making these decisions is beyond the scope of Flexr.
Do consumers know that their information is being collected and held when it is sent over the DTS and then	If you are a signatory to the DTS, you must ensure that your data privacy statements and your contracts with consumers contain provisions to allow the usage of the data against what has been set out in the DTSA.

potentially shared on a non-aggregated basis? Do they not need to provide their consent for this to happen?	The DTSA has stringent rules as to how that data can then be surfaced and used. Any use case that comes through and which is to be used by someone who is not a member of the DTSA is subject to approval by the DTSA Governance Committee. As such, any consumer should be aware of this. This information should be written in the contracts held with the parties connected to the DTS.
If Flexr is only starting with one DNO, what is the expected timing for Flexr to contain data from all DNOs?	The Customer Value Proposition (CVP) stage, which takes over from the MVP, will run from Q1 2020 and will have a duration of 2 years in the program. Thus, for the 5 DNOs, that data will become available during that period. So, Flexr will contain the data from 6 DNOs by 2022, assuming success with the MVP.
Will heat pump vendors be able to include their data, as will be a noticeable load on the grid when it takes off, especially during winter months?	Yes, this would be an ideal application for Flexr. Heat pump users will be able to provide data through the Portal and access the data already available. We would welcome you to join our Beta User Group, which would enable you to see and influence the development of Flexr.
Are you working with the likes of OCA regarding enhancing data output from chargers for the OCPP protocol, and with similar alternative protocols?	No, we are not currently working with OCA or looking at EV charger protocols, but we would like to start these conversations in the near future with a view to incorporating EV data (subject to governance) in the next stage of Flexr's development - from March 2021.
Are you working with EV OEMs on releasing useful data, perhaps via a charger?	Flexr recognises EV OEMs as key stakeholders, and we will be engaging with them to understand what data could be made available to them to usefully support the industry and its customers, and vice versa, as the Flexr programme moves forward in 2021 and beyond.
Does this work relate to a "3rd gen" smart meter that may integrate with other devices, such as chargers and heat pumps?	We will initially use the DTS system, which uses data from SMETS 1 and some SMETS 2 half-hourly settled meters, to populate the DER dataset this year, but we are keen to work with the industry to investigate how we might incorporate other data sources in the next phase of Flexr.
Where flexible assets have been installed as part of a NIC or NIA funded innovation projects, should those assets be automatically added to Flexr? It could be interesting to see the population of DER assets across the UK.	Thank you, this is an interesting question. Our understanding of NIA and NIC governance is that the DNOs own the foreground IP to the innovation projects (unless there is a special agreement), so this should be possible. We will discuss the integration of this data with the DNOs for the next phase of Flexr's development - from March 2021.
Are you aware of any upgrades to substations to allow improved data visibility at the source?	Several of the DNOs (i.e., UKPN and SPEN) are in the process of installing targeted LV network monitoring, and we will endeavour to make this data available over Flexr.
What will be the barrier(s) to entry for SMEs?	We hope that SMEs will use Flexr to innovate and help drive the industry forward. We are making the Portal as user friendly as possible, and we are working with the regulator and the DNOs to ensure that the operational cost of Flexr does not result in barriers for its users.

How far are you considering the 'public policy' benefits that Flexr might bring to bodies such as government, the regulator the CCC & NIC in having access to both a better national picture - plus a comparable regional picture - on a standardised basis?	Thank you for this great question. Flexr has the potential to make a big difference in helping the organisations you mentioned make better, more holistic planning decisions. Our vision is that Flexr will be compatible with other data services (i.e., for gas, water, transport, heat, smart cities, etc.) to enable the optimising of planning and operation across multiple vectors and boundaries.

Webinar polling results

During this webinar, we have run some polls to gain more insight into the attendees' perspectives on Flexr. Below is the summary of the key points uncovered by this polling, which also helps inform the results of the Flexr consultation:

- Most webinar attendees had read the Flexr consultation.
- Attendees said they find the following datasets provided by Flexr to be the most useful:
    - DER Data,
    - Network real-time data, and
    - Network asset data.
- Finally, of the Flexr benefits listed, attendees believe the service will have the most significant impact on making data more open, transparent, and accessible, as well as on standardising data and improving its consistency.

Attendees

In total, 159 people from across the energy industry attended this webinar.

Feedback from attendees

- We collected feedback from attendees through an online post-webinar survey.
- 100% of the respondents found this webinar useful.
- Overall, 80% expressed that they were either "very satisfied" and "satisfied" with the event.
- Finally, 80% of respondents said that they are "extremely or very likely" to attend a similar event in the future. We will process and incorporate constructive feedback data into our preparations and themes for future webinars.

Contact details

- For more information on ElectraLink's Spring Webinar Series, please visit our website or contact communications@electralink.co.uk
- For queries about Flexr and its development, please email: flexr@electralink.co.uk
- Follow us and keep checking our social media channels for updates, reminders and news on Twitter and LinkedIn.
- Keep checking our website for more information on governance services, our work, software and data solutions: https://www.electralink.co.uk/