



Technical Annex: Cost allowances

Draft Determination Annex 6



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

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Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional listening, explaining and acting with integrity.
- · Be a collaborative, co-operative and learning team.
- · Be motivated and empowered to make a difference.





Abstract

This provides more detailed analysis of our approach and proposals for cost allowances. It expands on the main body section 7 and relevant analysis in business plan assessment annex 2.

Audience

This document will be of interest to SONI and potentially its customers and other stakeholders.

Consumer impact

SONI's TSO costs of running its business which we price control are typically around 2% of the NI consumers electricity bill. How it chooses to deploy the costs of running its business and performs its role has a larger impact on outcomes such decarbonisation, grid security and wider system costs (for example, system service, wholesale and transmission investment costs which make up part of the electricity bill for NI consumers); given the influence it has across the system. We incentivise SONI through the price control to deliver high quality service to contribute to these good outcomes.





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1. SONI's cost allowance proposals

Business plan cost request overview

1.1 SONI estimates that the request will increase costs above the 2019-20 level by £6m on average, when translated into revenue. This translates to an increase of £2.76 in domestic bills based on average household consumption. While this may not be a large impact in consumer bill terms, SONI's proposal represents a large step-change in materiality from both existing allowances and the current level of spend. To put the request into some historic context, the table below details the business plan compared to projected spend in the current control, and also details the proportional increase from current UR allowances (post the CMA referral decisions).¹

| | UR Allowance ² 2015-20 £000s | SONI Spend ³ 2015-20 £000s | BP Request 2020-25 £000s | Proportional Increase % |
|-------|---|---|--------------------------------|-------------------------------|
| Opex | 62,591 | 70,473 | 94,791 | 51% |
| Сарех | 7,703 | 5,739 | 26,007 | 238% |

Table 1: SONI cost request context

Business plan cost request in more detail

1.2 SONI has submitted a five-year business plan requesting opex of c. £95m⁴ over the period split as follows:

| Opex Category | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|---------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Payroll | 10,504 | 10,489 | 10,543 | 10,443 | 10,449 | 52,428 |
| IT & Comms | 3,720 | 4,076 | 4,476 | 4,806 | 4,792 | 21,871 |
| Other Opex | 2,755 | 2,757 | 2,617 | 2,956 | 2,578 | 13,663 |
| Pension Deficit | 936 | 936 | 936 | 936 | 936 | 4,680 |
| Real Price Effects | 204 | 314 | 427 | 553 | 651 | 2,149 |
| Feasibility Studies | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 18,119 | 18,572 | 18,999 | 19,694 | 19,407 | 94,791 |

Table 2: SONI opex cost request 2020-25⁵

1.3 Whilst no formal request has been made within the business plan data tables, SONI has also

¹ Figures in this table excludes all revenue relating to PCG, margin and asymmetric risk.

² Allowances reflect those following CMA referral and decisions.

³ It should be noted that this refers to projected spend as the period has not yet finished.

⁴ All costs in this annex are in April 2019 prices unless otherwise stated.

⁵ This table excludes the opex associated with the re-openers (*Dt*items), Parent Company Guarantee (PCG), revenue collection margin and asymmetric risk. These items are discussed separately.

made proposals for a new ex-post regime regarding feasibility studies which may be required as part of the network planning process. The estimate cost of such work is c. ± 1.8 m, an average of ± 0.36 m per annum. It is however recognised that such costs are subject to fluctuation depending on levels of demand.

1.4 On the capex side, SONI has requested £26m split by project as follows:

| Licence Category | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|-------------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| IS Infrastructure | 454 | 459 | 333 | 188 | 151 | 1,586 |
| Corporate Systems | 522 | 544 | 423 | 510 | 477 | 2,476 |
| EMS | 865 | 865 | 865 | 865 | 865 | 4,324 |
| Facilities improvements | 150 | 100 | 60 | 70 | 80 | 460 |
| Telecoms | 293 | 259 | 266 | 274 | 275 | 1,366 |
| Data & Analytics | 89 | 0 | 0 | 0 | 0 | 89 |
| All Island Metering | 585 | 229 | 23 | 23 | 23 | 884 |
| Near Time Smart Outage | 210 | 126 | 101 | 23 | 23 | 484 |
| Alternative DRBC Site | 1,745 | 0 | 0 | 0 | 0 | 1,745 |
| Physical Security | 187 | 402 | 204 | 241 | 189 | 1,223 |
| Cyber Security | 38 | 45 | 27 | 27 | 27 | 163 |
| Control Centre Training | 179 | 336 | 224 | 45 | 45 | 828 |
| Capacity Market | 465 | 465 | 0 | 0 | 0 | 929 |
| DSU Compliance | 412 | 412 | 0 | 0 | 0 | 824 |
| Cloud Adoption | 67 | 68 | 292 | 247 | 74 | 747 |
| Operating Model | 83 | 101 | 0 | 39 | 0 | 222 |
| Control Centre Tools | 1,047 | 656 | 656 | 846 | 760 | 3,964 |
| DS30 | 1,813 | 918 | 582 | 134 | 134 | 3,581 |
| Clean Energy Package | 22 | 22 | 22 | 22 | 22 | 112 |
| Total | 9,225 | 6,004 | 4,078 | 3,554 | 3,146 | 26,007 |

Table 3: SONI capex request 2020-25

2. UR cost allowance proposals overview

Business plan cost request

2.1 The request (excluding margin, asymmetric risk and PCG) submitted by SONI is £95m opex and £26m capex split by year as follows.

Table 5: SONI opex and capex cost request 2020-25

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|-------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Total Opex | 18,119 | 18,572 | 18,999 | 19,694 | 19,407 | 94,791 |
| Total Capex | 9,225 | 6,004 | 4,078 | 3,554 | 3,146 | 26,007 |

Allowance proposals

2.2 We have sought to build up allowances via initiative decisions, salary benchmarking, pension assessments, productivity challenge and real price effect forecasts. The result of our deliberations are as follows:

Table 6: UR opex and capex cost allowance 2020-25

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|-------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Total Opex | 13,791 | 13,814 | 14,290 | 14,857 | 13,403 | 70,154 |
| Total Capex | 2,350 | 1,881 | 1,725 | 1,535 | 1,463 | 8,955 |

2.3 We have provided 74% of SONI's opex request but only 34% of the capex provision. However, to give the figures some historic context, the table below details requests and allowances against the previous price control and SONI's projected spend. The table also indicates the proportional increase the draft determination represents against comparable existing allowances.

Table 7: Cost request and allowance context

| | UR Allowance ⁶ 2015-20 £000s | SONI Spend ⁷ 2015-20 £000s | BP Request 2020-25 £000s | DD Allowance 2020-25 £000s | DD % Increase from PC15 |
|-------|---|---|--------------------------------|----------------------------------|-------------------------------|
| Opex | 62,591 | 70,473 | 94,791 | 70,154 | 12% |
| Сарех | 7,703 | 5,739 | 26,007 | 8,955 | 16% |

⁶ Allowances reflect those following CMA referral and decisions.

⁷ It should be noted that this refers to projected spend as the period has not yet finished.

3. UR assessment approach and view of business plan quality

3.1 This section provides our view of the quality of SONI's business plan and the principles and methodology that we adopt in our review of SONI's business plan costs. We have undertaken a proportionate amount of regulatory scrutiny of SONI costs to inform our proposals based on the large increase in proposed costs and the issues we have found with the quality of the business plan in this test area.

Our March 2019 regulatory approach

- 3.2 We challenged SONI to set out well evidenced and well explained proposals for efficient costs, ambitious and challenging proposals, and for it to demonstrate innovation that contributes to greater cost efficiency.
- 3.3 We set out expectations of what should be provided as part of the SONI business plan in support of cost requests. This included the following:
 - Breakdown of costs as required by the business plan guidance.
 - Detail on historic cost movements, trends and atypical expenditure.
 - Well-reasoned, evidenced based supporting analysis of cost lines, whether projected to increase, remain stable or reduce.
 - Link between costs, service and/or activity levels.
 - Details of any benchmarking or analyses to support company plans.
 - Rationale and assumptions behind cost projections for IT projects.
 - Any company specific 'special factors' which affect costs (either positively or in a negative fashion).
 - Forecast of real price effects for the TSO.
 - Productivity and efficiency targets to be applied to projected costs.
 - Detail on how SONI will provide assurance that certain services are being procured efficiently and costs will be kept to a minimum.
- 3.4 The approach signalled our expectation of a bottom-up assessment of costs with benchmarking where possible. We said that the level of regulatory scrutiny would depend upon both the quality of evidence and the materiality. More information on our guidance is set out as part of our cost efficiency test questions SCEMU 2, 3 and 4.

Review of SONI's on securing cost efficiency

- 3.5 This sub-section sets out our overall view of the cost allowance issues we found with the business plan submitted to us on 31 October 2019.
- 3.6 Our SCEMU2 test question⁸ asks, "*how ambitious and challenging are the company's proposals against the aim of securing cost efficiency for benefit of NI customers*"? We have the following observations on the quality of SONI's business plan.

⁸ SCEMU = Securing cost efficiency and managing uncertainty.

- 3.7 In relation to our expectations on business plan quality, we consider that the plan falls substantially short of the evidence required for an excellent response. SONI's service initiatives (BAU and enhancements) comprise the most significant driver of expenditure and we found significant issues across this area in particular. More specific views on each initiative and the outstanding actions are set out within this cost assessment section.
- 3.8 We make the following observations across the business plan cost request, as a whole, using illustrative examples:
 - The analysis is high level with data sources and assumptions quite often unexplained. For example:
 - The capital costs (£1.75m) of the proposed disaster recovery site service initiative are based on the costs incurred in the Dublin backup facility. SONI has, however, failed to provide an itemised list of the equipment and its respective cost.
 - Over half of the metering system capital costs (£0.5m of £0.9m in total) are simply listed as 'other' with no supporting justification.
 - Unclear whether insights and careful judgement has been used to draw together proposals. For example:
 - There was a rationale for consideration in many cases, but in some cases a sufficient needs case has not been demonstrated. A key issue was that the scope or design for cases was often high level, sometimes as a reflection of the uncertainty of work required.
 - It is somewhat unclear that significant aspects of the plan represents the views or priorities of a diverse base of customers. We are not convinced that the cases have been thoroughly tested with stakeholders. In some cases SECG members are of the view that initiatives are either not needed or misdirected as part of their assessment of the business plan.
 - Optionality justification is poor as in many cases we have concerns that another 3rd party could be undertaking the proposed service initiative but little justification has been provided for SONI's proposed approach: for example, whether SONI is considering an option which is least regrets. We also had concerns that SONI was putting forward options which were not fully fleshed out (perhaps because of uncertainty) or not optimal.
 - Benefits and service levels are often ill-defined with little explanation of base levels or the impact that the initiative will have.
 - SONI has often failed to detail the basis for cost increases and provide evidence that these are reasonable. This is obviously an essential step given the materiality of the cost request increase.
 - Whilst the plan represents progression in providing service transparency, gaps still remain. We note that no mapping has been provided between costs and services to provide stakeholders a high degree of transparency and a basis for ongoing engagement, despite this being a clear requirement as part of our guidance. We also note that it was very challenging to understand whether some of SONI's service initiatives represented an

enhancement over and above existing spend, and had concerns that certain costs may be duplicated within the request.

- There is mixed quality evidence that cost proposals are supported by range of different sources, including well explained benchmarks. For example:
 - SONI has based control centre tool capital costs on a review of market solutions but failed to provide any of these market prices or quotes by way of supporting evidence.
 - RES initiative capital costs are sourced from similar previous project experience.
 However, SONI has not detailed the days, daily rates or relevant split of costs to substantiate the appropriate cost level.
- Many, but not all, of the sources and justification for cost estimates in Appendix K appear reasonable and sound (i.e. benchmarking, quotes, market pricing, similar project experience etc.). However, these sources are merely asserted and rarely evidenced as part of the business plan.
- Evidence provided in the business plan on RPEs and productivity is clear, reasonably comprehensive and mostly based on sound reasoning. We are in agreement with many aspects of the chosen methodology, database selection and application, with a couple of exceptions. However, this is a relatively small element of business plan proposals in comparison to other opex and capex increases associated with service initiatives.
- Salary benchmarking in the plan is clear and appears broadly reasonable. We have adopted that methodology and source of comparisons in this draft determination. However, SONI has failed to adequately explain or demonstrate why the benchmarks are not appropriate. Nor has SONI provided justification for its proposed level of spend, particularly in light of benchmark differentials and other regulatory precedent.
- 3.9 SCEMU3 test question asks "*How ambitious and challenging are the company's proposals against the aim of securing cost efficiency to the benefit of NI customers*"? It is difficult to assess the ambition of cost proposals as service levels were not provided in the business plan and so are not defined. Without such detail, ambition of cost efficiency is very underdeveloped and so difficult to judge.
- 3.10 While we welcome that SONI has implemented a challenge and assurance process, SONI has not fully demonstrated its effectiveness and it sought no challenge from stakeholders on its costs (e.g. from SECG during business plan development). We agree with GHD consultants, who we asked to review the assurance process, that while the process undertaken appears reasonable, the business plan contains little evidence of how it was applied, making it difficult to have full confidence in its robustness.⁹ Taking these points into account, within the context of the material issues we found regarding the quality of business plan submission on costs, as noted above, we consider SONI's response to be substantially short of excellent.
- 3.11 SONI provides some examples of initiatives which have potential to be innovative and contribute to cost efficiency. On the one hand, as noted by SECG members, we agree that there is little evidential demonstration of how these will contribute to cost efficiency, and we agree with the concerns members have around SONI's approach to innovation. On the other hand, we note

⁹ See section 3 of Annex 9, GHD SONI IT Expenditure review report.

some SECG member points that some of these initiatives have the potential to result in credible net benefits which go beyond BAU. On balance, we consider that SONI's response to SCEMU4 test question is somewhat short of excellent.

Building blocks of business plan cost assessment approach

3.12 Based on the business plan quality, issues and the materiality of the costs proposed by SONI we created a methodology to further assess costs and support our view of where and how we need to intervene and/or set actions on SONI to protect consumers. As part of this we also set up a weekly query and response process with SONI to inform our proposals on interventions and actions. Our approach across each building block is set out below. We also asked SECG to review the business plan. While there were significant limitations in terms of the level of information that SONI shared with SECG, we have taken account of SECG views of what it could review, as part of our assessment.

1) Base Costs

- 3.13 Base costs in the current price control are to some extent accepted. SONI has demonstrated that price control opex has remained relatively constant in real terms over the 2015-20 period. At the same time, the complexity of the business has increased, indicating a reduction in certain unit cost indicators.
- 3.14 Whilst such information does not prove frontier efficiency, it does indicate an improving position over time. Relatively few adjustments are therefore made to base costs in future allowances (with the exception of staff benchmarking, atypical expenditure and some other adjustments for transfers to NIE Networks).
- 3.15 We are of the view that various elements of SONI's new initiatives are already provided for in existing revenues e.g. industry engagement costs, operational IT staff etc. As noted above, in this respect it has sometimes been very difficult to draw a clear distinction between new and BAU spend categories: we consider this to be a significant shortcoming of the plan. Where this is believed to be the case, we have not provided for any increase in base cost.
- 3.16 However, we have made some provision for an uplift to costs for a range of factors that might lead to cost increases under our proposed new framework which are not funded under either the base allowance or proposed allowances for new initiatives. This includes resource to:
 - Develop annual forward performance framework plan and engagement with stakeholders.
 - Monitor and analysis on performance to feed into annual self-assessment.
 - Costs of enhanced regulatory reporting (new performance framework, more granular cost reporting etc.)
 - Development of activity concerning new performance framework service expectations. We consider the main activity in year one will be to develop a strategy which considers whole system approach, digitalisation strategy, and a new stakeholder engagement approach.
- 3.17 These adjustments are more fully explained in Section 4 of this document.

2) Direct Labour Costs

- 3.18 Forecast SONI salary costs are benchmarked against relevant comparators from datasets such as the Annual Survey of Hours and Earnings (ASHE). Labour costs are determined on the basis of such benchmarking.
- 3.19 Application of a regional wage adjustment has also been adopted to account for lower rates of pay in Northern Ireland. Decisions on the salary allowance is detailed fully in Section 6 of this annex.
- 3.20 Pension costs are assessed on a bottom-up basis depending on the circumstances specific to SONI. Decisions regarding deficit repair and ongoing contributions are subject to analysis of information and evidence provided by the TSO.
- 3.21 Staff numbers are determined on the basis of existing levels and decisions on increases via project initiative request and allowances.

3) Initiative Expenditure - 'Shallow-Dive' Analysis

- 3.22 SONI has proposed a number of initiatives to either maintain or improve the operational capability or service level provided by the TSO. Each project results in opex and/or capex cost and has been assessed at a high level based on review of the business plan detail.
- 3.23 Our review principally looked at rationale for consideration and need, options, costs and benefits. A query log was established to provide further detail and clarification. The level of scrutiny applied is in line with the UR approach paper principles i.e. more analysis of financially material projects or poorly evidenced costs.
- 3.24 We received support from external consultants (GHD) on a number of key initiatives. Its findings are provided separately as an annex to the draft determination.

4) Initiative Expenditure – 'Deep-Dive' Analysis

- 3.25 For a selection of the projects (nine), we requested additional detail to provide assurance around initiatives. The projects were chosen to be representative from across SONI's full range of initiatives and services in order that results would be unbiased. The purpose of the audit was to address the concern that the challenge and governance process outlined by SONI is merely asserted in the business plan without being fully evidenced and so to help inform our proposed interventions and actions.
- 3.26 Within the audit we asked for a range of detail underpinning the business plan submission on whether there was a rationale for consideration and need, optioneering and risk, costs and benefits and assessed the business plan against these.
- 3.27 SONI provided an information submission on the 10 January 2020 which was subject to review by ourselves and GHD. We also had a meeting with SONI, at its request, to provide it with a further opportunity to clarify its information submission.

5) Real Price Effects

- 3.28 Certain price control costs will be adjusted based on the 'wedge' between expected costs and the rate of CPIH inflation (automatically built into the licence). This is known as the real price effect.
- 3.29 It is calculated on the basis of nominal forecasts of SONI's labour and non-labour costs and the subsequent difference between projected inflation. The real price effect analysis is explained

more fully in Section 7 of this annex.

6) Productivity Challenge

- 3.30 A productivity challenge is applied to certain price control opex costs. The challenge is based on a range of available data including:
 - Regulatory precedent.
 - Long-term trends in total factor productivity (TFP) improvements by sector and the total economy.
 - Average TFP improvements for a 'notional' TSO.
 - Labour productivity trends.
- 3.31 Productivity is combined with RPEs to give an overall cost trend. The productivity efficiency challenge and decision rationale are explained more fully in Section 7.

4. Base cost allowance assessment

Approach to assessment

- 4.1 For base cost allowances we have made relatively few changes to what has been submitted by SONI. Our approach can be summarised as follows:
 - Starting point for staff is the projected FTE numbers in 2019-20.
 - Base allowance for other costs is the projected spend for 2019-20.
 - Decisions on BAU IT expenditure uplifts have been taken on a service initiative by initiative basis.
 - Decisions on BAU telecoms expenditure has been taken on a service initiative by initiative basis.
 - Staff allowances going forward are determined based on salary benchmarking and FTE allowances as a result of initiative decisions.
 - An uplift to base has been provided to account for the additional costs imposed by the new performance framework.
- 4.2 We have not set out base cost request and allowances for a variety of factors including:
 - The business plan is not really structured in this fashion.
 - BAU IT and telecom initiative allowances are set out in the service initiative section below.
 - It is our view that some of SONI's new initiatives are already covered by BAU allowances.
- 4.3 Adjustments to base cost can be deducted however from our initiative allowances and staff salary benchmarking. These are set out in more detail in the sections below.

5. Service initiative cost allowance assessment

Business plan cost request

- 5.1 The SONI business plan has set out activities and additional spend by initiatives. SONI's request is set out largely in annexes D to H. Each initiative takes on a business case format including detail on need, options (including risk), costs and benefits. There are 34 initiatives in total split accordingly:
 - Initiatives D1 to D6: Business as usual (BAU) activities.
 - Initiatives E1 and E2: Telecoms opex and capex.
 - Initiatives F1 to F8: Sustainability and decarbonisation.
 - Initiatives G1 to G12: Grid security.
 - Initiatives H1 to H6: Partnership and engagement.
- 5.2 The overall cost (opex and capex) of these initiatives can be summarised as follows:

Table 8: SONI initiative cost request

| Initiatives | Combined Cost (Opex & Capex) - £m |
|-----------------------|-----------------------------------|
| Initiatives D1 to D6 | £10.4m |
| Initiatives E1 to E2 | £8.6m |
| Initiatives F1 to F8 | £14.1m |
| Initiatives G1 to G12 | £13.2m |
| Initiatives H1 to H6 | £4.1m |
| Totals | £50.4m |

Approach to assessment

5.3 We reviewed SONI's initiatives according to need, options, costs, and benefits. The level of scrutiny applied is in line with the UR approach paper principles i.e. more analysis of financially material projects or poorly evidenced costs. We considered the following factors:

Robust and appropriate need

- Rationale for consideration. For example, whether the service activity being proposed is something that is relevant for consumers and that should undertake during the period of price control review.
- Source information and demonstration on need or drivers for action i.e. risk assessment and scope definition and establishment etc.
- Evidence of need reflecting customer, consumer, and stakeholder priorities which has been identified, tested and has taken account of feedback through stakeholder engagement.

Robust and appropriate optioneering and risk

• Evidence of options reflecting customer priorities which have been identified, tested and taken account of through engagement.

- Consequences of the 'Do Nothing' option has been fully considered.
- Supporting justification and evidence for why the scope and range of options was considered including the rejection of alternate options.
- Supporting justification and evidence for how risk has been considered in optionality. This is about evidence for choice of option in considering whether lower risk, more flexible options have been considered (this should include why the chosen option is 'least regrets').
- Detail on differentiation between typical and innovative projects.

Robust and efficient costs

- Details on the changes to projects through governance challenge.
- Detailed breakdown of cost and activity i.e. task, days, vendor rates etc.
- Evidence of costing assumptions i.e. provision of quotes, benchmarking, market pricing etc.
- Rationale for cost allocation between opex and capex.

Robust and appropriate benefits

- Evidence and justification on chosen performance metric and measurable benefit provided.
- Detail on current service level and enhanced outcome and how this is considered to be sufficiently challenging.
- Evidence and justification of why and how SONI has considered the project provides overall value for money.
- 5.4 We have attempted to map initiatives to SONI roles and services as adapted by UR (see Annex 4, Evaluative performance framework). This involves allocating projects to the following service areas:
 - Support functions Not a customer service but spend which allows SONI to do its job i.e. replacing telecoms, metering and IT systems etc.
 - System operation and adequacy Activity related to scheduling and dispatch functions, market delivery and system adequacy / security.
 - Independent expert this includes SONI expert voice and industry Governance.
 - Transmission network development and system planning Planning, project scoping, high level design and consenting activities. Communicating system needs and wider benefits of the network.
 - Commercial interface Connection / access rights and the Moyle interconnector administration function.
- 5.5 Our mapping has resulted in the following allocation of initiatives by service area, though we accept that this is open to interpretation.

| Role | Service | Initiatives |
|-------------------|-----------------------|-------------------------------|
| Support functions | Support functions | D1 to D6, E1, E2, G11 and G12 |
| System operation | Scheduling & dispatch | F1, F4, and F5 |

Table 9: Mapping Initiatives to service areas

| and adequacy | Market development & system adequacy: support costs | F2 and G2 | |
|---------------------------------|---|--|--|
| | Market development & system adequacy: other costs | F3, F8, G1, G3, G4, G6, G7, G8 and G9 | |
| Independent expert | Industry governance | G5 and G10 | |
| | Expert voice | F7, H1, H2 and H5 | |
| | Assess & communicate system needs | H4 | |
| Transmission network | Project scoping & feasibility | F6 | |
| development and system planning | Outline design & consenting | Funded through TNPP | |
| | Handover & commissioning | Funded through TNPP | |
| Commercial | Connection and access rights | H3 and H6 | |
| interface | Contractual interface | No initiatives | |

5.6 Appendix 1 at the end of this annex sets out our detailed bottom up views on business plan quality, query process, interventions and actions for each service initiative proposal. We have ranked the rationale for consideration and need for action, options, costs and benefits as follows for each service initiative as follows:

Table 10: Initiative Ranking Key

| Initiative Category and Ranking |
|----------------------------------|
| Excellent |
| Somewhat short of excellent |
| Substantially short of excellent |

5.7 For the purposes of clarity and in line with our business plan assessment guidance, the 'traffic light' rankings only relate to the information submitted as part of the business plan. However, we have considered additional information provided by SONI through the query log and the 'deepdive' audit in coming to our proposals for interventions and actions. Our views also reflect feedback from the SECG and our consultants review of certain initiatives where relevant. Within our analysis we have also set out draft determination actions which identifies existing gaps where full allowances have not been provided.

UR service initiative proposals

Staff Allowances

5.8 Across all the initiatives, SONI have requested an additional c. 20 FTEs above the existing resource of 91 internal staff. On average, this increases the internal number of staff to 111 FTEs over the period. This represents a material increase in staffing resource. The request can be summarised by year and project initiative as follows:

| Initiative | 2020-21 FTEs | 2021-22 FTEs | 2022-23 FTEs | 2023-24 FTEs | 2024-25 FTEs |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| F1 – Renewables Strategy | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |
| F2 - Control Centre tools | 0.00 | 0.00 | 0.50 | 0.50 | 0.50 |
| F4 - Migration to IP Technology | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| F6 - System Planning | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| F7 - Promoting Change | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| G2 - Control Centre Training | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| G4 - Cyber Security | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| G5 - EUNCs | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| G6 - CM Secondary Trading | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| G9 - State Aid | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| G10 - Market Governance | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| G12 - Support for IT | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| H2 - Education & Engagement | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| H3 - Pre-Application Process | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| H7 - Customer Account Team | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Total Extra FTEs | 19.65 | 19.65 | 20.15 | 20.15 | 20.15 |

Table 11: SONI additional staff request by service initiative

5.9 On review of the initiatives, our staff allowance represents an increase of 6.5 FTEs as follows:

Table 12: UR additional staff allowance by service initiative

| Initiative | 2020-21 FTEs | 2021-22 FTEs | 2022-23 FTEs | 2023-24 FTEs | 2024-25 FTEs |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| F1 – Renewables Strategy | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |
| F2 - Control Centre tools | 0.00 | 0.00 | 0.50 | 0.50 | 0.50 |
| F4 - Migration to IP Technology | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| F6 - System Planning | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| F7 - Promoting Change | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G2 - Control Centre Training | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G4 - Cyber Security | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G5 - EUNCs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G6 - CM Secondary Trading | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| G9 - State Aid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G10 - Market Governance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| G12 - Support for IT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|------------------------------|------|------|------|------|------|
| H2 - Education & Engagement | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| H3 - Pre-Application Process | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| H7 - Customer Account Team | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Extra FTEs | 6.00 | 6.00 | 6.50 | 6.50 | 6.50 |

5.10 We have noted concerns above about whether increase in staff opex are BAU or not. As an action we request that SONI sets out a resource plan as part of its response to the draft determination. This should include mapping of what existing staff are working on to service areas (including time spent and setting out their existing activities and what they are working on) and justification of additional resource request as required.

Cost Allowances

- 5.11 The combined opex and capex request across all the initiatives is £50.4m for the price control period. Our allowance at draft determination stage is £19.2m, although there are initiatives where we have set an action for SONI to provide further evidence and justification with in its response to support its request where we have found there is a case for need and/or the initiative is not part of BAU, but where insufficient evidence or justification has been provided on other features (e.g. cost).
- 5.12 There are also some cases where we have provided no allowance but consider that outputs should still be provided. In these cases it is our view that such activity is already either previously funded or part of BAU allowances. The appendix on service initiatives highlights where this is the case (e.g. metering systems or connection pre-application process work).

| Initiatives | SONI Initiative Request (Opex & Capex) - £m | UR Initiative Allowance (Opex & Capex) - £m |
|-----------------------|--|--|
| Initiatives D1 to D6 | £10.4m | £8.6m |
| Initiatives E1 to E2 | £8.6m | £6.6m |
| Initiatives F1 to F8 | £14.1m | £3.9m |
| Initiatives G1 to G12 | £13.2m | £0.1m |
| Initiatives H1 to H6 | £4.1m | £0.0m |
| Totals | £50.4m | £19.2m |

Table 13: Initiative cost request and allowance

6. Salary cost allowance assessment

Business plan cost request

6.1 Staff costs make up the largest element of SONI's internal opex. SONI has presented this graphically as follows:



Figure 1: SONI opex cost breakdown¹⁰

6.2 In overall terms, SONI is estimating the following staff compliment of full-time equivalents (FTEs) for the TSO in the next price control:

Table 14: SONI staff number request¹¹

| Staff Category | Number of FTEs | Funding Method |
|------------------|----------------|----------------------------|
| Internal FTEs | 110.6 | Price control allowance |
| Recharged FTEs | 9.4 | Price control allowance |
| Connection Staff | 5.0 | Connection fees |
| TNPP Staff | 11.0 | Project specific allowance |
| Totals | 136.0 | |

- 6.3 For the purpose of this draft determination, decisions around funding only relate to the 111 internal FTEs and those who are typically EirGrid staff but have been employed on SONI activities and recharged to the TSO on this basis.
- 6.4 SONI's staff number request is based on existing internal FTEs of 91 plus a further 20 additions relating to the various business plan service initiatives that it proposes. Some increase in the cost of recharged staff is also proposed.

¹⁰ Source: SONI business plan, Appendix M, Figure 2, page 19.

¹¹ Figures derived from data tables and response to query UR-92.

6.5 In terms of cost, SONI is proposing an increase in payroll from current price control s pend of £44.3m to £52.4m in the 2020-25 period. This increase is mostly made up of additional staff. The cost request can be broken down as follows:

| Cost Category | Payroll Cost | Explanation |
|---------------|--------------|---|
| Basic Pay | £32.2m | Basic salary and wages for internal FTEs |
| Other Pay | £4.0m | Overtime, standby & bonus for internal FTEs |
| Employer Cost | £11.8m | NIC & pension contributions for internal FTEs |
| Indirect Cost | £2.2m | Travel, training & sundry costs for internal FTEs |
| Recharges | £1.6m | Cost of external staff recharged to SONI |
| Agency Staff | £0.6m | Any agency staff costs |
| Totals | £52.4m | |

Table 15: SONI staff cost request

6.6 Within the business plan service initiatives, SONI has budgeted £80k for an extra staff member. However, looking at payroll on a cost per FTE basis for the internal staff, the business plan data table request is as follows:

Table 16: SONI average internal FTE unit costs for 2020-25

| Cost Category | Cost per FTE |
|--|--------------|
| Basic Pay per FTE | £58.2k |
| Gross Pay per FTE (Basic plus other pay) | £65.4k |
| Direct Cost per FTE (Basic, other & employer cost) | £86.5k |
| Total Cost per FTE (Basic, other, employer & indirect) | £90.5k |

Review of SONI business plan quality

- 6.7 The SONI plan is less focused on justification of the rate of pay and more on explaining the rationale for increasing staff numbers. Such an approach is understandable to an extent, given that staff numbers is the principal factor affecting payroll cost increases.
- 6.8 Within Appendix M of its plan, SONI has reported on actual payroll costs, indicating spend below current UR allowances. It does however state that,

"SONI's staff related costs should outturn close to that assumed by the UR in its determination. However, the difficulties in achieving this efficiency challenge and the consequential impact on staff morale and potential for SONI to add value for customers should not be underestimated when the UR considers its determination for the 2020-2025 Price Control period."¹²

6.9 SONI has conducted payroll benchmarking against ASHE data comparators. The figure below indicates that SONI is typically above median wages but comparable to levels at the 75th

¹² Source: SONI business plan, Appendix B, para B.216, and page B-44.

percentile across the UK.



Figure 2: SONI staff cost per FTE compared to a composite index based on 3-digit ASHE data¹³

6.10 Data was also provided from the Engineer Salary Survey¹⁴, the Brightwater Survey and NERA's benchmarking of the National Air Traffic Services (NATS). Despite the benchmarking, the overall conclusion in this appendix is that:

"Overall, publically available comparator datasets do not provide sufficiently robust benchmarks to draw firm conclusions on the relative efficiency of SONI's staff costs."

- 6.11 Appendix M lists a variety of reasons why international comparisons with other TSOs are not appropriate. The points made are valid to an extent, though CEER¹⁵ has attempted to address such issues in its latest TSO benchmarking exercise.¹⁶
- 6.12 With respect to comparisons against ASHE data, the following objections are raised:
 - Job categories will not perfectly reflect the types of skills required for SONI.
 - ASHE data does not explicitly control for experience or education, both of which are a key driver of wages.
 - ASHE does not control for levels of unionisation or the impact of shift patterns.¹⁷
- 6.13 Whilst we acknowledge some benchmarking difficulties exist, it is our view that ASHE data can be considered a good comparator. In relation to the specific points raised, we would make the following response;
 - Job categories will not be perfect comparators. However, they can be reasonably well
 assumed by matching SONI roles with standard occupational classifications (SOCs).
 Furthermore, it is not the case that there would be a systematic bias against SONI in any

¹³ Source: SONI business plan, Appendix M, Figure 15, page 37.

 ¹⁴ Source: <u>https://theengineer.markallengroup.com/production/content/uploads/2019/06/2019-Salary-Survey.pdf</u>
 ¹⁵ CEER = Council for European Energy Regulators.

¹⁶ See TCB18 [<u>https://www.ceer.eu/1766</u>] and the steps taken to ensure data comparability.

¹⁷ Source: SONI business plan, Appendix M, page 37.

such comparisons.

- Education can be controlled for to some extent depending on the choice of SOC. Experience can be factored into the analysis based on the choice of percentile comparison. In addition, the NI ASHE dataset specifically reports some salary data based on skill level, thereby taking account of both education and experience.
- Gross pay data in ASHE does include shift and overtime pay. It is also not clear that the shift patterns of SONI staff in general would be materially higher than comparators.
- 6.14 Besides these specific points, it is generally recognised that ASHE is a very comprehensive and reliable dataset which has been used by the UR and various other UK regulators to make salary decisions. As such, it forms the basis of our analysis, though other comparators have been used including recent regulatory precedent for the market operator.

Approach to assessment

- 6.15 Our salary benchmarking follows a virtually identical methodology as that undertaken in Appendix M of SONI's business plan. This includes comparing SONI's **basic** and **gross** salary costs per FTE against the following:
 - UK ASHE data at the median using SOC2, SOC3 and SOC4 classifications.
 - UK ASHE data at the 75th percentile using SOC2, SOC3 and SOC4 data.
 - NI ASHE data at the median using SOC2 classifications.
 - NI ASHE data at the 75th percentile using SOC2 classifications.
 - Other relevant survey detail and pertinent regulatory precedent.
- 6.16 Both the choice of comparator occupations and the weightings follow that used by SONI's consultants. We could have exercised some of our own judgement in this area but have chosen not too on this occasion. The SOC choices and weightings are listed below:

Table 17: Weight of SOC composite indices

| Standard Occupational Classification Used | Weighting |
|---|-----------|
| SOC2 | |
| Science, research, engineering and technology professionals | 50% |
| Business, media and public service professionals | 50% |
| SOC3 | |
| Engineering professionals | 20% |
| Information technology and telecommunications professionals | 30% |
| Legal professionals | 17% |
| Business, research and administrative professionals | 17% |
| Quality and regulatory professionals | 17% |
| SOC4 | |
| Electrical engineers | 20% |
| IT specialist managers | 10% |
| IT project and programme managers | 10% |

| IT business analysts, architects and systems designers | 10% |
|---|-----|
| Solicitors | 13% |
| Management consultants and business analysts | 13% |
| Business and financial project management professionals | 13% |
| Quality assurance and regulatory professionals | 13% |

Benchmarking Results

6.17 At the level of basic pay, the results are as follows:

Table 18: Benchmarking results of basic pay analysis

| Comparator | Cost per FTE | SONI % Differential |
|---|--------------|---------------------|
| SONI Request - Basic Salary Cost per FTE | £58,227 | 0.0% |
| UK ASHE - Median [SOC2] | £40,781 | 41.5% |
| UK ASHE - Median [SOC3] | £42,875 | 34.6% |
| UK ASHE - Median [SOC4] | £45,712 | 26.2% |
| UK ASHE - 75th Percentile [SOC2] | £52,707 | 9.5% |
| UK ASHE - 75th Percentile [SOC3] | £57,464 | 0.4% |
| UK ASHE - 75th Percentile [SOC4] | £58,835 | -1.9% |
| NI ASHE - 75th Percentile [SOC2] | £45,885 | 25.8% |
| Engineer Salary Survey [NI Region] | £44,941 | 28.4% |
| Brightwater Survey – Electrical Engineer [NI] | £45,000 | 28.2% |

- 6.18 As the table shows, SONI proposals are in excess of UK median comparators. There is also a material gap (c. 26% 28%) between SONI and any of the NI comparators or survey information. Proposed spend is however reasonably aligned with UK 75th percentile comparisons.
- 6.19 For gross pay (basic plus other pay), the following detail can be observed.

Figure 3: Benchmarking results of gross pay analysis



- 6.20 When accounting for the additional costs of overtime, standby and bonuses, SONI proposals are above the UK 75th percentile benchmarks. There is also a material difference between SONI and the NI highest skill level salaries at the 75th percentile.
- 6.21 In terms of regulatory precedent some obvious comparators exist. These include previous SONI allowances, SEMO,¹⁸ and the gas market operator in Northern Ireland. When comparing *direct costs per FTE* (i.e. basic, other pay, employers NIC and pension contributions) in April 2019 prices, the results are as follows:

| Comparator | Cost per FTE | SONI % Differential |
|---------------------------------------|--------------|---------------------|
| SONI BP Request - Direct Cost per FTE | £86,484 | 0% |
| SONI 2015-20 Allowance | £82,175 | 5% |
| SEMO Allowance | £74,697 | 16% |
| SEMOpx Allowance ¹⁹ | £73,808 | 17% |
| GMO NI ²⁰ Allowance | £66,227 | 31% |

Salary proposals

6.22 Typically speaking, regulated monopoly allowances would often be based on salaries at the median level. The yardstick benchmarking would therefore suggest that allowances should be

¹⁸ Single Electricity Market Operator.

¹⁹ SEMO and SEMOpx figures are calculated using RPI figures and an exchange rate of £1: €1.15 as of the 05/03/20.

²⁰ Gas Market Operator for Northern Ireland.

reduced, particularly in comparison to regional rates of pay.

- 6.23 SONI have not provided much justification to support their salary proposals. In addition, when comparing against direct costs, regulatory precedent for similar skill levels and activities indicates that proposals may be inflated. The SEMO and SEMOpx precedent seems particularly relevant in this regard.
- 6.24 However, we recognise the value that SONI, as a relatively small organisation, can deliver to customers and the wider energy industry. As a consequence, we are minded to provide a staff allowance in line with the 75th percentile benchmark, which SONI's basic pay is. This should provide SONI the resource to deliver frontier service level performance.
- 6.25 However, it is unclear to us why an adjustment should not be made to reflect the labour cost in Northern Ireland. Regional cost and price adjustments are common place and seem equally relevant to SONI.
- 6.26 As such, we have adjusted SONI's basic pay of £58.2k by 12.5% to reflect the overall difference established by ASHE regional differences for full-time staff. The result is an allowance of £51k for basic pay.
- 6.27 With the exception of pensions, other direct and indirect staff costs are provided for at the same percentage rate as the SONI request. Consequently, overall allowances for these line items will be lower given the difference in staff numbers and rates of pay.
- 6.28 The result of our decisions provide allowances for internal FTEs as follows:

Table 20: UR average allowances for internal FTEs for 2020-25

| Cost Category | Cost per FTE |
|--|--------------|
| Basic Pay per FTE | £51.0k |
| Gross Pay per FTE (Basic plus other pay) | £57.3k |
| Direct Cost per FTE (Basic, other & employer cost) | £73.6k |
| Total Cost per FTE (Basic, other, employer & indirect) | £78.9k |

- 6.29 The table above indicates **direct cost allowance of £73.6k per FTE** reasonably aligned with SEMO/SEMOpx (c. £74k) and a **total cost per FTE of £79k** which is similar to SONI's budget of £80k per person in the text of the business plan annexes.
- 6.30 Besides the internal staff, SONI has requested £320k per year on recharged staff and £125k per year on agency employees. This represents a step change from existing spend. We recognise that some expertise sharing will likely be inevitable so have provided for the full TSO request. This results in an additional allowance of £445k per year or 5.6 FTEs based on a unit cost of £79k per person.
- 6.31 Given the initiative staff allowances, the resource compliment provided for via this control is 104.7 FTEs. This includes a further two FTEs to account for the resource associated with new reporting and engagement obligations associated with the benefit framework. Assuming the full complement of connection and TNPP staff, this would equate to 120.7 staff allocated to SONI TSO activities.

Table 21: UR staff number allowance

| Staff Category | UR Allowance Number of FTEs |
|-------------------------------|--------------------------------|
| Internal FTEs | 99.0 |
| Recharged FTEs | 4.1 |
| Agency Staff | 1.6 |
| Price Control Total | 104.7 |
| Other Non-Price Control Staff | |
| Connection Staff | 5.0 |
| TNPP Staff | 11.0 |
| Overall TSO Total | 120.7 |

6.32 In overall terms, our payroll decisions take account of the following elements:

- Number of internal FTEs.
- Rates of basic remuneration.
- Levels of bonus, overtime and other pay.
- Allowances for employer defined benefit and defined contribution costs.
- Recharge and agency staff.
- 6.33 On the basis of the decisions outlined above, our payroll allowance is as follows:

Table 22: SONI payroll request and UR allowance

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|----------------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| SONI Payroll Request | 10,504 | 10,489 | 10,543 | 10,443 | 10,449 | 52,428 |
| UR Payroll Allowance | 8,148 | 8,141 | 8,181 | 8,103 | 8,075 | 40,649 |
| Proportional Allowance (%) | 77.6% | 77.6% | 77.6% | 77.6% | 77.3% | 77.5% |

6.34 We welcome SONI views on the relevant decisions. We would further encourage submission of detail on staff roles by service area. This will help improve the quality of payroll benchmarking going forward.

7. RPEs and productivity assessment

Business plan cost request

- 7.1 SONI has set out its assumptions concerning real price effects and productivity in Appendix M of its business plan. The forecasts are set in the context of our signal in the approach document to move away from RPI to CPIH as the relevant measure of inflation.
- 7.2 The overall findings of the business plan analysis can be summarised as follows:

| SONI Forecasts – RPEs and Productivity | | | | | | | |
|--|--------|-------|----------------|--|--|--|--|
| Real Price Effects | | | | | | | |
| | Raı | nge | | | | | |
| Category | Low | High | Point Estimate | | | | |
| Labour | 0.20% | 1.30% | 1.00% | | | | |
| Non-Labour | 0.42% | 0.75% | 0.60% | | | | |
| Overall RPE | 0.30% | 1.10% | 0.90% | | | | |
| Inflation | | | | | | | |
| СРІН | 1.82% | 2.17% | 2.00% | | | | |
| Productivity | | | | | | | |
| Independent Forecasts | 0.30% | 0.60% | 0.45% | | | | |
| EU KLEMS ²¹ - Adjusted | -0.25% | 0.62% | 0.28% | | | | |
| Regulatory Precedent | 0.00% | 0.30% | 0.15% | | | | |
| Overall Productivity | -0.25% | 0.62% | 0.30% | | | | |
| Cost Trend | | | | | | | |
| Total Cost Trend | -0.30% | 1.40% | 0.60% | | | | |

Table 23: SONI assessment of RPEs and productivity

- 7.3 SONI is forecasting input costs rising 0.9% above CPIH inflation. This is mostly (68%) derived from wage growth forecasts, though SONI also expected real prices to rise for non-labour (32%) elements.
- 7.4 Alongside the RPEs, SONI has applied an efficiency challenge of 0.3% per annum. This figure has been derived from:
 - Total Factor Productivity (TFP) growth forecasts for the general economy.
 - EU KLEMS data for a 'notional' TSO using proxy sectors and weighting by SONI areas of spend.
 - Regulatory precedent for 'asset light' companies.
- 7.5 SONI has given more weight to TFP results for recent time periods. It has also placed emphasis
- ²¹ EU KLEMS stands for EU level analysis of capital (K), labour (L), energy (E), materials (M) and service (S) inputs.

on 'asset light' precedents such as SONI (0.3%), SEMO (0.3%) and Power NI (0%). Its view is that capital rather than labour drives TFP growth for energy networks.

7.6 When applied to relevant costs, the total cost trend of 0.6% above inflation results in additional revenue of £2.2m for SONI over the price control period.

Review of SONI's Business plan

- 7.7 The approach taken by SONI to estimate RPEs and productivity is based on well-established regulatory precedent. The business plan analysis and detail is clear, comprehensive and based on broadly sound reasoning. We are in agreement with many aspects of the chosen methodology, database selection and application. However, there are a couple of areas where we are in disagreement. These include the following:
 - Views on non-labour cost RPEs.
 - Proposals on capital substitution and relative efficiency.
- 7.8 For non-labour costs, SONI has made the assumption that there is an RPE of 0.6% based on the 'wedge' between inflation and the services element of CPIH. We have not been able to replicate SONI figures and estimate the wedge to be c. 0.4%.
- 7.9 More importantly, other relevant indices such as the *Services Producer Price Index (SPPI)* would appear to indicate increases below inflation and hence a negative RPE. Like Ofwat, we have concluded that no adjustment is required if the expected value of the input price and CPIH is not materially different from zero. In this instance it would seem that no adjustment is necessary.
- 7.10 For productivity, SONI has argued that there is no need for a capital substitution adjustment as there is little scope to replace labour with capital. Furthermore, it has adjusted EU KLEMS findings by -25% to reflect changes resulting from relative efficiency improvements as opposed to frontier shift.
- 7.11 From our perspective we understand the arguments raised. However, in this business plan SONI has asked for a material increase in capital allowances. These are, at least in part, aimed at productivity improvements (i.e. transition to cloud, smarter outage management etc.). Moreover, a reduction to productivity forecasts would be appropriate if SONI were able to evidence that they are a frontier performer. As such evidence has not been provided, our view in the absence of better information, is that the capital substitution and relative efficiency issues cancel each other out.

Approach to assessment

- 7.12 Our approach closely follows SONI's as it is a well-established methodology. For the purposes of clarity, areas where we have diverged from SONI include the following:
 - We have incorporated the Services Producer Price Index (SPPI) into the assessment of non-labour RPEs.
 - Used the latest version of the EU KLEMS dataset.²²
 - Placed more emphasis on long term trends to avoid the issue of business cycle bias.
 - Taken wider regulatory precedent into account including Ofgem and UR decisions with

²² See the Vienna Institute for International Economic Studies (<u>https://euklems.eu/</u>).

respect to gas TSOs.

- Taken economy wide estimates of TFP and labour productivity into account.
- Made no adjustments for relative efficiency or capital substitution.
- 7.13 For RPEs the material difference is the views on non-labour costs. Looking at the services index against inflation, the following can be observed.



Figure 4: Movements in CPIH and SPPI indices since 2009

7.14 The graph demonstrates service producer price increases consistently below inflation. While many of these services will not be applicable to SONI, the concern remains that these costs will not be materially different from inflation.

Proposals

7.15 The outworking of our analysis has provided the following results:

Table 24: UR assessment of RPEs and productivity

| SONI Forecasts – RPEs and Productivity | | | | | | | |
|--|--------|-------|----------------|--|--|--|--|
| Real Price Effects | | | | | | | |
| | Rar | nge | | | | | |
| Category | Low | High | Point Estimate | | | | |
| Labour | 0.20% | 1.08% | 1.00% | | | | |
| Non-Labour | -0.91% | 0.41% | 0.00% | | | | |
| Overall RPE | -0.16% | 0.87% | 0.68% | | | | |
| Inflation | | | | | | | |
| СРІН | 1.82% | 2.17% | 2.00% | | | | |
| Productivity | | | | | | | |

| Independent Forecasts | 0.30% | 0.60% | 0.45% |
|-------------------------|--------|-------|-------|
| EU KLEMS - TFP (Old) | 0.28% | 0.95% | 0.62% |
| EU KLEMS - TFP (New) | 0.67% | 1.02% | 0.85% |
| ONS Labour Productivity | 1.14% | 1.30% | 1.22% |
| Regulatory Precedent | 0.00% | 1.00% | 0.62% |
| Overall Productivity | 0.00% | 1.30% | 0.60% |
| Cost Trend | | | |
| Total Cost Trend | -0.76% | 0.27% | 0.08% |

- 7.16 Following SONI's approach but applying no RPE to non-labour costs results in an overall real input price effect of 0.68% per annum.
- 7.17 For productivity we have assumed a challenge of 0.6% per annum. This is close to the central point of our forecasts and is in line with general economy assumptions. It could be considered somewhat conservative given the 'notional' TSO findings using EU KLEMS data which are often thought to be the most appropriate method.
- 7.18 In overall terms the real price effect is largely cancelled out by expected efficiency. The draft determination has allowed an overall cost trend of +0.08% per annum. When applied to relevant opex items, this provides SONI with £203k additional revenue over the price control period.

8. Pension cost allowance assessment

Business plan cost request

- 8.1 SONI's business plan request for the defined benefit (DB) pension scheme is based on an initial assessment from the actuaries on the funding level in the scheme of 86%. It is this figure that has been used to calculate an estimate for the deficit. This deficit figure has then been used to calculate an estimate for the contribution rate.
- 8.2 The defined contribution scheme contribution rate of 7% is based upon a June 2019 report. SONI did not submit this report. Deficit repair costs are estimate at £4.7m over the price control period. The combined employer cost of the defined benefit and defined contribution schemes are estimated to be in the region of £6.8m.

Review of SONI's Business plan

- 8.3 The expenses for the defined contribution scheme included in the business plan are approximately 60% more per annum than those outlined in the figures in the relevant appendix that the actuary contributed.
- 8.4 This is a material increase and SONI state that this is reflective of the 'actual administration costs incurred'. The defined benefit scheme expenses require scrutiny upon receipt of the revised valuation and may require further justification and benchmarking given this material increase.
- 8.5 In its model it seems that SONI has indexed their deficit. Taking account of the time value of money in a deficit is not accurate as allowances will already be indexed in line with RPI. The response to query log questions²³ further indicates the intention to repair the deficit within five years (by April 2025). This seems questionable given the current approach to the deficit. Concern is also raised by the DB administration cost of claim of £159k per annum against the valuation recommendation of £100k per year.
- 8.6 The contributions for the defined contribution outlined in the model that are presented in the staff allowances section do not reconcile with those in the pension's section. Our approach is therefore based on our best estimate as outlined below.

Approach to assessment

- 8.7 SONI's pension submission for the defined benefit scheme is not based on a formal valuation but an initial high-level estimate of the funding levels. For this reason, we cannot assess appropriate allowances for the defined benefit scheme.
- 8.8 DB pension employer contributions included in the staff allowance are based on the previous price control percentages (38.4%) and will be updated using the principles outlined upon receipt of the revised valuation.
- 8.9 Contributions for the defined contribution scheme are based on an estimate of the salary roll for the defined contribution members multiplied by the scheme contribution rate and expenses as per the costs submitted in the business plan.

²³ Query UR-74 response on pension deficit recovery.

Pension proposals

Deficit repair allowance

- 8.10 SONI's business plan proposes a five year recovery plan for the current deficit. This is a changed approach from the previous price control. Given the significant increase in the size of the pension deficit and the inherent volatility of financial markets, we consider an appropriate approach is that current deficit within the scheme should be recovered over a ten year period.
- 8.11 We consider that this is a more proportionate burden on consumers. It helps ensure adequate deficit recovery but minimises any risk of a 'stranded surplus'. SONI have confirmed that the scheme's rules outline that any surplus must firstly be used to the benefit of the pension scheme members, with any share to the company and its customers subject to trustee discretion.
- 8.12 We therefore consider this approach necessary to protect consumers against the real risk of a stranded surplus. This is a balanced approach as we have not made any allowances in the recovery plan for expected asset out-performance, which would reduce the required repair payments.²⁴
- 8.13 The allowance provided in this draft determination is based on a deficit of £5.3m which is the estimated deficit that the scheme actuaries have provided in their appendix for the year 2019-20, recovered over 10 years. This will be updated upon receipt of the revised valuation.

Incremental Deficit

- 8.14 The proposal to allow for recovery of the pension deficit over a new ten year period is also aligned with the application of a deficit 'cut-off' to the scheme. This 'incremental deficit' is the deficit for which consumers are no longer liable for²⁵ post the cut-off date. It is not currently a material figure²⁶ but a greater deficit will emerge as liabilities are accrued post the pension deficit cut-off date.
- 8.15 A significant proportion of the total pension deficit risks will continue to be passed on to customers even after a pension deficit cut-off date takes effect, supporting a proportionate approach to recovery as outlined.
- 8.16 No allowance is therefore provided for incremental deficit as it is not a recoverable figure.

Ongoing contributions

8.17 Our approach will be to apply the actuarial contribution rate to an estimate of actual active members as this best reflects actual costs. This approach was endorsed by the CMA in the last price control. Allowances in this draft determination are based on the previous price control's contribution rate (38.4%) and will be updated upon receipt of the actuarial valuation.

Administration costs

8.18 We would expect to see the defined benefit administration expenses in the actuarial valuation to be in line with the previous valuation, adjusted for inflation. Allowances in this draft determination are in line with this approach i.e. £100k per annum.

²⁴ All other things being equal.

²⁵ The date after which consumers are no longer liable for the Defined Benefit scheme deficit is December 2017.

²⁶ SONI's business plan estimate the current incremental deficit amount for 2020/21 to be £174k.

Defined Contribution Scheme

8.19 The approach to the contribution allowance for the defined benefit scheme in our draft determination is to an estimate of the salary roll for the defined contribution members and application of the contribution rate to this. Expenses are as requested by SONI in the business plan tables submitted.

Summary

8.20 The approach to the contribution allowance for the defined benefit scheme in our draft determination is to an estimate of the salary roll for the defined contribution members and application of the contribution rate to this. Expenses are as requested by SONI in the business plan tables submitted.

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Deficit Repair Request | 936 | 936 | 936 | 936 | 936 | 4,680 |
| Defined Benefit Request | 538 | 474 | 474 | 314 | 314 | 2,114 |
| Defined Contribution Request | 897 | 918 | 923 | 971 | 972 | 4,681 |
| SONI Pensions Request | 2,371 | 2,329 | 2,333 | 2,221 | 2,222 | 11,476 |
| Deficit Repair Allowance | 529 | 529 | 529 | 529 | 529 | 2,646 |
| Defined Benefit Allowance | 383 | 360 | 370 | 275 | 245 | 1,633 |
| Defined Contribution Allowance | 489 | 493 | 493 | 510 | 515 | 2,499 |
| UR Pensions Allowance | 1,401 | 1,382 | 1,392 | 1,314 | 1,289 | 6,778 |

Table 25: SONI pension request and UR allowance

8.21 We recognise that the allowance will require amendment upon receipt of the actuarial valuation. This should be received prior to the final determination decision. However, we welcome comments on the principles established in this draft decision.

9. Overall summary of UR proposed allowance

Business plan cost request

9.1 The request (excluding margin, asymmetric risk and PCG) submitted by SONI is £95m opex and £26m capex split by year as follows.

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|-------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Total Opex | 18,119 | 18,572 | 18,999 | 19,694 | 19,407 | 94,791 |
| Total Capex | 9,225 | 6,004 | 4,078 | 3,554 | 3,146 | 26,007 |

Table 26: SONI opex and capex cost request 2020-25

Allowance proposals

- 9.2 We have sought to build up allowances via initiative decisions, salary benchmarking, pension assessments, productivity challenge and real price effect forecasts.
- 9.3 Besides this, we have made three other minor adjustments to our allowances. This includes:
 - We have provided a provisional allowance of £0.75m (including contingency) within opex allowances for network planning feasibility studies. However, we would welcome further discussion on this issue with SONI.
 - Certain stable and predictable costs such as licence fees, ENTSO-E²⁷ and CORESO²⁸ membership have been provided for as part of ex-ante costs as opposed to being subject to an uncertainty mechanism request each year.
 - As detailed in the salary proposal section, we have provided two additional FTEs to cover the resource required to enable SONI to undertake the relevant proposals, monitoring, analysis and reporting associated with the new evaluation performance framework.
- 9.4 Our view is that costs which are relatively uncontrollable but predictable: CORESO, ENTSO-E and licence fees, can be provided for in the price control cost allowance. This would also avoid need to submit/review costs within the annual uncertainty mechanism process. However, the possibility of retaining these items under the uncertainty mechanism exists, subject to convincing argumentation by SONI or other stakeholders. The result of our deliberations are as follows:

Table 27: UR opex and capex cost allowance 2020-25

| | 2020-21 £000s | 2021-22 £000s | 2022-23 £000s | 2023-24 £000s | 2024-25 £000s | Totals £000s |
|-------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| Total Opex | 13,791 | 13,814 | 14,290 | 14,857 | 13,403 | 70,154 |
| Total Capex | 2,350 | 1,881 | 1,725 | 1,535 | 1,463 | 8,955 |

²⁷ ENTSO-E = European Network of Transmission System Operators for Electricity.

²⁸ CORESO = Co-Ordination of Electricity System Operators.
9.5 We have provided 74% of SONI's opex request but only 34% of the capex provision. However, to give the figures some historic context, the table below details requests and allowances against the previous price control and SONI's projected spend. The table also indicates the proportional increase the draft determination represents against comparable existing allowances.

| | UR Allowance ²⁹ 2015-20 £000s | SONI Spend ³⁰ 2015-20 £000s | BP Request 2020-25 £000s | DD Allowance 2020-25 £000s | DD % Increase from PC15 |
|-------|--|--|--------------------------------|----------------------------------|-------------------------------|
| Opex | 62,591 | 70,473 | 94,791 | 70,154 | 12% |
| Сарех | 7,703 | 5,739 | 26,007 | 8,955 | 16% |

Table 28: Cost request and allowance context

²⁹ Allowances reflect those following CMA referral and decisions.

³⁰ It should be noted that this refers to projected spend as the period has not yet finished.

10. Appendix: Assessment of individual service initiatives and associated interventions and actions

Support function

D.1: Assets Reaching End of Life

- 10.1 SONI has proposed to invest in upgrading and replacing IT assets which will be reaching their end of life expectancy. In total, SONI requests a £5.67m capex allowance. We propose to provide a partial allowance for capex of £4.80m.
- 10.2 We found that both the rationale for consideration and the need was sufficiently clear for the 'renewal of our core EMS up to 2025' element. In relation to 'BAU Software/System Upgrades' elements there is a justified rationale for consideration and need for action identified for the majority of assets highlighted in the business plan. However, the need for certain BAU Software/System Upgrades' elements assets has not been sufficiently established and well evidenced to justify the full amount. However, we have requested additional information, such as SONI's IT strategy, to provide us with sufficient confidence in relation to the need of these assets.
- 10.3 We have accepted cost request for the BAU Software/System Upgrades (those assets excluding EMS) initiative, where a rational for consideration and need for action has been justified, and where we consider the benefits of renewing or replacing these BAU tasks are likely to outweigh the costs for this initiative. In relation to EMS renewal, we recognise this is a mission critical technology needed to operate the system, the need and benefits have been sufficiently justified. We consider that the need is likely to outweigh the costs for EMS renewal.
- 10.4 There has also been a contingency amount added to projects within both 'BAU Software/System Upgrades' and the EMS renewal which will not be provided for. As contingency costs are not guaranteed nor represent the central efficient cost estimate, their inclusion would not be appropriate in a risk sharing framework.
- 10.5 We provide more detailed views separately for 'BAU Software/System Upgrades' and 'EMS' elements in the respective tables below.

Table: UR views of the BAU Software/System Upgrades' elements (excluding EMS)

| Rationale for consideration and Need | Whether rationale for considering the initiative and the need for action is established and well evidenced The rationale and need for action for considering the majority of the assets D.8.2.1 Desktop Infrastructure Refresh, D.8.2.2 VMware & Citrix Software Upgrades, D.8.2.3 Operating Systems Upgrades – Windows Server 2012, D.8.2.4 Oracle Audit Vault Refresh, D.8.2.5 Data Centre Access Layer Switching Upgrade, D.8.2.6 Floor Access Layer Switching Upgrade, D.8.2.7 Wireless Infrastructure Upgrade, D.8.2.10 Corporate Oracle Database Hardware Refresh and Virtualisation, D.8.2.11 Dynamics On-premise Upgrade, D.8.2.12 Standing Data Workbook, D.8.2.13 Private Communications Network (PCN)] is sufficiently established and well-evidenced for these assets. The business case is sufficiently clearly defined and evidenced to upgrade or replace the majority of assets highlighted to the importance to maintain continuity of service which will help ensure reliable system operation for customers. While we do consider there is potentially rationale for considering 'D.8.2.8 Server & Storage Expansions' and 'D.8.2.9 Storage Area Networks (SANs)', we do not, however, have the confidence and assurance that the needs are defined sufficiently to warrant investment. We agree with SONI that their ongoing transition to cloud technologies will reduce the need for server storage space over the price control period. However, we have not seen an IT Strategy from SONI: we would expect this to confirm cloud transition timelines, server information including how servers will be affected by the cloud transition. We are aware that there is a need for the replacement and renewal of the majority of assets highlighted. This will ensure that SONI have the necessary assets to maintain a reliable system for NI consumers. We could not find evidence of thorough testing with stakeholders. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus There is little optionality provided within the majority of assets in the 'BAU Software/system Upgrades' section. For some assets SONI suggests that it has explored options or that no options are viable, but has provided no further explanation beyond this. We recognise SONI provides a general explanation of the 'Do Nothing' approach which covers all IT BAU initiatives (page D-32) and we agree with SONI that if assets are extended beyond the recommended time this creates heightened risk to service. Some high-level risks and mitigations have been provided which cover all of the assets, however no individual, specific risks have been identified for any of the assets in the 'BAU Software/system Upgrades' section. |

| | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale |
|------------------------------|---|
| Robust and efficient cost | Overall, there is insufficient information from the business plan to understand whether the costs are efficient and based on good sources/evidence. SONI has provided limited detailed cost breakdown from high level capex or robust costing assumptions (e.g. benchmarking) for any of the assets. SONI has also added contingency to its costs in relation to "unforeseen requests" (page D-47). Contingency costs should not be included as contingency costs are not guaranteed nor represent the central efficient cost estimate, their inclusion would not be appropriate in a risk sharing framework. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome The business plan provides no quantifiable information on measurable benefits or enhanced outcomes. However, we do recognise that there has been various credible BAU benefits identified for the asset replacement areas which may provide value for money and help maintain continuity of these services and the network in the interest of customers across Northern Ireland. |
| Additional Ana | lysis |
| BAU Distinction | There is clear information that these asset replacements are BAU as proposed by SONI. |

| | The query process requested various information in relation to: |
|--------------------|--|
| | a) The amount of contingency costs included by SONI (Query UR-52). b) Information in relation to the costs and potential correlation of cost amounts of various BAU software/system upgrades (UR-17). c) Information in relation to the 300 servers moving to the cloud in the price control (UR-63) |
| | For a), SONI indicated that the rates of contingency would range from 5% to 10% depending on the level of uncertainty around the estimated costs of the project. |
| Query Process | For b), it further made it clear that there was no correlation between costs and have provided more background to these costs (Oracle Audit Vault, Desktop Infrastructure Refresh, Data Centre Access Layer Switching & Floor Access Layer Switching upgrades). However, no evidence to the sources of these costs have been provided. |
| | For c), SONI also provided which applications they envisioned would move to the cloud. It demonstrated that their test environments and servers would be migrated. SONI state that it plans to migrate 30 servers per annum over the 5-year period. SONI provided further information that relates to the numbers of physical / virtual servers and the likely number to be moved to cloud over the next price control period. While we appreciate these estimates, we would find an IT strategy more appropriate to help identify need. |
| | In summary the query process helped understand high level information in relation to servers and test environments that planned to be migrated to the cloud. However, we require an IT Strategy to fully understand the rationale for need for 'D.8.2.8 Server & Storage Expansions' and 'D.8.2.9 Storage Area Networks (SANs)' |
| Deep Dive Audit | N/A (except for EMS renewal) |
| | We are willing to re-assess the disallowances if SONI can provide: |
| Draft | |
| Determination | An IT strategy demonstrating a breakdown of server replacement cycles. |
| Actions | How these servers will be affected by the transition to cloud. |
| | Why the server and storage expansions are required in light of cloud transitions. |

10.6 As a critical function and one which was subject to the 'deep-dive' audit, we have assessed the EMS separately even though it forms part of the overall D.1 initiative.

Table: UR views of the EMS initiative

| Rationale for consideration and Need | Whether rationale for considering the initiative and the need for action is established and well evidenced The rationale for considering the initiative is appropriate and the need for action was well-established and evidenced by SONI. This is because the business plan clearly identified detailed reasoning for the renewal of the EMS system up to 2025 and SONI highlights that EMS platforms are upgraded every five years to replace obsolescent hardware, upgrade software and to maintain appropriate support arrangements with vendors. We recognise that this is evidenced by the Gemserv recommendation in 2015, who recommend that it is accepted practice to refresh IT systems every 5-7 years. |
|--|--|
| | Case for customer, consumer and stakeholder focused need SONI demonstrate the case for consumer focused need in the business plan. They state "the EMS is a key enabler of all-island power system operation, providing the control centres with a single view of the power system and the ability to optimise capacity and flows accordingly in the best interests of customers" (page D-41). We could not find evidence of thorough testing with stakeholders. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has demonstrated appropriate optioneering and risk (no alternative options have been provided to the EMS Renewal approach, but the business plan makes it clear that the EMS system is a critical function). We recognise that there is no alternative option but to refresh the EMS system. We acknowledge that SONI has identified the potential option of replacing their EMS supplier however, we agree with SONI's recommendation to rule this out, suggesting it is not cost efficient. SONI have identified various relative risks in the business plan which can be mitigated through a fully operational EMS system. We agree that one of the risks of not having an operational EMS system is the potential delay to the integration of new technologies which in turn, could increase wholesale prices and carbon emissions. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Overall, there is insufficient information to understand whether the costs are efficient, based on good sources/evidence or subject to optimum timing. SONI have provided some cost breakdown indicating the five main areas that make up the financial forecast of the EMS renewal. However, there is a lack of detailed cost breakdown amongst these five areas and no evidence provided behind these cost sources. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome The benefits provided are not measurable and have not been demonstrated as sufficiently challenging. However, we recognise SONI have identified credible critical benefits that the EMS renewal will bring to provide value for money. We recognise that benefits included a customer focus, for example, SONI highlight there could be potential delays to new technologies due to EMS limitations which could cause an increase to end user prices. We do recognise the benefits SONI have demonstrated are critical as <i>"EMS is a key enabler of all-island power system operation, providing the control centres with a single view of the power system and the ability to optimise capacity and flows accordingly in the best interests of customers"</i> (page D-41). |
|-----------------------------------|--|
| Additional Ana | lysis |
| BAU Distinction | There is clear detail that these asset replacements are business as usual as expected. |
| Query Process | Queries UR-58 and UR-59 focused on need and cost profile type. SONI confirmed that the hardware is already running on extended warranty and will likely be replaced in the early part of the price control when most of the costs will be incurred. |
| Deep Dive Audit | SONI provided some additional evidence in relation to need, optioneering (including the consequences of the 'Do Nothing' approach) and costs, including some additional capex costs breakdown. However, additional information was not provided to help us understand the sources or evidence of costing. SONI also identified additional benefits and demonstrated how these are consumer focused. SONI state that the <i>"success or failure of this initiative is measured by the level of availability of the EMS and that the ultimate benefit of the EMS renewal project is the ability for SONI to safely and reliably operate the power system of NI for the benefit of all customers and consumers in NI on an ongoing basis</i> ". (Deep Dive, P4) |
| Draft Determination Actions | No action is required as all costs barring contingency have been provided for. |

D.2: Transition to Cloud

- 10.7 SONI proposed to continue to transition to the cloud and move away from owning and maintain their own 'on premise' servers and moving to cloud-hosted software over the price control period. SONI has requested £923k (opex) and £748k (capex). We propose to allow SONI the full amount requested for the transition to the cloud.
- 10.8 We agree with SONI's rationale for considering a move the cloud. We also agree with the needs case outlined by SONI in the business case. We acknowledge that SONI has provided some useful cost information (i.e. server costs). However, we felt the opex and capex costing outlined by SONI was generally lacking in detail and provided insufficient information to understand whether the costs are efficient. Costing in the business plan is seen as somewhat short of excellent due to a lack of detail in cost breakdowns and costing assumptions. However, we note that in the deep dive query process SONI provided a more detailed breakdown on the server costs from those in the business plan. The deep dive query process also provided more information in relation to the rationale for cost allocation between opex and capex. These areas of additional information have improved our confidence in relation to costing and has improved the overall business case.
- 10.9 We note GHD's opinion that SONI is adopting a cautionary approach of staged implementation to gain knowledge of the services, and that this presents a reasonable approach for a utility business which would mitigate concerns around governance and security management. We also recognise one of the benefits of transitioning to the cloud is the potential cost savings through reductions in operational server costs and more efficient staff working, moving away from on premise technologies. On the basis that the needs case is clear and options are strong, and we have sufficient confidence that there will be net-benefits, we accept SONIs proposal.

Table: UR views of the cloud initiative



| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has demonstrated robust and appropriate optioneering and risk in relation to cloud transition. We agree with GHD in that SONI are taking a staged approach. This risk adverse approach will allow SONI to gain knowledge of the services as they progress in the transition. We recognise that SONI have identified the alternative option to cloud, which is to implement solutions internally. We agree that this is not the best approach and SONI have clearly set out the disadvantages of this approach. We appreciate that robust, relative risks have been identified throughout the business plan for cloud transition along with the probability, mitigation and impact of the risks. |
|--------------------------------|---|
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale The estimated costs identified for cloud transition in opex and capex are high level amounts which is insufficient information to understand whether the costs are efficient. Some server comparison costs between virtual and physical servers, but these are high level figures. No evidence provided in relation to costing assumption sources i.e. provision of quotes, benchmarking, market pricing |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome No quantifiable benefits have been demonstrated. SONI suggest cost savings through moving to the cloud, though this has not been quantified. This makes the benefits assessment challenging. However, we recognise in the business plan that SONI have identified numerous credible benefits that the cloud transition will bring, including a) cost improvements through reduction in server maintenance; b) increased security. We recognise SONI also identify customer focused benefits i.e. "Adoption of Cloud Services would support an internal shift in the IT function, from an inward focus on IT operations, to an outward focus on building an integrated relationship with the business to better support our end customer." (page D-49) |
|--------------------|--|
| Additional Ana | alysis |
| BAU Distinction | There is clear BAU distinction as SONI continue their transition to Cloud technologies. |
| Query Process | The query process requested information in relation to whether SONI had incorporated any cost savings (£15m over 5 years) into their business plan (Query UR-64). SONI highlighted there will be a reduction in on premise data centre costs (energy, DR provisioning, networks), licencing (e.g. security/backup products) and also staff costs. However, as there was no quantification of savings provided, this information was not useful in relation to improving our confidence in costing. The query process also requested information in relation to NI specific, sensitive data and its protection (Query UR-101). SONI provided a thorough response, highlighting that <i>"within the SONI organisational structure, the personal data of a data subject is restricted to the specifically appointed staff for each designated project</i> ". This response was useful in assuring that the necessary data integrity risks had been taken into consideration, and helped justifying our allowance. |

| Deep Dive Audit | Within the deep-dive audit: SONI did provide a timeline of workshops with other stakeholders to provide information on need and more detailed breakdown on server costs, which improved our confidence on cost and therefore improved the 'robust and efficient cost' score. SONI have provided a detailed breakdown in relation to the rationale for cost allocation between opex and capex, this has again helped improved our confidence in relation to robust costing and has improved the business case. There was no evidence provided in relation to costing assumption sources from SONI. However, we note that GHD have states that server installation and ownership costs are in line with expectations for servers including the cost of ongoing maintenance. Again this has improved our confidence in the business case. No additional information on optioneering and risk to the business plan. |
|-----------------------------------|---|
| Draft Determination Actions | Not applicable as full allowance provided. |

D.3: IT Operating Model

- 10.10 SONI has proposed to invest in continuing to centralise their IT services. SONI has identified two main areas which will be the key focus to do so: 'Data Centre Optimisation' and 'Improved Vendor Management and Agile Project Delivery'. SONI has requested £701k in opex and £223k in capex. We propose to allow SONI's full request.
- 10.11 The rationale for consideration and the need for the proposed capex and opex allowances is well established and justified in the business plan. The need is driven by continuous improvement in SONI's IT operating model through driving efficiencies by optimising their data centre and improving internal processes through vendor management and agile project delivery. We also note that the option SONI is proposing is reasonable and GHD considers it low risk.
- 10.12 Although we felt in the business plan costs were not adequately demonstrated through a lack of evidence of costing assumptions and high level figures provided for opex and capex with no justification of sources, the query process, along with GHD's opinion helped improve our confidence in relation to costs for the IT Operating Model. SONI provided a detailed breakdown of costs, which helped us understand exactly where the costs were being allocated across the Data Centre Optimisation project and the Vendor Management Process. GHD highlighted their confidence in the cost estimations from SONI in relation to server costs and ongoing maintenance. We have sufficient confidence on that the benefits are likely to outweigh the costs in this instance.

Table: UR views of the IT operating model initiative

| Rationale for consideration and Need | Whether there is a rationale for consideration and need for action is established and well evidenced We agree with GHD in that the current data centre location does not allow for the necessary physical space needed to accommodate the growth in assets to manage the data management and decision support tools. SONI has identified and justified the need for an improved vendor management process. We agree with SONI that; 'As technology becomes more complexcontract management is more challenging and needs specialist resources to ensure that agreed value and performance is controlled throughout the life of the contract.' (page D-31) Case for customer, consumer and stakeholder focused need We echo GHD's views that data centre optimisation is especially important in relation to the security, flexibility and resilience. All areas could have a negative impact on the consumer if not properly addressed. We could find no evidence of thorough testing with stakeholders. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We acknowledge that SONI has demonstrated full deliberation of a variety of alternative options and risks in relation to Data Centre Optimisation. It has considered 'On premise infrastructure', 'Managed Service (outsourced) with co-location', 'Infrastructure as a service', 'Platform as a service' and 'Software as a service' We agree with GHD's view that SONI's preferred option (Outsourced with Co-location) is the correct approach, as there is justified need. We also agree with GHD's point that SONI are adopting a low risk approach, which in our view is correct and ensures that there is increased resilience With each of the five options highlighted by SONI, it has identified relevant risks in the options they have discounted, for example in implementing Infrastructure as a Service (IAAS), SONI may face 'significant management overhead' (page D-58) Although SONI has highlighted various options with risks considered for Data Centre Optimisation, it has not provided any options/risks that relate to consumer, customer or stakeholder focus. |

| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale The estimated costs identified for IT operating model are high level amounts with no detail or evidence of sources, which is insufficient information to understand whether the costs are efficient. There is no differentiation in costs provided in the business plan between the Data Centre Optimisation project and the Vendor Management Process. |
|-----------------------------------|--|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome There is no identification of customer focused benefits. However, we recognise in the business plan that SONI have identified some credible benefits in relation to the IT operating model, for example; a) Co-location of data centre ensures higher level of cyber security (Tier iii). b) A quantifiable benefit has been demonstrated as SONI suggest the co-location of a data centre can provide SONI a 'forecast of 99.82% availability or 95 minutes downtime per year'. (page D-58) c) SONI can improve their vendor performance through established KPIs and developing performance standards for their vendors. d) SONI have demonstrated how they will achieve enhanced outcomes by 'facilitating this step change in vendor/contract management from a primarily technical approach to an agile commercial focus'. (page D-56) |
| Additional Ana | lysis |
| BAU Distinction | There is clear BAU distinction as SONI continue to develop their IT operating model efficiencies through data centre optimisation and improved vendor management processes. |
| Query Process | SONI's response on breakdown of costs (Query UR-104) provided much greater detail on the cost allocations across opex and capex for both Data Centre Optimisation project and the Vendor Management Process over the price control period for this initiative. This additional detail has improved our confidence in the cost efficiency and value for money. However, no identification was provided of evidence for cost sources for cost lines within opex and capex. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | Not applicable as full allowance provided. |

D.4: Simplify and Standardise IT Solutions

- 10.13 SONI requested £1.2m in capex for the simplification and standardisation of six separate IT solutions/processes which will allow for improved efficiencies in time and organisation flexibility. We propose to provide an allowance of £550k from the requested amount.
- 10.14 The rationale for consideration and need for action has been well established for some of the solutions and process identified namely, 'Application Rationalisation', 'Capacity Market Platform' and 'Middleware Changes'. However, for 'Application Updates', Change Requests' and 'Customer Relationship Management' the need for the proposed capex allowance has not been sufficiently established and well evidenced to justify the capex allowance as they are covered under other initiatives SONI is proposing.
- 10.15 We have proposed a partial allowance for those solutions/processes where a rational for consideration and need for action has been justified and where we consider the benefits of maintaining and improving these BAU tasks are likely to outweigh the costs for these initiatives.

Table: UR views of the standardising IT solutions initiative

| Rationale for consideration and Need | Whether rationale for consideration of the initiative and need for action is established and well evidenced We agree with rationale for consideration and need identified for "Application Rationalisation". We acknowledge that as the application landscape becomes more complex, it is important to continue to drive efficiencies amongst SONI's applications. We acknowledge that the Capacity Market Platform is a critical aspect of IT infrastructure, with potential industry, business and technical changes over the price control period. We agree with SONI on the importance to "make small to medium changes to the platform to accommodate changing industry requirements and business and technical platform improvements." (page D-66) We are in agreement with the iterative approach SONI are taking to implement middleware changes (OSD and GDX) to business solutions. The need for the proposed capex allowance as part of this initiative is not justified for "Application Updates and Change requests". The business case alludes to "Addressing application vulnerabilities due to emerging security risks", and so this activity is related to the maintenance of Cyber Security. SONI also demonstrate "A strict process of change control is enforced, to manage expectations from external and internal stakeholders". Change control processes should be identified and implemented as an ongoing business task and does not warrant the need for the capex requested. The rationale for considering "Customer Relationship Management" is not justified as part of this initiative as it is a cloud application, and so these activities and tasks highlighted are part of the cloud transition. The need for "REMIT & ENTSO-E Transparency" is not justified. SONI have referenced "enhancing the data interfaces that were developed during PR4", which is not a SONI price control. There is also no justification of costs provided for REMIT and ENTSO-E. Case for customer, consumer and st |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We recognise SONI provide a general explanation of the 'Do Nothing' approach which covers all IT BAU initiatives. However, no specific alternative options were provided for the individual projects identified in Initiative D4. |

| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale • The estimated costs identified for the solutions/processes highlighted are high level capex cost amounts with no detailed breakdown and no identification of costing sources. |
|-----------------------------------|--|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome SONI has not quantified the savings nor seem to be proposing any reduction in base costs as a result of the investment. This makes the benefits case challenging. However, we recognise in the business plan that SONI have identified credible benefits in simplifying and standardising IT can have on their business, these include; a) Reduction in support and license costs. b) SONI will be better equipped to respond to potential future market and business changing and stakeholder demands. |
| Additional Ana | lysis |
| BAU Distinction | There is clear BAU distinction as SONI continue to simplify and standardise their IT solutions |
| Query Process | The query requested further information on the benefits section in relation to potential reduced support and licence costs. SONI were asked to advise if any of these savings have been incorporated in the BP tables. SONI provided no quantification of any savings or any indication that they would be passed onto consumers via lower allowances. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | SONI would be required to prove the needs case for disallowed items and provide assurance that there is rationale for considering certain activities we have flagged by evidencing that they are not part of other initiatives. It would be also beneficial for SONI to explain how costs are efficient, based on good sources and are beneficial to customers. |

D.5: Maintaining and Developing Baseline Cyber Security

- 10.16 SONI is proposing to continue with the maintenance and development of their baseline cyber security posture. SONI has requested £502k in capex over the 2020-2025 price control. We have allowed the total requested amount.
- 10.17 SONI has identified six separate activities which compromise Initiative D5. These are:
 - 1) Enterprise Backup;
 - 2) Enhancements and Enterprise Refresh;
 - 3) Firewalls;
 - 4) Email & Web Protection Refresh;
 - 5) Intrusion Prevention & Detection Systems; and
 - 6) Cyber Security Awareness Training.
- 10.18 The rationale for considering the initiative and the need for the proposed capex allowance has been sufficiently established and evidenced. SONI also evidences key risks that may potentially occur if cyber security is not maintained and developed to the necessary levels. Cost levels demonstrated in the business plan are substantially short of excellent,
- 10.19 On the basis that there is a clear rationale for considering the initiative and need identified to maintain SONI's cyber security posture, and we consider that there are strong credible benefits that are likely to outweigh the relatively small increase in costs for this particular initiative, we accept SONI's proposed allowance in full.

Table: UR views of the baseline cyber security initiative



| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We recognise that the only viable option in this instance is to maintain adequate cyber security. SONI demonstrate that they have fully considered potential risk if they do not ensure appropriate maintenance and development of cyber security. The business plan highlights there could be major detrimental impacts on the availability, integrity or delivery of essential services and significant impact on national security, defence, or the functioning of the state. |
|--------------------------------|---|
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale The estimated costs identified for the activities are mainly high-level capex cost amounts with no detailed breakdown, which is insufficient information to understand whether the costs are efficient. We recognise that more detail has been provided into Cyber Security Awareness Training in that SONI illustrate that these costs are made up of a subscription for a training tool, supplemented by consultancy costs. Although more detail has been provided for Cyber Security Awareness Training costs in the business plan in comparison to the other areas that make up Initiative D5, there has been no evidence to demonstrate the cost sources. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome No quantifiable, measurable benefits have been provided making the assessment challenging. However, we recognise the importance of maintaining cyber security and the potential risks to consumers if cyber security is not maintained to an adequate level. SONI identifies plausible benefits associated with maintaining and developing their cyber posture. The business plan states that "the strategic output of this initiative is to maintain our defence of critical national infrastructure against continuing and increasing cyber threats". (page D-72) |

| Additional Ana | Additional Analysis | |
|-----------------------------------|--|--|
| BAU Distinction | We agree that these costs are BAU as SONI continue to maintain and develop their cyber security systems. | |
| Query Process | N/A | |
| Deep Dive Audit | N/A | |
| Draft Determination Actions | Not applicable as full allowance is provided. | |

D.6: SONI Workplace BAU

- 10.20 SONI are requesting a total of £460k in capital costs to make investments in their building premises. We propose to allow £125k of the capex requested for this initiative. SONI has identified three main areas in which the capital will be spent;
 - a) Gas Boilers (£100k)
 - b) Building Energy Metering System (BEMS) (£50k)
 - c) Small Capital Projects (£310k)
- 10.21 We propose £75k for gas boilers. This partial amount has been allowed as while we recognise the identification of need in the business plan, we have concerns that some capex had been provided in a previous price control (2010-2015), and this was not spent on the allocated area. We also consider the information on costing to be of poor quality as it has not been fully justified.
- 10.22 We propose to allow £50k capex for small capital projects. The need for the total proposed capex allowance has not been appropriately demonstrated or well supported for all the items to provide the full capex allowance requested in the business plan. No allowance will be provided for Building Energy Metering System because the need was not warranted.
- 10.23 We also have concerns that some capex had been provided in a previous price control (2010-2015) and this was not spent on the allocated area. We consider the information on costing to be of poor quality as it has not been fully justified.

| UR view of BP submission quality (including SECG views where relevant) | |
|--|--|
| Rationale for initiative and Need | Rationale for consideration and whether need for action is established and well evidenced We acknowledge that SONI have provided some identification of need to replace gas boilers through limited life expectancy, high maintenance costs and leakages. The need highlighted in relation to the Building Energy Metering System (BEMS) is not warranted and there is no associated consumer benefit demonstrated. We agree that there is justification for some of the small capital projects identified in the business plan, which is demonstrated by the recommended life expectancy date. However, the life expectancy of various items does not expire until near the end or after the price control period, which demonstrates that need is not fully established. Examples of these items include the central extract fan, sanitary and waste water plumbing, CWST and zip hot taps. Need is not fully evidenced throughout each of the items. No evidence has been provided of purchase dates, manufacturers life expectancy recommendations etc. Case for customer, consumer and stakeholder focused need No identification of customer need in the business plan. For example, thorough testing with stakeholders. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We recognise the business case demonstrates two main options, 'Do Nothing' and to take 'Proactive Approach'. We acknowledge that SONI have identified risks in relation to doing nothing. These risks include; a) Increased boiler costs b) Health and safety risks c) Prevention of heat to the building No identification of customer/consumer focused risks with any workplace BAU initiatives. |

| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Cost estimations are internally validated. If these costs were discussed with external sources evidence should have been provided which would help verify cost efficiencies. We note £20k was provided to SONI in the 2010-2015 price control for the ongoing maintenance of boilers, however, these provisions were not spent on boiler maintenance. There is no indication of costs for each of the small projects highlighted, just a total sum. This information supplied does not provide sufficient detail to confirm costs are justified. |
|-----------------------------------|---|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome No quantifiable information provided on measurable benefit provided. However, we acknowledge that SONI have identified some plausible benefits. We agree, for example, that boiler replacement will ensure the health and safety needs are met amongst staff. |
| Additional Ana | lysis |
| BAU Distinction | This is clearly BAU activity, though may be somewhat 'lumpy' in nature given asset life of items being replaced. |
| Query Process | The query process requested further information regarding the breakdown of costs in relation to the small capital projects. We requested the number of Items to be replaced and estimated cost of each item. (Query UR-40) SONI could not provide this information; SONI stated 'items in this table is provided as an example of the types of items that may require replacement on an ad-hoc basis due to failure. The list and overall cost estimate is informed by historical pattern of replacement of similar building equipment.' We further asked SONI if they had upgraded their conventional boiler since £20k was awarded in the 2010-2015 price control. SONI confirmed that they had not upgraded their boiler. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | N/A |

E.1 and E.2: Telecoms Opex and Capex Spend

- 10.24 Appendix E within the business plan is SONI's telecoms BAU expenditure. SONI have requested £7.3m in opex and £1.4m in capex over the period. We propose to allow £6.1m in opex and £0.5m in capex over the period.
- 10.25 For the bulk of the opex, SONI proposes to pass through 30% of NIE Networks Operational Telecommunications Network (OTN) and has requested monies associated with the OFCOM notice of Product Withdrawal, Disturbance Monitoring & Metering Services and Operational Telephony & Emergency Voice.
- 10.26 The capex request is made-up of RTU³¹ replacement project, UPS³² replacement project, Moyle HVDC³³ project, Ballylumford 275kv upgrade and an IP Telephony Upgrade.
- 10.27 Under licence, NIE Networks is the Transmission Asset Owner (TAO) and SONI is the Transmission System Operator (TSO). As a principle, the assets used in the field for the operation of a regulated licenced function should be in the ownership of the asset owner and remunerated via the TAO price control mechanisms. We therefore propose not to allow SONI to pass through the 30% of NIE Networks OTN request and for NIE Networks to request 100% of these costs.
- 10.28 We recognise that Section 6.12.1 of the purchase agreement between NIE Networks and EirGrid outlining the agreement for SONI to use the OTN may have to be reviewed. We also consider that there may be a requirement for an additional supplementary document to be agreed within the Transmission Interface Agreement (TIA) between NIE Networks and SONI in regards to the future use of the OTN.
- 10.29 As this review may take some time, and will affect future tariff allocations, we have decided to provide SONI with the pass-through telecoms opex for the remainder of NIE Networks RP6 price control period (2023-24) and exclude the OTN allowance from RP7 onwards (2024-25). It is expected that NIE Networks would request the full OTN allowance as part of its RP7 price control.
- 10.30 SONI have requested £7.3m in telecom opex. With the 2024-25 pass through amount removed we propose an acceptance of the remaining elements and an allowance of £6.1m.
- 10.31 We also consider that any physical capex assets operating within the field, outside of Castlereagh and the secondary control room, should fall within the remit of the TAO. This will include any future RTU replacements including the Ballylumford 275kv Upgrade and associated UPS replacements.

³¹ RTU = Remote Telemetry Unit.

 $^{^{32}}$ UPS = Uninterruptible Power Supply

³³ HVDC = High Voltage Direct Current.

- 10.32 We therefore propose to not allow SONI, the RTU and UPS replacements and we would expect NIE Networks to request these assets via their D5 mechanism within RP6.
- 10.33 We asked SONI to provide a breakdown of the £250k for the Moyle HVDC Equipment Replacement Project. However the scope of work provided was not detailed enough to allow a full assessment of the costs of the project. We also considered the SONI project management and project engineering resources to be excessive and have provided an allowance of £225k.
- 10.34 SONI confirmed their requirement for IP Telephony Upgrade was £300k and we have provided a full allowance. SONI have requested £1.4 in telecoms capex. We propose an allowance of £525k.

Table: UR views of the telecoms initiatives

| | UR view of BP submission quality (including SECG views where relevant) | |
|--|---|--|
| Rationale for consideration and Need | Whether rationale for consideration of initiative and need for action is established and well evidenced We found SONI opex request is in line with previous years, after accounting for inflation and ongoing initiatives. SONI provided a good background, context and overview on the telecoms network to help support its rationale for considering this initiative. SONI also provided a breakdown of spend over the last price control and we note that SONI did not make any capital investments in the telecoms equipment that it owns over the 2015-20 period. Case for customer, consumer and stakeholder focused need We are particularly concerned there is no evidence of testing this initiative with NIE Networks. | |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We agree that options are limited as majority of the costs is pass-through. We are particularly concerned about the role of the TSO under this initiative. We consider that field assets within the OTN should be under TAO ownership but TSO should have access as required. | |

| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Overall there is insufficient information to understand whether the costs are efficient or based on good sources/evidence. However we would agree with GHD's point that the costs seem reasonable which has been reflected in our allowances provided. Use of internally validated costs does not provide sufficient assurance around the materiality. |
|-----------------------------------|---|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Although no quantifiable information has been provided in relation to measurable benefits, we can understand that there may be some potential credible benefits in upgrading telecoms. |
| Additional Ana | lysis |
| BAU Distinction | Most of the opex OTN costs are BAU, but we consider that this should sit within the TAO's price control. |
| Query Process | The query process response did not provide us with any more confidence in expenditure allowance. We asked SONI a number of queries in regards to Appendix E, requesting further breakdowns of costs, and details on the RTUs and the Moyle HVDC equipment replacement project. In regards to capex assets we also asked if SONI could provide reasons as to why these RTUs and UPS systems should remain on SONI's asset base, SONI did provide examples of RTU ownership between different DNO, DSO, TSO, TNO and Private Networks however they did not provide any reasons as to why future RTU's should be on the TSO's asset base. We asked for further information on the Moyle HVDC Equipment Replacement Project. However, the scope of work provided was not detailed to allow a full assessment of the costs of the project, we also considered the SONI Project Management and Project Engineering Resources excessive. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | SONI has requested £7.3m in opex and £1.4m in capex over the period. We propose an opex allowance of £6.1m and a capex allowance of £0.525m. We further welcome views about the transfer of assets to the TAO. |

G.11: Metering System

- 10.35 SONI has requested £970k (mostly capex) to replace the metering system required under the trading and settlement code, we propose to allow none of the allowance requested. SONI has listed the outcomes as more efficient operation of the grid with improved data integrity and less billing disputes.
- 10.36 We consider that the rationale for considering this initiative and the preferred option has been quite well evidenced, but that the need for action has not been fully established or justified yet. Another key concern relates to costings. SONI has failed to detail the breakdown in costs to a suitable level. GHD considers that the information provided does not justify amount of expenditure requested. Within the query process³⁴ SONI also confirmed that spend on the metering system funded in the current control period has been deferred.
- 10.37 We have concerns that allowances requested for this initiative cover activity for which funding has already been provided but not undertaken. As a consequence of the above, no allowance is provided in the draft determination. However, we do expect SONI to deliver this initiative given the funding previously provided to undertake such activity.

Table: UR views of the metering initiative

| UR view of BP submission quality (including SECG views where relevant) | |
|--|---|
| Rationale for consideration and Need | Whether rationale for consideration of the initiative and need for action is established and well evidenced We consider that there is rationale for considering the initiative: we agree with GHD that the systems require a refresh to meet the new demands being imposed on them by the change in the market, such as increasing number and complexity of connections, current systems that process meter data is nearing the end of its useful life and current system is labour intensive and requires automation. However, the scope of the final design has not been provided yet which undermines the case for need for action being fully established. |
| | Case for customer, consumer and stake holder focused need Refresh is expected to reduce billing disputes and increase customer satisfaction. |

³⁴ Response to UR-57 query.

| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has consider three options which seem reasonable. Rationale for the preferred option is acceptable. | | |
|-----------------------------------|--|--|--|
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale We agree with GHD's view that the cost is not detailed enough to be justified. We are of the same view given that over 50% of costs are listed as 'other' with little supporting information. No assurance provided that customers are not paying twice for this project. | | |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome There is no information on measurable consumer benefits making this challenging. There is some brief information on how this may benefit consumers in terms of impact on the grid, and on the number of disputes and the forecast impact of the investment. The relevant metrics of customer satisfaction and reduced disputes seem reasonable. | | |
| Additional Ana | Additional Analysis | | |
| BAU Distinction | This is a BAU activity and there is a risk of some duplication from previous price control. Though there is recognition that there is a rationale for undertaking such activity. | | |
| Query Process | Response on breakdown of costs (Query UR-111) was unsatisfactory. This did not provide the level of detail required. SONI did confirm (Query UR-57) that this investment had been deferred from the current price control. | | |
| Deep Dive Audit | N/A | | |
| Draft Determination Actions | For the purpose of a future allowance, SONI would have to: Provide detail on the cost breakdown, basis of estimates and scope of activity. Provide assurance that customers are not funding this activity twice. | | |

G.12: Operational Support for IT Projects

- 10.38 SONI has proposed to include additional support for various IT projects to ensure sufficient resources are available during the price control period from operational teams to deliver these projects. SONI has requested £1.2m³⁵ in opex for three additional FTEs. We propose to allow none of the requested amount.
- 10.39 The need for the proposed allowance has not been sufficiently established and well evidenced to justify the request. Operational support for individual IT projects should be included within each IT project's specific initiative request.
- 10.40 As the needs case is weak, this rendered the benefits, risks and optioneering less relevant. We are also of the view that any cost in relation to IT support should be identified within the sponsored project's initiative. We propose that no opex will be provided for this initiative.

| | UR view of BP submission quality (including SECG views where relevant) |
|--|--|
| Rationale for consideration and Need | Whether rationale for consideration of the initiative and need for action is established and well evidenced We agree with GHD that there is a lack of rationale for the consideration of the initiative and need identified with this initiative to justify additional operational support for the cost identified. Any extra operational support required to support the delivery of the IT projects should be captured and justified within the relevant project initiative. |
| | Case for customer, consumer and stakeholder focused need No clear customer need demonstrated. We could not find evidence of thorough testing with stakeholders. |
| Options (including | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus |
| risk) | |

Table: UR views of the support for IT projects initiative

³⁵ Figure derived as a result of query log responses. Business plan initial figure was £0.2m equivalent to an additional 0.5 FTEs.

| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Costs should be identified and justified in the specific IT initiative. The business plan has asked for 0.5 FTEs but query process has revealed the correct request to be 3 FTEs. No justification is provided for this request. We agree with GHD that this cost is not justified. |
|------------------------------|---|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Metrics do not appear to be customer focused. Benefits are IT project delivery related which we consider to be already funded in the individual initiative allowances. Based on the description of this project it is unclear whether any benefits accrued to consumers would be material. |
| Additional Ana | lysis |
| BAU Distinction | This is a BAU activity. |
| Query Process | Response to staff number query (Query UR-7) confirmed that SONI actual resource required is 3 FTEs, not the 0.5 FTEs detailed in the business plan. |
| Deep Dive Audit | N/A |
| Draft Determination | For the purpose of a future allowance, SONI would have to: |
| Actions | Provide assurance that resource is not funded via IT specific project allowances. Provide detail on the existing levels of IT staff and justification for an increase of 3 FTEs as part of a resource plan. |

System Operation and adequacy

F.1: Renewables strategy

10.41 SONI proposes to develop six schemes (tools and systems) for scheduling and monitoring of renewable generators. It requests £3.6m capex and £3.5m opex allowance. We propose to allow SONIs full staff request and part of its capex i.e. the request for £0.9m for the TSO DSO interface item.

Capex

- 10.42 While there seems to be a rationale for the consideration of 'settlement system' and 'scheduling of systems services from new tools' schemes the need for the full proposed capex allowance has not been sufficiently established, well evidenced and stakeholder focused to justify the full allowance request. We therefore propose to disallow these schemes at this point. We also note that stakeholders had concerns around how SONI service activity is meeting needs of its diverse set of customers and consumers, and so we expect any future capex submission for those submissions to have been effectively tested with stakeholders: particularly the need to adopt an appropriately ambitious and customer focused approach to keep pace with the rapid pace of change in the energy system.
- 10.43 We also have material concerns around the proposed optionality for three other schemes which relate to generation connecting to the distribution network. We consider that there has not been an appropriate justification for an appropriate rationale to consider these as a SONI role. We do not propose an allowance for these.
- 10.44 We do, however, consider that the rationale for consideration and optionality for the TSO to DSO interface is sufficiently well-evidenced. We note GHD's views that the costs are reasonable, and we consider the benefits of this element have the potential to outweigh the costs. We also note that there was some SECG support for this as a high priority item. We, therefore, propose to allow this item now.

Opex

10.45 While the initiative is not yet sufficiently scoped as a whole and we are disallowing certain elements, we recognise that certain schemes have the potential to provide credible net-benefits to consumers if certain elements are scoped appropriately. We propose to accept SONIs full opex staff request so as to support its research, scoping, researching and development, and implementation. However, we note stakeholder concerns around the risk of there being insufficient skills to perform the solution analysis and design may be under-appreciated and so we urge SONI to consider how it can address this in using its opex allowance.

Table: UR views of the renewable strategy initiative

UR view of BP submission quality (including SECG views where relevant)

Whether rationale for consideration and need for action is established and well evidenced

We agree with GHD that there is some rationale for further consideration of two of the six schemes (Scheduling of system services from new technologies and settlement system) with GHD that the same two schemes are in the developmental/ research stage and their scope and need is not identified, defined and established sufficiently to warrant capex investment. We agree with GHD that the rationale for consideration and need for action is established now for the TSO to DSO interface as this is appropriately in line with our expectations on whole system thinking and there is a need to use such an interface to help address critical network capacity constraint issues.

Rationale for consideration and Need

Case for customer, consumer and stakeholder focused need

 We recognise that this area represents a key area of customer and consumer interest and there seemed to be some support for the rationale for considering these initiatives from some members of SECG. However, we could not find evidence of thorough testing with stakeholders. We note SECG member concern that the initiative may not be sufficiently responsive to the needs of certain customers (e.g. newer technologies) which goes beyond the proposal: in terms of testing of tools, need for commercials and market expertise and initiatives and not just technocratic tools, and whole system and cross vector approaches. We note an SECG member view during our SECG business plan assessment phase that the TSO/DSO interface may address constraint issues which are significant in west of NI.

Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus

Options (including risk)

- We agree with GHD concerns that three of six schemes relate to generation connecting to the distribution network and its view that distribution network connected generation could fall under the remit the DSO and not the TSO. This represents a material proportion of the business case.
- We agree with SECG member view that the TSO/DSO interface seems more priority now given constraints and that this also fits with our service expectation.
- We also recognise SECG member views that optionality may also not just be concerned with tools but also market engagement, development of
 new markets, new commercial frameworks and data. We note SECG member concerns with SONI's risk assessment in that it may be taking too
 conservative an approach to keep pace with the rapid pace of change in the energy system and deliver the quality of service that customer's will
 demand in future; and that the risk of there being insufficient skills to perform the solution analysis and design may be under-appreciated.

| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Overall there is insufficient information to understand whether the costs are efficient, based on good sources/evidence, subject to optimum timing, and the allocation between opex and capex is subject to clear rationale. The cost case is made mostly on the basis of previous experience and some limited vendor engagement and there is no provision of the underlying costing assumptions and why the past initiatives may be a good benchmark for these proposals. The costs are also only high level breakdowns. We have taken into consideration that GHD notes that the costs for a small percentage of the overall capex initiative (TSO-DSO interface costs) seem reasonable in its experience, but we are particularly concerned that the remaining costs for capex are not likely to be robust as the scope is high level and has not been fully justified, and/or SONI has not justified its choice of options and timing optimally. |
|------------------------------|--|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging No quantifiable information on measurable benefit provided/high level information on skeleton metrics provided/little information on step change in performance. However, we note SONIs description of some of the proposed benefits and that if this initiative is scoped appropriately and ambitiously, it has potential to bring benefits to consumers across decarbonisation and system wide costs which may be sufficiently positive depending on addressing the issues with the business case. |
| Additional Analys | sis |
| BAU Distinction | There is little clear, meaningful information on activity difference (e.g. how and why builds in historical BAU cost, service and value), but the description provided in business suggests these may be new. |
| Query Process | In response to Query UR-5, SONI has submitted detail on <i>Output Metrics and Targets</i> including KPIs on: RES-E (%); SNSP (%); and Renewable Dispatch Down (%). |
| Deep Dive Audit | SONI provided little to no further evidence and justification to further its case as part of its response. It also did not respond to aspects on benefits. |
| | 1 |

| | | Whilst much of the capex request has not been provided in the draft determination, we anticipate a separate regulatory process on system services analogous to the following: |
|--|-----------------------------------|--|
| | | High level design led by the national regulatory authorities (NRAs). Bilateral working between TSOs and NRAs. |
| | Draft Determination Actions | Consultation and decisions by SEMC. |
| | | Detailed design by TSOs in conjunction with DSOs. |
| | | Detailed design approved by SEMC. |
| | | SONI to submit cost request for required capex. |
| | | It is likely that this activity will not be completed within the timeframe for final determination. As such, we expect that these costs will not formulate part of the final determination decisions. We therefore propose that such allowance will be subject to price control reopener requests. |

F.2: Control Centre Tools

- 10.46 The control centre tools within the business plan is SONI's request for new and improved control room functionality within the 2020-25 period. SONI has requested £0.6m in opex and £4.0m in capex over the period. We propose to allow SONI £118k of the opex request which equates to 0.5 staff for 3 years.
- 10.47 SONI has stated that the control centre is another area where data volumes are growing. The numbers of parameters that the TSO needs to assess and forecast to ensure a stable and secure transmission system has increased over the current period. This is expected to continue to grow over the next decade. It considers that automation of data input into the decisions made in the control room will be vital. The enhanced control centre functionality will ultimately facilitate the delivery of policy outcomes and lower bills for customers as the cost of renewable energy falls.
- 10.48 GHD reviewed the proposal and stated that the plan had not presented anything more than a conceptual design and a list of potential developments. SONI has not provided a clear justification of the costs, or demonstrated they will be able to meet the programme to complete the work during the next price control period. GHD also concluded that SONI is proposing to upgrade the EMS. However, at this time it is not clear which, if any of these proposed tools, are to be included in the EMS solution. This uncertainty presents a risk to delay of the development and deployment of the tools.

- 10.49 Through our involvement in the DS3 program and the DS3 Advisory Council³⁶ the regulatory authorities are aware of the current timetable for control room tools and have been advised that the new versions of the Look-ahead Security Assessment, Ramping Margin Tool and Voltage Trajectory Tools are being installed in 2020.
- 10.50 The regulated authorities are currently working on a project to deliver an enduring competitive framework for the TSOs to procure system services by April 2023, including control room tools. This new program is still in its infancy and the arrangements will be publicly consulted upon throughout 2020 and 2021.
- 10.51 As the output of these consultations and decisions are currently unknown, we do not consider it appropriate to provide a capex allowance for control room tools at this time. However, we do recognise that there is a need for the development for these arrangements. This point came across from stakeholders in SECG and we recognise this type of activity has the potential to bring consumer benefits depending on a number of issues we have found set out below. We have therefore allocated the 0.5 staff allowance for 3 years that SONI has requested to enable SONI to develop any future tools request. We have disallowed the remainder of the £0.6m opex, at this point, which relates to license support, as SONI has not yet set out clearly what it is going to deliver (or license) as part of this initiative in order to propose a robust cost for licensing support.
- 10.52 Following decisions for the enduring competitive framework for the procurement of system services we would expect SONI to engage with us regarding a request for any new control tools to be installed in the 2020-25 period.

Table: UR views of the control centre tools initiative

³⁶ <u>http://www.eirgridgroup.com/how-the-grid-works/ds3-programme/industry-forums/</u>

| Rationale for consideration and Need | Whether need for action is established and well evidenced We agree with GHD that there is likely to be rationale for the consideration of development for new system tools to improve things like accuracy of forecasting, for example, but that the scoping provided in the business plan is conceptual and subject to uncertainty to extent that the need is not presently fully defined. As the new control room tools are proposed to be in place from 2020, SONI has not demonstrated the timeline for when additional new tools will be needed and how they are incorporated into the EMS system, if at all. SONI is also potentially undertaking DSO without proper justification. Case for customer, consumer and stakeholder focused need We agree with SECG concerns around how SONI has been engaging in this service activity area: particularly around how responsive it is being to stakeholder needs to fully meet decarbonisation, system wide costs and grid security outcomes. The business case did not evidence the output from stakeholder engagement. But we also note that there seems to be some level of stakeholder support for the development of new tools at a conceptual level from SECG during the business plan development and assessment phase. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has not identified any alternative options nor has the risk been fully considered and evidenced in terms of coming to choice of option/customer, consumer stakeholder focus. We note, for example, SECG comments that improving service activity in this area is about more than simply upgrading engineering tools and that certain functions could be undertaken by 3rd party market players, and also points about certain ways to manage constraints may be missing. We are concerned that SONI is choosing to potentially take on roles which may be DSO without considering other options. SONI has not provided any roadmap for delivery, or demonstrated that they would consider engaging with the DSO, the ENA or other areas outside of Ireland. |

| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale SONI has provided high-level breakdown on costs. The estimates for spend are based on SONI's experience in developing and delivering solutions within the control centre, such as the wind penetration tool and a review of market solutions. For each of the proposed tools SONI have undertaken a bottom- However, SONI has not provided the costing assumptions. We agree with GHD that it has not provided timelines on when the new tools will be installed, nor what capabilities they will have, and that the capex scope is ill-defined. While estimates for spend are based on SONI's experience, these past costs have not been evidenced, nor has SONI demonstrated that the estimated costs are efficient. Together these points mean that our confidence in the robustness of the costs, particularly in the capex for tools, is undermined. | | |
|------------------------------|--|--|--|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging A number of benefits of developing the control centre capability were provided include enhanced ability. We consider that there are credible benefits for this type of activity depending on issues identified like more appropriate scoping (although they have not been quantified). | | |
| Additional Ana | Additional Analysis | | |
| BAU Distinction | SONI has not demonstrated how this factors in with existing BAU allowances, of the interactions with other initiatives including the EMS refresh. | | |
| Query Process | We asked and SONI provided some useful detail around internal staff levels on this initiative and the operation of the WSAT tool. | | |
| Deep Dive Audit | N/A | | |

| | Whilst no capex has been provided in the draft determination, we anticipate a separate regulatory process on system services and control room tools analogous to the following: |
|---------------|---|
| | High level design led by the national regulatory authorities (NRAs). |
| | Bilateral working between TSOs and NRAs. |
| | Consultation and decisions by SEMC. |
| Draft | Detailed design by TSOs in conjunction with DSOs. |
| Determination | Detailed design approved by SEMC. |
| Actions | SONI to submit cost request for required capex. |
| | SONI will need to engage effectively with customers to understand and take account of their diverse needs. |
| | It is likely that this activity will not be completed within the timeframe for final determination. As such, we expect that these costs will not formulate part of the final determination decisions. We therefore propose that such allowance will be subject to price control uncertainty mechanism requests. |

F.3: Smarter Outage Management

- 10.53 SONI has requested £540k (£60k opex and £480k capex) to develop a new approach to outage management. The approach will involve the development of a decision support system to provide the TSO with relevant information when making outage decisions. We propose to allow the full amount requested.
- 10.54 Whilst we consider there is some gaps in the analysis, it is our view that the project should be supported on the basis of the net-benefit it could provide, the fact that there is a rationale for the consideration of the initiative and the need is relatively clear given the requirement to manage outages and the increasing number of generators to be considered. We also note that a degree of further cost assurance has been provided from the query process/deep-dive. The full allowance is supported by GHD.

Table: UR views of the smarter outage management initiative
| Rationale for consideration and Need | Whether need for action is established and well evidenced We agree that there is rationale for considering the initiative and there is a need to manage outages effectively and it may be beneficial to systematise this process to aid decision making. Case for customer, consumer and stakeholder focused need One SECG member explicitly expressed support for this project evidenced within SONI's business plan. However, the testing of need with stakeholders could be more thorough. |
|--|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI presented three viable options and consistent rationale for selection of preferred option. A comprehensive list of risks and mitigations was also provided. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale SONI only provides a high level breakdown of costs and has not provides evidence of the costings assumptions i.e. quotes or daily rates of the listed suppliers. However, the list of suppliers on which costs were based seems comprehensive, we note that GHD assume the costs seem reasonable and we also consider that the cost request does not seem excessive given the work required. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging The proposed metrics seem rather undefined i.e. increased visibility and optimised delivery of outages. They neither state the current level or the expected improvement. It is not clear why delivery of the governance framework for outages is important and what benefit it will achieve. However, given the number of outages it is expected that the project has the potential to deliver cost savings for customers. |
|-----------------------------------|---|
| Additional Ana | lysis |
| BAU Distinction | Whilst SONI is already managing outages, the project initiative does appear to be a different approach to the issue. |
| Query Process | SONI was unable to demonstrate the hypothetical savings of the new system on a real-life event as requested. They did however provide further clarity on the problems involved in planned outage decision making. SONI also presented information in the query log explaining that in 2019 alone 477 outage requests had been received. This helps provide some indication of the level of resource required. |
| Deep Dive Audit | SONI provided some further detail on the cost breakdown as well as engagement they have had around the need for the project. This provided a further degree of confidence in coming to our decision to approve the costs. |
| Draft Determination Actions | Not applicable as full allowance is being provided. However, it would be beneficial if SONI could be able to quantify the outage costs going forward. |

F.4: Migration to IP Technology

- 10.55 SONI has requested approx. £800k opex (2 FTE's) and £270k capex for the migration to IP technology to support SCADA services across the Operational Telecommunications Network (OTN). We propose to provide none of the requested amount. This initiative is closely linked to SONI's Appendix E request, and via the query process SONI confirmed that the 2 FTE's are to implement the telecoms work.
- 10.56 As stated previously as a principle, the OTN assets used in the field should be in the ownership of the TAO and remunerated via their price control mechanisms. We propose to provide SONI with the pass-through telecoms opex for the remainder of NIE Networks RP6 price control period (2023-24) and excluded the OTN allowance from RP7 onwards (2024-25). For capex we did not allow the RTU and UPS replacements and we would expect NIE Networks to request these assets via their D5 mechanism within RP6. We did however also allow SONI requirements for IP Telephony Upgrade of £300k as part of their request.

- 10.57 Following the same principle, we would expect NIE Networks to fulfil the Migration to IP technology and not SONI. This view is mirrored by GHD who has considered that the need relates predominantly to manage distributed generation, and this assumes that the TSO will be managing and instructing distribution connected generation. GHD are of the view that telecoms within distribution connected generation will fall under the remit of the DSO
- 10.58 As we expect this role to be fulfilled by NIE Networks, we are not allocating any additional staff to SONI. In regards to the capex allowance, SONI has not provide any detail as to what this £270k request is and we have already allocated £300k capex for IP Telephony Upgrade. Therefore, we have not provided an allowance for this initiative.

Table: UR views of the migration to IP initiative

| UR view of BP submission quality (including SECG views where relevant) | | |
|--|--|--|
| | Rationale for consideration and whether need for action is established and well evidenced | |
| Rationale and consideration of Need | We agree with GHD that there may be a need for this type of activity. We are concerned that SONI did not communicate any engagement with NIE Networks in the need justification and did not highlight any deficiencies in the current data connectivity nor control. Case for customer, consumer and stakeholder focused need We could not find any evidence of customer, consumer or stakeholder need for SONI undertaking this activity and SONIs proposal. | |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options highlighted, 'Do nothing' or 'Do Something', yet we note issues about the role of SONI in undertaking this activity | |

| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Cost forecasts are based on 2 additional staff. Use of internally validated costs does not provide sufficient assurance around the materiality of costs. No description nor breakdown of the capex costs or the costing assumptions listed. |
|------------------------------|---|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging SONI did identify some credible benefits, risks and mitigations, they also suggested metrics such as incident analysis, system minutes lost and system service costs. |
| Additional Ana | lysis |
| BAU Distinction | SONI have been given allowances for IP Telephony Upgrade, any costs associated with migration to IP technology would be expected to come from that allowance. SONI have existing staff for the enduring service and ongoing projects over the 2020-25 period, which would be covered by their existing staff. |
| | We asked SONI why it expects to need two additional FTEs to manage the transfer of NIEN SCADA to an IP platform. SONI responded stating that the 2 additional FTEs are not just required to deliver the transfer of NIEN SCADA to an IP Platform but also for the enduring service and ongoing projects over the 2020-25 period. |
| Query Process | One telecoms engineer will be responsible for delivering all of the telecoms opex related works and a telecoms PM who will be responsible for delivering all of the capex related works. |
| | No explanation was given of NIE Networks responsibilities or engagement, nor how their existing staff is not sufficient for the enduring service and ongoing projects over the 2020-25 period. |
| Deep Dive Audit | N/A |

| | S | ONI would need to: |
|---------------|---|--|
| Draft | • | Justify why this is not a TAO function. |
| Determination | • | Justify the requirement of an additional telecoms engineer and telecoms project manager for the 2020-25 period. |
| Actions | • | Identify the additional tasks within the period that will be beyond the enduring tasks that the current BAU staff cannot fulfil. |
| | • | Identify an itemised breakdown of the capex request. |

F.5: Data Services

- 10.59 SONI has requested approx. £100k capex broken down into professional fees (£30k), hardware/ Software (£10k) and internal project services (£60k) to provide additional support to undertake a scoping activity to identify key data analytics requirements and assessments for improving overall functionality. We propose to provide none of the requested amount.
- 10.60 SONI's solution is to improve data analytics by scoping a strategy to support the realisation of benefits of data services to help manage increase level of uncertainty in the energy system and internal efficiency.
- 10.61 Similar to GHD, we found that the solution was not clearly defined and there may be apparent duplication with other initiatives and their BAU activity. We would also expect any prudent and efficient operator to be doing this activity to minimise costs under its normal business as usual activity. Consequently, we have not allocated an allowance for this initiative.
- 10.62 However, we recognise there is a need for SONI to improve how it uses its data in light of customer feedback but in a way which makes a more open use of its data provision. We have provided an action on SONI to develop a digitalisation strategy as part of its 1st forward plan under the performance incentives framework to meet this this.

Table: UR views of the data services initiative

| Rationale for consideration and Need | Whether need for action is established and well evidenced SONI has identified a need to improve how it uses data services. We agree there is rationale for considering how it improves its use of data, however, we consider the rationale is not fully fleshed out: SONI should be considering how it can make more open use of data to benefit consumers. We also agree with GHD view and rationale that the driving need and solution for this initiative is not fully defined or justified. Crucially, we agree with GHD that the proposal as it stands risks duplication with other initiatives. Case for customer, consumer and stakeholder focused need We agree with SONI that it should be considering how it can make better use of its data. However, an important difference is that we and other stakeholder consider it should instead be making better use of data in a more open, customer focused way involving 3rd parties to fully maximise consumer outcomes. For example, SECG member proposed SONI could consider best practice like a digitalisation strategy. |
|--|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has not considered a 'do nothing' option which we consider is a material issue in light of our concerns around duplication with other activities. SONI only highlights one option. We are concerned that a more customer focused option to make data more open has not been considered, in light of our expectation on SONI to consider how it can involve 3rd parties in improving whole system outcomes. There also appear to gaps that we would expect should be considered as part of a more digitalised approach to use of data (such as governance and workforce capability considerations). |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale It has considered a bottom up cost assessment via a review of market solutions and experience and with a cost validation through an internal SME review. It has provided no itemised breakdown or no underpinning evidence of how it came up with the costs to do a scoping strategy or evidence on the costing assumptions. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging The description of benefits and how they will benefit consumers is high level and poorly justified. In any case, where there are benefits we consider that these would likely be delivered by BAU and other initiatives, and risk potentially being inward facing (benefiting the TSO) The business plan does not provide justification of chosen performance metric and measurable benefit nor linked them to customer/consumer focused outcomes. | |
|-----------------------------------|---|--|
| Additional Ana | lysis | |
| BAU Distinction | We would expect this to be covered by existing BAU staff and it is duplicated elsewhere in the request. | |
| Query Process | N/A | |
| Deep Dive Audit | N/A | |
| Draft Determination Actions | SONI would need to: Demonstrate that there is no duplication against BAU activity and elsewhere in its request. Justify why consumers should pay for this investment given the enhanced operational efficiency. Explain what the £60k for internal project services relates to. We also expect that SONI should develop a whole system digitalisation strategy as part of its performance incentives forward plan. | |

F.8: Clean Energy Package (CEP)

- 10.63 SONI has requested £110k capex for external consultancy. We propose to provide the full amount requested. This is the initial cost for professional fees for high-level design analysis to implement the CEP. SONI note that this excludes implementation costs because the precise requirements are still to be finalised.
- 10.64 SONI has not been in a position to develop a robust and costed business case for associated work. The funding requirements, when known, will be processed through the regulatory *Dt* mechanism within the 2020-25 period. It has stated that they have included SONI's share of the cost of initial preparatory work here only. The implementation programme is to be drafted later this year and will require consultation and

agreement with the UR.

- 10.65 SONI has noted that implementation will be a cross-functional process and tasks such as the drafting of methodologies, the introduction of new network codes and subsequent legal and regulatory reviews and implementation of new tools and processes may be substantial in terms of resource (FTE) commitment. SONI estimate that their share of the initial cost for professional fees for high-level design analysis will be approximately £110k.
- 10.66 We recognise that the cost impacts for the requirements for CEP are still not fully developed and that some external consultancy will be required in the initial costing, therefore we are proposing to approve the allowance request for £110k.
- 10.67 As SONI will be coming back with a CEP reopener, any unspent external consultancy allowances in the initial period associated will be factored into any future approval.
- 10.68 It should be noted that we consider that NI customers would not expect to share costs associated with the CEP, if following Brexit, the obligations are different than the obligations in ROI. NI customers should be only paying for external consultancy for CEP for the NI TSO activity only.

Table: UR views of the clean energy package initiative

| Rationale for consideration and Need | Whether there is rationale for consideration of initiative and need for action is established and well evidenced SONI has provided a sufficient rationale for consideration of initiative. It provides a background to the legislative package and a timeline of EU energy policy. It went through the six key areas and provided a list of the legislative documents of the Clean Energy Package. However, it is too early to agree to full needs establishment. We note that in the business plan it is stated that "EirGrid Group will provide support to ENTSO-E for the development of EU level tasks and also shall be responsible to deliver local TSO obligations." We would expect SONI to deliver the local TSO obligations for Northern Ireland and not the wider EirGrid group. |
|--|---|
| | Case for customer, consumer and stakeholder focused need Expected to be a necessary compliance project. |

| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options highlighted; Stepwise and minimum requirements; and Go fast & ambitious SONI state that the first (stepwise) approach (with strong risk monitoring) is a preferred approach which will deliver a gradual rampup of resources, testing and learning whilst managing risk of incurring some delay. The second approach would require a high resource requirement and contingency without gradual testing or learning. We note that SONI's implementation programme is to be drafted later this year and will require consultation and agreement with us. This is a potential reopener and the full risks are yet to be defined. |
|--------------------------------|---|
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale SONI estimate that its share of the initial cost for professional fees for high-level design analysis will be approximately £110k. These costs have not been validated and we have some concerns around SONI's share of the costs. However, we acknowledge that some external consultancy may be required for the initial cost for professional fees for high-level design to implement the CEP within Northern Ireland. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging SONI did not identify customer benefits, risks and mitigations, nor metrics It did state "The Clean Energy Package aims to set the right balance between making decision at EU, national and local level. In doing so, efficiency gains at European level will be established that otherwise could not be found if each country acted alone." It also stated "TSOs and market operators have a key role to play in the development and realisation of our low carbon energy future and EirGrid Group, working with our partners, is committed to supporting and delivering Ireland and Northern Ireland's climate objectives." |

| Additional Ana | Additional Analysis | |
|-----------------------------------|---|--|
| BAU Distinction | Changes to legislation occur in every price control period. Part of keeping up with changes falls within BAU, however we acknowledge that some external consultancy may be required for the initial cost. | |
| Query Process | N/A | |
| Deep Dive Audit | N/A | |
| Draft Determination Actions | Whilst full allowance has been provided, it would be useful for SONI to: Explain why this consultancy cost is a capex expenditure. Provide assurance that customers are paying only in relation to NI TSO activity. | |

G.1: Alternative Disaster Recovery and Business Continuity (DRBC) Site

- 10.69 SONI has requested £1.75m capex costs to fit out a new DRBC and £0.75m opex costs associated with the lease over the price control period, we propose to provide no allowance for the draft determination.
- 10.70 We consider that the existing facility is deficient and a new site is required. There seems to be a rationale for consideration given the fact that the current Rosebank facility is too close to the TSOs headquarters. Consequently, both sites could be affected by a major incident because of this proximity. GHD reviewed the initiative and were of the view that there is rationale for considering a DRBC facility for SONI is established as the current facilities are rented from NIE Networks and are not fit for purpose.
- 10.71 However, we provide no allowance in the draft determination. Our concerns focus around the options considered, the need for a control room as large as requested and the ultimate costs of the facility.

Table: UR views of the DRBC initiative

| Rationale for consideration and Need | Whether need for action is established and well evidenced Rationale for consideration of the initiative is justified given the requirement for a backup control room from the Emergency and Restoration Network Code, proximity of Rosebank which is less than a mile away, the physical security and unsuitability of Rosebank. However, the full need has not been established as size of the facility at 500 sqm seems questionable as this would suggest provision for c. 35 staff using a conservative value of 15 sqm/FTE. We agree with GHD that the scope of the requirements has not been established. |
|--|--|
| | Case for customer, consumer and stakeholder focused need |
| | • The project is a compliance related initiative. We could not find evidence of thorough testing with stakeholders. Though the need for an alternative site was discussed with SECG, neither the size nor cost of the facility was covered. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has presented four relevant options and set out the consequences of doing nothing. However, it is not entirely clear why a standalone facility (Option 4) is preferred to a shared facility (Option 3). Furthermore, it seems to us that some options have not been investigated i.e. other NIE Network sites. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Capital costs are based on backup facility in Dublin. Unfortunately, SONI has not provided any detailed breakdown of what this cost entails. Lease costs of £300/sqm or £27.87/sqfoot seem excessive for Belfast office space. Overall lease cost could also be reduced for a smaller facility. GHD has provided a provisional allowance until costs are more certain. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome • The benefit is resilience related which can be hard to measure. We do however accept the project is compliance related. |
|-----------------------------------|--|
| Additional Ana | lysis |
| BAU Distinction | It is accepted that a new facility will have additional cost beyond what is currently being spent by SONI. |
| Query Process | Within the query process SONI has provided more detail on the unsuitability of the Rosebank facility. |
| Deep Dive Audit | N/A |
| | For the purpose of a DRBC allowance, we would require the following detail: |
| Draft Determination Actions | Evidence that existing NIE Network sites are not appropriate. Evidence that the facility needs to be 500 sqm in size. Evidence that the rental costs should be at the proposed unit rate. An itemised breakdown of the DRBC assets and their respective capex costs (as was invested in the Dublin backup). Visibility of the current business continuity plan including any updates following the impact of COVID 19. |

G.2: Control Centre Training

- 10.72 SONI has requested approx. £400k opex and £830k capex for control centre training within its site. We propose to provide no allowance for the draft determination. SONI already has a training suite currently on site with a simulated EMS system and as the control centre is evolving with new tools and systems SONI states that it needs to simulate these as well.
- 10.73 We agree that there may be benefit in control centre training initiatives, but we are particularly concerned that there is no rationale for consideration of this particular initiative (nor has the need been identified or sufficiently established). This is because the existing control centre training suite should already be compliant and meet the requirements within the European System Operations Guidelines and the training should be covered under its IT refresh. As such, based on the information provided we cannot consider an allowance.

Table: UR views of the control centre training initiative

| | UR view of BP submission quality (including SECG views where relevant) |
|--|--|
| Rationale for consideration and Need | Whether there is rationale for consideration and need for action is established and well evidenced In its submission SONI quotes Article 58 of SOGL³⁷. These articles look at training program, training conditions, coordinators and trainers and cooperation between TSOs on training. For example, Article 59 states "Offline training shall be carried out in an environment which simulates the control room and with network modelling details at a level appropriate to the tasks being trained for". SOGL was formally adopted on 2nd August 2017 and was published in the Official Journal of the European Union on 25th August 2017 and therefore entered into force 20 days after the publication of the Guideline – 14th September 2017. We note that nothing in the network code requires the offline training to be an [actual] control room. Most of these articles provide an implementation date, for example "By 18 months after entry into force of this Regulation each TSO shall develop and adopt" Therefore, we would have expected SONI to be compliant with the SOGL and have put in place the requirements for Article 58 to 63 by mid May 2019. The existing control centre training suite should already be compliant and meet the requirements within the European System Operations Guidelines. The business plan fails to explain why training is not an integral part of the procurement of a new IT system (rather than separate training facility). GHD also looked at this initiative and stated that in the case of the SCADA/EMS, training like this is normally provided as part of the system supply contract. It is not clear from the details provided if SCADA/EMS training are also included as part of the EMS refresh. Case for customer, consumer and stake holder focused need Little detail provided on how unavailability of offline versions is affecting customer service and outcomes. Little evidence of thorough testing with stakeholders. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI do provide 3 options. Do nothing, use third party providers, or new in-house training tools (SONI's preferred option). Options appear reasonable though it is not certain why doing nothing would result in a breach of legal obligations. |

³⁷ - <u>Article 58 to Article 63</u> of European System Operations Guidelines (SOGL).

| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale SONI state that costs reflect internal management estimates and have been internally validated. However, the basis of the estimate is unclear and no evidence has been provided to support these cost assumptions. No breakdown of capex costs apart from Professional fees: £200k; Hardware/software: £180k; Systems: £450k. It is not clear to what extent systems training has already been funded in the procurement of new IT. Our expectation is that some level of training and familiarity would be incorporated into individual IT project requests. |
|-----------------------------------|--|
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome SONI do identify some benefits, risks and mitigations, however these would be expected to be covered under normal BAU activities. Benefits are non-specific so it is difficult to determine how spend will improve service levels. |
| Additional Ana | Ilysis |
| BAU Distinction | Staff training like this would expect to be covered under BAU activity and part of EMS refresh. |
| Query Process | N/A |
| Deep Dive Audit | The 'deep-dive' did not provide a robust and appropriate need nor any additional evidence on the detailed breakdown of cost and activity. We asked for detailed breakdown of cost and activity i.e. task, days, vendor rates etc. but this detail was not forthcoming. |
| Draft Determination Actions | For the purpose of a training allowance, we would require the following detail: Detail of what is deficient in current training arrangements and impact this is having on service. Explanation of training received when procuring new IT systems. Assurance that such training spend would not duplicate funding. Itemised breakdown of capex costs and basis for these estimates i.e. quotes, daily rates etc. |

G.3: Physical Security

- 10.74 SONI has requested approx. £1m opex and £1.2m capex for physical security tech replacement and enhancement within its site. SONI states that the physical security requirements at their offices over the life of the next price control are underpinned by the threat environment pertaining throughout NI and the requirements of the new NIS Regulations. We propose to provide no allowance for the draft determination.
- 10.75 We consider that while there is a rationale for further consideration of this initiative, as there is a strong case for addressing security issues, SONI has not demonstrated an established needs case. Furthermore, parts of the opex request appear to be ongoing BAU activity.
- 10.76 We do not propose an allowance at this point but have set an action for SONI to provide evidence which we require as an action.

Table: UR views of the physical security initiative

| | UR view of BP submission quality (including SECG views where relevant) | |
|--|--|--|
| Rationale for consideration and Need | Whether rationale for considering and need for action is established and well evidenced We consider that SONI has set out an appropriate rational for consideration, but not established a well evidence and justified needs case. SONI state that the proposed investment is informed by the Security of Network & Information Systems Regulations (NIS Regulations). We assumed that the 2018 physical security review audited SONI against the NIS Regulations. However, SONI confirmed that the gap analysis was not based upon the requirements of the NIS Directive but on best practice. SONI has not provided the report nor identified any non-compliant issues with the NIS Regulation which needs to be rectified. We note that GDH has assumed that the physical security review audited SONI against the NIS Regulations and on that assumption believe that there is a rationale to consider this initiative to address security issues. However, as SONI has not provided a copy of the report nor highlighted which gaps are non-compliant with the NIS Directive, it has been therefore difficult to assess need and what is an appropriate scope of works. | |

| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI provided three reasonable options to address the gaps Do nothing; Replace existing physical security technology and equipment with like-for-like products and equipment; Enhance physical security technology and equipment. |
|--------------------------------|---|
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale As part of their business plan SONI only provided high level costs, a further breakdown had to be requested via the query process. SONI stated that the methodology of the costs were based on UK and Irish market pricing for physical security protective products, and that it was validated by physical security consultants however they provided no evidence validating the costs. We note that GHD has noted that it is challenging to take a view on the costs as the scope of works has not been properly evidenced. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Some of the metrics and benefits seem reasonable. i.e. a) Improve the resilience of the operation of the power system across Northern Ireland. b) Reduce physical security breaches. c) Maturity assessment scores. Would be useful to have detail on current security levels and expected impact of preferred option. |
| Additional Ana | lysis |
| BAU Distinction | This is a BAU function though we recognise some investment will likely be required. |

| Query Process | We asked SONI to provide a further breakdown of their costs which they did helpfully provide (UR-117). However it provided no evidence of UK and Irish market pricing nor justification for the costs associated with each element. In response to Query UR-116, SONI also confirmed that the gaps analysis was not based on NIS Regulations but best prevailing practice. |
|-----------------------------------|---|
| Deep Dive Audit | N/A |
| Draft Determination Actions | We propose no allowance at this stage. We are however content to consider further if SONI provides the following detail: A copy of the consultant's security report. Differentiation between what is replacement spend and what is enhancement security. Some justification for the costs e.g. quotes, tenders, unit rates etc. Estimate of the impact on physical security incidents and maturity assessment scores. |

G.4: Cyber Security

- 10.77 SONI is proposing six measures to improve their effectiveness in managing cyber risk. The plan highlights this will be done through "a combination of increased automation and data analytics which will reduce reliance on manual processes and resources to deliver thereby improving accuracy and efficiency." SONI has requested £1.12m in opex and £163k in capex for the price control period. We propose no opex or capex for this initiative for the draft determination.
- 10.78 We recognise that there is a strong rationale for considering an initiative for effective cyber security capabilities and the importance of this for the *TSO* who host critical infrastructure and has various EU regulations to adhere to. However, SONI has not fully established the need in the scope of their proposals in the business plan and has not provided a risk assessment document of how the initiative differs from existing business as usual. We have set appropriate actions on SONI to provide the evidence.

Table: UR views of the cyber security initiative

| Rationale for considering and Need | Rationale for considering and whether need for action is established and well evidenced We recognise and agree with SONI's business plan in that it identifies there is an important rationale to consider the initiative to ensure cyber security risks are mitigated, that SONI adhere to NIS regulations and cyber security capabilities are maintained and enhanced. However, the need is not fully established and evidenced for the proposed measures within the business plan. We note GHDs comments that it would seek to confirm that the needs case for cyber security is focussed on attaining current legislation and / or industry best practice, but yet there is no evidence from SONI to allow us to understand this. There is lacking evidence of need to demonstrate that SONI should implement the proposed initiative. It is not possible to distinguish if some of the proposed initiatives are business as usual tasks or enhancements. Case for customer, consumer and stakeholder focused need Compliance related initiative. Not properly tested with stakeholders. |
|--|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We recognise the business case demonstrates two main options, 'Do Nothing' and to 'Invest in proposed measures in the business case'. We acknowledge that SONI have identified risks in relation to doing nothing, "It is unlikely that we will be able to keep pace with the rapidly-evolving external threat landscape; the threat to the NI electricity system would be unacceptably high and we would be in breach of our regulatory requirements, including NIS." (Page G-30). SONI's option to 'Invest in proposed measures in the business case' is not detailed to understand the scope of work. However, in order to identify these risks and how they will be mitigated, we require a risk assessment. We are concerned SONI have not provided a risk assessment document identifying the areas of the business which clearly require additional cyber sec urity enhancements and therefore justify the six initiatives that make up the delivery of approach. The lack of risk assessment makes it difficult to distinguish what areas of the initiative are enhancement and if any are BAU. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale The business plan identifies some high level detail in relation to capex and opex cost breakdown for cyber security. We acknowledge that cost data has been validated by external sources, such as 'cyber business partners' for capex and 'potential vendors' for opex. However, no evidence has been provided of these cost assumptions. The plan did not substantiate the scope of works as suggested by GHD and so the costs. |

| Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome We acknowledge that SONI has identified some potentially robust benefits. However, there is no quantifiable information on measurable benefit provided for cyber security enhancements. As part of the <i>Output Metrics and Targets</i> submission (received 25 February 2020), SONI has since developed a target around cyber security maturity scores. |
|--|
| lysis |
| The distinction between BAU tasks and additional enhancements is not clear here. A risk analysis would help identify this. |
| We asked SONI to provide a further breakdown of their costs which they did provide (UR-117). However SONI provided no evidence of UK and Irish market pricing nor justification for the costs associated with each element. |
| SONI provided some more breakdown in detail of the opex and capex spend. However no evidence was provided in relation to costing assumptions, such as quotes, benchmarking and market pricing. |
| We are require the following: The cyber risk assessment report. Evidence of how the proposed enhancements will mitigate cyber risks. Clear identification and evidence of why these proposed initiatives are enhancements to the business and not BAU tasks. |
| |

G.6: Capacity Market Secondary Trading

- 10.79 SONI has requested a total of close to £1m for this initiative. This includes £440k capex costs to develop a secondary trading platform and £580k opex costs mostly associated with an additional 1.25 FTEs. With relatively little detail on costs or the justification for additional staff we are minded to provide allowances associated with 0.25 FTEs to manage the manual trading: we propose to provide £92k for the draft determination.
- 10.80 Whilst we agree that the there is a rationale for consideration, we do not consider that SONI has demonstrated that its preferred option is optimal. As the UR and CRU are progressing a capacity market code modification to address the issue, it is not clear that a dedicated platform is required. In the absence of this certainty, we do not propose allowance of capital costs. We agree with GHD that without a

timeline for delivery, no detail on the type of platform, the resourcing profile of four permanent staff from the start does not appear reasonable.

Table: UR views of the secondary trading initiative

| | UR view of BP submission quality (including SECG views where relevant) | |
|--|--|--|
| Rationale for consideration and Need | Rationale for considering and whether need for action is established and well evidenced Rationale for considering it is clear as we recognise there is a need for a solution, however the full need for action has not been established as it not obvious that a platform is required given the current code modification process. Case for customer, consumer and stakeholder focused need SECG member raised the point during the business plan assessment phase that the proposal is not in line with regulatory process and should already have been delivered. | |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus The three options proposed seem reasonable but no assessment of manual trading. There is no timeline for delivery as part of the option. SONIs appreciation of risk and timing is poor given the state of regulatory developments. | |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Use of internally validated costs does not provide sufficient assurance around costs. GHD consider that the resource profile of staff costs is not reasonable. Some concern that existing allowances (i.e. I-SEM opex reopener) should already have considered the secondary trading issue. | |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome SONI has identified security of supply and less forced outages as a result of capacity trading. This seems like a reasonable assumption if generators are maintaining assets better. However, the materiality of the benefits is unclear as not quantified but we do not consider these to be material. |
|-----------------------------------|--|
| Additional Ana | lysis |
| BAU Distinction | It is accepted that a trading platform does not currently exist. |
| Query Process | Within the query process we asked SONI to advise if the platform was still required in light of regulatory developments. SONI confirmed it was, but failed to explain why this is the case. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | For the purpose of a future trading platform allowance, we would require the following detail: Evidence of why the platform is required in light of the current code modification. Evidence of why the trading platform requires an additional 1.25 FTEs. |

G.7: DSU State Aid Compliance

- 10.81 SONI has requested £0.82m capex costs in order to remove the exemption from difference charges for demand side units. This will involve changes to the trading and settlement code and developing metering solutions for DSUs. We propose to provide no allowance for the draft determination.
- 10.82 Rationale for considering for the project is clear as removal of the exemption is a legislative requirement. There is also a fixed timeframe for compliance so action must be taken as a matter of some urgency. However, we do not have a detailed breakdown of costings, or the scope of work involved with metering. This position was also confirmed by GHD in their project review. As such, we propose no allowance until the required evidence is submitted.

Table: UR views of the DSU state aid initiative

| Rationale for consideration and Need | Rationale for consideration and whether need for action is established and well evidenced Rationale for consideration of the initiative is sufficiently clear: we agree on the provision of a solution. Calculation of metered DSU quantities is also a necessary activity. However, we agree with GHD that the scope of supply of equipment, hardware, software development, communications etc. required to deliver the project has not been provided. Case for customer, consumer and stakeholder focused need Project is compliance related. |
|--|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options were developed but these options do not seem unreasonable in this particular instance. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Costs don't appear that excessive given the work to be undertaken i.e. removing exemption, implementing a metering solution and accounting for procurement of DSU energy reduced. However, cost provided are at a high level and no evidence of costing assumptions/sources has been provided and so we are not fully confident that these are reasonable. We agree with GHD that it is challenging to understand whether they are reasonable, particularly as the scope of works has not been set out. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome • The primary outcome is compliance but improving metering capabilities and monitoring of DSUs represents a positive outcome. |
|-----------------------------------|--|
| Additional Ana | lysis |
| BAU Distinction | It is accepted that this is a change in the current method of operation. |
| Query Process | N/A |
| Deep Dive Audit | The audit did not provide much more detail than was submitted in the business plan. We would have welcomed some further breakdown of costs and evidence on the scope of works in particular. |
| Draft Determination Actions | SONI should provide: Evidence of the scope of works. A detailed breakdown of costs. Detail on the basis of cost validation. |

G.8: Implementing an MIP Solver

- 10.83 SONI has requested £410k (£260k capex and £150k opex) in order to implement a mixed integer programming (MIP) solver. We propose to provide no allowance for the draft determination. The purpose of the solver is to aid the capacity market auction process and maximise net social welfare.
- 10.84 SONI has based its needs assessment on the direction of travel indicated by the SEMC in moving to an enduring solution.³⁸ This is not an unreasonable position to understand whether there is sufficient rationale for considering the initiative; however establishing a need will depend on the successful delivery of the optimised approach which SONI has not demonstrated.
- 10.85 Costs are also uncertain given that we have had success trialling free versions of excel software which recreates auction processes using an

³⁸ See SEMC consultation <u>paper</u> on 2023/24 T-4 Capacity Auction Parameters.

MIP solver. The full cost of such software is significantly less than SONI proposals. As a consequence, no provision has been made at this stage.

Table: UR views of the MIP solver initiative

| UR view of BP submission quality (including SECG views where relevant) | |
|--|--|
| Rationale for consideration and Need | Rationale for consideration and whether need for action is established and well evidenced Rationale for consideration is clear as SONI has demonstrated that SEMC has requested such an approach as an enduring solution. However, external supply scope has not been set out so the full needs case has not been defined or established. Case for customer, consumer and stake holder focused need Project is compliance related. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options were developed but these do not seem unreasonable in this particular instance. We agree that the preferred to develop the auction format D. However, we consider that other technical solutions might well have been considered. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Cost provided are at a high level and evidence of the sources has not been provided. It is unclear that the level of expense is justified given GHDs view that the external supply cost scope has not been evidenced to give confidence that the costs are reasonable and particularly given the potential for much cheaper alternative options. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome SONI has estimated the net social welfare to be €664k for the 2022/23 T-4 auction. It would however been beneficial to understand how this value was arrived at and the potential benefit in other auctions however the benefit to consumers of this initiative does not seem large. | | |
|-----------------------------------|---|--|--|
| Additional Ana | Additional Analysis | | |
| BAU Distinction | It is accepted that this is a change in the current method of operation. | | |
| Query Process | N/A | | |
| Deep Dive Audit | N/A | | |
| Draft Determination Actions | For the purpose of a future allowance, we would require the following detail: Why costs are appropriate given the potential for cheaper alternatives. We need evidence to suggest that the external supply costs are scoped to deliver the project are reasonable. Why potential benefit could be derived across other auctions. | | |

G.9: State Aid Cross Border Capacity

- 10.86 SONI has requested £630k (£230k capex and £400k opex) in order to allow other member states to participate in capacity auctions where technically feasible. We propose that no allowance will be provided in the draft determination for this initiative. The purpose of the project is compliance with the Clean Energy Package in the first instance, though SONI do see some future security of supply benefits.
- 10.87 We have some significant concerns whether there is a rationale for considering this project given the fact that the UK is no longer an EU member state so the need is uncertain. The project is also heavily dependent on whether GB wish to facilitate this initiative which is again unclear. Moreover, GHD are of the view that costs are not justified. We have not therefore provided any allowance for this project.

Table: UR views of the state aid initiative

| UR view of BP submission quality (including SECG views where relevant) | |
|--|---|
| Rationale for consideration and Need | Whether there is a rationale for considering and need for action is established and well evidenced Given Brexit, it is not clear that this is an issue for SONI. Given uncertainty around GB views, it is also uncertain that any activity is required. We also agree with GHD that the scope of works has not been defined. Case for customer, consumer and stakeholder focused need Project is compliance related though unclear if this is an issue for SONI. There is no evidence of thorough testing with stakeholders. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options were developed but preferred option may not be necessary for SONI. SONI have failed to note the risk of wasted expenditure and stranded IT assets which is a distinct possibility for this project. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale We agree with GHD that the cost estimate is not justified and the scope is not sufficiently developed which means we have little confidence that the costs may be robust. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Consumer benefit seems low though there could be security of supply improvements if GB generators can be incorporated into the auctions. |

| Additional Analysis | |
|-----------------------------------|---|
| BAU Distinction | It is accepted that this is a change in the current method of operation. |
| Query Process | N/A |
| Deep Dive Audit | N/A |
| Draft Determination Actions | For the purpose of a future allowance, we would require that SONI: Justify with evidence why this project must be undertaken in light of Brexit developments. Confirm what Ofgem thoughts are in relation to the project in order to determine need. Provide assurance that spend will not result in waste or stranded assets. Provide further justification with evidence for the level of costs proposed. |

Independent Expert Voice

F.7: Promoting Change

10.88 SONI has requested £100k (all opex) for 0.25 additional FTEs in relation to its proposal to establish a specific policy and sustainability role. We propose that no allowance will be provided in the draft determination for this initiative. We consider this to be BAU activity with little discernible benefit for the NI consumer.

Table: UR views of the promoting change initiative

| Rationale for consideration and Need | Whether rationale for considering the initiative and need for action is established and well evidenced While the initiative is not entirely clear or fully scoped, the SONI needs case seems to be built around improving sustainable practice internally and then an external need to 'educate' communities to help support SONI infrastructure projects. While we recognise that broadly speaking there is likely to be rationale for SONI to consider how its own business operations can become more sustainable, we consider that this initiative, as currently proposed, is something which SONI should already be doing (e.g. reference to workplace environmental/energy saving initiatives) and may already be doing with respect to the externally facing element (engaging with communities to support the case for its infrastructure projects). Case for customer, consumer and stakeholder focused need No evidence of support or that this has been thoroughly tested with stakeholders. |
|--|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI only presented two options and only limited evidence of the impact of the 'do nothing' alternative. We also agree that with SECG member concerns that the initiative seems to be delivered as a public affairs and communications deliverable, when SONI should be considering more systematically across its business around how it can embed sustainability into its organisational processes. We also note stakeholder broader concerns around educating. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale SONI does not provide evidence of why it considers the costs are reasonable. For example, there is no evidence of how decided the resource cost is reasonable. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome It is not clear why developing and delivering against internal and external sustainability policies proposed will materially benefit customers. |

| Additional Analysis | |
|-----------------------------------|---|
| BAU Distinction | Activities listed are BAU as far as we are concerned and why additional resourcing is required for this activity. |
| Query Process | N/A |
| Deep Dive Audit | N/A |
| Draft Determination Actions | Though relatively immaterial, we fail to see the need, options, or benefit in this initiative and consider that the development and delivery against internal policy in the way proposed by SONI is a business as usual function. As such there is no action as we do not consider funding this to be in the consumers' interest. |

G.5: European Network Codes (EUNCs)

- 10.89 SONI has requested £800k for two additional FTEs to implement EUNCs. We propose that no allowance will be provided in the draft determination. SONI proposes that these additional staff are required to fulfil enduring roles which SONI states are being driven by both the *System Operation* and *Connection Network Codes*. It states that the additional staff are required to manage increased complexity associated with changes to all elements within network codes.
- 10.90 While we recognise there is rationale to consider work on ENCs we agree with GHD that the additional need and the option chosen has not been justified. On the assumption that there is currently insufficient resources, we would have expected to see evidence of that under resourcing. As the development of EUNCs has been underway for several years, the needs case should identify a step change in workload that would require extra resource. We are also particularly concerned this is accounted for as BAU.
- 10.91 As most of the intervention needed to comply with the codes will be in place by the end of 2020, we do not see the requirement for additional staff for the 2020-25 period. As such, we have not provided any additional allowance for European Network codes.

Table: UR views of the EUNC initiative

| Rationale for considering and Need | Whether there is rationale for considering and the need for action is established and well evidenced We recognise that there is rationale for work on European Network Codes (ENCs) given compliance with connection and system operation codes. The existing EU legislation that relates to <i>System Operation</i> and <i>Connection Network Codes</i>.³⁹ However, we do not consider that the full needs case has been sufficiently established. On the assumption that there is currently insufficient resources, we would expected to see evidence of that under resourcing, yet as GHD note, this has not been provided. As the development of EUNCs has been underway for several years, the needs case should identify a step change in workload that would require extra resource. We further note that most of requirements will be fulfilled before the start of this price control: the regulatory authorities have been engaging with the TSO for a number of years to implement the codes. All EUNCs have now entered into force, indeed some of them entered into force in 2016 and 2017. SONI state that they have five FTEs shared between SONI and EirGrid, who are responsible for addressing the enduring roles following the implementation of the DCC and HVDC codes into the Grid Code by the end of 2020. Case for customer, consumer and stakeholder focused need Compliance related work. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Three options considered including a 'do nothing' option. However, we have significant concerns that SONI has not justified with evidence why under its 'do nothing' option it cannot undertake the activity with its existing staff and why under its preferred option 2 additional staff are required. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Cost forecasts are based on two FTEs. However, we are uncertain why this level of resource is appropriate. |

³⁹ Requirements for Generators (RfG); Demand Connection Code (DCC); HVDC Connection Code (HVDC); System Operation Guidelines (SOGL); and Emergency Restoration Code (ER).

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome The business plan provides no quantifiable information on measurable benefits or enhanced outcomes. We would expect SONI to comply with changes to the regulatory and legal environment as a minimum. |
|-----------------------------------|--|
| Additional Ana | lysis |
| BAU Distinction | SONI notes that these are enduring roles. EU Network Codes have been in place a number of years so we would have expected SONI to have been implementing the codes throughout the 2015-2020 period. It is very unclear how this is not part of SONI's existing BAU. |
| Query Process | N/A |
| Deep Dive Audit | N/A |
| Draft Determination Actions | SONI would need to: Identify and provide a timeline for implementation all aspects of the network codes beyond 2020. Identify and evidence within its resource plan of under resourcing. We would also seek evidence to justify the additional tasks within the 2020-25 period that will be beyond the enduring tasks that the current staff are completing. |

G.10: Market Related TSO Governance

10.92 SONI has requested £200k which translates to an additional 0.5 FTEs in order to help ensure compliance with the capacity mark et code. We propose to provide no allowance for the draft determination. We consider the need to be ill-defined and the activity to be BAU. GHD consider that there is insufficient information to support the request so no allowance has been provided.

Table: UR views of the TSO governance initiative

| Need | Whether need for action is established and well evidenced Need is ill-defined and fails to explain why there is a step change in activity from existing levels. Case for customer, consumer and stakeholder focused need No clear indication that this has support from stakeholders or is based on a needs gap. |
|--------------------------------|---|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus Only two options were developed. The 'do-nothing' option seems to suggest that there is no existing resource overseeing SONI's TSO compliance with its market related obligations. This does not seem realistic given such obligations are already in place. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale • We agree with GHD that there is insufficient information to support the cost request. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome The service level benefits listed are compliance related which SONI should already be providing. There does not appear to be any discernible benefit to the consumer. |
| Additional Ana | lysis |
| BAU Distinction | It is not clear why this represents a step change from BAU activity. |

| Query Process | N/A |
|-----------------------------------|--|
| Deep Dive Audit | N/A |
| Draft Determination Actions | For the purpose of a future allowance, SONI would have to evidence why this is not a BAU activity. |

H.1: Rebranding

- 10.93 SONI has requested £40k (opex) to rebrand the TSO, *"to be meaningful, memorable and trigger a direct, positive response from customers."* The case for a new brand seems to be largely built around making the case for new grid infrastructure to concerned landowners or their neighbours. The expense is related to signage, website rename, updated branding and social media etc. We propose that no allowance will be provided in the draft determination for this initiative.
- 10.94 Whilst we accept that the SONI name may cause confusion, it is difficult to reason this as the explanation for material infrastructure delays. Needs assessment also doesn't seem to consider that a new brand will have to start from 'scratch' and the TSO will have lower awareness at least for a period. SONI customers at SECG also questioned the need for this initiative.
- 10.95 Moreover, SONI are already spending money on this activity and such costs would appear to be BAU expenditure. SONI are free to rebrand if they desire, but we do not see a clear need and do not think that consumers should pay for this. As such, no revenue provision has been made.

Table: UR views of the rebranding initiative

| Rationale for consideration and Need | Whether rationale for consideration and need for action is established and well evidenced Rationale for consideration and need is not justified. It is unclear why the general population has to be aware of SONI to support investment in its infrastructure projects. Issue of short-term decrease in awareness. SONI has noted success of infrastructure projects such as NSIC occurred when general branding was low Case for customer, consumer and stake holder focused need Little evidence of stakeholder support. We noted SECG were largely not in favour of this initiative. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has considered two options. However, we note that SECG members raised concerned that this mode of engagement may not be optimal. Risk that rebranding does not deliver increased awareness would be thought to be of high probability given the difficulty in this area. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Little underpinning evidence was provided for the cost request but we are of the view that the costs are not material and seem reasonable for the work in question. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Customer benefit seem negligible in this instance. |

| Additional Analysis | |
|-----------------------------------|--|
| BAU Distinction | This is already a BAU activity |
| Query Process | SONI response to our query on general branding (Query UR-80) indicates that they are already spend £27k per annum in this area. This would suggest that further allowance is not necessary. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | We do not consider this project different from BAU activity so would not propose any allowance. SONI would have to demonstrate both need and that these activities are not part of baseline costs for additional allowance to be provided. |

H.2: Education and Engagement Campaign

- 10.96 SONI has requested £1.76m (opex) for a media campaign providing information on SONI, its services and detail on their role in the clean energy transition. SONI has linked the benefits to acceptance for grid infrastructure projects and cited the North South Interconnector (NSIC) project by way of example. We propose to provide no additional allowance for the draft determination.
- 10.97 Our view is that the evidence to support such spend is unnecessary. It is unclear to us why SONI need to be leading in educating the public on the energy transition. SECG has also queried the value for money given that the focus is on traditional media (radio and TV) with no opportunity for feedback. In addition, the benefit seems highly unlikely and does not seem to represent a good value investment even if awareness is increased. We therefore have not provided the increase in the media spend requested.

Table: UR views of the education and engagement initiative



| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has consider three options. However, we agree with SECG members that SONI has not considered alternative online channels, which might be both cheaper and more engaging; We would wish to see evidence that current spend levels is delaying infrastructure projects as SONI have argued when discounting the base case option. High probability that the requested spend will not improve awareness given the difficulty of impacting these metrics. |
|--------------------------------|--|
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Costs breakdown is quite well detailed, however we have concerns whether the costs are value for money: we agree with SECG member that is the overall proposed spend on education may not be proportionate (to the benefits) |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome Customer benefit seems negligible in this instance even if awareness is raised. Probability of success also seem risky. Target is to increase awareness from 8% to 12%-16%.⁴⁰ Hard to see how such an outcome will materially impact network projects since the vast majority of the public will still have no awareness of SONI. |
| Additional Ana | alysis |
| BAU Distinction | Recognise that SONI are not currently undertaking spend at the levels proposed in the business plan. |

⁴⁰ Source: Deep-dive audit response, p39.

| Query Process | Responses to queries UR-79 to UR-81 acknowledge the challenges and uncertainty about the links to the benefits. |
|-----------------------------------|--|
| Deep Dive Audit | Detail in the audit has not provided much further detail on the initiative. |
| Draft Determination Actions | We do not consider this project to be well supported in terms of need or benefit. This view is supported by SECG members. W hilst willing to hear arguments to the contrary, further detail is unlikely to affect our position regarding this allowance. |

H.4: Industry Partnerships

- 10.98 SONI has requested £1.34m (opex) of additional spend with respect to developing industry partnerships. We propose that no additional allowance will be provided in the draft determination for this initiative. Spend is anticipated on grants, roadshows, digital partnerships, collaboration with key stakeholder groups and assembly engagement to support to gain support for its grid infrastructure projects. SONI has argued for the additional spend given increases in less informed connected customers.
- 10.99 It is our view that the project rationale for consideration and needs case is weak. The key reason is that engagement to support infrastructure projects is an activity which SONI is well-established in and it is unclear what is deficient with current partnership arrangements to support this objective. As a BAU activity, this activity is already funded. SECG has also voiced concerns about whether the appropriate stakeholders are being consulted and if the type of engagement is correct. It also seems questionable that generators or users connected at transmission will not be suitably informed.
- 10.100 Besides the rationale and need justification, the benefits are ill-defined, though we recognise this can be difficult to quantify. We are also concerned that there may be a risk of duplication of funding given that engagement allowances are a typical part of large TNPP projects. As a result of these concerns, no additional funding has been provided.

Table: UR views of the industry partnership initiative

| Rationale for consideration and Need | Whether rationale for consideration and need for action is established and well evidenced It is unclear what is deficient with current arrangements for engaging partnership stakeholders to support infrastructure projects There is little evidence provided that new customers are not suitably informed. SONI already undertake significant community work to explain the rationale and impact of network projects. Direct project engagement funding is a normal part of large TNPPs. Case for customer, consumer and stakeholder focused need SECG members queried the type of engagement and the fact that it appears one directional. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI presented two options but failed to address SECG concerns about the ability of third parties (new technologies) to contribute (on a variety of things which SONI does other than gaining support for infrastructure) and that the options proposed by SONI risk being out of date and there may be other modes of engagement it has not considered. Whilst we agree that the risks identified are generally low probability and impact, this is in our view due to the fact that such engagement is a continuation of BAU activities. We have some concern around duplicate funding as such activity will normally be provided via TNPP allowances. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale High level split of costs provided by activity. Not clear what the step change is from current spend levels. |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging SONI has not provided any performance metric in the business plan in relation to this initiative. Reduced opposition to infrastructure projects is stated but this is not something that can be easily evidenced. |

| Additional Analysis | |
|--------------------------|---|
| BAU Distinction | SONI is well-established now in engaging with stakeholders on gaining support for its infrastructure projects. Many of the activities listed are BAU i.e. engaging with UFU, councils, assembly members etc. Not clear which of the proposals are new. |
| Query Process | Within the query process SONI was asked about the deficiencies (Query UR-82) but provided an unsatisfactory answer. They referred to the consequences of the do-nothing option, but this fails to explain why current engagement is restricted to business group focus. |
| Deep Dive Audit | Some further detail was provided in the audit but nothing which has strengthened the case for increased spending. |
| | The proposals as drafted have a weak needs case and do not address SECG concerns. For additional funding to be provided SONI would need to demonstrate all of the following: |
| Draft | What is deficient in current engagement and why this is the case. |
| Determination Actions | What activity proposed is above and beyond BAU engagement. How SONI will incorporate two-way engagement and feedback from third parties. |
| | How SONI will engage with new technology and market participants. |
| | Assurance that any opex funding for engagement will not also form part of TNPP requests. |
| | How the consumer can be assured spend is delivering and represents VFM. |

H.5: Improving Industry Communication and Understanding

- 10.101 SONI has requested £100k (opex) of additional spend with respect to investment in improving industry consultations for existing initiatives. We propose to provide no allowance for the draft determination.
- 10.102 Whilst the materiality is low, it is our view at the moment that there is no case for additional funding. While we recognise that there is certainly a rationale for improving industry communications and understanding during the energy transition, we are not convinced that extra expenditure to support more traditional means of regulatory consultation is good value for money option. We also note that, as the business plan demonstrates, SONI regularly undertake consultations and has significant experience in this area already and so it is unclear why this request is additional.

Table: UR views of improving industry communication and understanding initiative

| Rationale for consideration and Need | Whether rationale for consideration need for action is established and well evidenced SONI is seeking expenditure to enhance its reach and understanding of its existing regulatory consultations. At a broad level, we agree with the idea that SONI should be 'improving industry communication and understanding' by ensuring that it is asking the right questions and that its customers are effectively engaged. This was a key theme of feedback from SECG. However, we consider that the full need for action is undermined as we agree with SECG feedback that SONI should be considering initiatives which try and genuinely enhance its engagement in a way which doesn't simply over-rely on traditional formal means of communications, like regulatory led consultation: we agree this approach is not sufficiently diverse given the nature of the energy transition. We also consider that SONI regularly undertake consultations and has significant experience in this area without the need for additional spend to improve how it undertakes consultations. Case for customer, consumer and stakeholder focused need SONI already produce feedback reports i.e. TDPNI. We could not find evidence that the case has been thoroughly tested with stakeholders. |
|--|--|
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus We are very concerned about the optionality as we think that SONI is precluding important options for 'improving industry communication and understanding' based on more effective modes of engagement (not simply regulatory led consultations) |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale • Cost are not material but not clear why this is not BAU activity. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging Customer benefit seems limited and feedback reports are already being undertaken and represent a normal part of engagement activity. | |
|-----------------------------------|--|--|
| Additional Ana | Additional Analysis | |
| BAU Distinction | Initiative activity is BAU as far as we are concerned. | |
| Query Process | N/A | |
| Deep Dive Audit | N/A | |
| Draft Determination Actions | For additional funding to be provided SONI would need to demonstrate: Why spend will add value. How this is a step change from BAU activity. | |

Transmission Network planning and system development

F.6: System Planning

- 10.103 SONI has requested £500k (all opex) for 1.25 additional FTEs in relation to its network planning function. We propose to provide £493k allowance for the draft determination. This is the full staff compliment but at our slightly lower cost per FTE allowance. It is our view that the project should be supported. The scope of the initiative is quite ill-defined in the sense that that it is unclear what SONI is going to deliver but we think that the system planning under the service area of assessing and communicating system needs, is an area where there is a service gap for the energy transition, and so there is a very strong rationale for consideration. The costs are relatively small. We consider it likely that this initiative can provide a net-benefit.
- 10.104 We have set out examples of things which SONI could be considering to improve its performance in this area e.g. see service expectations and GHD annex on whole system planning. We will be monitoring SONIs performance to understand how it seeks to achieve good ou tcomes

using this allowance. We expect its 1st forward plan to set out what deliverables it is going to use to put this resource to use and how this provides value for money.

10.105 The UR has already provided an interim allowance in the current price control for costs associated with the transmission development plan (TDPNI) and future energy scenarios (FES). The full allowance is also supported by GHD. As such, full allowance has been provided for this initiative.

Table: UR views of the system planning initiative

| | UR view of BP submission quality (including SECG views where relevant) |
|--|--|
| Rationale for consideration and Need | Whether rationale for considering the initiative and need for action is established and well evidenced We accept that there is a strong rationale for improving system planning expertise: this is a key service with planning issues becoming more complex; though the need is not that well scoped. We further accept the developing work on FES, TDPNI and TNPPs. Case for customer, consumer and stakeholder focused need SECG members recognised issues with the delivery of the first TDPNI and had an expectation that service would be improved. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI only presented two options and only limited evidence of the impact of the 'do nothing' alternative. |
| Robust and efficient cost | Cost forecasts are efficient, based on good source s/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Cost request is reasonably clear and does not seem excessive in light of interim allowances. GHD also supports allowance on the basis of bringing previously outsourced work in-house. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging SONI has not provided any performance metric in the business plan in relation to this initiative. An output submission in February 2020 by SONI did include network delivery metrics. However, these appear problematic and it is unclear how they would be different without this initiative. We think that improved system planning is an area which can provide value for money. | |
|-----------------------------------|---|--|
| Additional Ana | Additional Analysis | |
| BAU Distinction | Activities listed are BAU, though SONI has demonstrated that planning is becoming more complex with new generation coming ont o the system. | |
| Query Process | Within the query process SONI clarified that the need for 1.25 FTEs was based on internal assessment by the relevant manager. | |
| Deep Dive Audit | N/A | |
| Draft Determination Actions | Not applicable as full allowance is being provided. | |

Commercial interface

H.3: Pre-Application Process and Data Availability

- 10.106 SONI has requested £410k (opex) for an additional staff member and sundry costs in relation to pre-application work for new connections. We propose that no allowance will be provided in the draft determination for this initiative. The allowance is also focused on the provision of up-to-date information on capacity and generation.
- 10.107 We support the rationale for considering the initiative and recognise the potential benefit to a formal process and data publication. However, it is not clear to us that either:
 - a) The activity could not be carried out by the existing five connection FTE resource.
 - b) General electricity customers should pay as the benefit accrues to the applicant seeking a connection.

10.108 For this reason, no allowance has been provided in the draft determination, though we consider that the activity should be undertaken.

Table: UR views of the pre-application initiative

| | UR view of BP submission quality (including SECG views where relevant) |
|--|---|
| Rationale for considering and Need | Whether rationale for initiative and need for action is established and well evidenced SONI has made a good case that customers would benefit from a formalised pre-application process. We further recognise that generation and transmission forecast statement quickly become outdated. As such, customers would likely benefit from publication of more frequent updates. Case for customer, consumer and stake holder focused need We could not find a strong evidence of testing with stakeholders but we do note that SECG members voiced some level of concern about the connection process indicating some level of rationale for consideration. |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI has consider three options which seem reasonable. Not clear why those who seek a connection (Option 2) should not pay for the service provided and why this option has been ruled out. |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale Costs breakdown is clear. |

| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome We agree that SONI should be making its data available, but this initiative does not seem ambitious. It is unclear what the service level agreements associated with the pre-application process are. We would also have liked some indication of the frequency of data publication. |
|-----------------------------------|---|
| Additional Ana | lysis |
| BAU Distinction | Recognise that SONI are not currently providing this service but not clear why the existing connection staff cannot undertake. |
| Query Process | SONI response to query UR-94 confirms that the activity is specific to the connector. It is not however clear from the response to UR-95 why this cannot be funded by those seeking a connection. This seem particularly unclear given that connection revenue is forecast to well exceed SONI's resource costs. |
| Deep Dive Audit | N/A |
| Draft Determination Actions | Whilst we support the activity proposals, consideration for funding would require the following: Demonstration why existing connection staff cannot provide the service. Evidence of why the costs should fall on electricity consumers when those seeking a connection are the beneficiary. Service level agreements for the pre-application process. Frequency of data publication proposals. |

H.6: Dedicated Customer Account Team

- 10.109 SONI has requested an extra staff member (£400k opex) to provide an account manager and single point of contact for customers. We propose that no allowance will be provided in the draft determination for this initiative.
- 10.110 There may be rationale for considering more dedicated customer account service but the need is not well defined and there is no indication of level of customer interaction or indeed satisfaction. No additional monies have been provided, though SONI should consider such an approach to customer interaction.

Table: UR views of the dedicated customer account initiative

| | UR view of BP submission quality (including SECG views where relevant) | |
|--|---|--|
| Rationale for considering and Need | Whether rationale for considering and need for action is established and well evidenced It is recognised that customer interaction may be increasing but need for addition resource is not justified. The task is already being delivered to some extent as SONI already interact with customers. It would therefore seem that the initiative could be delivered without extra resources but some staff reorganisation. Case for customer, consumer and stake holder focused need SONI already undertake customer interaction so would appear to be a BAU activity. We could not find evidence of thorough testing with stakeholders or stakeholder support. | |
| Options (including risk) | Whether alternative options have been properly considered and costed/ consequences of a 'Do Nothing' option are fully considered /Risk has been fully considered and evidenced in terms of coming to a choice of option/customer, consumer stakeholder focus SONI presented two options which seems reasonable given materiality. | |
| Robust and efficient cost | Cost forecasts are efficient, based on good sources/evidence and subject to optimum timing/ Costs provide value for money to customers/ Allocation between opex and capex is subject to clear rationale • Cost are clear but this appears to be BAU activity. | |
| Benefits | Evidence and justification of chosen performance metric and measurable benefit provided (including customer/consumer focus and link to outcomes)/current service level and enhanced outcome and how this is sufficiently challenging Customer benefit seems limited. | |

| Additional Analysis | |
|-----------------------------------|---|
| BAU Distinction | Initiative activity is BAU as far as we are concerned. |
| Query Process | N/A |
| Deep Dive Audit | N/A |
| Draft Determination Actions | For additional funding to be provided SONI would need to demonstrate: Evidence of how this is a step change from BAU activity. |