

Cost Assessment Working Group – Meeting 11

From: Ofgem

Date: 24th October
2019

Time: 10:00am –
1:00pm

Location: Ofgem, London

1. Present

Ofgem

Cadent

NGN

SGN

WWU

Citizens Advice

2. Agenda

1. Actions from last meeting
2. Summary of RIIO-2 tools for cost assessment consultation responses
3. Cost Assessment Model Testing Update
4. AOB
5. Future CAWGs

3. Summary of RIIO-2 tools for cost assessment consultation responses

- 3.1. An overview of responses¹ received from the Cost Assessment Consultation was provided, highlighting the range of feedback on model selection and the use of different methodologies.

¹ Available on the Ofgem website <https://www.ofgem.gov.uk/publications-and-updates/riio-2-tools-cost-assessment-consultation>

- 3.2. The group discussed the use of 'model estimation' techniques, noting the different responses we received. One stakeholder suggested that Ofgem should explore both Stochastic Frontier Analysis (SFA) and Data Envelopment Analysis (DEA) because some of the existing RIIO-1 bottom-up Ordinary Least Squares (OLS) models are not very robust (based on the R^2 values). Another stakeholder argued that different estimations techniques should only be explored further if they provide additional value. One stakeholder highlighted that this issue of low robustness only applies to some bottom-up models, not totex, and stated that these alternative model techniques are unlikely to overcome the issue.
- 3.3. The group discussed 'cost drivers' used in the models. Stakeholders noted that it is important that Ofgem continue to test workload cost drivers. One stakeholder suggested Ofgem examine asset health data to verify that the Modern Equivalent Asset Value (MEAV) cost driver is sensible, as it doesn't take into account asset condition. They argued that the quality of assets impacts maintenance and capital replacement costs. It was noted that taking asset condition into account could lead to perverse behaviour to influence future allowances. One stakeholder stated that asset health, as reported in the NARM, drives workloads, and therefore should be taken into account. They suggested that regional factors could potentially be used to take account for differences in NARM in some cases.
- 3.4. Some stakeholders raised views on 'cost pooling'. One stakeholder agreed that it is useful to look at cost pooling options to see if they overcome any bottom-up inconsistency issues, but noted that there could be a danger of cherry picking. Another stakeholder suggested that Ofgem look at pooling processes rather than activities, and that Ofgem should start with processes that are consistent across the networks, and build from there.

- 3.5. In relation to 'business support' costs, one stakeholder argued that Ofgem should consider economies of scale for relevant business support activities so that multi-GDN groups don't have an unfair advantage in the benchmarking. The system control center was given as an example of an area where economies of scale exist. Another stakeholder noted that economies of scale don't apply to all aspects of business support, and that multi-GDN groups have added complexities to manage. Stakeholders noted that for some activities, qualitative assessments will also need to be carried out in addition to benchmarking analysis.
- 3.6. The group discussed 'regional factors'. With respect to the measurement of density, one stakeholder noted that there must be a clear economic or technical rationale for including a density variable within the models, and Ofgem shouldn't simply choose a model with a density variable included because it may have a better fit. Another stakeholder noted that Ofgem could use data on customer numbers at the postcode level from Xoserve to derive a more suitable density variable than used in RIIO-1, which used data at the local authority level. The group agreed that a future meeting to further discuss regional factors may be useful, depending on information contained in the final business plan submissions.
- 3.7. The group discussed 'real price effects' (RPEs) and 'ongoing efficiency'. Stakeholders noted that the materiality of RPEs should be considered over the five-year price control period, because even a small RPE could have a material impact over five years. The discussion highlighted that both the volatility and variation of RPEs should be considered. The group discussed indices for RPEs. One stakeholder suggested that if there is a suitable index that doesn't produce forecasts, Ofgem could create a forecast based on the index. Ofgem raised the point that indices may need to be publically available, and asked the group for views on this. One stakeholder agreed that ideally, the indexation of RPEs should be transparent and accessible. The group discussed

some questions around the choice of an index for labour. Stakeholders suggested that it would be useful to discuss this in depth with actual data, and Ofgem informed the group that they intend on bringing this topic to the next working group for a more detailed discussion. One stakeholder asked if Ofgem will stick to one index for each RPE category, or if Ofgem will consider multiple weighted indices for certain areas. They suggested that using multiple weighted indices could dilute volatility in individual indices.

- 3.8. Ofgem stated that they don't intend to publish a formal consultation again before draft determinations, but will continue to engage with stakeholders through CAWGs. Stakeholders agreed that further CAWGs will be useful in place of an additional consultation, and that it will be good to be able to work through some more of the detail of the modelling in future sessions. Stakeholders asked that any meeting material is circulated earlier for future sessions to allow proper time for companies to review the analysis and models. Ofgem agreed that this would be useful, and suggested approximately two weeks before could be a good timescale to aim for, but highlighted that it would be a snapshot that is circulated, and that work could continue to evolve up until the meeting.

4. Update on model testing

- 4.1. Ofgem presented their latest model testing results, particularly addressing some the points raised in the consultation. With regards to 'model estimation', Ofgem compared the results of its SFA panel model testing with the OLS and Random Effects (RE) totex models. One stakeholder questioned why 'log likelihood' was used to measure model robustness. Ofgem clarified that R^2 values aren't calculated for SFA models, however log-likelihood can be used to compare the model fit instead.
- 4.2. One stakeholder mentioned that there are many different types of COLs models, and asked if there are other SFA models. Ofgem stated that the assumptions on how

efficiency varies over time and the distributional assumption on the error term can change the SFA model. There was a brief discussion on the ways that the model assumptions can be selected. The R^2 or log likelihood, statistical techniques or comparing time-variant and time-invariant models were all mentioned as possible ways to choose model assumptions. One stakeholder noted that in future CAWGs when Ofgem present any model results, it would be useful if they could also outline any model assumptions and the logic behind choosing them.

4.3. With regard to 'cost drivers', Ofgem presented its progress updating MEAV, noting issues around calculating unit costs and volumes. For unit costs, Ofgem presented a table illustrating the differences in unit costs when using linear interpolation on the difference between the midpoint of the old bands and the new bands. This highlighted a material difference in unit costs for Band C diameter pipes. Ofgem agreed to share the workbook used to derive these calculations so that the GDNs could investigate further. For volumes, Ofgem noted data issues with embedded entry points and multiple occupancy buildings (MOBs).

4.4. With regards to 'cost pools', Ofgem listed the models it had tested according to different cost pools, and presented a table demonstrating correlations between each cost activity, which may support the use of some cost pools over others. One stakeholder noted that the capex middle-up model results were unreliable due to the lack of smoothing and the inclusion of a large standalone project. Ofgem noted the diagnostic tests it used to scrutinize the model results, and presented a table showing which tests each model had passed or failed. Ofgem further noted that the majority of models did not pass the RESET tests and would be subject to further testing. Stakeholders commented on the repex regression, noting that results were somewhat surprising, which could be due to year-on-year fluctuations, the inclusion of CISBOT or the use of forecasts in the final two years of RIIO-GD1.

5. Future meetings

- 5.1. This topic was discussed during the session on the cost assessment consultation, and the summary notes are outlined in section 2 above (paragraphs 3.6 to 3.8).