Memo

Innovation Working Group

Notes and issues from second Innovation Working Group meeting held on Wednesday 02 March 2011, at Ofgem's offices, 9 Millbank, London.	From To cc Date	Melinda Anderson Innovation Working Group 14 March 2011

1. Introduction

Anna Rossington (AR) welcomed attendees and outlined the purpose of the meeting - to provide feedback to the working group on our December 2010 consultation on innovation and discuss issues arising out of the previous meeting.

These notes attempt to capture the key points of discussion. They do not indicate or imply Ofgem's agreement to points made by attendees.

2. Name change

The first agenda item was to flag the new name for the innovation stimulus. The December document referred to the elements of the innovation stimulus package as the innovation stimulus and the innovation allowance (IA). AR proposed that as the innovation stimulus refers to the competitive element of the package that it be called the Network Innovation Competition (NIC). AR noted that name for the IA would not change. The group agreed with the name change.

3. Innovation stimulus package – update on current policy position

3.1 NIC scope

AR provided the group with an update on Ofgem's current policy position on the innovation stimulus package following stakeholder responses to the December consultation. She began with an update on the NIC position. In relation to the scope she told the group that Ofgem is minded to increase the scope from low carbon to include environmental benefits. She asked the group for their views.

One group member asked whether there might be a conflict with the Discretionary Reward Scheme (DRS) if the scope was increased to included environmental benefits. AR responded that there would need to be clear boundaries.

A comment was made that we need to be cautious around defining low carbon and environmental benefits such that it is so precise that it fails to accommodate new issues as they arise or becomes too limiting. The term environment was considered to be very wide and it could be difficult to know what was included. The group asked whether it could include better services for customers or doubling the capacity of existing corridors. Another consequence of having the scope too wide could be that the fund would be stretched - because projects were required to compete to win funding if the scope was too wide the number of projects put forward will be higher and funds will essentially be reduced. One member noted that the group needed to keep in mind the end point 2050 targets and the overarching aim of RIIO.

There was some discussion around whether low carbon would cover carbon avoidance. It was suggested that the scope should include demand reductions in targeted distribution constrained areas. Hence 'avoided carbon' as a name to bundle together innovation in the supply (transmission, distribution) but also - and especially - in the demand side measures.

One member said that it could be argued that smart grids increase carbon intensity so the term avoided carbon was a useful one. Another issue raised in relation to carbon avoidance was that of storage and whether that would fit within the scope.

One member asked what would stop companies from putting forward projects that might be captured through other incentives. AR informed the group that the March document is still very high level and that many of these issues will be defined and refined as we move forward. AR asked the group if they could identify projects they considered more environment than low carbon. One member identified the replacement of SF6 greenhouse gases as a potential example.

3.2 NIC funding profile

AR noted that Ofgem's minded position following consultation was for the profile to be flat.

One member queried whether the profile would increase with inflation. AR said that it would. Another asked if an under spend occurred in one year could you bring that amount forward for the next year? AR responded that this wouldn't be allowed because the amounts of money could potentially be very large and would increase the burden on customers. One member noted that each year's funding is essentially capped.

3.3 NIC funding amount

A lively debate ensued about the amount of funding proposed. One member thought that the amount was 'tiny'. Another agued that large scale storage could not be bought for this amount of money. AR commented that the fund amount was not intended to drive all of the elements of innovation but instead ensure that networks are playing their role. She also noted that we haven't had any feedback to suggest that any single project would require the amounts proposed.

A number of members defended the amount. One member noted that innovation funding in the UK is three times larger than in the US and that in Europe funding is 50/50 whereas this was 90/10. He thought this was a unique amount of funding. In response however one member noted that the US schemes provided loan guarantees which made a difference.

Some members thought that a lot could be done with the amount proposed and that there would be opportunities for other interested parties such as suppliers to add funds to projects initiated via the fund. One member thought that it would be unwise to spend £300m on a storage facility at this point in time. There will be a lot of opportunities to facilitate innovation and investment will follow. One comment was made that small scale smart grid trials could still be statistically relevant and therefore the proposed levels were suitable. It was also recognised that the NIC is an opportunity to prove a concept. Funding for a proven project could then become part of the next business plan.

A question was asked about whether the Low Carbon Networks (LCN) Fund could shed any light on the size of funds required. AR responded that the projects awarded were two large projects awarded £20m each and two smaller projects. It was confirmed that this was the project cost and not an annual spend.

3.4 NIC gas funding

AR updated the group on the changed position on gas funding. She informed the group that we had been challenged to justify £45-50m and that we struggled to find examples of projects that would require this amount. There was a lot of discussion about how there is potential to utilize a higher amount for gas. It was acknowledged that gas innovation is in its infancy. It was also recognised that studies show that gas will be important in meeting 2050 targets. Some members felt it would therefore be a mistake to have the amount set too low in case large projects came forward. One member felt that the £20m amount makes a statement in itself about the future of gas. An alternative view was that whatever the size of the fund projects will evolve to fit it.

AR responded that no-one had yet identified significant projects that would justify such a large amount for gas. However she suggested that the expert panel could ask us to review the level if they felt there was a need. Ofgem could then consult on the amount based on a body of evidence. This option was supported by the group.

There was a discussion about why the group hadn't provided evidence of projects that would require a higher level of funding. Some said they thought that the £50m was adequate and so did not put forth ideas. Others were cautious because of the competitive environment. The group started to identify areas of work requiring higher levels of funds but stated a preference for providing confidential examples. AR said she would be happy to consider confidential examples.

The group briefly discussed stranded assets in relation to the gas infrastructure. AR felt that this was a separate issue that would require a specific work stream devoted to it.

One member asked whether electricity distributors could access the NIC at an earlier stage (they are due to join once the LCN Fund ceases in 2015). AR said only if they wanted the LCN Fund to be transitioned into the NIC before 2015.

3.5 NIC maximum funding

AR noted that Ofgem is minded to set the maximum funding to 90%. There were no objections.

3.6 How should the NIC be funded?

AR noted that Ofgem's position following consultation was that the NIC be funded via fast money - similar in format to the LCN fund.

AR asked the group if they had any other points they wished to make on the competition aspect of the NIC. One group member asked what would encourage the roll-out of innovation from a successful project. AR said that the revenue adjustment mechanism would enable the roll-out of innovation from successful projects but agreed that there may not be an incentive for companies to do this. She also said that she would welcome any ideas from the group, noting that different companies need innovation at different times.

One member commented that innovations are likely to provide temporary solutions. Some innovation may not save a company money so a question was raised about how we would incentivise this type of roll-out. Another comment was that targets set by government mean that companies won't always be able to wait for proven innovation and therefore we need to consider outputs that recognise system benefits now. One member noted an incentive used in the US where innovation roll-out attracts a higher rate of return.

AR asked the group whether in setting something up front to encourage the roll-out of innovation the mechanism reward should be output or input based. One member raised the idea of looking at value saved vs. value raised. Another noted that we don't know what network will look like in the future we only know what they will need to do. AR noted that there is merit is discussing how to stimulate rollout in more depth at a future meeting.

A question was raised about how you would make the transition from innovation to business as usual. One response was that the robustness of transition from innovation to roll-out could be considered as criterion for selection. One member responded that this approach was not a good idea because there are too many unknowns. Another made the point that there will be a changing mindset in relation to innovation and getting people to accept that it works. This will then lead to them to think about how to incorporate the innovation. AR noted that an option could be to have an end plan for roll-out to emerge at the end of the project. One member responded that sharing project knowledge will free up resources for others to think about next steps. A final comment was that some of the learning will require regulatory changes.

3.7 Innovation allowance

AR noted that Ofgem's current position following consultation was for the IA to be provided. Stakeholder feedback confirmed that the innovation funding incentive (IFI) and First Tier of the LCN Fund were successful in incentivising innovation and should be kept in some form. AR asked the group what they thought of the change in the amount – now 0.5 per cent as standard with an option for companies to propose up to 1 per cent.

The group asked for clarification around the previously discussed requirement for bidding for a level of expenditure based on proposed outputs. A number of members expressed difficulty around specifying appropriate outputs. AR noted that the term output needs to be defined correctly but that something needs to be delivered at the end of a project. To that end although companies need to justify their bids the current position will require they do so in the innovation strategy in their business plans. The strategy will be self certified and approved by Ofgem, however this is still something that needs to be defined going forward.

One member commented that this amount could be quite small for smaller companies and asked whether we would consider other options such as a 'baseline plus' arrangement, fixed amount, or consider customer numbers or per cent of revenue. AR said that she would check and see how this is factored into the IFI. She also noted that the previous position of the allowance being 2 per cent of allowed expenditure meant that it would be significantly higher than the NIC.

Another member commented that the one per cent felt right given that if it is to have a similar function to the IFI it would be principally used for R&D. He continued that there was value in not having too much intervention in the amount. One member asked if the IA would be treated like the First Tier in the LCN Fund where companies are allowed to use a proportion of it to prepare submissions for Second Tier projects. Another member queried whether the 0.5-1 per cent level is set in stone or whether it can be changed. AR explained that due to the introduction of fast tracked settlements in the price control this needed to be decided early was unlikely to be changed.

The group discussed what type of projects would be carried out under the IA. A question arose from the group about whether there will be a clear definition of what the IA should deliver. BS responded that the IA is envisaged as having a broader scope than the NIC and would follow the model of the IFI as a starting point. A group member highlighted that we wouldn't want to duplicate incentives in the Price Control. Another comment was that under the IA companies would largely tackle unproven ventures and that once they became proven they would then be undertaken as business as usual. One member noted that one difference between the IFI and the IA was that commercial innovation is included under the IA. Another comment was that under the IA proven innovation needs to be shared among companies.

One member of the group asked where smart metering fits in. AR responded that this is really in the next level of detail and at this point we are not sure. Another member asked if there will be clearer direction in the future from the smart meter teams within Ofgem and DECC in relation to network challenges. JC confirmed this would occur via the Smart Meter Forum.

3.8 Revenue adjustment mechanism

AR updated the group on the outcome of the consultation in relation to the revenue adjustment mechanism. She noted stakeholders' broad support for this element of the innovation stimulus package. However there was less of a consensus on whether the adjustment should be made mid period or annually. Stakeholders also supported the criteria which they agreed was broadly correct. AR informed the group that as a result of stakeholder views Ofgem was minded to make the adjustment on an annual basis and the criteria for roll-out was expanded to include projects undertaken via the IA. AR further noted that the adjustment could be applied for in relation to innovation proven anywhere e.g. if something was proven in the US and a company decided they wanted to roll it in the UK.

3.9 Third party access

The January open letter consultation on third party access closed on 4 March 2011 so there was no update on Ofgem's current position about this issue. Despite this there was a lively debate about third party access. Some new experiences were shared with the group about third parties leading in collaborative projects. One member talked about a model he had encountered where DNOs volunteer to be involved as hosts and third parties approach these potential hosts to collaborate with them. This model does not involve third parties to be licensed and works well. AR asked the group who, in this model, they thought the money would flow to. One member thought the money should go to the innovation company because there is a danger that if given to the network company the third party might be squeezed out. Another comment was that third parties should be given the option to work either collaboratively or alone.

A familiar concern was raised by one member that giving third parties direct access would give them power to force network involvement. This was argued against by another member who said that he didn't believe that third parties would want or need to force network involvement. Another said that most projects would be location specific and so DNOs would want to be involved. A further comment was that a network operator would have to provide a clear justification for denying a third party access to their network or agree to collaboration. AR noted that not all funding would go to third parties but that there should be clear opportunities for third parties to lead on well justified projects.

The group discussed collaboration in further detail. Some members felt that collaboration was the way to proceed and that experience to date indicated that this option worked well. A concern was raised about networks acting as barriers to collaboration. One member suggested that an arbitration process could resolves concerns from third parties and networks about collaboration. A key issue raised about collaboration was that its not just about ensuring collaboration takes place but that collaboration is open to new partners. In response a member asked 'shouldn't Ofgem challenge non-changing partnerships?'

The role of small companies was discussed. It was recognised that the more ideas put forward the better and that small companies would benefit from having an opportunity to be in the driver's seat. For small companies to lead on projects it was put suggested that they would need bargaining power such that came with them having direct access to funds. It was recognised that where a third party had access to funding directly and a network was required to come on board this would have to happen before funding was awarded. It was also commented that we should remember that not all third parties would necessarily be small companies.

A question was raised about preparation funding and whether third parties would be eligible for this. AR responded that she wasn't sure. Another member said that a lot of competitions require a lot of detail in the early stages. However it was commented that the better organised a proposal is the more likely the process will be cost effective.

A comment was raised about transferring funds to third parties and concerns about ensuring the financial stability of third parties. AR responded that these issues are not insurmountable and we would set eligibility criteria to ensure that all parties are financially credible. One member suggested it might be preferable for the network operator to hold the money. However one argument against this was that not everyone would be comfortable in approaching DNOs with their ideas for projects. Another issue was whether third parties could be awarded funding but the networks would be required to run the project. AR commented that this was not something that we needed to have a final view on just yet. The key issue is the creation of the licence.

The issue of intellectual property rights (IPR) was briefly discussed. Questions were raised about how to protect against the sale of IPR. It was also noted that small companies depend on IPR and being required to share IP might put some third parties off applying for funds.

4. Further issues

4.1 Funding cross sector projects

In the previous innovation working group meeting the group raised the importance of keeping cross boundary projects in scope. AR asked the group if they could provide examples of this type of project. She explained that these examples would need to be explored by Counsel to provide a legal viewpoint on the issue of funding cross sectoral projects.

The group thought that some examples of this type of project could include heat networks, fuel cells, transferring energy and the role of storage to offset capacity. One member commented that these projects would likely be R&D based projects with benefits to both networks. It was recognised that as experience grows the incidence of this type of project is likely to increase.

One member suggested arbitrage opportunities along the energy supply chain, or payments by the DNOs to the gas network for providing ancillary services.

The group acknowledged that the benefits for both sectors would need to be commensurate with the funds provided. The group thought that projects would need to be determined on a case by case basis. A question was raised about whether the expert panel would decide who to award the funding to. A comment was made that perhaps one sector could be utilised as service provider as a work around. Another option raised by AR was that the funds would go to where the majority benefits lie. BS suggested that a test could be devised to decide where funding goes to.

4.2 Criteria for awarding funding

The criteria for awarding funding for the LCN Fund were considered as a starting point for the NIC. AR noted that at this stage nothing needed to be finalised but this would be the first discussion among many. AR also stated that the NIC criteria won't be limited to network solutions at the trialling stage as they were for the LCN Fund. She also noted that in light of our discussion on cross sector projects that setting the criteria may impact on cross sector projects.

The group posed a number of questions about criteria. One group member asked how we would measure benefits to future transmission customers. Another asked how the criteria would apply to gas. One member suggested that on a list of criteria the more you ticked the stronger your chance of success would be. For this example it was also suggested that the criteria should be set out in order of importance.

The criterion related to sharing knowledge was discussed in some depth. One member noted that third parties would be likely to patent IP before applying for NIC funds and therefore how would these benefits be shared. It was suggested that perhaps customers would benefit more from a network company selling IPR rather than sharing. A counter argument to this was that allowing companies to keep IPR incentivises innovation. This ensures that innovation is rolled out and the benefits reach customers. Another member argued that if information is shared this may remove the incentive for other networks to innovate – they may decide to wait for another company to 'do the hard work' and in effect become free riders. One member noted that some companies are better at innovating than others and don't mind taking the lead. Yet another commented that 'hands on' learning is a bigger incentive for some companies to do their own innovation.

One member thought that we need to ensure that the IPR principle is not overly complex. Another member agreed it needed to be simple and concise. AR acknowledged that IPR needs to be a specific work stream and that we will need to work with other entities who have been dealing with this issue for a longer time. One member thought that the IPR principle is exactly right – it needs to be shared across all networks. Another member asked about the rest of the chain e.g. suppliers and new market players – should IP be shared with them? AR responded saying that in terms of how the principle is applied it must 'at least' be shared with networks and there may be 'extra points' for sharing wider.

There was broad support for keeping the criteria simple and retaining the four criteria (or equivalent) of the LCN Fund.

AR asked the group how companies should demonstrate that innovation is outside of 'business as usual'. In response members suggested innovation outside of business as usual would likely be projects that aren't commercially viable, projects that are higher risk or had less certainty. One member asked how we would treat projects that wouldn't be commercially viable for another 10 years but are expected to be eventually e.g. storage. It was noted that we would need to ensure that those benefits were not replicated within the price control.

AR asked for the groups opinions about the extent to which applicants should be required to provide qualitative and/or quantitative evidence in support of projects. She noted that the projects awarded via the LCN Fund are now at this stage. Criteria are an important consideration here. One member commented that the focus may be better placed on magnitude of impact rather than exactitude. Another member noted that in the LCN Fund awarded projects are, by definition of the criteria, low carbon. The group also discussed different ways of assessing low carbon. One suggestion was to consider what the costs of decarbonisation would be if the project was not undertaken.

4.3 How projects will be funded

It was broadly agreed at the last meeting that 'fast money' was the preferred mechanism – revenue is recovered in the year of expenditure (costs are borne by current customers). At the last meeting the group also asked the question about whether projects would be funded over the life of the project or in the first year i.e. fast vs. ultra fast? They discussed this issue further.

One member thought that phased annual funding shouldn't be a problem. Another noted that capital intensive projects are more likely to need 60 per cent up front but the rest later which would fall outside of the phased annual proposition. The group recognised that not all projects would be the same. Another point raised was linked to the LCN fund and the fact that as time progresses and innovation is undertaken it may be harder to come up with projects that require the full fund amount in the final year.

AR noted that one issue is that there is no physical fund. Funds are raised from customers and transferred directly to the implementing company. One member asked if we could have the fund held in a bank account. AR noted that this is not an option as it would require significant legislative changes.

The group also discussed the different funding requirements of transmission vs. distribution projects. A suggestion was made that we look at distribution projects already undertaken and see how the funding was allocated and use this as a benchmark.

The group talked about funding by instalments. They thought the benefits of this approach would be that more projects will start earlier and as a result learning will be realised earlier.

4.4 How will the money be raised?

The group was asked from which customer base the money should be raised i.e. would raising the money from transmission customers cover all customers given that all customers are charged for use of the transmission system but not all customers are charged for the use of the distribution systems e.g. large users connected only to the transmission network. The group said they would need to think about this in depth and discuss at a later time.

5. Discretionary rewards

The group discussed the various types of discretionary reward that they thought would incentivise innovation. One comment was that the use of a discretionary reward for cost over runs, similar to that provided under the LCN Fund, was useful. Another comment was that finding out that an innovation didn't work was not necessarily a bad thing so would there be room to reward for this type of outcome. If there wasn't this could put companies off trying out innovation which is inherently risky.

AR asked the group whether a discretionary reward actually provides any incentive. One response was that the potential for a discretionary reward in itself does not drive innovation. Another member thought the discretionary reward was helpful in encouraging efficient delivery. One member commented that the reward should be used to drive the success of the project.

One member asked whether the discretionary reward could be given to third parties. One member thought that there would need to be some objectivity around how the discretionary reward should be awarded. AR informed the group that the issues around the discretionary reward are not finalised and that this discussion will help to formulate questions to be consulted on later.

6. Further issues going forward

The group was asked what it would like to discuss in the next working group meeting. It was agreed that feedback from the January open letter on third party access would be timely.

Additionally they wanted to discuss issues around the transition from the IFI to the IA.

The group also raised the issue of innovation within the business plan and how to justify where innovation will sit.

7. Close and next meeting

AR summarised the key points of discussion and thanked attendees for their participation. The next meeting was tentatively scheduled for early May 2011.

8. Appendix

Iain	Welch	National Grid Transmission
Martin	Hill	SP Transmission
Stewart	Reid	SSE Transmission
Richard	Buckley	Scotia Gas
Nigel	Winnan	Wales and West Utilities
Gaynor	Jones	National Grid Gas
John	Christie	DECC
Alex	Murley	Renewable UK
Jason	Eis	The Carbon Trust
Taco	de Vries	Intellect representative
Stephen	Benians	The Regulatory Assistance Project
Dave	Openshaw	DNO representative
Martin	Atkinson	SBGI
Mark	Wagner	Isentropic