TPCR5 outputs working group: Environmental impact and customer satisfaction/conditions of connections

Note of first meeting - 19 August 2010

1. Introduction

1.1. The first meeting of the group was on Thursday 19 August 2010. See Annex A for a complete external members list.

1.2. Ofgem set out the purpose of the group and discussed the principles for its operation. In particular, these included:

- group is not a decision making body but instead provides advice, evidence and views from a wide cross section of interested stakeholders;
- 'Chatham House' rules apply;
- summaries will be taken, reviewed for comment and published on the Ofgem website; and
- while consensus may be welcome in some areas, it is not the aim of the group and in some cases different views with improved understanding of the reasons for the difference and the evidence base that might help guide final decision may be just as useful.

1.3. When discussing the absence of a social outputs working group, the group highlighted the status of 'connect and manage' obligations as public service obligations.

Action: Ofgem would consider how to suggest reflecting the public service obligation ('connect and manage' arrangements).

1.4. We noted that there is a lot of work to cover in the four meetings planned at this stage. We confirmed that we would review the number of meetings in light of progress in the working group and may arrange additional meetings or consider different ways of taking work forward.

1.5. Given the different working groups in existence across TPCR5 and in GDPCR2, transparency of summary notes and aligned terms of reference was recommended.

2. Environmental impact

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2.1. Ofgem gave a presentation to introduce the issues likely to be involved in developing this output.

2.2. There was some concern at how decarbonisation of the energy sector is reflected in the outputs. One member of the group felt that a separate category should address this. Others felt that the environmental impact primary output could reflect it but in doing so would need to overcome conflicting difficulties of providing sufficient importance to it compared to other environmental impacts (e.g. the networks business carbon footprint). This could not be done in a way that unduly discriminates against different generators/producers. It was also confirmed that legislative obligations remained (although recent changes to Ofgem's duties were also highlighted).

2.3. Another general point raised was about the need to bring value for money understanding into the design and the use of the primary environmental output. This would be through a cost benefit assessment.

Different aspects of environmental impact

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2.4. The different aspects of the environmental impact output were categorised as:

- internal business impact e.g. own carbon footprint;
- external business impact e.g. noise, amenity, flora/fauna; and
- facilitating environmental objectives of users of the network e.g. network contribution to decarbonisation and renewables targets.

2.5. The group debated whether this third category was:

- appropriate to include with the other impacts; and
- to what extent an output in this area would imply picking winners and/or unduly discriminating.

2.6. The group agreed that it would be useful to carbon map the high-level components of the electricity market.

Carbon footprint

2.7. The group considered what the 'business carbon footprint' should involve in terms of a primary output. It distinguished between:

- asset related footprint; and
- corporate level footprint.

2.8. The group was open-minded about having a carbon footprint measure included in the primary outputs. It, however, highlighted the lack of control of some aspects of the footprint e.g. while the choice of transformer is made by the Transmission Owner (TO) and can have a direct impact on the footprint, it is the Systems Operator (SO) who decides the loading placed on the transformer which also impacts on the footprint.

2.9. Losses and/or shrinkage plus Sulphur hexafluoride (SF_6) in electricity were seen as the material elements of a carbon footprint measure, to the extent that other elements would be a very small proportion (perhaps as low as 1%).

2.10. In looking at losses, trade-offs were identified e.g. more renewables connection in the north of Scotland implies potential increase in losses given increase in network but also may be beneficial in overall environmental impact. The need to include value for money in the design of the output was emphasised. It was noted that the electricity distribution incentive in this area took account of changes in generation connected.

2.11. Some felt that the carbon reduction commitment (CRC) and other initiatives should drive the reduction in the internal footprint anyway.

Action: Transmission owners would provide information on current reporting of the business carbon footprint and ongoing work.

SF_6

2.12. The group discussed SF_6 (for which TOs have an incentive currently in place to reduce levels). New designs had allowed equipment consistent with lower levels of leakage. New European rules also encouraged best practice.

2.13. A key question was how much of progress had been made and how much more was needed, including in terms of providing value.

2.14. The group recognised that transparent information about SF6 was a key part of current requirements. It was noted that there is a trade off here as SF6 allows innovative design of high voltage switchgear.

2.15. There was recognition that one might need to look at absolute rather than just % based targeting.

2.16. Understanding the CO_2 equivalent of SF_6 levels emitted by the TOs was highlighted as helpful.

Action: National Grid would share SF_6 levels in carbon equivalence with group.

2.17. The group also discussed an Energy Networks Association (ENA) report prior to DPCR5 about the standard emissions from different types of assets.

Visual amenity

2.18. Visual amenity was identified as a normal part of an environment impact assessment reflecting the Schedule 9 obligations. Specific issues were recognised e.g. around specific habitats.

2.19. The group discussed how DPCR allowances for undergrounding had been granted and that the group should consider the read-across implications. Some felt that the current regulatory framework pushes towards overhead solutions because of the lower costs. Instead feeding in all evidence into the cost benefit assessment was seen as important. Willingness to pay data had underpinned small capex allowances in relation to distribution network operators.

2.20. An important distinction here was local connections vs. wider infrastructure upgrades. The logging up approach followed in TPCR4 was also highlighted. One view was that the current arrangements worked well at the 'local connection' level.

2.21. It was also noted that the decision to underground is not exclusively in the control of the network company.

2.22. Wider works would also need to be considered where there was a disconnect in what the developer funds.

Energy efficiency (facilitating end users)

2.23. Good work was identified here including the reform of G59, demand management initiatives and the LCN fund. The group agreed that the implications of these would need to be considered in developing any aspect of primary output.

Broader environmental impacts

2.24. The group discussed the changes to Ofgem duties and legislative change. They also discussed whether outputs could reflect the positive ways that networks could support new connecting renewables given their specific characteristics without detrimentally affecting other connection works.

2.25. The wider electricity market review was seen as one of the wider developments we would have to understand in setting a primary output. Also the implications of CHP developments.

Action: CHPA would consider further the implications of developments in CHP on a broader environmental primary output.

2.26. The group discussed the tension between seeking an output that unambiguously supports success in the delivery of a sustainable energy sector but which does not unduly discriminate against any party.

2.27. The need for a clear legal background was recognised by the group so that network companies were encouraged to consider ways in which they could play a full role in the decarbonisation of the electricity sector without unduly discriminating.

Action: It was noted that discussions in relation to the broad measure were more limited given time constraints. Ofgem agreed to place this item at the start of the environmental section for the next working group meeting.

3. Customer satisfaction

3.1. Ofgem ran through the terms of reference for the group – there were no comments from the group on the proposed terms. Ofgem recognised that this was the category with the most overlaps with other output categories and therefore this would need to be borne in mind when developing ideas in this area.

3.2. One member of the group suggested that it might be appropriate to break customers down into directly connected customers and indirect customers. In terms of directly connected customers, generators, large demand users and distribution companies were noted. In the case of the Scottish transmission companies, the group set out that National Grid should also be recognised as a customer. The group recognised that indirect customers of the TOs would be a much wider group than direct customers. They outlined that the indirect group would include suppliers, end consumers, interconnectors, storage operators, shippers and beach/import terminals. Storage operators were recognised as sophisticated users of the system that might be able to provide insights on customer satisfaction and the Storage Operators Group was noted as a potential group that it might be worth speaking to on these issues.

Action: Ofgem would contact the Storage Operators Group.

3.3. Ofgem asked the working group how much feed in they already have in terms of customer feedback on satisfaction. National Grid noted that while they do not have a huge amount of historic data, in the past year or so they have begun to collect data on customer satisfaction. This information is collected in quantitative and qualitative formats and relates to direct customers of the network. They noted that work in this area has allowed them to learn more about what customers want and how they want to be treated. They noted that caution would need to be exercised in developing outputs related to customer satisfaction as it should deliver meaningful outcomes rather than developing outputs that do not deliver what customers want.

3.4. A member of the group noted that a lot of customer satisfaction data used to be collected and that there may be some useful lessons from this historic data. The drive to collect this data had been linked to implementation of the network code and the detailed work that had been taken forward on the shippers services provided.

3.5. Reference was made to the quarterly connections summary seminars that National Grid takes forward and it was noted that these played a helpful role in managing issues on connections.

3.6. A point was made that it could be argued that as all customers have their contractual relationship with National Grid SO the TOs do not have any direct customers. It was noted that the main interface with consumers took place at the point of connection and

that, on an ongoing basis, the TO/consumer relationship is largely an 'informational one' which is facilitated by the SO. The main complaints that arise are related to information provision, cost and timeliness of connections and this led to questions about where responsibility for some of these service elements should rest e.g. should it be with the SO or the TO?

3.7. Group members questioned whether the role of the SO and TO could be disentangled in the eyes of consumers. It was noted that the ability to differentiate between the parties would depend on the types of consumer being asked. All of the interfaces with the consumer is with the SO whereas all of the information on the TO role comes from the TO itself.

3.8. A suggestion was made that a survey would need to be carried out relating to both the SO and TO activities. Concern was raised that, unlike distribution, it would not be possible to achieve a statistically meaningful sample size. A further point was raised that while there are complaints about TO connection much of the issues stem from problems with project management and developers.

3.9. A suggestion was made that a basket of areas related to customer satisfaction could be put together with objective measurement of performance against this basket.

Action: NG, SP and SSE agreed to give some thought to the potential basket of metrics that could be developed to monitor customer satisfaction.

3.10. A point was made that the extent to which indirect customers were affected by the actions of the TO was on a scale whereby some would be more affected than others e.g. end consumers would be affected by interruptions on the network.

3.11. A group member noted that customer concerns could vary according to different fuel types as while electricity will fail safe, gas will fail to danger. The group noted that these types of security of supply issues would probably also be picked up within the work of some of the other groups and these linkages should be recognised.

3.12. A point was made that the key measure of customer satisfaction would be linked to whether customers were aware of the existence of the network company as if they had no need to contact the network company this would be an indication of good service. A question was asked about whether indirect activities of the network company should be included within the scope of the group e.g. if parties were affected by building works being taken forward by the network company, would this fall under the banner of customer satisfaction. The group agreed that it would. It was also noted that third party relationships that could arise as a result of other elements of the RIIO model e.g. as a result of innovation and competition in delivery should also be incorporated within considerations of customer satisfaction.

3.13. One of the TOs noted that they do a lot of work on gas and electricity forecasting into the future e.g. the role of electric vehicles and the impact that they could have on the transmission network. They noted that it would be useful to understand whether this is useful from a customer point of view.

3.14. A member of the group raised a question about willingness to pay and suggested that this should be built into considerations of costs associated with the delivery of initiatives intended to facilitate customer satisfaction. It was recognised that this would need to be built into any financial incentive that was developed.

3.15. It was suggested that the measure of customer satisfaction should be taken at various contact points that the TOs have with their consumers. It was noted that this could also avoid some of the potential problems that may arise with needing to explain the TO arrangements which views were being sought on.

3.16. In light of the potential problems that may arise associated with controllability of some of the elements of TO service and the limited sample size, it was suggested that greater weight could be placed on stakeholder engagement and intelligent use of survey data rather than on a complaints metric.

Action: NG to feed in details regarding the work that they have undertaken more recently with respect to customer satisfaction.

4. Connections

4.1. Ofgem clarified that the work in this area was purely related to connections and not to the wider constraint issues which were being dealt with in the reliability and availability working group.

4.2. A suggestion was made that a metric could be developed related to the number of offers made as compared with the number of offers accepted.

4.3. The group noted that the arrangements on connection were different across gas and electricity given that user commitment was required in gas while in electricity the process was based on a contractual application. However, it was noted that although the arrangements are different the processes are comparable with pre-connection information, the application process and final delivery of the connection. The group therefore noted that the types of output that were developed could be similar.

4.4. The group discussed the merits of an output related to the timeliness of connection. There were concerns that there are a number of dependencies in this area and in this respect, while many connections could be completed expediently there were often issues associated with the developer. Reference was also made to the regularity with which the connections agreements vary over time. Members of the group therefore noted that there were issues associated with controllability of the outputs.

4.5. A suggestion was made that the output could be related to the time taken to connect as compared with the requirement of the customer. There were concerns with this approach in that in many cases developers would not be able to provide realistic connection dates.

4.6. A member of the group suggested that it would be sensible to identify those elements of connection that were within the control of the TO and look for potential outputs that could be developed around these. A concern was raised that the TOs would always be dependent on the developer/customer who would be able to change terms during the process. It was also noted that all connection projects are different and therefore this could create issues associated with comparability.

4.7. It was noted that it would be important to place incentives on the TOs to deliver connections as expediently as possible and a suggestion was made that the time taken to connect following the receipt of planning consents could be measured as an output. The TOs recognised that they have some control over the time between the receipt of planning consents and energising the connection.

4.8. A member of the group pointed out that from the customer point of view the main concern was whether their project was being delayed due to the absence of a connection. It was noted that instances of this happening were very rare and usually the developer would underestimate rather than overestimate the time it would take. Another member of the group suggested this might not always be the case particularly if there is an economic upturn and a number of generators want to connect quickly. The TOs did not consider this to be a likely scenario.

4.9. A member of the group asked whether the provision of information could form a potential output measure, particularly where this made it easier for a developer to connect to the system. The TOs noted that the process followed at the moment was fairly informal and that developers were encouraged to approach them at an early stage in the process (e.g. before they submit an application) to discuss some of the issues and ensure that the connection would be viable. This helps avoid unnecessary costs and ensures there is an ongoing interface between the TO and developer.

4.10. Others in the group recognised this as a service provided by the TOs and that it is a really useful route for discussion. A suggestion was made that this could be the subject of a primary output. A member of the group also noted that it might be useful to talk to the storage operators group on these issues as they might have some useful feedback. A suggestion was also make that it might be useful to speak to internal colleagues about issues related to the connection of biogas as although it isn't currently an issue in transmission it could be in the future.

4.11. A member of the group outlined that although the 90 day rule had worked well to date, the emergence of offshore connections could begin to push the boundaries with respect to this timescale and this could merit further discussion. Recognising these issues and other challenges, it was suggested that rather than a single licence obligation it may be more appropriate to consider a 'menu' approach whereby different timescales would be offered for different types of connection. To facilitate this approach, it would be important to understand average connection timeframes. It was also noted that it would be important to find out what customers want and to then try and meet those timeframes. To recognise that some responsibility also sits with the customer, emphasis would need to be placed on the quality of applications submitted, with objective criteria established to assess these applications.

4.12. A member of the group asked whether, under 'connect and manage', connection to the network could be a lot quicker given that the need to reinforce the network would be divorced from the offer process and others recognised that this could be the case. It was noted that under the 'connect and manage' approach underwriting of wider works wouldn't be carried out as the capacity the customer would be underwriting would be used by a range of parties. It was pointed out that there should be full transparency around the wider works that the TOs were carrying out to provide clarity to customers.

4.13. The group noted that it would be important to recognise the role of innovation as these were likely to facilitate more expedient connection in the future. While there was recognition that this may fall more under the remit of the SO, the relevant assets could be owned by the TO. The group agreed that it would be appropriate to reward the outcomes of the innovation rather than the innovation itself.

4.14. A question was raised about the role of CCS and how alternative uses of the transmission network could be recognised within the outputs framework.

5. Way forward

5.1. The date for the next meeting was identified as **8th September** between 10:30 and 16:30. The third meeting will be on **29th September**. The date for the fourth meeting will be reviewed and views of group members will be sought shortly.

Following feedback the date of the fourth meeting has now been confirmed as 25th October.

Annex A: Environment and customer satisfaction/conditions of connections working group. External contacts*

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* This contacts list contains attendees plus some additional contacts who have shown a direct interest in the work of the working group.