

SHE TRANSMISSION STAKEHOLDER WORKSHOPS

MAY 2019

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INTRODUCTION

On 7 May 2019, SHE Transmission hosted a stakeholder workshop to seek feedback from stakeholders to help inform its proposals for the RIIO-T2 Business Plan. The workshop was aimed at gathering feedback from its stakeholders on the following topics: customer connections; innovation strategy; and whole systems.

The workshop took place at the HVDC Centre in Cumbernauld. The event consisted of three presentations given by SHE Transmission representatives, each followed by round-table discussions. Quantitative feedback was gathered via feedback forms which stakeholders were asked to complete at the end of each session. In addition, a webinar was hosted on 9 May 2019, giving those stakeholders who were unable to attend the event the opportunity to give their feedback remotely. Data and feedback from the webinar session have been included where appropriate.

SHE Transmission instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the workshops and take notes of the comments made by stakeholders.

Every effort has been made to faithfully record the feedback given. In order to encourage candour and open debate, comments have not been ascribed to individuals. Instead, notes have been assigned to the type of organisation that each stakeholder represents.



EXECUTIVE SUMMARY

The workshop began with an introductory presentation from Lauren Logan, Commercial Policy Manager.

WORKSHOP ONE: CUSTOMER CONNECTIONS

The first feedback session started with a presentation from Lauren Logan, Commercial Policy Manager. After this presentation, stakeholders were asked to give their feedback. The key points raised by stakeholders were as follows:

- The majority of stakeholders reported that they were 'satisfied' with SHE Transmission's policy initiatives to deliver each of its three ambitions. Stakeholders were most satisfied with the initiatives in the area of delivering an optimal connection solution, which includes digitisation measures, rating their satisfaction at 4.1 out of 5 on average.
- In general, stakeholders agreed that Ofgem should introduce an incentive for Transmission Operators (TOs) to continually improve their service for connections customers, with only 4% of respondents disagreeing. While some felt that this would force TOs to innovate, those who disagreed felt that an incentive should not be needed as this should be business as usual for TOs.
- There was a mixed response to SHE Transmission's proposed placement survey question to measure customer satisfaction, with stakeholders rating their agreement at 3.6 out of 5 on average and the majority describing their position as 'neutral'. Whilst some felt that it gave SHE Transmission the opportunity to collect valuable feedback, others felt that the questions were overly simplistic and therefore may not capture valuable feedback.

WORKSHOP TWO: INNOVATION STRATEGY

The second feedback session was introduced with a presentation from Andrew Urquhart, Commercial Manager, on the development of SHE Transmission's Innovation Strategy. After the presentation, stakeholders were asked to give their feedback. The key points raised by stakeholders were as follows:

The vast majority of stakeholders either strongly agreed (32%) or agreed (64%) with SHE Transmission's proposals to undertake a cost benefit analysis (CBA) to design and deliver potential innovation projects. However, stakeholders had several suggestions around how SHE Transmission could use CBA effectively, such as ensuring that analysis is ongoing and does not focus exclusively on the financial benefits, instead taking factors such as the low carbon economy into account.

- The majority of stakeholders (72%) agreed with SHE Transmission's proposed funding selection process for innovation projects, although there were calls for greater visibility of the funding process in the future. Stakeholders urged SHE Transmission to take steps to ensure that the funding process allows for projects to be discontinued if necessary and it was commented that providing funding at the end of a project may result in it being pursued irrespective of whether or not it is meeting its objectives.
- Stakeholders were split as to whether SHE Transmission's proposals do enough to
 ensure that successful innovations get transferred to Business as Usual, with half of
 respondents agreeing with this statement but 38% describing their position as 'neutral'.
 Stakeholders put forward a number of suggestions to improve this process, including
 more visibility on successful and unsuccessful innovations for stakeholders and
 improved internal communication.
- Most stakeholders seemed to have limited experience engaging with the SHE Transmission innovation team. When asked to rate the level of engagement they had had, the average score across the groups was 2.4 out of 5. Those from small and medium-sized enterprises (SMEs) in particular were keen for greater engagement with the team, pointing out that establishing a relationship with the company and attending innovation workshops can be a significant challenge for small businesses.
- Face-to-face meetings were the preferred method of engagement for workshop attendees (4.4 out of 5) and webinar participants (5 out of 5). In general, stakeholders advocated a range of engagement methods, with all five options (meetings, phone calls, workshops, online consultations and webinars) receiving some support.

WORKSHOP THREE: WHOLE SYSTEMS

The final session was introduced by Bless Kuri, Head of Transmission System Planning Manager, and Qi Tang, System Planning and Investment Engineer, who explained SHE Transmission's proposed approach to whole systems. Afterwards, stakeholders were asked to give their feedback. The key points raised by stakeholders were as follows:

- On average, stakeholders rated their level of knowledge of whole systems at 3.4 out
 of 5. Most stakeholders (65%) felt that the concept of whole systems had been
 explained well, with a number of stakeholders commenting that the workshop had
 improved their level of understanding.
- Most stakeholders strongly agreed (23%) or agreed (59%) with SHE Transmission's level of ambition for whole systems and the majority (62%) were satisfied with the company's objectives in this area. However, some felt the company should strive to be even more ambitious and a number of stakeholders felt that SHE Transmission, and

- the industry in general, needed to take a more proactive approach and start acting now.
- Stakeholders generally described themselves as 'satisfied' with the four principles identified by SHE Transmission (64%). Collaboration was seen as crucial, and future consumer demand for electric vehicles (EVs), and decarbonisation were put forward as additional principles for the whole systems approach.

EVENT FEEDBACK

After the Cumbernauld workshop, stakeholders were asked to complete a short feedback form. Some of the key findings are shown below:

- Seventy-one percent of stakeholders described the workshop as 'interesting', with 29% opting for 'very interesting'.
- All stakeholders agreed (47%) or strongly agreed (53%) that they had the opportunity to make their points and ask questions during the workshop.
- The majority of stakeholders (94%) agreed that the right topics had been covered on the day.
- Stakeholders described the way the workshop was chaired by facilitators as 'good' (16%) or 'very good' (84%).
- All respondents indicated that they would like to receive the post-event report as well as invitations to similar events in the future.



PARTICIPANTS

A total of 18 stakeholders attended the workshop in Cumbernauld and a further 12 participated in the webinar. In total, 22 organisations were represented, although three participants on the webinar did not state the name of their company. The organisations which participated are shown below:

ABB Ltd Nortech Management Ltd

ABO Wind National Grid

Aquatera Ofgem

Balfour Beatty Open Grid

BayWa r.e. Power and Renewables

Corrie Construction Powerline Technologies

General Electric RES

Infinergy Scottish Power

Local Energy Scotland Siemens

LSTC Ltd The Cyberhawk

Morgan Sindall Xero Energy

WORKSHOP ONE: CUSTOMER CONNECTIONS

The first workshop began with a presentation from Lauren Logan, Commercial Policy Manager, who informed stakeholders of SHE Transmission's progress on its RIIO-T2 Business Plan development. After giving a recap on what's driving the changes in the upcoming price control period, she explained the company's RIIO-T2 Commercial and Connections Policy plans and proposals, outlining the company's policy initiatives under its three ambitions: an optimal connection solution; tailored customer services and products; and an accessible connections process. She then explained the company's proposals to introduce placement survey questions as a means of measuring success, raising the potential that this be incentivised to encourage continuous improvement.

After the presentation, stakeholders were asked to give their feedback in a round-table discussion session. At the end, to provide some quantitative feedback, stakeholders were asked to complete a short feedback form. The feedback below has been summarised according to the questions asked during the discussion session, with the results from the feedback forms supplementing the feedback where appropriate.

SUMMARY OF FEEDBACK

Stakeholders expressed support for SHE Transmission's policy initiatives in all three of its ambition areas: an optimal connection solution; tailored customer services and products; and an accessible connections process. When asked in the post-discussion survey how satisfied they were with the company's proposed initiatives, no stakeholders said that they were dissatisfied with any of the initiatives.

Of the three connections ambitions, an optimal connection solution received the most support from stakeholders. The proposed policy initiatives in this area involved digitalisation, with deliverables including a live availability map and online portal. Almost three quarters of attendees said that they were 'satisfied' with these policy initiatives (73%), with around a fifth of participants saying they were 'very satisfied' (19%). The remaining 8% answered 'neutral' to this question. The digitalised information and tools were welcomed by stakeholders as it was hoped that they would help SHE Transmission to be more proactive in sharing information with its customers. However, stakeholders felt that before it could be a success, digitisation would require a greater level of collaboration between TOs, distribution network operators (DNOs), as well as closer communication between distribution system operators (DSOs) and electricity system operators ESOs.

The main benefit of digitalisation was making information and documents easier to find and access, thereby saving businesses time and money, which would be particularly helpful for

SMEs. The majority of stakeholders also felt that the ability to access real-time information on capacity maps would be a significant advantage, although some questioned whether disclosing capacity could have a negative impact, causing developers to focus on a particular area. A few stakeholders felt that the quality of information was more important than real-time availability, explaining that they are interested in obtaining high-quality data for their own analysis. The cost estimation tool and the curtailment calculator were particularly welcomed, although some questioned how accurate the estimates would be. Stakeholders also felt that the portal had the potential to be a useful tool, particularly if it could be used to share documents among a wider project team, such as contractors.

There was a high level of interest in the new products and services put forward by SHE Transmission to meet its ambition in the area of tailored connections products and services, with most stakeholders stating that they were either 'very satisfied' (15%) or 'satisfied' (62%) with these initiatives. Stakeholders felt that the offer in principle could give them the flexibility to explore connections options, which was particularly appealing given that important details, such as turbine size, often change in the early project stages. Queue management was also seen as a welcome opportunity to make the connection process more flexible, although it was recognised that it could be challenging to achieve collaboration between different sectors. Stakeholders welcomed SHE Transmission's proposed outage solution product, especially in light of the serious implications of outages for developers. It was felt that contractors could help shorten the construction period to minimise outages if they were given an opportunity to innovate, which required earlier engagement and longer tender periods.

Stakeholders were generally in favour of policy initiatives around enhanced engagement, which SHE Transmission had developed to achieve an accessible connections process, with the majority of stakeholders stating that they were 'satisfied' (65%) or 'very satisfied (9%) with these policy initiatives. Stakeholders recognised the benefits of collaboration between industry players such as TOs, DNOs and the ESO as well as between customers in the connection queue, although commercial sensitivities were a common concern. Automated analysis was seen as a potential solution to this problem.

The majority of stakeholders (82%) either 'agreed' or 'strongly agreed' with the principle of Ofgem introducing an incentive for TOs to continually improve their service for connections customers, with only 4% disagreeing with this suggestion.

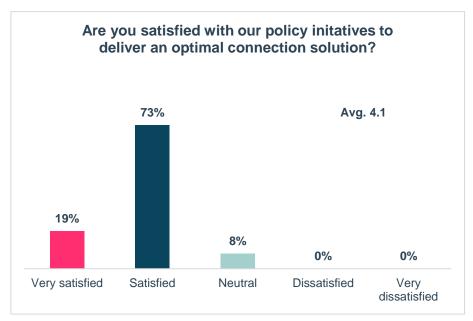
Although the largest proportion of stakeholders (48%) 'agreed' or 'strongly agreed' with the proposed placement survey question to measure customer satisfaction, opinion was divided, with almost half (44%) describing their position as 'neutral'. Some felt that the survey questions would give stakeholders the opportunity to feed back to SHE Transmission, in turn enabling

the TO to justify its plans to Ofgem. On the other hand, several stakeholders felt that as surveys usually attract people who have had negative experiences, they may not capture accurate feedback. The survey questions themselves also received some criticism, as they were viewed as overly simplistic. Stakeholders were in favour of providing targeted feedback after each stage of a project while the experience was still fresh in their mind, and they advised SHE Transmission to ensure that they contact the person who is best placed to give feedback for each project, which in some cases may be a consultant if they have been heavily involved. Ultimately, stakeholders recognised that SHE Transmission needs to use a variety of engagement methods, agreeing that surveys were no substitute to talking to a SHE Transmission representative over the phone. This was reflected in the feedback provided in the post-discussion survey, with stakeholders expressing some level of support for all five engagement methods (meetings, phone calls, workshops, online consultations and webinars).



STAKEHOLDER FEEDBACK

Q. Are you satisfied with our policy initiatives to deliver an optimal connection solution?



- "I think SHE Transmission have listened and they're going to put a process in place. The data that will be on the portal is critical, but there are assumptions in there and vague descriptions. They've taken on a challenge in keeping that live with so many people in the background. I'm hoping that the developers will realise that SHE Transmission will be doing their best and that things change over the course of a project. There might be outages, or landowner disputes. It's a bit of a moving target and keeping the data fresh in the system will be a huge challenge." Infrastructure / engineering representative
- "It is always very difficult trying to find the document you're looking for. There are often
 document managers in big organisations, with the amount of information that's
 needed. There could be a portal that could have the document you need stored for
 you." Developer / connections representative
- "We could be sharing documents between the various partners in a project team. For example, the contractors may need access to some documents on the portal. I would be interested in ways to innovate and improve; I would be open to discussions."
 Business representative
- "The plan looks interesting; I'm interested to see how it develops. The current set up is very vague. Transmission upgrade updates have five stages, sometimes there are issues and they just sit [there]. There's no real-time information." Developer / connections representative

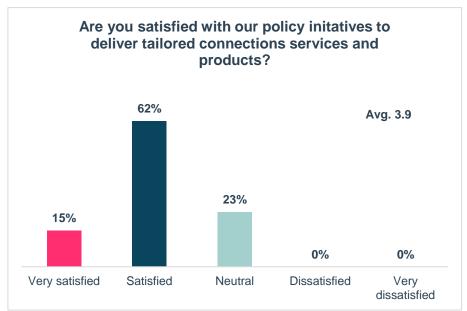
- "About the tools, if the online systems are self-service, it relies on the information being
 fresh and current. Your existing capacity maps take too long between updates; it's
 every six months or a year. It's not useful if it's out of date; the information needs to be
 there straight away." Infrastructure / engineering representative
- "Could it be counter-intuitive to disclose capacity? You could have a mass influx of developers, rather than in other areas." Infrastructure / engineering representative
- "Generally, after some discussion, you can find out what the capacity is. Although live would be quicker, the key thing is what it's going to take to change that capacity and how long it will take. What's already planned? That information would be useful."
 Developer / connections representative
- "Cost estimation. In the history of the network, how are we going to come up with real costs? How realistic is it to come up with a cost early on? Do you envisage that it will include local and deep reinforcement? It's a cumulative effect." Infrastructure / engineering representative
- "Making the data available and accessible offline is another issue. It's hard to get network data for analysis. A connectivity model with all of the electrical characteristics, for example. People want embedded models. Is that something you see as part of this? There are conversations on DSO / ESO exchanges of data; we know there are disconnects internally." Infrastructure / engineering representative
- "The curtailment calculator sounds like a good idea, especially for flexible connections, but it's only valuable if you can reduce the risk in terms of what the curtailment would actually be. Would there be any guarantees? It's difficult to overcome unquantified curtailment as a developer." Developer / connections representative
- "It is good to see that there will be a cost estimation tool and an expected curtailment calculator, but we need to know quickly. Those tools are needed to work out budgets and as a small company, that can save us a lot of money. There's no time to trawl through everything looking for the information you need." Developer / connections representative
- "All these areas I would support. The drive for an online calculator and that sort of thing
 is really good. The challenge is working together as ESOs, TOs, DSOs and DNOs."
 Energy / utility company
- "We were making a grid connection and we had to find out everything for ourselves. You have to ask the right question to get the right response. There needs to be a proactive phone call from you to say: 'are you aware of this?' If you've got a new site and you're developing a connection, you're having to ask, 'can we increase the

connection?'. There should be tools to say we're looking at that site: what is available there?" Developer / connections representative

Feedback form comments

- Need collaboration with ESO. Possibility for DNOs to optimise there.
- The idea of the live portal and data sharing is of great interest. I would be intrigued to know how you vet who can access this data.
- Good approach to digitalisation.
- Definitely a step in the right direction. Focus on sharing of data that is machine readable. For example, something similar to the International Electrotechnical Commission (IEC) systems would be a welcome addition.
- Devil will be in the detail.
- Needs to be current and accurate; regular updates.
- Looking forward to the online portal.

Q. Are you satisfied with our policy initiatives to deliver tailored connections services and products?



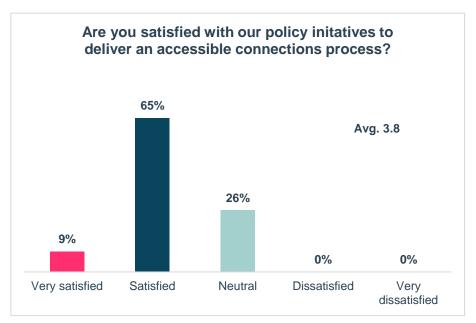
- "I like the idea of the offer in principle but this needs to be consistent thing." Business representative
- "Would the cost of securing an offer in principle be different to securing a standard offer? That would be really interesting to us." Developer / connections representative
- "An offer in principle is a great idea for when you haven't formulated plans yet, i.e.
 when it's in development but the end connection is not ready. You've got a big

- connection sitting on your desk, but things are changing, turbine sizes are changing." Developer / connections representative
- "The queue management is interesting. When a development is stuck in the planning stages and you've got consent, you end up having to compress the construction period. When you contract construction, that's when mistakes get made. You can't influence the planning process. So, it needs some flexibility and it's good that you're recognising that. You have discussed postponing the connection and agreed that you will need to do a modified application. It costs money, but it's not our fault. It would be good to change that, so developers aren't penalised for what they're not in control of." Developer / connections representative
- "There has been work on queue management in RIIO-T1. There's a lot of sensitivity.
 Collaboration and working with developers is key. It's hard in commercial operations to work together too much but being flexible and working with the other sectors helps make things better." Energy / utility company
- "Outages are really serious for developers as they cost the companies a lot of money. When it comes to outage solutions, I'd hope the intention is to engage with construction companies to accelerate the works and shorten the outages. If you engaged with your construction partners early, you could get innovative ideas on how to shorten the construction period. At the moment, you do it through the tender and then have a four-week turnaround. If you want us to shorten outages, then you need to engage with your contractors earlier on." Infrastructure / engineering representative
- "Planning a large project can mean knowing 4–5 years ahead of an outage. What would be the way to optimise that advanced notice, how early is too early to start engaging with contractors?" Energy / utility company
- "We need to be in on the outage planning stages to plan ahead. Your construction tenders are always based on the lowest cost model. However, if you take into consideration the loss of money as a result of the outage, better headway could be made." Infrastructure / engineering representative
- "What about a tiered tender return? How do you build the financial cost of an outage into the tender process, so it becomes part of the decision-making? I agree completely, good idea." Energy / utility company
- "Outage planning is becoming more fixed, so we need to break down the barriers."
 Infrastructure / engineering representative
- "To innovate, you need time to sit down and think about it. Two weeks to tender is not long enough." Infrastructure / engineering representative

- "What options could be put on the table earlier in the tender process?" Infrastructure / engineering representative
- "As part of pre-application meetings, we would like to engage and have a conversation with your development / property team around the grid connection risks." Webinar participant
- "We would like to see the details of how you plan to engage with customers during offer preparation stage. Where can we find that information?" Webinar participant
- "Collaboration is the key part during offer preparation stage to ensure developer gets
 what they expect (and perhaps agree extension to offer issue timescales to
 accommodate customer requested changes)." Webinar participant
- "How does your queue management proposal fit with the work being undertaken by the Energy Networks Association (ENA) on this topic and do you think it is necessary to have a consistent approach to queue management across GB?" Webinar participant

- The current ideas are promising. Re: the portal, however, a key aspect that I think has been missed is how this works when you also consider that we need to interact with National Grid Electricity System Operator (NGESO) as well as yourselves.
- Useful to look at how much of this could be automated.
- Would welcome further discussion on queue management and how this will work in practice, in terms of data sharing and competition within the place of the queue.
- Again, great ambition, but the way it works will be criticised.
- Transparency a good thing moving forward.

Q. Are you satisfied with our policy initiatives to deliver an accessible connections process?



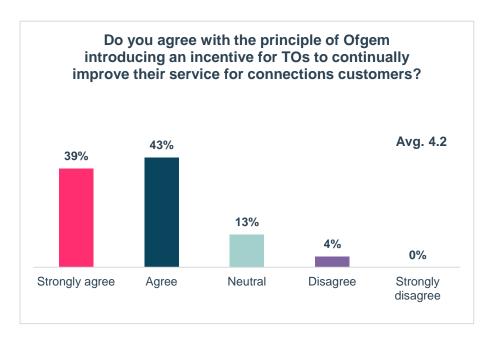
- "Where do you draw the line between the role of a TO and a normal commercial operation, in terms of customer advocacy, for example? Some of these could stand outside the role of the TO." Business representative
- "A more open process would be great, collaboration across the industry, with ESOs,
 TOs and DNOs. But there are obviously commercial sensitivities involved." Energy /
 utility company
- "How much automation would there be? That might avoid accusations of favouritism. Could there be automated analysis, for example? A lot of it goes down to data mining and automation. Somebody else could apply different assumptions to the same data, so better analysis may give a company a competitive advantage. As long as you provide the data." Infrastructure / engineering representative
- "Firstly, it's important to align things with National Grid. Are you encouraging some kind
 of trading behind the meter of capacity? You have to think practically." Infrastructure /
 engineering representative
- "What about existing big users or generators having someone else come in and affect the way it feeds into the grid?" Developer / connections representative
- "That's where I see the attraction: the big energy users will be saying 'bring us some storage, and we'll pay you for that'. Maybe that will benefit the whole system, but you have to be careful that you are going to attract that process and it won't just be two new customers coming today." Developer / connections representative

 "It links back to queue management. Is there any way to make the queue management data and connections between people in the queue possible? Sometimes you want to speak to people in the queue, not necessarily a new person." Developer / connections representative

Feedback form comments

- Should some of these be outside of TO role?
- Single point of information would be invaluable.
- Queue management / visibility is a good idea. Again, who can see this? Is it only for people in the process? Is it something open to all, investors, etc.?
- Again, would be interested in hearing more on collaboration of connection.
- This service will only be of value if the information contained on the website is up to date.
- Collaboration across customer to constructor would be useful.
- Any improvement welcomed.

Q. Do you agree with the principle of Ofgem introducing an incentive for TOs to continually improve their service for connections customers?



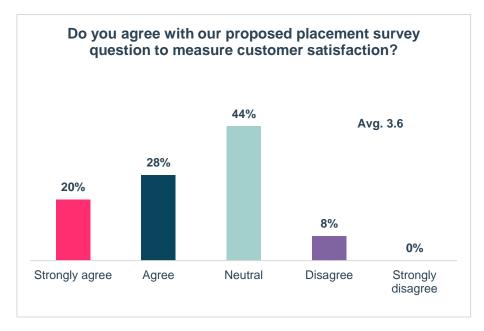
"You've got to be able to deliver it, but still demonstrate what the customer wants. This
helps justify the money you are allowed to spend so that Ofgem allows it; it legitimises
it." Energy / utility company

• "If it's not said by your stakeholders, then it's not done because shareholders won't spend money on something if they don't know it's wanted." Energy / utility company

Feedback form comments

- Need to understand Key Performance Indicators (KPIs) needs more meat on the bone (!).
- Important to legitimise our investment in this area.
- Yes, it forces the TOs to innovate.
- I believe this should be business as usual and not incentivised.
- Would be interested how an incentive would apply across the board, or whether the expectation is that this would be bespoke?

Q. Do you agree with our proposed placement survey question to measure customer satisfaction?



- "Uber and Netflix are very simple, but this is a complex process. I'd be happier having someone I could call who could sort out the problem." Infrastructure / engineering representative
- "With the DNO more than transmission, the biggest attraction is someone on the end
 of a phone. The app or the portal are fine for getting a separate type of feedback, but
 with the overall process, you want to have a chat about it. You need different
 mechanisms of feedback." Developer / connections representative

- "I am not keen on the questions. There should be more specific, technical questions.
 If we've got a problem, we just go to the key account manager to sort it." Developer / connections representative
- "The survey questions need more meat on the bone." Developer / connections representative
- "It needs to be more in depth. Don't call it a survey because that turns people off."
 Infrastructure / engineering representative
- "It sounds like it's too basic, like it's just ticking a box. It should be more tailored."
 Developer / connections representative
- "Make it clear how many questions there will be at the start. When you don't know how
 many questions you are going to get, you stop because you don't know how long it's
 going to take." Developer / connections representative
- "I think it attracts people when they've got a negative response." Infrastructure / engineering representative
- "The people who normally reply to these are the most disenfranchised. Is it also worth reviewing the supply chain?" Business representative
- "We run the SSE customer app, and the app store reviews are generally, 'my power's not on, one star'. You also need a critical mass before these feedback things become useful. In business to business, is someone authorised, or do they need an approval process? The devil's in the detail." Infrastructure / engineering representative
- "The current satisfaction survey is quite open-ended. Will the three questions be the last feedback with stakeholders, or will it be ongoing?" Government / government body representative
- "On the distribution side, once we've completed a connection type for a client, sometimes we'll pick up the call asking for feedback and I feel it's a bit of a crossover when consultants are involved. Some of the questions are open ended so it's hard to give the feedback." Developer / connections representative
- "It's easier to get the feedback after each stage progressively. Sometimes it's a month afterwards, and you've forgotten. It's hard to go back to it." Developer / connections representative

- Needs to be specific to each individual customer, not a skype-quality survey.
- Regarding the survey, I think it may be better placed if it was specifically handed to the companies it was aiming to deliver to. Questions to be more reflective.
- Qualitative feedback is important too.

- The placement will be crucial on how it's fed back. Could the customer manager take some responsibility for identifying where there may have been issues?
- Needs to be more substantial.
- I don't believe you can get sufficient detail from the type of survey proposed.
- Needs to be a defined set of questions, perhaps established at project commencement.
- Could also survey supply chain mangers.

Q. Do you have any other comments in relation to commercial connections? Are there any other policy initiatives we should be doing?

- "In general, it sounds quite positive; it's opening a door and not closing it." Developer / connections representative
- "SPT and National Grid: quite a lot of your data will depend on them, so I don't know how it's aligned, but it's something to think about. You're all connected." Infrastructure / engineering representative
- "The developers, too: there's a qualification process or gate process to make sure it's a real application, not just blocking other people." Infrastructure / engineering representative
- "We would like SHE Transmission to develop a process and technical specification for contestability of transmission assets. Haven't seen this is covered in your proposal." Webinar participant

- Collaboration. Collaboration.
- Those who manage the network data will require direct access to decision makers to keep the information fresh and relevant.
- Engage in customer reviews rather than a questionnaire.
- Engage construction contractors early in the process to ensure sufficient time to develop innovation and to understand SHE Transmission /customer requirements / expectations.
- National infrastructure improvements for reaching 2030,40,50 targets should override
 connection applications as a rationale for upgrading our grid. This needs to come from
 UK Scottish government and Ofgem.
- I think SHE Transmission are taking a sensible approach to RIIO-T2.
- Un-proportional level of liabilities are a key issue for pipeline developments. Do you have something lined up to address that?

Q. Any other comments?

- A live system would be preferential, but to keep it live would be a task in itself, since the process is ever-changing. A good thing in principle.
- Developers will need to be carefully managed to ensure they do not misuse the system for their own benefit.

WORKSHOP TWO: INNOVATION STRATEGY

The second feedback session was introduced with a presentation from Andrew Urquhart, Commercial Manager, about the development of SHE Transmission's Innovation Strategy. He gave an overview of the innovation life cycle, which takes new ways of working through stages such as idea generation, cost benefit analysis and funding, through to adoption as Business as Usual. He also outlined how SHE Transmission plans to engage with stakeholders on innovation.

After the round-table discussion, stakeholders were asked to provide quantitative feedback and written comments to build on the questions asked during the session. The findings from this questionnaire have been included below where appropriate.

SUMMARY OF FEEDBACK

There was a good deal of support for the proposals to include a cost benefit analysis (CBA) for potential innovation projects, with 64% stating that they 'agree' with this approach and 32% opting for 'strongly agree'. The remaining 4% answered 'neutral' to this question. Several stakeholders noted that their organisations use a similar cost benefit analysis to design and deliver projects and that this is fairly standard practice. It was also stressed that CBA should be ongoing rather than completed at the end of a project to ensure that the innovation is meeting its original purpose and makes financial sense. Notwithstanding this, it was commented that there was a worry that there would be too much focus on the financial benefit of new innovations; something that could hinder creativity by overlooking other benefits that the project could deliver. To combat this, areas of strategic importance to SHE Transmission were suggested, such as driving the low carbon economy, should be considered as part of the process. Stakeholders also pointed out that it was important to consider the full life cycle of costs and specify how the cost benefit is delivered to the customer.

The proposed funding selection process proved popular among stakeholders, with 72% of stakeholders stating that they 'agree' with this process. Stakeholders gave a number of suggestions for improving the process to ensure that it encourages meaningful innovation. For example, some stakeholders pointed out that it can be counterproductive to allocate funding early on, when the benefits of a project are not yet clear. In light of this, one stakeholder felt that using binary 'yes/no' questions to determine the funding level wasn't helpful. A number of stakeholders felt that the funding process should allow for projects to be shelved if they are no longer set to achieve their original purpose, pointing out that providing funding at the end of the project incentivises innovations to be pushed through regardless of their merit and could actually be detrimental to innovation. Stakeholders also felt that some funding mechanisms such as the Network Innovation Allowance (NIA) can encourage network operators to 'reinvent

the wheel' rather than adopt an innovative solution implemented by another utility. They also asked SHE Transmission to provide greater visibility of the overall funding process, with ongoing checks in place to ensure that the intended benefits are being realised.

In the post-discussion survey, over half of stakeholders agreed or strongly agreed that SHE Transmission's proposals do enough to ensure that successful innovations get transferred to Business as Usual (BAU) (54%), although a relatively high proportion said that they felt 'neutral' about this (38%). It was commented that that SHE Transmission should put processes in place and use a joined-up approach to encourage further progress in this area. For example, stakeholders urged SHE Transmission to bring the project managers on board, as they may be put off by the extended timeframes and costs involved with new innovations. Stakeholders also pointed to the importance of tracking successful innovations and setting up mechanisms that capture innovations established on-site to enable them to be transferred to other projects, as these new ways of working can be lost all too easily. It was also felt that innovation needs to be proposed early in a project life cycle in order to support BAU transfer.

When stakeholders were asked to indicate how much they have already engaged with the SHE Transmission innovation team, the average score was 2.4 out of 5, suggesting that engagement levels have been relatively low in this area. However, some stakeholders reported that they had worked with SHE Transmission on innovation, including on a project to reduce the use of sulfur hexafluoride gas (SF6), which is particularly harmful to the environment, if it escapes. During the discussion, it transpired that most stakeholders were not familiar with the current innovation webpage.

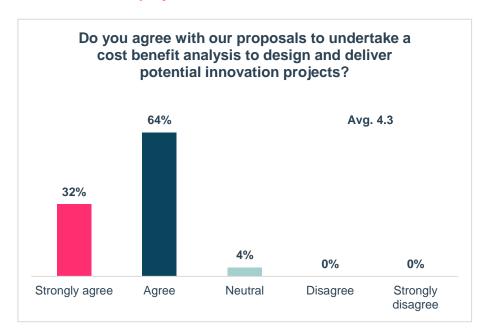
In terms of how stakeholders want to engage with SHE Transmission, face-to-face meetings were the most popular method of engagement for workshop attendees (4.4 out of 5) and webinar participants (5 out of 5). In general, innovation workshops were seen as an opportunity to engage with the company in the early stages, although stakeholders stressed that at this stage, they were interested in hearing about the problems that SHE Transmission were looking to solve and were reluctant to share ideas with their competitors in the room. Stakeholders raised a number of concerns that would need to be addressed, including the procurement process, which was seen as difficult to navigate, and intellectual property issues. There was a lack of trust among some SMEs following experiences of projects being taken inhouse after an initial proposal, leading to lost time and money for the potential supplier. Smaller businesses felt that the process sometimes worked against them, explaining that it could be difficult to approach a network operator and access the workshops. Stakeholders suggested that networking events with a 'speed dating' format could resolve a lot of these

issues, enabling stakeholders to hear about the problems SHE Transmission is looking to solve and pitch solutions out of earshot of competitors.

It was widely felt that better communication and visibility would improve the innovation process and optimise stakeholders' contributions. Stakeholders felt that wider information on industry developments would be helpful, as it would allow them to focus their efforts on useful areas. It was suggested that the company could showcase innovation projects to achieve this, and stakeholders pointed out that it was equally important to disseminate learning from unsuccessful or smaller-scale projects. Although stakeholders were happy that innovation projects be published in an annual report, it was felt that the protection of intellectual property was of paramount importance. Stakeholders also called on the company to share learning points with stakeholders via a repository and called for transparency on how SHE Transmission values factors such as safety and the environment so that businesses can tailor their proposals accordingly. Stakeholders advised the company to improve its internal communication and foster a culture of sharing innovative practices, which would enable innovation to be transferred to BAU.

STAKEHOLDER FEEDBACK

Q. Do you agree with our proposals to undertake a cost benefit analysis to design and deliver potential innovation projects?



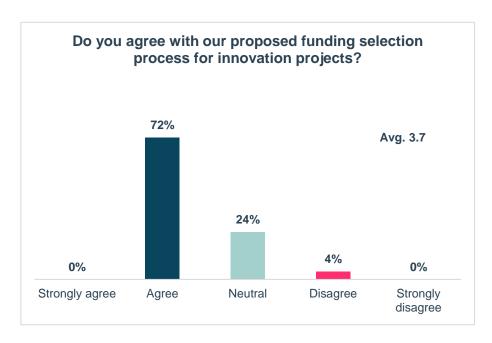
"Innovation is brilliant, but it has to have a positive effect on the end numbers. If it
doesn't return on investment, I'm not sure how many people will accept it." Developer
/ connections representative

- "The CBA is exactly the same kind of thing we use. You've got to continually check that you are achieving the benefits you said you would get at the outset. For me, the question is how do you keep checking throughout the process? You have to keep checking your tender costs, from a supplier point of view." Business representative
- "It's the same at our company too. I would say that engineers in general tend to understate risk. The other point is that if you have a sunk cost, it is a sunk cost, so you need to think about your CBA; you can't undo it." Business representative
- "Does using a cost benefit analysis model potentially restrict creativity? You don't
 always know if something is going to have a benefit. Do we need something to
 encourage creative thinking without the cost being a factor?" Energy / utility company
- "There needs to be an ability to account for things that are of 'strategic' importance. There wouldn't necessarily be a business case at the moment because it's too new. There has to be a bigger mandate than just the economic outcome. Maybe the climate change driver is as important, if you're just focusing on the economic benefits then other the benefits are appropriately represented." Energy / utility company
- "There should be a cost benefit, but it could be broken down into different factors and compared with other projects to really see the benefits. This is what you're charged at the moment, but this is what you'd be charged if this new technology was used."
 Business representative
- "If there's a cost benefit, does that flow back through to the customer?" Infrastructure
 / engineering representative
- "It would be good to calculate the full life cycle of costs. By the time you do the full life cycle, was it worth the investment?" Infrastructure / engineering representative
- "If there isn't a typical timeline for the four or five stages, can you give us some examples? Is it two, five years? Everything is changing in those times: how do you take on board what has been innovated in the interim?" Developer / connections representative

- No official route to present their affairs.
- Yes, it should aid in filtering viable solutions.
- Better to have continuous CBA than to get to the end of an innovation project to find it doesn't make sense financially to run.
- [Technology Readiness Levels] TRLs are not the only deciding factor and in some cases not applicable.

Needs strategic view to stimulate and identify targets, SF6 example: tech readiness of
 1, but very important.

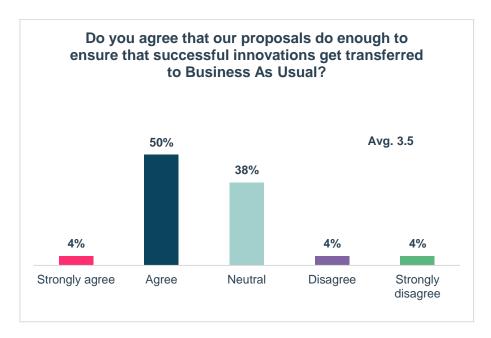
Q. Do you agree with our proposed funding selection process for innovation projects?



- "The first question in the funding flow chart is too binary. There needs to be some more fluidity here, as I don't think it is a case of two options at that stage". Infrastructure / engineering representative
- "It's a hard line. You've got to be willing to invest to stimulate innovation. Thinking about how it's funded too early can stop it because the benefit might not be obvious straight away." Infrastructure / engineering representative
- "Do you have a set budget for innovation? Do projects have to compete with other projects? How would you manage that when it comes down to the returns?" Developer / connections representative
- "How visible will the process be? Other stakeholders might have ideas that could accelerate it. How do they get in and help?" Infrastructure / engineering representative
- "You come up with innovation and you don't get funding until it's actually built, it gets to the stage where you have to build it just to get your funding. How does that work with SHE Transmission? Some people get so emotionally attached to an innovation, but it might be time to put it away." Infrastructure / engineering representative
- "[With] the CBA and funding solutions based on the Technology Readiness Level (TRL), just applying TRL might exclude certain things." Infrastructure / engineering representative

- [We would like] More visibility on why innovation gets shelved or not approved; more opportunities to engage and provide solutions.
- This flowchart should also include decisions relating to strategic objectives, sustainability, climate change obligations, etc., to widen the selection criteria.
- Doesn't demonstrate strong enough incentives to innovate. [It] also doesn't include 'customer' benefits.
- A careful process needs to be established to enable engagement with innovators, and not restrict them to just being a contributor.

Q. Do you agree that our proposals do enough to ensure that successful innovations get transferred to Business as Usual?



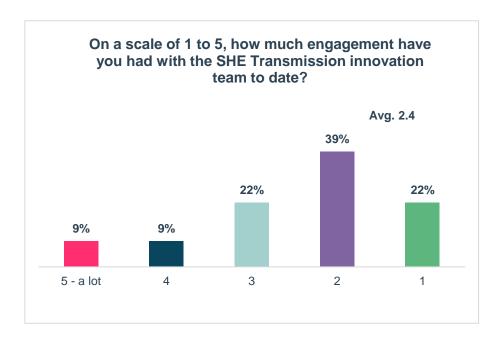
- "The innovation you're talking about happens on a daily basis when you're on-site. Is there a mechanism that takes BAU and applies it to other projects?" Developer / connections representative
- "We've done a number of Network Innovation Allowance (NIA) projects. In general, they work well for us working with a utility, but you'll go to another network operator and they'll say, 'that's an SHE Transmission thing'. It's easy for someone to reinvent the wheel with their own small software company with their own innovation money. So, the harder thing for us is getting a Business as Usual thing approved for other utilities.

- It goes down the full procurement process, and we don't have the middle management that deals with that." Infrastructure / engineering representative
- "When you bid for a project, normally there are tech hurdles, and then price plays the majority factor. If we had a product that was, say, £50 more expensive but safer, how do you evaluate that from a BAU process and is that transparent enough so that people can see you value safety, environment, etc.? We need to understand how you value these things. If we have an understanding of how you value a particular factor, that will help us to innovate." Business representative
- "Procurements are costly. It might not be transparent what will weight it. Is it a twostage process where you get proposed a problem and then the innovation gets shortlisted?" Developer / connections representative
- "Do we track the success rate on these innovation projects? We want to see how things come out in the end." Developer / connections representative
- "Is there a central repository where learning points come out? Sometimes we come up with an idea, then have to root through all the previous projects to find out if it's been done before. It might have already been tried, but the information on the website is absolutely impenetrable. There was a call for innovation projects under the RIIO-T1 scheme. Is there anything presented to industry about what's actually needed to be worked on, so people can focus their new ideas? You should broadcast to the wider community." Infrastructure / engineering representative
- "It comes down to how you evaluate the procurement of the equipment. The cost over years can easily outweigh the initial investment. Things like if the new technology helps avoid penalties; there's all different factors in the cost. Making people do the innovation at the procurement stage would just become a box-ticking thing." Business representative
- "Is it incentivised by Ofgem? How do you get people to take the risk?" Business representative
- "How do you turn that from innovation to delivery? Introducing a new way of doing things might put an extra three months on a programme. It adds risk and uncertainty.
 So, you need to get your project managers on board with this, otherwise they are just not going to take the risk." Infrastructure / engineering representative
- "We need to be bringing it in early enough that it's achievable, not coming at the eleventh hour looking for projects to apply the technology to." Infrastructure / engineering representative

- "We've got a system where you fill out a form that goes to a committee to review. That
 person whose idea it is is included all the way through the process." Infrastructure /
 engineering representative
- "Internal social media. People share suggestions and it spreads. Communication. It's a culture thing." Infrastructure / engineering representative
- "We've just moved over in terms of social networking to Yammer. It's the same kind of
 process: lessons learned, about bad things and benefits. It's a method of logging along
 with the value engineering benefits analysis process whereby we can record benefits
 for substations. They are recorded and captured so we can go back to them." Business
 representative
- "How many people read all the information? I question the benefit." Business representative

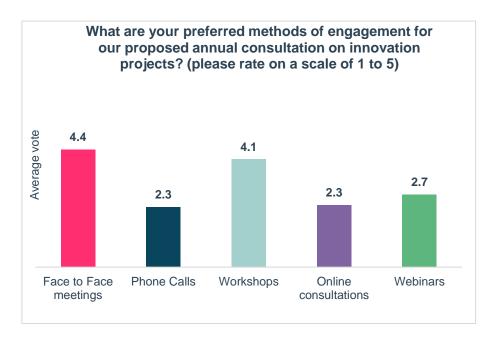
- Better visibility of these projects would be useful.
- In theory yes, but experience in SSEN (not just SHE Transmission) is sometimes [that] another Business as Usual project causes a successful innovation project to get shelved. Difficult for an SME to deal with procurement when moving to BAU.
- Must have senior management sponsors to ensure implementation at project level.
- The innovation as part of BAU projects needs to be identified and published.
- Project for construction, don't allow for time/risk/cost profile to deliver innovations, needs central funding.
- Funding through third parties should be promoted.

Q. How much engagement have you had with the SHE Transmission innovation team to date?



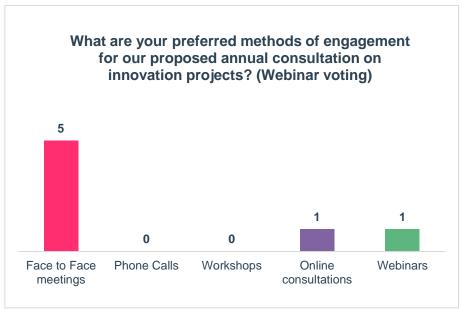
- Our work with SHE Transmission has been great from an innovation perspective. We have dealt with SHE Transmission networks. We have things in line with distribution and transmission. Some of it was an introduction: we made proposals and worked with SHE Transmission over the years and it was discussions about problems they were having. We were involved with a bid, and it comes down to getting a foot in a door." Infrastructure / engineering representative
- "We're a bit different as we don't manufacture. We're more about the process of the introduction of a new tower type, etc. Whether the idea is brand new or it's been used elsewhere in the world, it's more about managing the stakeholders at SHE Transmission to accept it on the system. Normally we're at our best when we're trying to solve a problem. When it comes to innovation, keep your eyes on what you're trying to achieve." Infrastructure / engineering representative
- "We were delivering a couple of substations at the moment, where we've eliminated a huge amount of SF6. It's BAU with SHE Transmission. There's a huge environmental benefit." Business representative
- "We would welcome a meeting with Andrew Urquart and his team to see how our business can assist with innovating on how we install new transmission assets."
 Webinar participant

Q. What are your preferred methods of engagement for our proposed annual consultation on innovation projects?



- "The first element was inception, which is unfunded where you manage ideas. Do you have workshops for that?" Developer / connections representative
- "We can present solutions to the problems you don't realise you have." Infrastructure / engineering representative
- "I don't think innovation workshops are the way forward: you won't share ideas if your competitors are there." Business representative
- "I would prefer to hear the problems that SHE Transmission have." Business representative
- "You want to hear all the things they have on the shelf." Developer / connections representative
- "That's what they did recently. We presented bids on the basis of SHE Transmission telling us the problem and giving us a timescale." Infrastructure / engineering representative

"I think there's a value in workshops if we find out general areas where problems are sought. You don't have to participate and give your solution to competitors. Then it's a question of how we feed back to you. It could just be that we're finding out who the stakeholders are. We did a speed dating event where people with utilities came round and chatted to us. You had some anonymity from the other vendors, but you could have 5 or 10 minutes and they could tell you what they need." Infrastructure / engineering representative



- "I think it's a sensible approach. However, there needs to be a point earlier in the
 process. We've got lots of possible solutions, but we haven't got a specific route to get
 in and influence your thinking. We should get in earlier, and continually, so that we
 could access and influence the process, i.e. something more formal than just pushing
 ourselves in." Business representative
- "I used to attend the 'open for business' events: do you still hold them? That was a
 very good portal for engagement with landowners and consumers, locals, etc. Being a
 small business, it was very beneficial." Infrastructure / engineering representative
- "We have to be careful to make sure we have something when we do the initial bit. You guys don't want to own it, but the Ofgem rules around the Network Innovation Allowance (NIA) require that, so we need to be careful of intellectual property (IP) ownership. I don't think we would be considered a 'strategic partner', so it's about how we get into those workshops." Infrastructure / engineering representative
- "In the past we've given requests for information and done presentations, and in the end, the company in question says that they just decided to do it in-house."
 Infrastructure / engineering representative
- "The procurement process is a minefield." Infrastructure / engineering representative

- "Do you have events currently that showcase innovation projects? That would be good to see." Infrastructure / engineering representative
- "We need to see more from the customer's point of view." Infrastructure / engineering representative
- "It's good to know what's coming through so that we can bring it in to our tenders [and
 explore] new possibilities. We need more time to think things through; subsidies help
 with that. It's good to hear what industry is doing, to see what's out there." Developer
 / connections representative
- "It's hard to bring value because you don't have access to all the ideas and influences.
 You have to get the right people at the table to innovate solutions." Infrastructure / engineering representative
- "It's greater transparency I want to see. I don't get visibility of the greater funding process, so that might be useful." Business representative
- "Face-to-face meetings are essential, but workshops would encourage collaboration."
 Webinar participant

- Workshops would not include competitors. Innovations to solve specific problems usually focuses the minds of suppliers.
- Face-to-face technology sharing. Project specific 'value engineering' part way through the Invitation to Tender (ITT) process.

Q. Are there any other ways that we can encourage stakeholders to generate ideas for innovation projects?

 "When you have got past this phase, perhaps setting an open challenge to some of the strategic partners would be a way of starting the conversation." Webinar participant

- Better integration into bid evaluation better transparency and qualitative values and evaluation.
- Centralised online hub with problems to solve and solution proposals.
- Present forum that gives stakeholders the opportunity to feed in.
- Maybe through an established internal-led drive network engineers identifying needs and pushing to industry.
- Innovation days.

- Commercial discussions on how IP is protected through Non-Disclosure Agreements (NDAs), etc. Contractors need to create sustainable, competitive advantages to get returns on investment.
- The European Innovation Council (EIC) ran a 'speed dating' exercise for SMEs and utilities several years ago. Very useful for meeting providers.
- Publish and present your known challenges. Your past 'shelved' projects and the reason for shelving.
- Harvest operational suggestions and improvements from SHE Transmission staff.
- Present information on problems in an open and succinct way.
- Ensure IP protection through NDA process.

Q. Do you have any other comments in relation to our innovation plans?

• "How do you secure TO internal resources to develop innovations? Has that been thought through during process development?" Webinar participant

- Early contractor engagement is required to avoid the contractor's ideas being introduced too late in the process.
- Establish a structure for early engagement. Existing behaviour is project-based and difficult to implement.
- CBA and funding decision process appears to be solely based on technology readiness level. All innovations may not neatly fall under a TR level e.g. methodology, process, commercial idea, etc.
- Progress information of schemes essential and timeline adjustments.



WORKSHOP THREE: WHOLE SYSTEMS

The final session was introduced by Bless Kuri, System Planning Manager, and Qi Tang, System Planning and Investment Engineer. The presentation explained SHE Transmission's dynamic definition of 'whole system' and described the benefits and challenges posed by this approach. It was noted that the company's approach to whole systems revolves around the principles of consumer value, stakeholder feedback, collaboration and innovation.

The feedback below has been summarised according to the questions asked during the discussion session, with the results from the feedback forms handed out after the session supplementing this feedback where appropriate.

SUMMARY OF FEEDBACK

There were varying levels of knowledge around whole systems. Whilst the most prevalent answer to the question 'How would you describe your level of knowledge of whole systems?' was 4 out of 5 (52%) the average score for this question was 3.4 out of 5, indicating that some stakeholders had very little knowledge of this subject. Although a number of stakeholders felt that they didn't quite grasp the concept of whole systems, they were keen to learn more about the benefits to their businesses and several noted that taking part in the workshop had improved their knowledge of the topic.

A number of stakeholders felt that a whole systems approach would be beneficial as it would encourage SHE Transmission to adopt a proactive approach. One developer felt that removing barriers would be helpful to their business, suggesting that developers should have a key account manager at SHE Transmission who could put them in contact with different parts of the business. However, some stakeholders seemed to be unclear on the roles that SHE Transmission, regulation, the market, and government policy would play in the whole systems approach and called for more detail of the whole picture, with one stakeholder suggesting that case studies could help to illustrate the concept of whole systems.

Most stakeholders expressed support for SHE Transmission's objective for whole systems, with 62% stating that they were 'satisfied' with the objective. However, the point was made that as SHE Transmission was not in a position to make decisions in isolation, the objective should focus on 'informing' rather than 'making decisions'.

Stakeholders were also generally satisfied with SHE Transmission's level of ambition for whole systems, with over four fifths (82%) opting for 'agree' or 'strongly agree'. However, a number of stakeholders felt that the industry in general had a short-sighted approach to planning, with several stakeholders calling on SHE Transmission to lay the groundwork now to enable it to

achieve its ambitions. More broadly speaking, the main barriers to a whole systems approach were seen to be regulation, the flexibility of assets, and a lack of policy and direction.

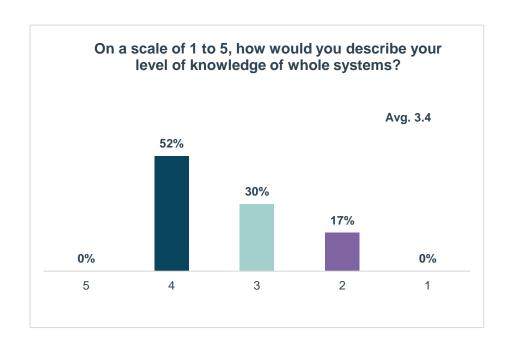
The majority of stakeholders said that they were 'very satisfied' or 'satisfied' with the four identified principles of whole systems (78%), and no stakeholders reported that they were dissatisfied. It was felt that 'collaboration' was a particularly important principle of whole systems, with support for increased collaboration between transmission and distribution, although some felt that these silos should already be in the process of being broken down. Stakeholders suggested that the whole systems approach should also include future consumer demand for EVs and decarbonisation as core principles and advised that Key Performance Indicators (KPIs) should be developed for the principles to measure progress.

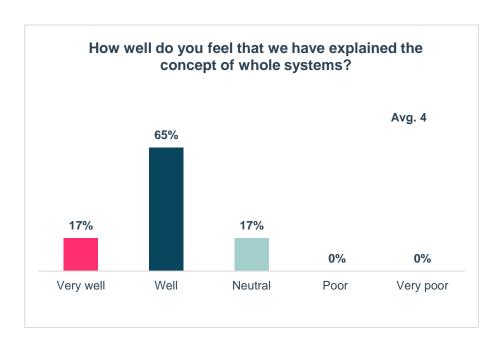
STAKEHOLDER FEEDBACK

Q. Overall, do you understand what we mean when we say 'whole systems'? Do you think that we are explaining it clearly enough, or can our definition be improved?

- "I think it makes sense." Business representative
- "I don't quite get the benefits for me. For example, why switching six transformers to four is helpful. As a business that supplies the infrastructure, that would not help my business." Business representative
- "Why isn't this happening already?" Infrastructure / engineering representative
- "It seems a bit like the emperor's new clothes. There are so many different departments. You need to spend money wisely, make sure it's not overengineered. If the solution is to break down silos, then do it. We should break down barriers between different areas." Infrastructure / engineering representative
- "The silos are set up to give competition; we need market solutions. Transmission
 and distribution should be more joined up. The big change is not to enter into the
 market as transmission companies, find the right solution from market solutions
 and transmission solutions." Utility company
- "That's what we're looking for. Tell me what and where I can connect. I want to see the whole scenario so I can see where is best to invest. The developer doesn't know what assets there are. You should have a key account manager to pull people from different parts of the company." Developer / connections representative
- "I've heard about it, but not in detail. It sounds like things you should be doing anyway." Infrastructure / engineering representative
- "I don't really understand what's being undertaken. There are lots of descriptions about what might be done, but I don't know what's happening now. If it involves all

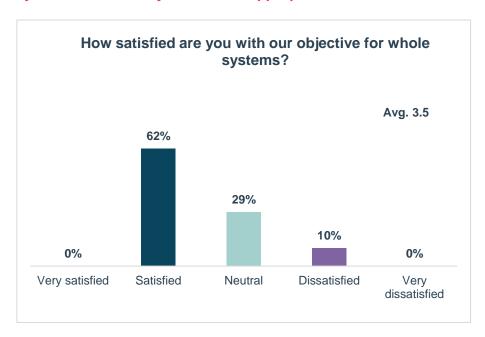
- these parties, do you meet with them regularly, do you have a forum, or is it project by project?" Developer / connections representative
- "What's the end goal here? Petroleum and gas are the biggest users, and if we
 need to go carbon free, will the gas industry be happy with an overall policy that
 will see them disappear? This seems to go far beyond the current set up and gets
 into large-scale country-wide planning for energy." Infrastructure / engineering
 representative
- "I don't entirely understand your role in all of this. For example, do you drive the strategy? With energy vectors, do you, for example, look to promote [photovoltaic cells] PV? Do you push for a certain thing?" Infrastructure / engineering representative
- "I think at the start I was nearly getting it, but through the discussion I understand it's effectively SHE Transmission moving from being reactive to being proactive and making sure they talk to stakeholders. What we've seen with wind farms, if SHE Transmission's not proactive, we'll end up seeing private networks to support EV networks. That's the threat." Infrastructure / engineering representative
- "[I] understand the benefit of whole system, but how customers (i.e. developers) can contribute is unclear. It's a very broad subject." Webinar participant
- "How do you expect funding and allowances to be moved around if alternative whole system solutions are found to be 'better' options to deliver a TO output?"
 Webinar participant





- As a whole electrical system, I think myself and my organisation have a good understanding. However, this presentation feels like it's moving the goal posts by considering other energy vectors. Though it is good to have this level of visibility in terms of SHE Transmission's thinking.
- Better understood now.
- Regulations, remit and ability to speculate seem to limit activity.
- Good on electricity, less so on others!
- Very little knowledge prior to today but understand SHE Transmission's approach.
- What was provided was sufficient for a base understanding, but maybe more information provided within the pack given out, as slides were not in the pack.
- The weeds of why this approach is required was well presented. However, what needs to be done to change the frameworks to make this straightforward?
- Separate out the current constraints on a regulated business define whole system without that.
- Use case studies more.
- More detail in integrating various energy sectors would be good.

Q. What do you think of our objective – is it appropriate?

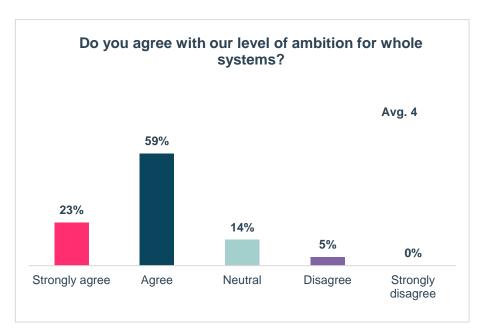


- "I challenge the word 'decisions'; it could be 'informing'. Also, who makes that decision?" Infrastructure / engineering representative
- "Whose decision-making is it? Is that not regulated?" Infrastructure / engineering representative
- "It is all very well saying 'let the market decide'. But who is deciding what the energy networks look like? The government sets the goals, but the market has to supply them. For example, EVs: are people going to buy them? We can put the facilities in place, but we don't know how much we are going to need. What part should we play in this decision-making? We need to come up with ways to compare costs with new solutions and existing [ones], and how can we decide that?" Energy / utility company
- "I'm very comfortable with that objective, trying to provide options we can deliver, but with the optimal solution for consumers and shareholders." Energy / utility company

- Having a lack of fully understanding your process.
- Would be interested to understand the influence of [National Grid] NG and [Scottish Power Energy Networks] SPEN policies in relation to the operational aspects of whole systems approach.
- But needs to be sooner/now, not in six or seven years.
- Not ambitious.

- Objectives good, timelines ambitious.
- It is not far reaching enough doesn't look long term enough.

Q. Last time you said you felt our ambition for whole systems was about right – do you still agree?

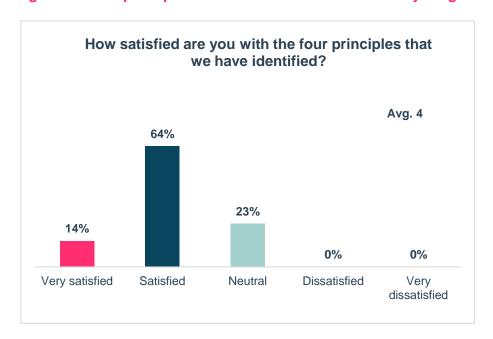


- "I think it's in keeping with the RIIO-T2 plan." Business representative
- "Advanced is only six years away. In this industry, that's nothing." Infrastructure / engineering representative
- "No new houses will get a gas boiler, but everyone who has one will need to get it replaced. You'd need to start five years before that to improve the infrastructure and I don't see that. You're suddenly working alongside other energy sectors in 2026, but that needs to happen now." Developer / connections representative
- "Future energy scenarios show there will be huge demand on the electricity network, so if you don't start implementing now, none of the scenarios can be implemented. I feel like we're always chasing and not doing things when we're needed." Developer / connections representative
- "It's true that you need to prepare in advance, [although] the periods don't help in being five-year periods. You don't have the foresight to put things in place before you're trying to justify your next period. Now we have a feel for what was going to happen, whereas eight years ago, we didn't." Infrastructure / engineering representative
- "Do you think there needs to be a wider level of strategy i.e. something above Ofgem setting goals and incentives?" Infrastructure / engineering representative

- "If you did it with incentives for the market to deliver, that's different from nationalising everything. There are different ways of doing these things. It's lacking anything above the regulator setting direction. You get vague promises at election time, before someone does a study and finds out the cost." Infrastructure / engineering representative
- "If you set the goals accordingly, the market will provide. However, you'll be up against
 the fact that you will get kickback from people with vested interests or people who use
 gas. Distribution and transmission should collaborate rather than acting separately."
 Infrastructure / engineering representative
- "Regulations are the barrier." Infrastructure / engineering representative
- "The other barrier is assets and their flexibility. It's how much you can integrate those. Some of the digitisation stuff comes into it." Infrastructure / engineering representative
- "If you're not stimulating, then you're reacting." Infrastructure / engineering representative

- When you consider the future energy requirements, it is very relevant.
- But to do that, the discussions and policy are needed now.
- Not ambitious enough, too many barriers not being pushed.
- Agree, but need to continually review and monitor to ensure coupling to RIIO-T2.

Q. Do you agree with the principles we have identified – is there anything missing?



- Consumer demand for future of electric vehicles (EVs).
- Decarbonisation.
- None, but above principles need some robust KPIs.

Q. Do you have any other comments?

Feedback form comments

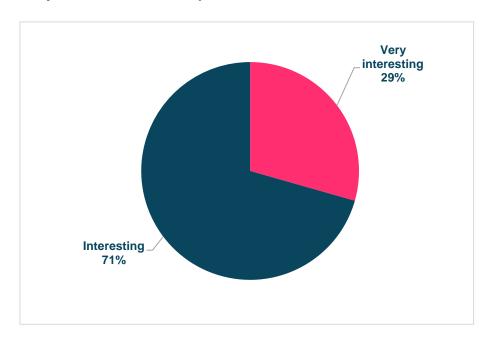
Good to move from reactive to proactive approach.



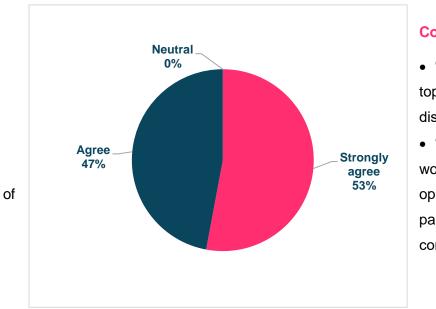
APPENDIX 1: EVENT FEEDBACK

After the workshop, stakeholders were asked to complete a short feedback form on what they thought about the workshop itself. The feedback was as follows:

1. Overall, did you find this workshop to be:



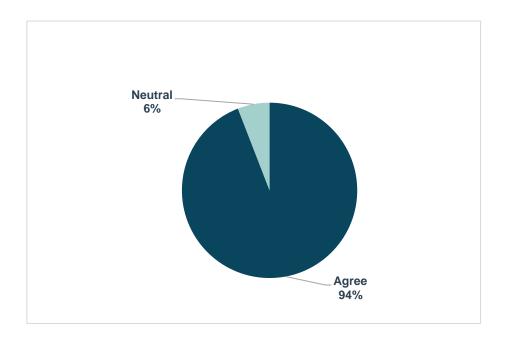
2. Did you feel that you had the opportunity to make your points and ask questions?



Comments:

- "Well-guided topics and points for discussion."
- "Well-run workshop with plenty opportunity to participate / contribute."

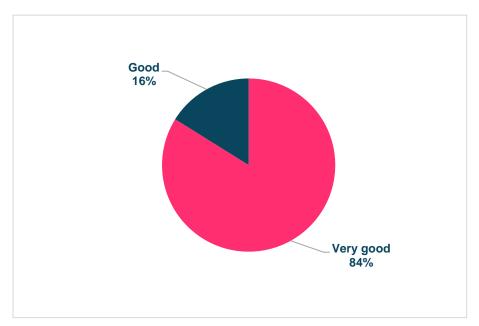
3. Did we cover the right topics for you on the day?



Comments:

- "It is really dictated by the delegates, which presents an interesting range / variety of subjects covered."
- "Would have benefitted from more examples in the whole systems framework changes."
- "Innovation seemed less tangible to engage with."

4. What did you think of the way the workshop was chaired by your facilitator?



Comments:

- "Good knowledge from facilitator."
- "Good facility, right size."

5. Would you like to receive our post-event report, and invites to similar events in the future?

